

Automated Biometric Identification System (IDENT) Exchange Messages (IXM) Specification – v3.1

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Change Control Log

Version	Date	Name of Author	Summary of Changes
1.0.0	12/14/2005	P. Frederick	Initial Version
1.0.1	01/06/2006	P. Frederick	Added more information including XOP, security, communication protocols, and EFTS mapping table.
1.0.2	02/21/2006	P. Frederick	Modified IXM structure, updated XML examples and figures including SOAP header, changed operation names per standard group, added request, acknowledgement, and response messages, updated EFTS mapping table to add more information.
1.0.3	02/27/2006	R. Montes, P. Frederick	Resized the document to reduce paper. Updated Verify diagram. First baselined version for distribution.
1.1.0	04/18/2006	P. Frederick	Added section 13 and 14 on SOAP header and fault, changed the namespaces in Attachment B to use SOAP 1.2, provided absolute URI for IDENT namespaces, added derogatory information and apprehension data under DerogatoryInformation structure, added a structure to provide comments within the IXM messages, updated all response messages to have an activity result date/time, added activity ID to all acknowledgement messages, removed acknowledgment messages from Verify and RetrievalIdentity, added section 16 for details on the fingerprint set definition, added datatype length and descriptions as appropriate to all IXM messages, added section 1.4 to include legend used throughout the element tables., added section 2.3 on WSDL conformance, and included Attachment G-I, and updated XML examples in Attachment B to reflect new IDENT XML schema changes.
1.2.0	09/21/2006	P. Frederick	Updated the security section and modified various section based on MITRE's review comments. Updated the WSDL action tag in Attachment B. Updated the WSDL to include Fault message and added ErrorTimestamp to fault message. Changed Subunit INSP to OFO and added new subunit OM and PMO. Added Alert to StatusCodeType and changed StatusCodeType Criminal History to Derogatory History. Added section 2.7 on JMS header configuration. Added clarification on EFTS and GJXDM format in section 17. Changed the host URL for US-VISIT/IDENT.
1.3.0	01/15/2007	P. Frederick, R. Montes	Separated Identify, Verify, Retrieve Identity and Retrieve Criminal History element tables out as unique attachments to the primary IXM document. Moved section 17 into section 15. Added the PersonEnumeratorID to Identification, Verify, Verification, RetrievalIdentity, and Identity messages. Updated all messages within the attachments to reflect the PersonEnumeratorID. Added PersonAssignedIDDetails as optional element outside the Person for the FNU. Added suffix and PersonAlternativeName to include aliases.

Version	Date	Name of Author	Summary of Changes
			Removed VerifyAcknowledgementType from IXM schema. Updated XML examples to reference US-VISIT/IDENT URI destination. Updated Table 4-1 and Table 4-2 to include potential messages and descriptions. Removed section 9-11. Updated Table 2-1 (Data Exchange Steps) and Table 4-1 (IDENT Messaging Operations) to include new comments and details. Added more descriptions to section 2.5 on interacting with IXM services.
2.0	09/07/2007	P. Frederick	Updated Web service addressing namespace to reflect Addressing 1.0 Final of http://www.w3.org/2005/08/addressing/ . Added section 13.2 on country and place of birth codes and 13.3 on document types. Added new service operations: AddBiometric, AddDisposition, IdentifySync, VerifySync, and PreVerify to support Unique Identity 10-Print Pilot (Objective 2.1.1). Added notification messages such as UpdateDerogatoryNotification and UpdateEncounterNotification. Updated Table 4-1 to include five new services for 10-Print Pilot. Updated the error codes in Table D-1 to specify which services returned what error. Changed all organization data elements to uppercase. Updated Section 18.1.2 to add clarification for missing finger handling. Added Section 18.5 to include description on time zone for date and time data elements. Restructured the attachments.
3.0	10/03/2008	A. Galanes	Updated document to reflect new enumerator notification services as well as additional data elements within existing services.
3.1	11/26/2008	A. Galanes	Clarified explanations in section 3. Updated attachment references.

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1.0 Introduction

This document provides a specification on the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) Program's Automated Biometric Identification System (IDENT) Exchange Messages (IXM), a new standards-based service model for interacting with US-VISIT/IDENT applications, which is intended to provide a common interface for all client applications.

1.1 Purpose

The purpose of this document is to describe standard messaging format for interacting with the US-VISIT/IDENT systems. This guide is intended for the external users who are creating a client application that will interface with one or more US-VISIT/IDENT messaging services.

1.2 Scope

This document describes the IDENT IXM messaging format and the specifications and rules for its use. The guide assumes at least an introductory knowledge of basic eXtensible Markup Language (XML). This document provides an overview as well as detailed information on each messaging operation, the steps required to create an interface, and guidelines and examples intended to help external users interact with US-VISIT/IDENT applications via the IXM format.

The information in this document is effective at the time this document was written and may change without notice. Please verify accuracy and timeliness of this information prior to committing any software that interfaces with US-VISIT/IDENT applications.

1.3 Terminology

Terms such as client (or client application) and external user or customer are used extensively throughout this guide. Several terminologies are used when referring to the IDENT messaging services.

- **Activity** — The event about which an action is generated. Activities like Visa issuance, Entry, and Exit are actions that may occur over a period of time or may have multiple operations. Below is a list of possible activity types.
 - **Application** — part of applicant screening process (e.g. Visa issuance)
 - **Entry** — related to a person entering the country at a Port of Entry (POE)
 - **Exit** — related to a person exiting the country at a POE
 - **Enforcement** — related to an activity by law enforcement
 - **National Security** — related to an activity involving national security
 - **Datashare** — related to the sharing of encounter and derogatory information data between groups.
 - **Other** — all other activities
- **Operation** — Simple Object Access Protocol (SOAP) specification terminology for the service you want to perform.
- **Encounter** — IDENT specific terminology for an activity that involves set of fingerprints for a single person.
- **Transaction** — IDENT specific terminology used to identify any time IDENT performs an action.

A list of acronyms can be found in Attachment A.

1.4 How to Read the Element Tables

Table 1-1 contains the legend used within the element tables for all operations.

Legend	Description
?	Optional element
*	Element with 0..m cardinality
+	Element with 1..m cardinality
()	Operator
	“OR” operator/choice
Underlined or highlighted in yellow	Default value
Superscript 1	This is an extension to an existing GJXDM element.
Superscript 2	These enumerated values are an application constraint.

Table 1-1: Element Tables Legend

2.0 Messaging Communication Protocols

2.1 Protocol

Simple Object Access Protocol¹ (SOAP) will provide the communications framework for the new US-VISIT/IDENT services. SOAP provides a lightweight protocol intended for exchanging structured information in a decentralized, distributed environment. The IDENT Web Service Description Language² (WSDL) will provide the protocol information needed to connect to IDENT systems.

2.2 Reply Messages

Web Service Addressing³ (WS-Addressing) provides transport-neutral mechanisms to address Web services and messages. WS-Addressing adds information headers to SOAP messages to provide message identification, message correlating (reply messages), and message routing using endpoint references.

2.3 WSDL Conformance

WS-I Basic Profile⁴ 1.0 consists of a set of non-proprietary Web services specifications including clarifications and amendments to specifications to promote interoperability. In order to promote interoperability, IXM WSDL runs through a WS-I Conformance tool successfully and is WS-I Conformant.

2.4 Security

The following security features are minimal requirements for the messaging services

2.4.1 Transport Level Security

For direct web services calls, the interface will use point-to-point connections with HyperText Transfer Protocol (HTTP) over Transport Layer Security (TLS). The Federal Information Processing Standard (FIPS) 140-2 Cryptographic Modules Validation List will be reviewed for each proposed cryptographic module proposed for the connection to verify that it meets the requirements in the National Institute of Standards and Technology (NIST) FIPS 140-2, *Security Requirements for Cryptographic Modules*

2.4.2 Message Level Security

SOAP messages will be signed using digital certificates. Only certificates from the Department of Homeland Security (DHS) Digital Identity Management Center will be used unless a waiver is approved by the Chief Information Security Officer. The Federal PKI Bridge will be the certification authority when IDENT connects to another Federal agency. When IDENT connects to a non-Federal agency, such as a state government, the connection is “one way trust” because the non-Federal agency is not part of the Federal PKI Bridge. These connections will be reviewed on a case-by-case basis, to include the third party certificate authority.

2.4.3 Authentication

IDENT messaging services verifies that the organization indicated within the request message is consistent with the arrival queue. This type of transport-level authentication and authorization guards against unauthorized individuals or groups from inserting IXM messages into the system.

¹ <http://www.w3.org/TR/soap/>

² For more information on the WSDL, refer to http://www.w3.org/TR/wsd1#_wsdl.

³ <http://www.w3.org/Submission/ws-addressing/>

⁴ For more details on WS-I Basic Profile, please refer to <http://www.ws-i.org/Profiles/BasicProfile-1.0-2004-04-16.html#conformance>.

2.5 Interfacing With IDENT

Each external user of IDENT may access IDENT messaging services in two different ways. A user may access the IDENT messaging services with a direct Web service call or submit a SOAP/XML message via a queue. Figure 2-1 illustrates two possible methods for connecting to IDENT using different variations of clients, messaging, and transport mediums. Interface Security Agreements will be brokered with each external user of IDENT. The IDENT system owner has the final authority in deciding to allow a direct Web service call for a particular end user.

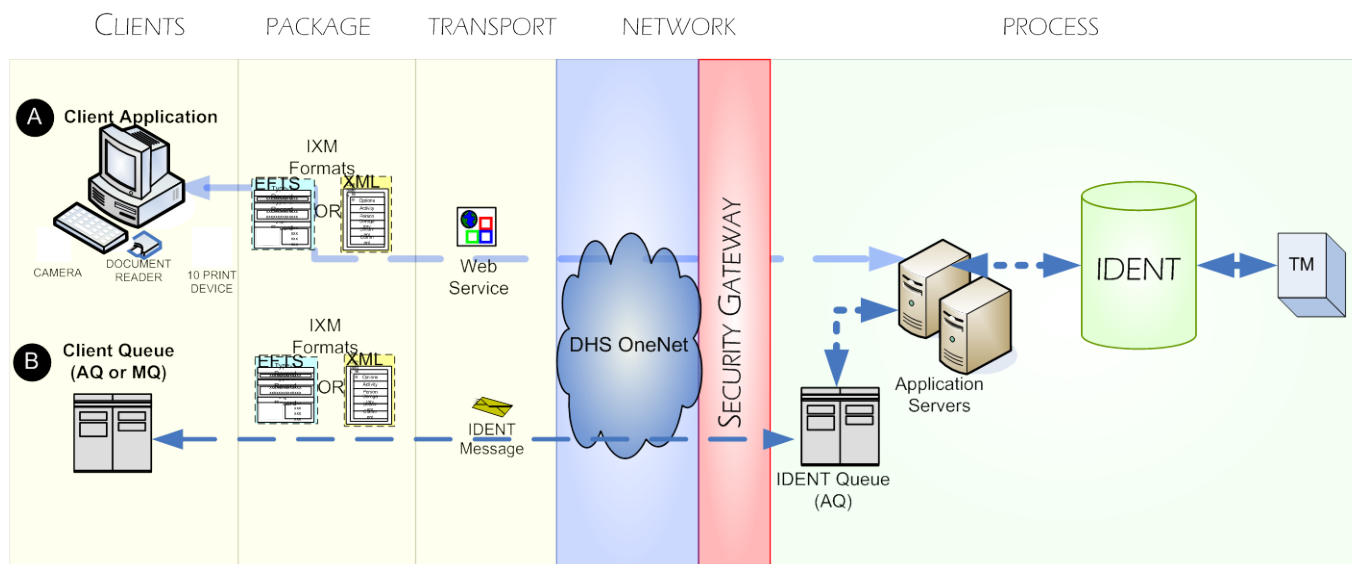


Figure 2-1: Methods of Interfacing with IDENT Messaging Services

In the first example (A), a client application with a document reader is used to capture biographical information. A peripheral camera and fingerprint scanner are used to capture biometrics. Next the data is formatted to the ANSI/NIST-ITL 1-2000 Standard and packaged in an IXM file (Electronic Biometric Transmission Specification (EBTS) or XML format) using a client application on the workstation. The IXM file is sent using direct web services call through DHS OneNet and arrives at IDENT for processing. For a direct Web service call, the user will access the Web services using a proxy or client application through HTTP over TLS. IDENT will obtain the message, process the request accordingly, and then return any acknowledgement or fault message back to the client through HTTP over TLS.

In the second example (B), a client application is used to capture biographical information. A peripheral camera and fingerprint scanner are used to capture biometrics. Next the data is formatted to the ANSI/NIST-ITL 1-2000 Standard and packaged in an IXM file (EBTS or XML format) using a client application on the workstation and then submitted via a client Oracle Advanced Queue (AQ), IBM WebSphere Message Queue (MQ), or TIBCO queue. For a SOAP/XML queue request, the IDENT application needs to have access to retrieve the message from the client-provided queue. The IXM file is sent through DHS OneNet and arrives at IDENT for processing. The IDENT queue will obtain the message, process the request accordingly, and then return any acknowledgement or fault message back to the client queue.

All IDENT IXM services reside on the application servers. The services parse the request message and store its content inside the IDENT database. The Transaction Manager performs the business logic for matching the biometric information and returns a response to the calling application.

2.6 Steps for Data Exchange

The IDENT suite of messaging services is comprised of both asynchronous and synchronous operations. The operations accept an XML document with only one end user or organization per transaction and the XML message must reside inside a SOAP message.

Clients may access the IDENT messaging services in two ways: direct web services call or queue request. A web services call is ideal for synchronous messages without a message reliability requirement. To guarantee message reliability, client applications may use queues to store the messages. Each customer is responsible for implementing their specific outbound and inbound queues using Oracle Advanced Queuing (AQ), IBM MQ Series, or TIBCO. IDENT will have an inbound and an outbound queue for request and response messages using Oracle AQ. The message type of the payload is specified as JMSBytes. The messages within the queues are processed in a “FIFO” order. There are no time constraints on getting a response at this time, but this may change in the future.

Table 2-1 lists the process overview steps for interfacing with the IDENT messaging services.

Step	Direct Web Services Call	Queue Request
1	Create an SOAP/XML Request message for the service. To prevent rework and resubmission via IDENT, make sure that the XML document is validated against the IDENT XML schema file before making a service call.	Same as direct Web services call.
2	Send the SOAP/XML Request message to the service via the HTTPS over TLS connection.	Send an SOAP/XML Request message to the Client Outbound Queue.
3	Receive the SOAP/XML Acknowledgement/Fault/Response via the HTTPS connection. If synchronous messaging services are successful, the Response Message will contain the requested data embedded in a SOAP Message.	Receive the SOAP/XML Acknowledgement/Fault/Response in the Client Inbound Queue. If synchronous messaging services are successful, the Response Message will contain the requested data embedded in a SOAP Message.
4	Parse the SOAP/XML Response message to retrieve data.	Parse the SOAP/XML messages in the Client Inbound Queue to retrieve data.
5	Identify and handle the response codes and error conditions.	Same as direct Web services call.
6	If the operation is an asynchronous service, a second response will be sent and this message will contain the requested data embedded in the SOAP Message.	Same as direct Web services call.

Table 2-1: Data Exchange Steps

2.7 Queue Request Setup in the JMS Message Header

To make a queue request to IDENT services, the JMS message header must be configured appropriately. The IXM services accept the JMS message type of BytesMessages (JMSBytes) as its payload. IXM services use the JMS message header field called JMSType to hold the content-type of the message. According to the JMS Specification 1.1, JMS clients should assign a value to the JMSType whether the application makes use of it or not. The IXM services require that the JMSType be defined to correctly process the message based on the client message format. The JMSType will enable the clients who provide a message definition repository to associate a reference to its physical format definition in the provider’s message repository. For XML-binary Optimized Packaging (XOP), the JMSType must be specified as “multipart/related.” For SOAP 1.2, the JMS Type must be specified as

“application/soap+xml.” For SOAP 1.1, the JMSType must be set to “text/xml.” Each of these content-types can have modifiers as needed. For example, XOP may have something like:

```
multipart/related; boundary=MIME_boundary; type="application/xop+xml"
```

The content-type uses the standard ‘;’ as the separator between modifiers.

The following describes the JMS message header fields and its properties in accordance to JMS Specification 1.1.

- **JMSDestination** — Specifies the destination queue to which the message is being sent. IXM services currently do not use this property.
- **JMSDeliveryMode** — Set to Persistent (default) for guaranteed message reliability.
- **JMSExpiration** — Default — Time to live is 0 (no expiration).
- **JMSPriority** — Optional. IXM services currently do not use this property.
- **JMSMessageID** — Automatically set by the send method.
- **JMSTimestamp** — Automatically set by the send method.
- **JMSCorrelationID** — Automatically set by the send method.
- **JMSReplyTo** — Specifies where a reply to the message should be sent. IXM services currently do not use this property.
- **JMSRedelivered** — Assigned by the Provider for message redelivery.
- **JMSType** — Client application should assign a JMS type of "multipart/related" for XOP, “application/soap+xml” for SOAP 1.2, or “text/xml” for SOAP 1.1.

2.8 Messaging Formats to IDENT Messaging Services

The IDENT interface messages provide data to client applications through messaging services. To interface with the IDENT, the host needs to send and receive SOAP/XML formatted messages. The WSDL provides client developers the operations and protocols necessary for the client application to make a request to the messaging services.

For all asynchronous IDENT messaging services, data is not immediately returned when the client application sends a SOAP/XML Request for data from the services. Rather, the service returns a Transaction Identifier and Encounter Identifier which the client may use at a later time (whether a few minutes or several hours later) to retrieve the requested records once they have been processed.

For additional information on the request, acknowledgement, fault, and response messages, please refer to the specific messaging operations in Table 4-1 and their XML schema structures starting in Section 4.5 Operations.

3.0 Messaging Standards

3.1 Data Model

The Global Justice XML Data Model⁵ (GJXDM) provides the foundation of the data dictionary used to define the IXM. Using GJXDM provides immediate benefits, since it allows US-VISIT/IDENT to leverage an existing data model, which has undergone intensive reviews since early 2003. Looking forward, GJXDM is a base for the ultimate deployment of the National Information Exchange Model⁶ (NIEM), and should simplify any future migration.

3.2 Application Data Model

In order to facilitate message documentation and validation, a subset of GJXDM has been selected, constrained, and extended to create a US-VISIT/IDENT data model. The constraints which have been applied are limited to element cardinality, lengths, and type restrictions. Each of these transformations does not invalidate the originally selected subset, but does provide application-specific details.

Figure 3-1 below describes the schema structures. IXM comprises the application XML data dictionary which is an application of GJXDM using the International Standards Organization (ISO), National Crime Information Center (NCIC), or other extensions. IXM contains all the elements needed to define the request, acknowledgement, and response messages which will be used by clients to format requests and interpret responses. The message schemas describe the requirements for a specific business function.

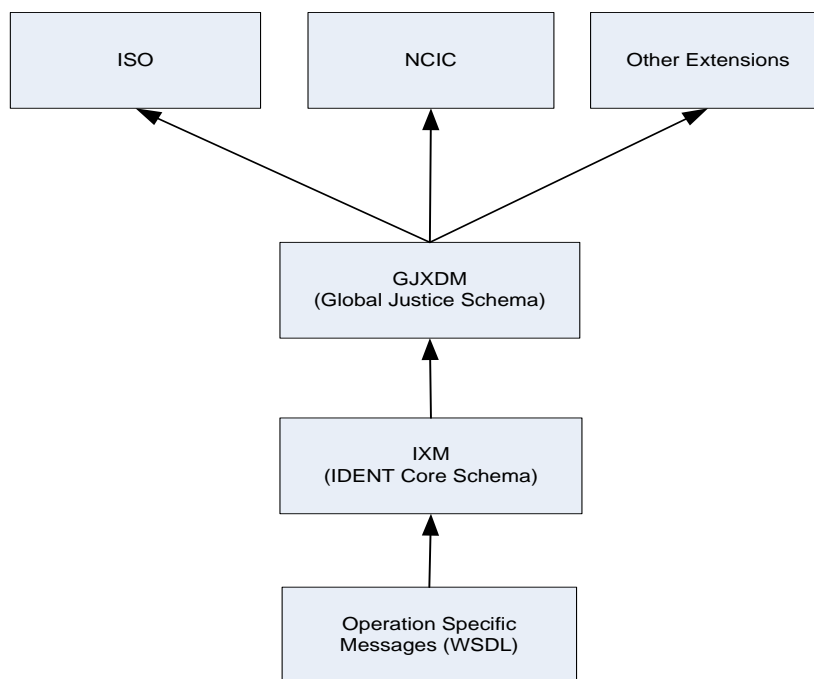


Figure 3-1: Application Data Model Diagram

3.3 Data

The Electronic Fingerprint Transmission Specification (EFTS) support has significantly shaped this specification. The EFTS file definition, including transactions and data fields, was used as a guide for the selection of a GJXDM subset. In addition, mappings between IXM data model and EFTS have been

⁵ <http://www.it.ojp.gov/gjxdm/>

⁶ <http://niem.gov/>

created in order to facilitate the use of EFTS within IXM. These mappings also promote interoperability between US-VISIT/IDENT and the Integrated Automated Fingerprint Identification System (IAFIS).

3.4 Message Structure

The body of each SOAP message invokes an individual operation. Figure 3-2 below shows the Message Structure. Explicitly defining each operation within an operation context will allow the XML schema to validate the operational details and data for each form of request. Each request message begins with an operation-specific section called Options which provides parameters to the specific operation. The Activity block is required information for all messages and is therefore shaded in the figure below

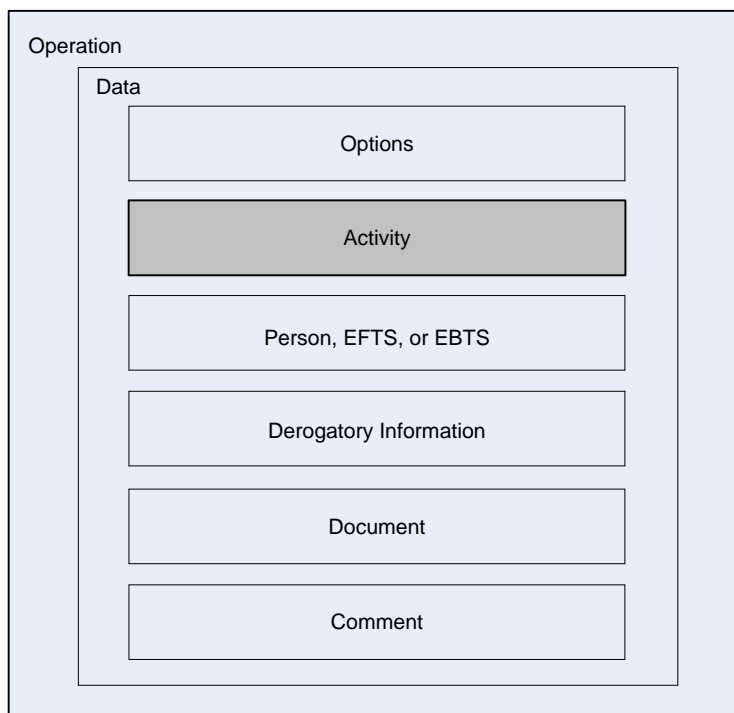


Figure 3-2: Message Structure

The Options block is followed by the Activity block. This Activity block is specific to the given activity performed by the organization making the request. Activity defines the activity being performed along with basic contextual information (e.g. who, what, where, etc.). Activities may span multiple messages, providing a consistent mechanism to relate a series of requests. Following the activity block is the Person block which contains the biographic information about an individual. Following the Person block are optional blocks consisting of DerogatoryInformation, Document, and Comment blocks and their corresponding sub-blocks. All sub-blocks inside the data section are the payload or service specific data. Below is a list of the data structures or blocks and their descriptions.

- **Operation** — SOAP specific terminology for the service you want to perform (e.g. Identify, Verify, RetrieveIdentity, RetrieveCriminalHistory, etc).
- **Data** — Payload information using GJXDM and IXM element hierarchy.
- **Options** — Additional information about the specific operation you want to perform. Specific options for each service are specified in attachments F1-F12
- **Activity** — An event about which an action is generated and may occur over a period of time or may have multiple operations. Contains the activity being performed (e.g. who, what, where, etc.).

- **Person, EFTS, or EBTS** — Contains person biographic and biometric information in GJXDM (XML), EFTS, or EBTS format.
- **DerogatoryInformation** — Contains derogatory information for an encounter.
- **Document** — Contains document information and document subject person for an encounter.
- **Comment** — Contains comment description information for an encounter activity

Figure 3-3 shows a standard message hierarchy which is also an example of an Identify request operation. For more information on the element definitions, please refer to Attachments D and E.

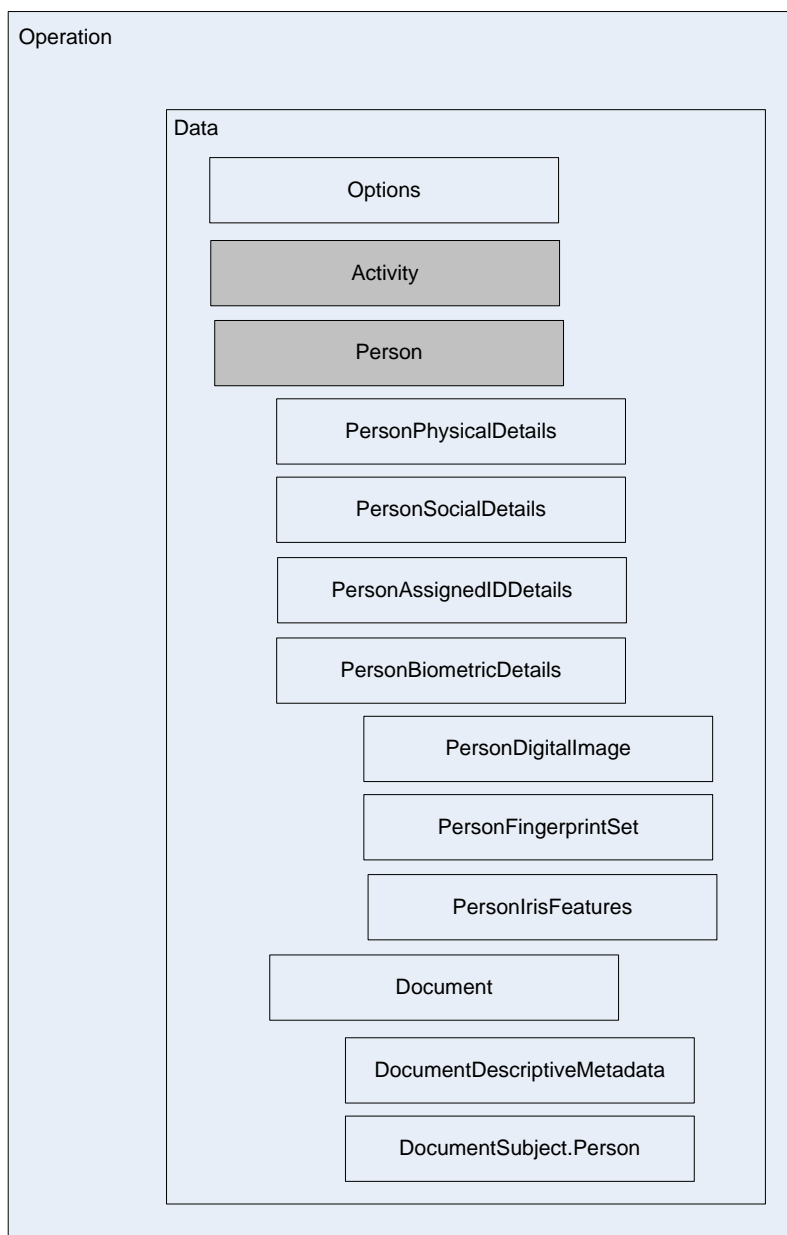


Figure 3-3: Identify Data Message Structure Example

4.0 Messaging Operations

Each operation (e.g. Identify, Verify, and other operations) is defined by a request, optional acknowledgement, and response, provided in a XML message format. The messaging services are SOAP operations designed to perform a specific business function or task. Each operation is classified as either synchronous or asynchronous. Synchronous messaging services provide a client with an immediate response for each request message. An acknowledgement message is defined for all asynchronous messaging.. If an error is encountered while processing the XML request messages, a Fault XML message is returned to the client.

4.1 Request Message

Every Request must be sent as a standard SOAP/XML message, formatted as defined in the IDENT Web services request schema and the WSDL provided. The details of the specific payload information for each service are provided in the request schemas. See Attachment B: for an Identify Request Body example.

4.2 Acknowledgement Message

For asynchronous operations, the system will send a Request Acknowledgement Message in a standard SOAP/XML message containing the Encounter ID (EID) which represents a unique identifier for the encounter involving an individual. The client application uses the EID to link their original requests and retrieve the response data for each request Activity. The synchronous web services contain no acknowledgment messages. See Attachment B: for an Acknowledgement Body identify example.

4.3 Fault Message

The system will send a Fault Message in a standard SOAP/XML message containing the message ID that the client application uses to link their original requests and retrieve the response data for each Request Activity. If an error occurred, the client application needs to parse the SOAP message for information on the error encountered and handle the errors accordingly. All requesting messages must validate against to the IXM schema (ident.xsd) file. For example, an element of data type date must have a standard XML schema date format which includes the date, month, and year.

4.4 Response Message

The system will send a Response Message in a standard SOAP/XML message with the response data embedded inside the SOAP message provided no system error occurred. If an error occurred, the client needs to parse the SOAP message for details regarding the error. The details of the Response messages vary for each service and are provided in the schema. See Attachment B: for an example of an Identification Response.

4.5 Operations

The following tables describe the operations, and their specific request, acknowledgement, fault, and response messages at a high-level.

Table 4-1 describes all operations related to identification, verification, and retrieval of biometric data.

Operations	Request	Acknowledgement	Fault	Response	Comment
<p>Identify (asynchronous) Given a biometric encounter searches the entire population of stored biometrics to find a previous encounter with the same biometrics. If a previous encounter is found, this new biometric encounters is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject).</p>	<ul style="list-style-type: none"> ▪ Options ▪ Activity ▪ Person, EFTS, or EBTS ▪ Person - 1 (including PersonPhysicalDetails, PersonSocialDetails, PersonAssignedIDDetails, and PersonBiometricDetails) ▪ Document —0:N (including Document DescriptiveMetadata, Document ControlMetadata, and DocumentSubject.Person) 	<ul style="list-style-type: none"> ▪ ActivityID ▪ ActivityResultDate ▪ ActivityResultTime ▪ EncounterID (when permitted by privacy rules/agreements) 	<ul style="list-style-type: none"> ▪ General SOAP Fault 	<ul style="list-style-type: none"> ▪ Activity (Result) ▪ EncounterID (when permitted by privacy rules/agreements) ▪ IdentityStatusCode (when permitted by privacy rules/agreements) ▪ EncounterSummary– 1:N (including EncounterID, EncounterTypeCode, EncounterDate, EncounterStatus) 	<ul style="list-style-type: none"> ▪ Use Identify for initial determination if an individual is on the biometric watch list then afterward use Verify instead for quicker response time. ▪ Multiple documents may have been presented ▪ A summary including multiple encounters may be returned ▪ Fingerprints can be 10-print rolled, identification flats, or 2-prints (2-print enrollment is being deprecated).
<p>Verify (synchronous) Given a biometric encounter and identity claim, compare stored biometrics associated with identity claim. If matched, this new biometric encounter is retained and associated with previous encounter. If not matched, initiate the Identify service.</p>	<ul style="list-style-type: none"> ▪ Options (VerifyRetainCode or IdentifyFormat) ▪ EncounterID or PersonEnumeratorID (Identifies Subject) ▪ Activity <ul style="list-style-type: none"> – Person - 1 (including PersonPhysicalDetails, PersonSocialDetails, PersonAssignedIDDetail s, and PersonBiometricDetails) ▪ Document —0:N (including Document DescriptiveMetadata, and DocumentSubject.Person) 	N/A	<ul style="list-style-type: none"> ▪ General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> ▪ Activity (Result) ▪ EncounterID ▪ VerificationStatusCode ▪ Watch List Status ▪ Potential EncounterSummary 	<ul style="list-style-type: none"> ▪ Use Verify when an EID or Enumerator is known to confirm an individual’s claim to an identity by comparing given biometric identifiers against previously enrolled biometric identifiers. ▪ EncounterID is only returned for encounters assigned to an existing biometric grouping.

Operations	Request	Acknowledgement	Fault	Response	Comment
<p>Retrieve Identity (synchronous) Given an encounter identifier, returns encounter details, including: physical details, biometric data (as requested) and document information. Returned information includes all encounters that are associated with the same person.</p>	<ul style="list-style-type: none"> Options (IdentifyFormatCode or EncounterBiometricCode) EncounterID or PersonEnumeratorID 	N/A	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) IdentifyStatusCode EncounterID EncounterSummary <ul style="list-style-type: none"> Person (including PersonPhysicalDetails, Photo, and Document) PersonBiometricDetails — PersonDigitalImage or FingerprintSet or PersonIrisFeatures 	<ul style="list-style-type: none"> Use Retrieve Identity when an EID is known to retrieve data on encounter and biometric information. Provide the user the ability to retrieve data on encounter and biometric information.
<p>RetrieveCriminalHistory (asynchronous) Retrieves any criminal history information associated with a given encounter identifier.</p>	<ul style="list-style-type: none"> EncounterID OrganizationORIID TransactionControlNumber 	<ul style="list-style-type: none"> ActivityID ActivityResultDate ActivityResultTime 	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) TransactionControlNumber PersonName PersonAssignedIDDetails CriminalHistoryText 	<ul style="list-style-type: none"> Use Retrieve Criminal History when an EID is known so that IDENT may submit a criminal history request to IAFIS for the previously associated biometric information
<p>PreVerify Given a biographic encounter and identity claim such as an FIN, and/or Document, compare stored biographic associated with identity claim. If matched, specifies what prints to capture via the VerifySync service. If not matched, initiate the IdentifySync service.</p>	<ul style="list-style-type: none"> Activity Fingerprint ID or EID Document 	N/A	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) FingerprintCaptureTechniqueCategoryCode ServicesOperationCode EID IdentityStatusCode FingerprintAnnotationDetails 	<p>The Pre-Verify Service will determine the number of prints to be captured and the subsequent IXM request to be sent to US-VISIT/IDENT.</p> <ul style="list-style-type: none"> - 10-Print Identify: If the traveler is unknown or the FIN from TECS is found to be invalid, then capture 10-Prints and Identify - 10-Print Verify: If the traveler is known, but not Enumerated OR is Enumerated, but has insufficient quality 10-prints, then capture 10-Prints and Verify - 4-Print Verify: If the traveler is Enumerated and has 10-prints of sufficient quality, then capture slap/4-prints and Verify - No Prints: If the traveler is known to be unprintable, then capture no prints

Operations	Request	Acknowledgement	Fault	Response	Comment
<p>IdentifySync (synchronous) Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject).</p>	<ul style="list-style-type: none"> Same as Identify above, but synchronous 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> General SOAP Fault 	<p>Activity (Result) EID</p> <ul style="list-style-type: none"> Identity 	<p>Use Identify for initial determination if an individual is on the biometric watch list then afterward use Verify instead for quicker response time. Multiple documents may have been presented A summary including multiple encounters may be returned Fingerprints can be 10-print rolled, identification flats, or 2-prints (2-print enrollment is being deprecated). No EncounterID is returned for identify only requests.</p>
<p>VerifySync (synchronous) Given a biometric encounter an identity claim, compare stored biometrics associated with identity claim. If matched, this new biometric encounter is retained and associated with previous encounter. If not matched, the entire population will be searched.</p>	<ul style="list-style-type: none"> Same as Verify above, but synchronous 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) Verification Status EID Identity 	<p>Use Verify when an EID or Enumerator is known to confirm an individual's claim to an identity by comparing given biometric identifiers against previously enrolled biometric identifiers. EncounterID is only returned for encounters assigned to an existing biometric grouping.</p>
<p>AddBiometrics (synchronous) Provides additional biometric information to existing biometric encounter.</p>	<ul style="list-style-type: none"> Activity EID PersonBiometricDetails 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) 	<p>Used capture additional 6 prints and send a Verify Service: Continue.</p>
<p>AddDisposition (synchronous) Provides a disposition to an existing encounter and other metric information.</p>	<ul style="list-style-type: none"> Activity EID PrimaryDispositionText ServiceRequesterMetric 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> Activity (Result) ServiceProviderMetric 	<p>Implemented specifically for the CBP officer at Primary to enter disposition information into the CBP client application and then send to US-VISIT/IDENT.</p>

Operations	Request	Acknowledgement	Fault	Response	Comment
<p>DerogatoryUpdateNotification (Notification Message Only) DerogatoryUpdateNotification is generated when a derogatory information about a subject is updated; when the subject is promoted or demoted from the Watchlist, or when a new Watchlist level DI is added to already promoted subject. The Notification Type in the message indicates promote, demote, or update. The message also contains the subject EID, it's owning OUS, and list of added and/or deleted DIs associated with that subject.</p>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Activity NotificationType EID+ IdentityStatusCode DerogatoryUpdateInformation+ 	
<p>EncounterNotification (Notification Message Only) EncounterNotification is generated when a biometric hit occurs for the watched subject. The message contains the EID of the existing encounter that is being watched and the EID of the new encounter that hits against the watched encounter.</p>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Activity EID+ EncounterSummary 	
<p>EnumeratorReassignNotification (Notification Message Only)</p>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> PersonEnumeratorID EID+ 	

Table 4-1: IDENT Messaging Operations

Table 4-2 describes all operations related to updating data within IDENT Systems

Operations	Request	Acknowledgement	Fault	Response	Comment
Add Derogatory Information (synchronous) Adds derogatory information to an encounter. The addition of such derogatory information may result in promoting the subject of the encounter to the biometric watch list.	<ul style="list-style-type: none"> ▪ Activity ▪ EncounterID ▪ Derogatory Information 	<ul style="list-style-type: none"> ▪ N/A 	<ul style="list-style-type: none"> ▪ General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> ▪ Activity (Result) ▪ DerogatoryInformationID 	
Deactivate Derogatory Information (synchronous) Updates derogatory information on an encounter. The updating of such derogatory information may result in demotion of the subject of the encounter from the biometric watch list.	<ul style="list-style-type: none"> ▪ Activity ▪ Derogatory InformationID 	<ul style="list-style-type: none"> ▪ N/A 	<ul style="list-style-type: none"> ▪ General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> ▪ Activity (Result) ▪ 	
DeleteEncounters (asynchronous) Removes an encounter from the US-VISIT/IDENT system..	<ul style="list-style-type: none"> ▪ Activity ▪ EncounterID 	<ul style="list-style-type: none"> ▪ ActivityID ▪ ActivityResultDate ▪ ActivityResultTime 	<ul style="list-style-type: none"> ▪ General SOAP Fault or ObjectNotFound Fault 	<ul style="list-style-type: none"> ▪ Activity (Result) ▪ 	

Table 4-2: IDENT Update Messaging Operations

5.0 Identify

The Identify messaging service searches IDENT using submitted biometric identifiers and enrolls the subject if no matches are found. The Identify messaging service is an asynchronous operation. This process provides a background check against the Watch List and can identify fraudulent applications.

Figure 5-1 depicts an Identify (previously known as Search) operation sequence diagram. In this case, the IDENT system receives an Identify request with the IdentifyRetainCode option set to Enroll from an external client. It then immediately responds with an Identify Acknowledgement message containing the EID after the payload is processed. Since the Identify operation is asynchronous, additional processing will continue on the back-end. After some time, the process will return the Watch List results with the EID and the status to the external client. Then, at a later time, the IDENT system will return the final Identify results to the external client. The rectangular bar shown in the diagram below is an activation box that indicates processing and time required to complete a task.

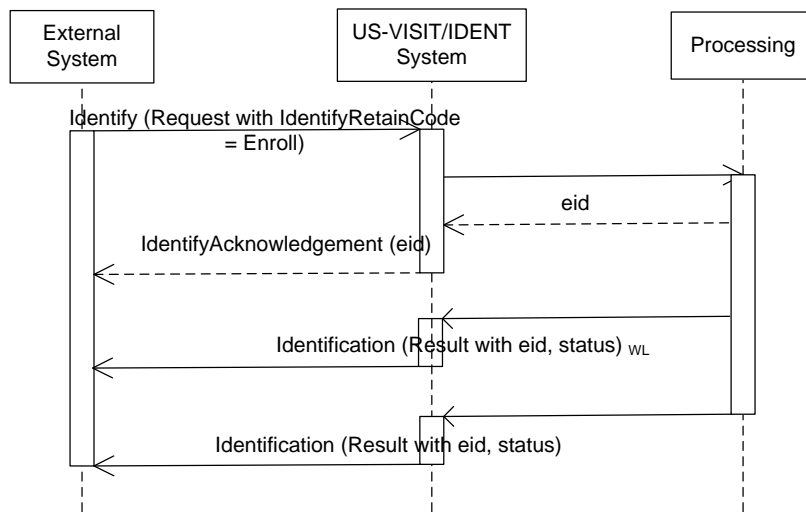


Figure 5-1: Identify Operation Sequence Diagram

5.1 Identify Element

Please see Attachment F1: Table F-1 for the element definition for an Identify request operation.

5.2 Identify Acknowledgement Element

Please see Attachment F1: Table F-2 for the element definition for an Identify Acknowledgement operation.

5.3 Identification Element

Please see Attachment F1: Table F-3 for the element definition for Identification, a result of the Identify operation.

6.0 Verify

The Verify messaging service determines if a subject is the same individual for whom a background check was conducted or a credential was issued. The Verify operation confirms the subject’s identity using submitted biometric identifiers against previously enrolled biometric identifiers.

Figure 6-1 below shows an external system requesting a Verify operation with the VerifyRetainCode option set to “Verify Only” option and the IDENT system immediately returning a Verify result of Match. Once a Match result is reported to the external system the request is completed. This example shows a synchronous Verify messaging service even though additional processing may occur after the result has been provided.

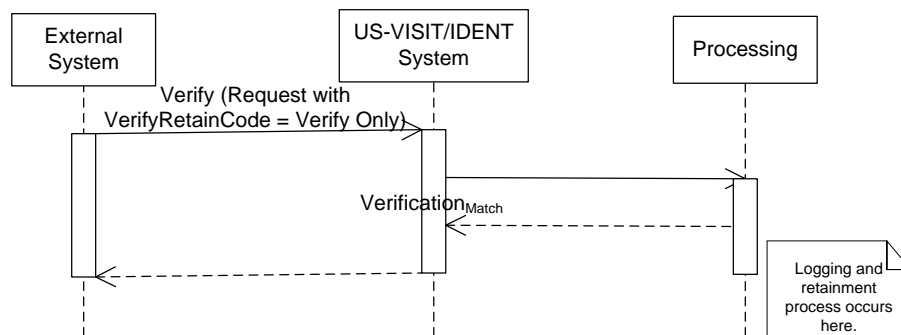


Figure 6-1: Match Verify Operation Sequence Diagram

Figure 6-2 below shows an example of a Verify operation as an asynchronous messaging service. In this case, an external system requests a Verify operation with Verify Only option and the IDENT system immediately returns a potential mismatch. The external system waits for a final result to be returned after further processing.

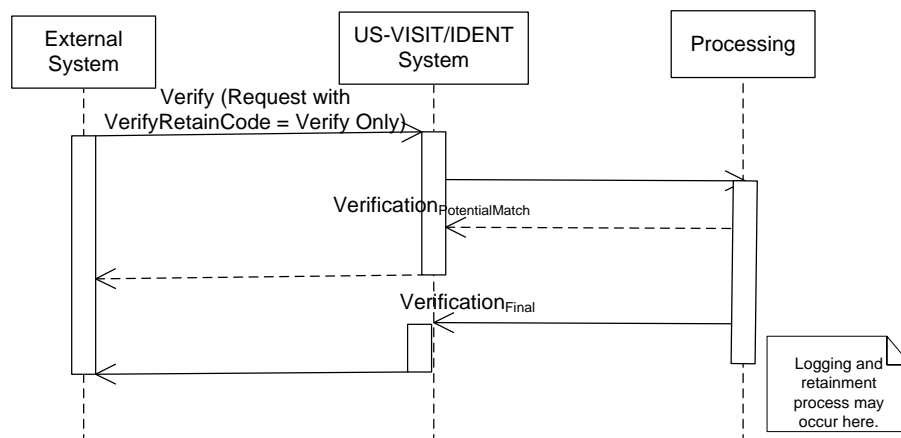


Figure 6-2: Potential Mismatch Verify Operation Sequence Diagram

6.1 Verify Element

Please see Attachment F2, Table F2-1 for the element definition for a Verify operation.

6.2 Verification Element

Please see Attachment F2, Table F2-2 the element definition for Verification, result of Verify operation.

7.0 Retrieve Identity

The Retrieve Identity operation accepts an EID and returns the details about the requested encounter and all other encounters associated with the subject. The external system may make a Retrieve Identity request with the IdentityFormatCode option set to List, Summary, or Detail and the EncounterBiometricsCode option set to None, DigitalImage, or All. The Retrieve Identity operation allows the external system to request biometric information including photographs, and fingerprints by using the EncounterBiometricsCode set to DigitalImage (photograph only) or All (all biometrics)

Figure 7-1 below shows a simple synchronous Retrieve Identity message service communication between the external system and the IDENT system. The external system submits a Retrieve message and it will receive the result or a fault message. No additional back-end processing occurs for the Retrieve Identity operation.

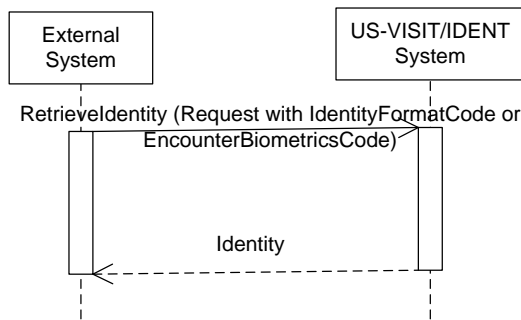


Figure 7-1: Retrieve Identity Operation Sequence Diagram

7.1 Retrieve Identity Element

Please see Attachment F3, Table F3-1 for the element definition for a Retrieve Identity operation.

7.2 Identification Element

Please see Attachment F3, Table F3-2 for the element definition for Identification, the result of Retrieve Identity operation.

8.0 Retrieve Criminal History

Following the submission of an IDENT Identify operation, the external client may additionally request retrieval of a Criminal Master File or Civil File via the Retrieve Criminal History messaging operation.

Figure 8-1 below shows a sequence diagram indicating a user making two separate requests for initial enrollment to IDENT via an Identify operation. This is immediately followed by a Retrieve Criminal History request which results in the IDENT system submitting an EBTS record format to IAFIS. This Retrieve Criminal History messaging operation is asynchronous because of the time lag between the initial Identify operation and the additional time required for IAFIS to return the final result to the user. Once the user receives the EID from the Identify Acknowledgement, the user may submit a Retrieve Criminal History request with the provided EID.

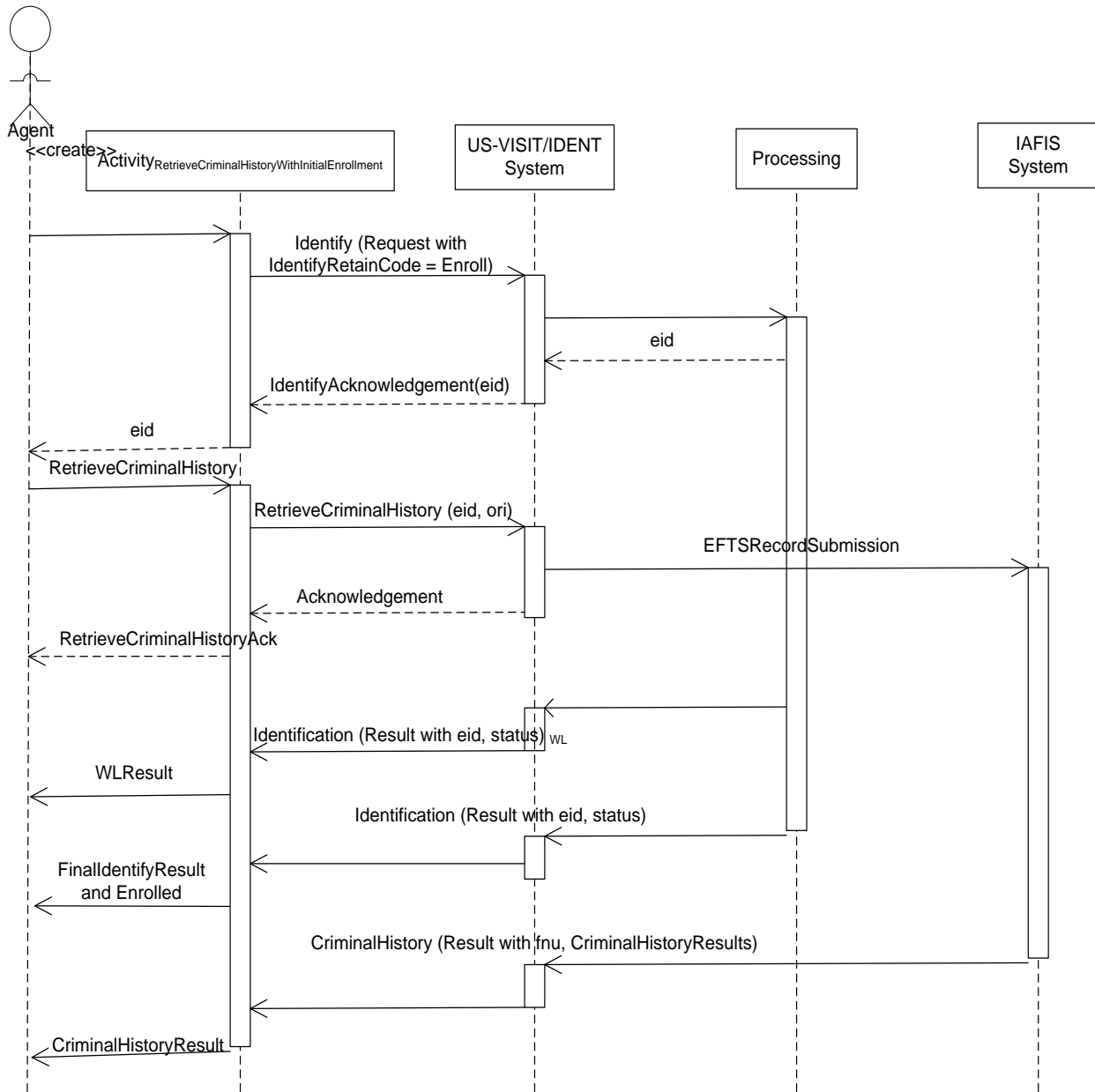


Figure 8-1: Identify Followed By Retrieve Criminal History Operation Sequence Diagram

Figure 8-2 below shows only the Retrieve Criminal History operation. The user may request the Retrieve Criminal History operation directly following the initial enrollment to IDENT system shown in Figure 8-1. Immediately following the external client requests of Retrieve Criminal History, the IDENT system will send a standard Acknowledgement message including the date and time to the external client. The final Criminal History result will be provided as soon as IAFIS completes processing.

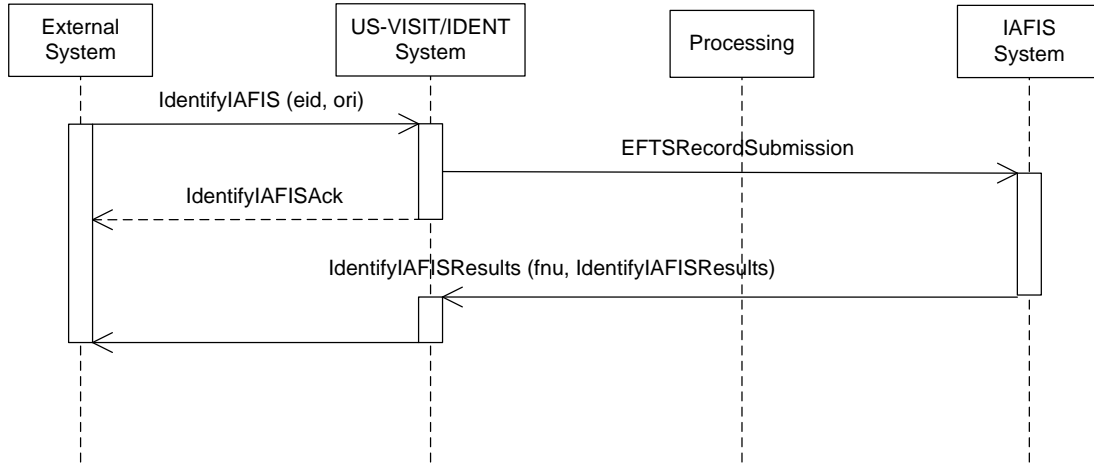


Figure 8-2: Retrieve Criminal History Operation Sequence Diagram

8.1 Retrieve Criminal History Element

Please see Attachment F4, Table F4-1 for the element definition for a Retrieve Criminal History request operation.

8.2 Retrieve Criminal History Acknowledgement Element

Please see Attachment F4, Table F4-2 for the element definition of Acknowledgement of a Retrieve Criminal History operation.

8.3 Criminal History Element

Please see Attachment F4, Table F4-3 the element definition of Criminal History, result of Retrieve Criminal History operation.

9.0 PreVerify

A PreVerify operation is a synchronous service. It accepts either a Fingerprint ID (FIN) or Encounter ID (EID) along with Document information or Document information without the FIN or EID. PreVerify specifies if a biometric encounter exists in US-VISIT/IDENT system, what type of fingerprints to capture, and what service operation code to perform in the next request messages to IDENT. If no error occurs, the US-VISIT/IDENT system then returns the PreVerification message. If an error occurs, a SOAP fault will be returned. Please refer to Attachment F for all US-VISIT/IDENT services implemented and used by external agencies. Figure 9-1 below shows a sequence diagram of the PreVerify service.

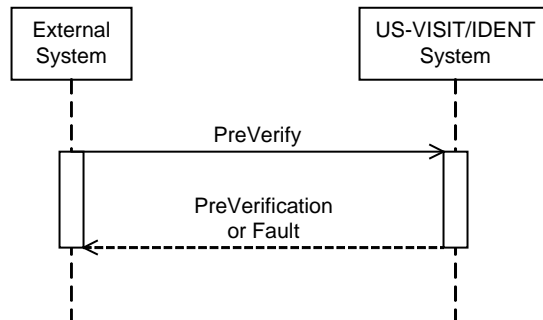


Figure 9-1. PreVerify Sequence Diagram

9.1 PreVerify Element

Please see Attachment F5, Table F5-1 for the element definition for a PreVerify request operation.

9.2 PreVerification Element

Please see Attachment F5, Table F5-2 the element definition of PreVerification, result of PreVerify operation.

10.0 IdentifySync

An IdentifySync operation is a synchronous service used for submitting new biometric encounter information. The IdentifySync service is used for initial determination if an individual is on the biometric watch list. If no error occurs, the US-VISIT/IDENT system then sends an IdentificationSync message to the calling application. If an error occurs, a SOAP fault will be returned. Figure 10-1 below shows a sequence diagram of the IdentifySync service. Please refer to Attachment F for all US-VISIT/IDENT services used by external agencies.

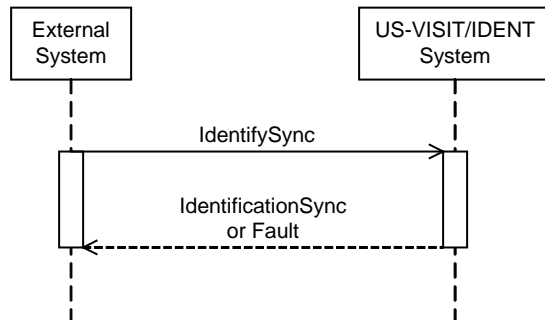


Figure 10-1. IdentifySync Sequence Diagram

10.1 IdentifySync Element

Although the service operation is different, the payload content of IdentifySync is the same as Identify payload. Please see Attachment F7, Table F-1 for the element definition for an IdentifySync request operation.

10.2 IdentificationSync Element

Although the service operation is different, the payload content of IdentificationSync is the same as Identification payload. Please see Attachment F7, Table F-2 the element definition of IdentificationSync, result of IdentifySync operation.

11.0 VerifySync

A VerifySync operation is a synchronous service. Use VerifySync when an EID or Enumerator is known to confirm an individual's claim to an identity by comparing given biometric identifiers against previously enrolled biometric identifiers. An EID is only returned for encounters assigned to an existing biometric grouping. If no error occurs, the US-VISIT/IDENT system then sends a VerificationSync message to the calling application. If an error occurs, a SOAP fault will be returned. Figure 11-11 below shows a sequence diagram of the VerifySync service. Please refer to Attachment F for all US-VISIT/IDENT services used by external agencies.

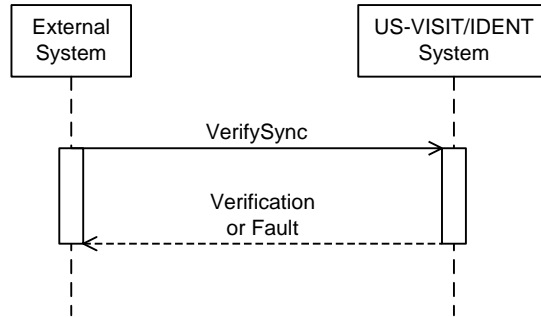


Figure 11-1. VerifySync Sequence Diagram

11.1 VerifySync Element

Although the service operation is different, the payload content of VerifySync is the same as Verify payload. Please see Attachment F8, Table F2-1 for the element definition for a VerifySync request operation.

11.2 VerificationSync Element

Although the service operation is different, the payload content of VerificationSync is the same as Verification payload. Please see Attachment F8, Table F2-2 the element definition of VerificationSync, result of IdentifySync operation.

12.0 AddBiometrics

An AddBiometrics operation is a synchronous service. Use the AddBiometrics service to provide additional 6-Prints to US-VISIT/IDENT system once US-VISIT/IDENT has determined that the quality of the biometric is insufficient. If no error occurs, the US-VISIT/IDENT system then sends a BiometricsAdded message to the calling application. If an error occurs, a SOAP fault will be returned. Figure 12-1 below shows a sequence diagram of the AddBiometrics service. Please refer to Attachment F for all US-VISIT/IDENT services used by external agencies.

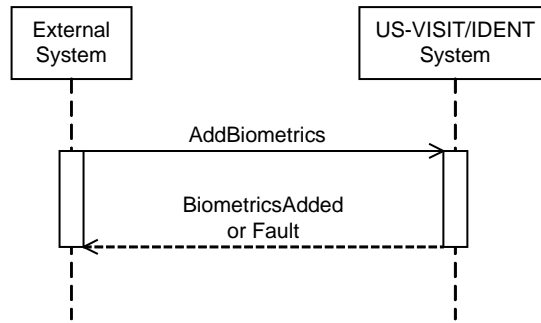


Figure 12-1. AddBiometrics Sequence Diagram

12.1 AddBiometrics Element

Please see Attachment F6, Table F6-1 for the element definition for an AddBiometrics request operation.

12.2 BiometricsAdded Element

Please see Attachment F6, Table F6-2 the element definition of BiometricsAdded, result of AddBiometrics operation.

13.0 AddDisposition

An AddDisposition is a synchronous operation. Use the AddDisposition request message to provide disposition and metric information to the US-VISIT/IDENT system. If no error occurs, the US-VISIT/IDENT system then sends a BiometricsAdded message to the calling application. If an error occurs, a SOAP fault will be returned. Figure 13-1 below shows a sequence diagram of the AddDisposition service. Please refer to Attachment F for all US-VISIT/IDENT services used by external agencies.

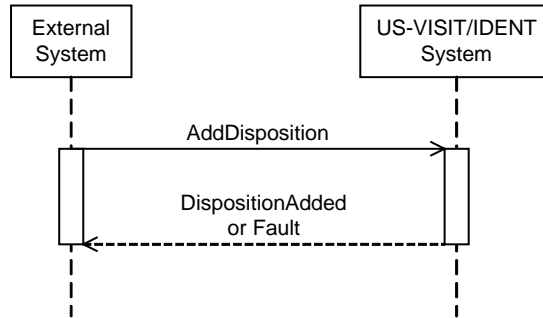


Figure 13-1. AddDisposition Sequence Diagram

13.1 AddDisposition Element

Please see Attachment F6, Table F6-3 for the element definition for an AddDisposition request operation.

13.2 DispositionAdded Element

Please see Attachment F6, Table F6-4 the element definition of DispositionAdded, result of AddDisposition operation.

14.0 Notification Messages

A notification message specifies to the clients a change that may occur about an encounter record. Consumers of the messaging services may subscribe to any notification messages. Subscribers will receive the following notification messages:

- **DerogatoryUpdateNotification** — This message is generated when a derogatory information about a subject is updated; when the subject is promoted or demoted from the Watchlist, or when a new Watchlist level DI is added to already promoted subject. The Notification Type in the message indicates promote, demote, or update. The message also contains the subject EID, it's owning OUS, and list of added and/or deleted DIs associated with that subject.
- **EncounterNotification** - This message is generated when a biometric hit occurs for the watched subject. The message contains the EID of the existing encounter that is being watched and the EID of the new encounter that hits against the watched encounter.
- **EnumeratorNotification** — This message is generated when an enumerator is added, changed, or deleted to an identity known by the external stakeholder,
- **EnumeratorReassignNotification** — This message is generated when the enumerator is reassigned to a different encounter within the identity.

14.1 DerogatoryUpdateNotification Element

Please see Attachment F12, Table F11-1 for the element definition for a DerogatoryUpdateNotification message.

14.2 EncounterNotification Element

Please see Attachment F12, Table F11-2 for the element definition for a EncounterNotification message.

14.3 EnumeratorNotification Element

Please see Attachment F12, Table F11-3 for the element definition for an EnumeratorNotification message.

14.4 EnumeratorReassignNotification Element

Please see Attachment F12, Table F11-4 for the element definition for an EnumeratorReassignNotification message.

15.0 SOAP and WS-Addressing Header Information

This section contains information about the SOAP header and the WS-Addressing elements used for reply messages. Check the WS-Addressing 1.0 Core Specification and SOAP Version 1.2 Specification for more details on elements used in this section. For an example of a SOAP header with WS-Addressing, please refer to Attachment B.

15.1 SOAP Request Header

All request messages for each service operation must have a SOAP request header with the following WS-Addressing elements specified below.

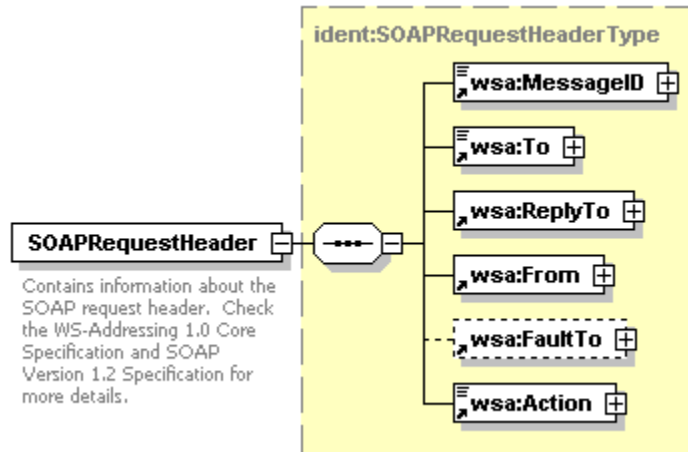


Figure 15-1: SOAP Request Header Element

15.2 SOAP Acknowledgement Header

Figure 15-2 specifies the WS-Addressing elements that the external users will receive from the IDENT message operations for all acknowledgement header messages

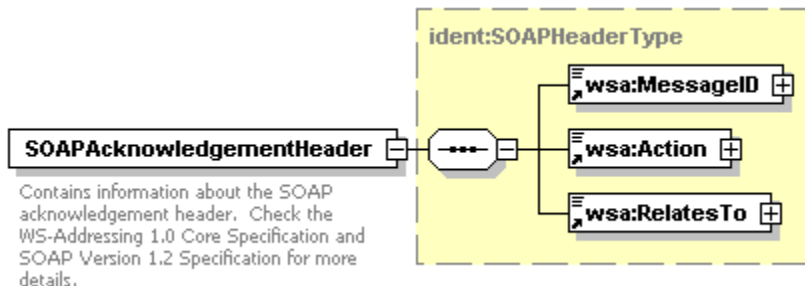


Figure 15-2: SOAP Acknowledgement Header Element

15.3 SOAP Response Header

Figure 15-3 specifies the WS-Addressing elements that the external users will receive from the IDENT message operations for all response header messages.

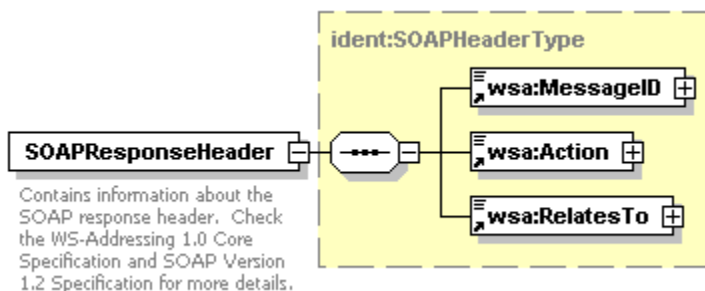


Figure 15-3: SOAP Response Header Element

15.4 SOAP Fault Header

Figure 15-4 specifies the WS-Addressing elements that the external users will receive from the IDENT message operations for all fault header messages. This message contains the same set of elements defined in the response and acknowledgement header messages.

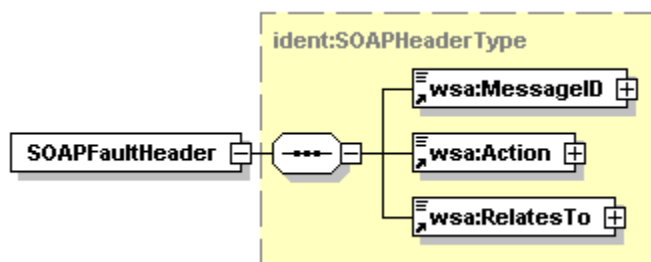


Figure 15-4: SOAP Fault Header Element

16.0 Error Messages and SOAP Fault

All message or service operations may return a fault or error messages in the format of a SOAP fault message as specified in the SOAP 1.2 Specification. The SOAP header will contain the related to message ID that the client application uses to link their original requests. If an error occurred, the client application needs to parse the SOAP message for information on the error encountered and handle the errors accordingly. When XML document errors are encountered, the system returns the validation error messages. Corrections to the XML document will need to be made by the end-users and re-submitted. Figure 16-1 specifies the SOAP fault elements that the external users may receive from the message operations.

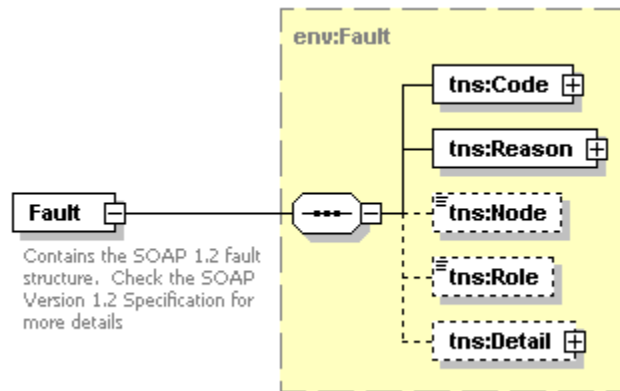


Figure 16-1: SOAP Fault Element

The SOAP fault detail element may contain error code and message text that is specific to the IDENT service operations under the IDENTFault element. Figure 16-2 specifies the FaultDetails within the SOAP fault detail elements that the external users may receive from the message operations (shown in bottom right). Under the FaultDetails is an IDENT specific FaultDetail element that contains the error code for an error and the message text for the description of the error.

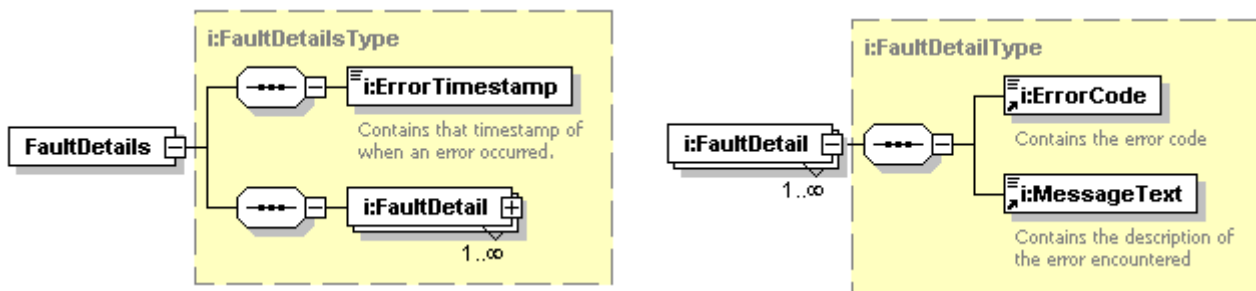


Figure 16-2: FaultDetails Element

Refer to Attachment B for an example of an XML file showing an example of a SOAP fault details message with IDENT specific error code and message text defined in the SOAP detail element.

For a list of possible error codes and error messages provided by the IDENT operations, please refer to Attachment D.

17.0 Submitting an EFTS Package

IXM promotes interoperability with IAFIS by allowing external clients to submit data to IDENT in two ways: (1) using the EFTS binary format in a base64 encoding EFTS XML element or (2) using a GJXDM Person structure in XML format. IXM EFTS data element preserves the exact content of the EFTS format including its Type-1, Type-2, and Type-14 records as needed for submission to IAFIS.

When using the Identify or the Verify messaging service the external client may submit either an “EFTS format” record or an “XML format” record (the latter follows GJXDM element naming conventions). All response messages are in XML format, even if the request was submitted in EFTS format. To submit an EFTS format record to the Identify messaging service, the content of the payload contains the Activity, Identify Option (Identify Only, Identify Assigned, or Identify Enrolled), and EFTS data elements. For examples of the Identify operation using XML or EFTS format, please refer to the Attachment B of the IXM Specification 3.1.

When using an “EFTS format” record, the EFTS data element is a base64 encoded binary text data type. All EFTS records submitted in an EFTS data element must follow the standard EFTS format. The EFTS format was based on the ANSI/NIST-ITL non-XML standard EFTS package. Since EFTS is a binary format and XML only allows for specific characters, the entire EFTS package must be base64 encoded. This is not the case when the “GJXDM format” option is used.

When using “GJXDM format” for submission, only the image data is base64 encoded. Like the ANSI/NIST-ITL XML Ad Hoc Group’s schema, the IXM “GJXDM format” messages specify base64 encoding only for the binary data. All other data is supplied in XML-tagged clear text.

The IXM Specification 3.1 document provides element definition tables for the XML elements. These tables have a standardized structure where an element is identified by an element name and then its sub-elements. For each sub-element, all possible Format/Values are called out. In the IXM document tables, the listed Format/Values are not constrained by the context. For example, a sub-element called “BinaryFormatText” can generally have one of six values:

- application/efts
- application/ebts
- image/jpg
- image/wsqa
- application/x-mnt
- application/x-fbk

In a given context, only one of these is correct. However, all six are always called out in the tables whenever BinaryFormatText is described.

An image/jpg is used when submitting facial digital images. An image/wsqa is used when submitting fingerprint images. Application/efts is only used when you have chosen the option to submit in an “EFTS format” record format. In this case, the complete EFTS transaction submission package is treated as a binary object and encoded in base64. An example of an Identify operation using an EFTS format is shown in Attachment B. Note that Attachment B provides examples of the two alternatives for an IXM submission: (1) using the “GJXDM format” and (2) using the “EFTS format”.

Although IXM accepts all base64-encoding binary data elements, it is recommended that external client applications support base64 encoding using XML-binary Optimized Packaging (XOP) for attaching binary outside of the XML data to optimize communications.

For a table of how EFTS fields map to IXM and GJXDM messaging, please refer to Attachment C.

18.0 Additional Information

This section contains additional information useful for processing and packaging the XML data.

18.1 Fingerprint Set Definition

Table 18-1 contains the IDENT fingerprint set definition.

Fingerprint Types	Fingerprint Finger Code	Impression
10-Print Rolled	1-10 11-14	Impression 1 (Live-Scan Rolled) or 3 (Nonlive-Scan Rolled) Impression 0 (Live-Scan Plain) or 2 (Nonlive-Scan Plain)
Identification Flat (10-prints)	13-15	Impression 0 (Live-Scan Plain) or 2 (Nonlive-Scan Plain)
2-Prints	1-10	Impression 0 (Live-Scan Plain), 1 (Live-Scan Rolled), 2 (Nonlive-Scan Plain), or 3 (Nonlive-Scan Rolled)

Table 18-1: IDENT Fingerprint Set Definition

18.1.1 10-Print Rolled

10-Print Rolled fingerprints consist of 14 fingerprint images (each finger has its own image). It contains the following fingerprint information.

- 10 single finger (1-10 images) with impression type of Live-Scan Rolled or Nonlive-Scan Rolled
- 4 slaps (4 images) with impression type of Live-Scan Plain or Nonlive-Scan Plain with the following finger code (e.g. FingerprintFingerCode).
 - 11 — right thumb
 - 12 — left thumb
 - 13 — right four fingers
 - 14 — left four fingers

18.1.2 Identification Flat

An Identification Flat is a type of 10-Print that contains the following fingerprint information.

- 3 fingerprint images (1 image per fingerprint) with impression type of Live-Scan Plain or Nonlive-Scan Plain
- The following are the finger codes for Identification Flat.
 - 13 right four fingers (4 segments with fingers 2, 3, 4, 5)
 - 14 left four fingers (4 segments with fingers 7, 8, 9, 10)
 - 15 left and right thumbs (2 segments with fingers 1, 6)
 - When the individual is missing both thumbs, external agencies should send US-VISIT fingerprint code 15 as amputated or missing with no image rather than sending annotations for each finger.
 - When the individual is missing all fingers from one slap, external agencies must send US-VISIT the slap (fingerprint code of 13 or 14) as amputated or missing with no image rather than sending annotations for each finger.
 - All fingerprint types with a finger pattern code of either bandaged or amputated do not require image or segment information.

Table 18-2 below following describes the fingerprint priorities for 10-Print Identification Flats.

Fingerprint Sets Definition and Priorities
IXM Verify shall accept a minimum of 3 fingers from a slap when verifying the identity of an enumerated individual with sufficient quality prints

Fingerprint Sets Definition and Priorities
IXM Identify shall accept minutiae for 3 prints per hand, 2 total prints may be accepted if no other prints are available, from CBP OIT application for each individual per encounter.
IXM Identify shall accept the first 3 extracted features from both hands in the following priority order: Index, Middle, Ring, Thumb, Pinky
IXM Identify shall accept at least 2 extracted features from individuals who have unprintable fingers (temporary or permanent).
IXM Verify shall accept minutiae for 3 prints per hand from CBP OIT application for each individual per encounter.
IXM Verify shall accept the first 3 extracted features from both hands in the following priority order: Index, Middle, Ring, Thumb, Pinky
IXM Verify shall accept at least 2 extracted features from individuals who have unprintable fingers (temporary or permanent).
IXM Identify shall accept the first 3 extracted features from one hand if any print is damaged (temporary or permanent) in the following priority order: Index, Middle, Ring, Thumb, Pinky
IXM Identify shall accept the first 3 extracted features from one hand if the individual is missing a hand in the following priority order: Index, Thumb, Middle, Ring, Pinky
IXM Verify shall accept the first 3 extracted features from one hand if any print is damaged (temporary or permanent) in the following priority order: Index, Middle, Ring, Thumb, Pinky
IXM Verify shall accept the first 3 extracted features from one hand if the individual is missing a hand in the following priority order: Index, Thumb, Middle, Ring, Pinky
IXM Verify shall accept the first 3 extracted features from a slap in the following priority order: Index, Middle, Ring, Pinky

Table 18-2: Fingerprint Set Priorities

18.1.3 2-Prints

Two-prints consist of 2 fingerprint images with impression type of Live-Scan Plain/Rolled or Nonlive-Scan Plain/Rolled for finger code 2 and 7. The following is the Immigration and Customs Enforcement (ICE) finger replacement policy for missing index finger for 2-prints.

- If the RIGHT index finger is missing, provide the alternative finger code from the RIGHT hand in the following order, thumb, middle, ring, and little.
- If the LEFT index finger is missing, provide the alternative finger code from the LEFT hand in the following order: thumb, middle, ring, and little.
- If the one of the hand is missing, provide the finger code from the other hand in the following order: thumb, middle, ring, and little.
- Each image must be of different finger code.

18.1.4 Bandaged or Amputated Finger

All fingerprint types with finger pattern code of either bandaged or amputated does not require image or segment information.

18.2 Binary Data Package

This section describes the packaging of binary data within a SOAP/XML messaging services. The IDENT messaging services support base64 encoding using XML-binary Optimized Packaging (XOP) for attaching binary outside of the XML data to optimize communications. An XOP package is created by

placing a serialization of the XML data using Multipurpose Internet Mail Extensions (MIME) encapsulation. Any base64-encoded binary data (with XML Schema base64Binary datatype) inside the XML payload are extracted and re-encoded and placed in the XOP package. The portions of the binary data are marked with element `xop:Include` that includes links to the packaged data using URIs in the attribute `href`. Figure 18-1 below shows is an example of a binary data for a photo prior to XOP processing.

XOP Sample
<pre> <!-- Below is an example of a binary data of a photo prior to XOP processing.. --> <m:data xmlns:m='http://example.org/stuff'> <m:photo>/aWKKapGGyQ=</m:photo> </m:data> <!--Below is the serialized XOP package of the photo.--> --MIME_boundary Content-Type: application/xop+xml; charset=UTF-8; type="text/xml" Content-Transfer-Encoding: 8bit Content-ID: <mymessage.xml@example.org> <m:data xmlns:m='http://example.org/stuff'> <m:photo><xop:Include xmlns:xop='http://www.w3.org/2004/08/xop/include' href='cid:http://example.org/me.png'/></m:photo> </m:data> </pre>

Figure 18-1.XOP Sample

For additional information on the XOP, please refer to the URL below.

<http://www.w3.org/TR/2005/REC-xop10-20050125/>.

18.3 Country and Place of Birth Codes

IXM uses the International Organization for Standardization (ISO) 3166-1 alpha-3 characters country codes for citizenship (PersonCitizenshipCode) and nationality (PersonNationalityCode) codes. IDENT currently does not support two character country codes.

IXM uses the two characters National Crime and Information Center (NCIC) codes for place of birth (PersonBirthPlaceCode) that identifies the state, province, or country of a person's birth. Although IAFIS requires the place of birth in its EFTS record submission, the IDENT messaging format has place of birth as an optional element since most clients do not have the information nor require it. For those agencies that need to perform an IAFIS Search, they need to provide place of birth via IXM. If the agencies do not have place of birth and according to the EFTS record submission, they should provide either 'YY' (country not on the list), or 'XX' (unknown).

18.4 Document Type Codes

Table 18-3 below contains the document type as specified with the IXM Specification. Additional document types may be implemented based on applicable business requirements and official US-VISIT/IDENT Government direction.

Document Type	Description
A	Permanent Resident Card Prior to 1998
S	Social Security Number
B	Border Crossing Card
C	Permanent Resident Card (Legacy IDENT)
F	Facilitation Document
I	INSPASS Document
M	Military
P	Passport
T	Reentry Permit Refugee
V	Visa
VI	Immigrant Visa
VN	Non-Immigrant Visa
C1	Permanent Resident Card
A1	Alien Registration Card
TR	Re-entry Permit, issued to 2003
TP	Refugee Travel Document (Re-entry Permit prior to 2003)

Table 18-3.Document Type Codes

18.5 Date and Time Data Elements

All date and time data element pairs must have the same time zone offset. This applies for all date and time element pairs within the IXM schema such as ActivityDate, ActivityTime, BiometricCaptureDate, BiometricCaptureTime, BinaryCaptureDate, BinaryCaptureTime, and others. If no time zone offset is specified within the IXM date or time data elements, then the IXM XML schema will default to the Coordinated Universal Time (UTC) time zone. If there exists any missing time zone between the date and time data element pairs, the default will also be UTC. UTC is also referred to as Zulu time. If the time zone provided in the correlated date and time data elements do not match each other, then an error (IXM-19010) is returned to the client application. If an error occurs, a SOAP fault will be returned (see Table 4-4).

Attachment A: Acronyms and Abbreviations

The following acronyms and abbreviations are used in this document.

Acronym	Description
AFIS	Automated Fingerprint Identification System
AFSP	Alien Flight Student Program
AQ	Advanced Queue
ASC	Application Support Center
BCC	Border Crossing Card
CBP	Customs and Border Protection
CCB	Change Control Board
CIS	Citizenship and Immigration Services
DHS	Department of Homeland Security
DOB	Date of Birth
DOJ	Department of Justice
DoS	Department of State
EFTS	Electronic Fingerprint Transmission Specification
EID	Encounter ID
FBI	Federal Bureau of Investigation
FIN	Fingerprint Identification Number
GES	Global Enrollment Services
GJXDM	Global Justice XML Data Model
HTTP	HyperText Transfer Protocol
IAFIS	Integrated Automated Fingerprint Identification System
ICE	Immigration and Customs Enforcement
IDENT	Automated Biometric Identification System
ISO	International Standards Organization
IV	Immigrant Visa
IXM	IDENT Exchange Messages
MIME	Multipurpose Internet Mail Extensions
MQ	Message Queue
NCIC	National Crime Information Center
NIEM	National Information Exchange Model
NIV	Non-Immigrant Visa
ORI	Originating Agency Identifier
POB	Place of Birth
POE	Port of Entry
SID	State Identification Number

Acronym	Description
SOAP	Simple Object Access Protocol
SSL	Secure Socket Layer
US-VISIT	United States Visitor and Immigrant Status Indicator Technology
WS-Addressing	Web Service Addressing
WSDL	Web Services Description Language

Attachment B: Identify Messaging Samples

This section contains example XML messages with the SOAP header for the Identify operation including the request, acknowledgement, and response messages.

Table B-1 below shows the Identify request message using XML/GJXDM format.

Identify (XML Format using GJXDM Standard without EFTS Format)
<pre> <?xml version="1.0" encoding="UTF-8"?> <env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header xmlns:wsa="http://www.w3.org/2005/08/addressing"> <wsa:MessageID>TSA34MM111111111</wsa:MessageID> <!-- Provide a known URI destination below--> <wsa:To>https://usvisit.dhs.gov/soap/services/ixm</wsa:To> <wsa:From> <wsa:Address> hostURI://from_TSA@dhs.gov </wsa:Address> </wsa:From> <wsa:ReplyTo> <!-- Provide a known URI destination or an anonymous address as below--> <wsa:Address> http://www.w3.org/2005/08/addressing/anonymous</wsa:Address> </wsa:ReplyTo> <wsa:Action>http://visit.dhs.gov/ident/ixm/Identify</wsa:Action> </env:Header> <env:Body> <i:Identify xmlns:i="http://visit.dhs.gov/ident/1.0" xmlns:i-ext="http://visit.dhs.gov/ident/extensions/1.0" xmlns:nist="http://fingerprint.nist.gov/itl-1-2000" xmlns:j="http://www.it.ojp.gov/jxdm/3.0.3"> <i:IdentifyOptions> <i:IdentifyRetainCode>Enroll</i:IdentifyRetainCode> <i:IdentifyFormat> <i:IdentifyFormatCode>Summary</i:IdentifyFormatCode> <i:EncounterBiometricsCode>None</i:EncounterBiometricsCode> </i:IdentifyFormat> </i:IdentifyOptions> </i:Identify> </env:Body> </env:Envelope> </pre>

Identify (XML Format using GJXDM Standard without EFTS Format)

```

<i:Encounter>
  <j:ActivityID>
    <j:ID>1029348577123</j:ID>
    <j:IDTypeCodeText>trans</j:IDTypeCodeText>
  </j:ActivityID>
  <j:ActivityTypeText>Other</j:ActivityTypeText>
  <j:ActivityReasonText>Identify</j:ActivityReasonText>
  <j:ActivityDate>2006-02-20-05:00</j:ActivityDate>
  <j:ActivityTime>14:20:22.000-05:00</j:ActivityTime>
  <j:ActivityPrimaryOrganization>
    <j:OrganizationName>DHS</j:OrganizationName>
    <j:OrganizationUnitName>CBP</j:OrganizationUnitName>
    <j:OrganizationSubunitName>GES</j:OrganizationSubunitName>
  </j:ActivityPrimaryOrganization>
  <i-ext:ActivityUserLogin>GX5001</i-ext:ActivityUserLogin>
  <i-ext:ActivitySiteCode>UNK</i-ext:ActivitySiteCode>
  <j:Person>
    <j:PersonName>
      <j:PersonGivenName>LUIS RODOLFO</j:PersonGivenName>
      <j:PersonMiddleName>BARRAGAN DIAZ</j:PersonMiddleName>
      <j:PersonSurName>SMITH</j:PersonSurName>
    </j:PersonName>
    <j:PersonBirthDate>1967-08-13</j:PersonBirthDate>
    <j:PersonBirthPlaceCode>AA</j:PersonBirthPlaceCode>
    <j:PersonPhysicalDetails>
      <j:PersonSexCode>M</j:PersonSexCode>
    </j:PersonPhysicalDetails>
    <j:PersonSocialDetails>
      <j:PersonCitizenshipCode.iso3166Alpha3>CAN</j:PersonCitizenshipCode.iso3166Alpha3>
      <j:PersonNationalityCode.iso3166Alpha3>CAN</j:PersonNationalityCode.iso3166Alpha3>
    </j:PersonSocialDetails>
  </j:Person>
</i:Encounter>

```

Identify (XML Format using GJXDM Standard without EFTS Format)

```

    <j:PersonBiometricDetails>
      <j:PersonDigitalImage>
        <j:BinaryObject.Base64>UjBsR09EbGhjZ0dTQUxNQUFBUUNBRU1tQ1p0dU1GUXhEUzhi</j:BinaryObject.Base64>
          <j:BinaryFormatText>image/jpg</j:BinaryFormatText>
          <j:BinaryCaptureDate>2000-08-13-05:00</j:BinaryCaptureDate>
          <j:BinaryCaptureTime>15:30:11.000-05:00</j:BinaryCaptureTime>
          <j:ImageHeightValue>250</j:ImageHeightValue>
          <j:ImageWidthValue>250</j:ImageWidthValue>
          <j:ImagePoseCode>Frontal</j:ImagePoseCode>
        </j:PersonDigitalImage>
      <j:PersonFingerprintSet>
        <j:BiometricCaptureDate>2000-08-13-05:00</j:BiometricCaptureDate>
        <j:BiometricCaptureTime>15:33:00.000-05:00</j:BiometricCaptureTime>
        <j:Fingerprint>
          <j:BiometricImage>
            <j:BinaryObject.Base64>UjBsR09EbGhjZ0dTQUxNQUFBUUNBRU1tQ1p0dU1GUXhEUzhi</j:BinaryObject.Base64>
              <j:BinaryFormatText>image/wsqa</j:BinaryFormatText>
              <j:ImageHeightValue>1600</j:ImageHeightValue>
              <j:ImageWidthValue>1400</j:ImageWidthValue>
            </j:BiometricImage>
            <j:FingerprintFingerCode>13</j:FingerprintFingerCode>
            <nist:FingerImpressionTypeCode>0</nist:FingerImpressionTypeCode>
            <i-ext:FingerprintFingerSegment>
              <i-ext:FingerprintFingerCode>2</i-ext:FingerprintFingerCode>
              <i-ext:FingerprintFingerSegmentCoordinates left="1090" right="1230"
top="900" bottom="1120"/>
              <i-ext:FingerprintImageQualityScore>4</i-
ext:FingerprintImageQualityScore>
            </i-ext:FingerprintFingerSegment>
          </j:Fingerprint>
        </j:PersonFingerprintSet>
      </j:PersonBiometricDetails>

```

Identify (XML Format using GJXDM Standard without EFTS Format)

```

        <i-ext:FingerprintFingerSegment>
            <i-ext:FingerprintFingerCode>3</i-ext:FingerprintFingerCode>
            <i-ext:FingerprintFingerSegmentCoordinates left="820" right="1050"
top="200" bottom="650"/>
            <i-ext:FingerprintImageQualityScore>4</i-
ext:FingerprintImageQualityScore>
        </i-ext:FingerprintFingerSegment>
        <i-ext:FingerprintFingerSegment>
            <i-ext:FingerprintFingerCode>4</i-ext:FingerprintFingerCode>
            <i-ext:FingerprintFingerSegmentCoordinates left="460" right="650"
top="80" bottom="490"/>
            <i-ext:FingerprintImageQualityScore>4</i-
ext:FingerprintImageQualityScore>
        </i-ext:FingerprintFingerSegment>
        <i-ext:FingerprintFingerSegment>
            <i-ext:FingerprintFingerCode>5</i-ext:FingerprintFingerCode>
            <i-ext:FingerprintFingerSegmentCoordinates left="200" right="350"
top="510" bottom="850"/>
            <i-ext:FingerprintImageQualityScore>4</i-
ext:FingerprintImageQualityScore>
        </i-ext:FingerprintFingerSegment>
    </j:Fingerprint>
    <j:Fingerprint>
        <j:BiometricImage>
            <j:BinaryObject.Base64>UjBsR09EbGhjZ0dTQUxNQUFBUNBRU1tQ1p0dU1GUXhEUzhi</j:BinaryObject.Base64>
            <j:BinaryFormatText>image/ws</j:BinaryFormatText>
            <j:ImageHeightValue>1600</j:ImageHeightValue>
            <j:ImageWidthValue>1400</j:ImageWidthValue>
        </j:BiometricImage>
        <j:FingerprintFingerCode>14</j:FingerprintFingerCode>
        <nist:FingerprintImpressionTypeCode>0</nist:FingerprintImpressionTypeCode>
    
```

Identify (XML Format using GJXDM Standard without EFTS Format)

```

top="80" bottom="480"/>
ext:FingerprintImageQualityScore>
    <i-ext:FingerprintFingerSegment>
        <i-ext:FingerprintFingerCode>7</i-ext:FingerprintFingerCode>
        <i-ext:FingerprintFingerSegmentCoordinates left="380" right="710"
    <i-ext:FingerprintImageQualityScore>3</i-
</i-ext:FingerprintFingerSegment>
<i-ext:FingerprintFingerSegment>
    <i-ext:FingerprintFingerCode>8</i-ext:FingerprintFingerCode>
    <i-ext:FingerprintFingerSegmentCoordinates left="380" right="710"
    <i-ext:FingerprintImageQualityScore>3</i-
</i-ext:FingerprintFingerSegment>
<i-ext:FingerprintFingerSegment>
    <i-ext:FingerprintFingerCode>9</i-ext:FingerprintFingerCode>
    <i-ext:FingerprintFingerSegmentCoordinates left="800" right="1100"
    <i-ext:FingerprintImageQualityScore>3</i-
</i-ext:FingerprintFingerSegment>
<i-ext:FingerprintFingerSegment>
    <i-ext:FingerprintFingerCode>10</i-ext:FingerprintFingerCode>
    <i-ext:FingerprintFingerSegmentCoordinates left="1120" right="1380"
    <i-ext:FingerprintImageQualityScore>3</i-
</i-ext:FingerprintFingerSegment>
</j:Fingerprint>
<j:Fingerprint>
    <j:BiometricImage>

```

Identify (XML Format using GJXDM Standard without EFTS Format)

```

<j:BinaryObject.Base64>UjBsR09EbGhjZ0dTQUxNQUFBUUNBRU1tQ1p0dU1GUXhEUzhi</j:BinaryObject.Base64>
      <j:BinaryFormatText>image/wsqa</j:BinaryFormatText>
      <j:ImageHeightValue>700</j:ImageHeightValue>
      <j:ImageWidthValue>1100</j:ImageWidthValue>
    </j:BiometricImage>
    <j:FingerprintFingerCode>15</j:FingerprintFingerCode>
    <nist:FingerImpressionTypeCode>0</nist:FingerImpressionTypeCode>
    <i-ext:FingerprintFingerSegment>
      <i-ext:FingerprintFingerCode>1</i-ext:FingerprintFingerCode>
      <i-ext:FingerprintFingerSegmentCoordinates left="120" right="560"
top="200" bottom="580"/>
      <i-ext:FingerprintImageQualityScore>2</i-
ext:FingerprintImageQualityScore>
    </i-ext:FingerprintFingerSegment>
    <i-ext:FingerprintFingerSegment>
      <i-ext:FingerprintFingerCode>6</i-ext:FingerprintFingerCode>
      <i-ext:FingerprintFingerSegmentCoordinates left="610" right="1050"
top="200" bottom="550"/>
      <i-ext:FingerprintImageQualityScore>2</i-
ext:FingerprintImageQualityScore>
    </i-ext:FingerprintFingerSegment>
  </j:Fingerprint>
</j:PersonFingerprintSet>
</j:PersonBiometricDetails>
</j:Person>
<j:Document>
  <j:DocumentDescriptiveMetadata>
    <j:DocumentID>
      <j:ID>8918273456</j:ID>
      <j:IDTypeCodeText>P</j:IDTypeCodeText>
    </j:DocumentID>
  </j:DocumentDescriptiveMetadata>
</j:Document>

```

```

Identify (XML Format using GJXDM Standard without EFTS Format)
    <j:DocumentExpirationDate>2009-08-13</j:DocumentExpirationDate>
    <i-ext:DocumentIssuerCountryCode.iso3166Alpha3>CAN</i-
ext:DocumentIssuerCountryCode.iso3166Alpha3>
    <i-ext:DocumentIssuedDate>2001-08-13</i-ext:DocumentIssuedDate>
    <i-ext:ClassAdmissionCode>6</i-ext:ClassAdmissionCode>
  </j:DocumentDescriptiveMetadata>
  <j:DocumentSubject.Person>
    <j:PersonName>
      <j:PersonGivenName>LUIS RODOLFO</j:PersonGivenName>
      <j:PersonMiddleName>TEST</j:PersonMiddleName>
      <j:PersonSurName>BARRAGAN DIAZ</j:PersonSurName>
    </j:PersonName>
    <j:PersonBirthDate>1985-08-28</j:PersonBirthDate>
    <j:PersonAssignedIDDDetails>
      <i-ext:PersonID>
        <i-ext:ID>111-11-1111</i-ext:ID>
        <i-ext:IDTypeCodeText>SOC</i-ext:IDTypeCodeText>
      </i-ext:PersonID>
    </j:PersonAssignedIDDDetails>
    <j:PersonPhysicalDetails>
      <j:PersonSexCode>M</j:PersonSexCode>
    </j:PersonPhysicalDetails>
  </j:DocumentSubject.Person>
</j:Document>
</i:Encounter>
</i:Identify>
</env:Body>
</env:Envelope>

```

Figure B-1. Identify Message (XML Format)

Table B-2 below shows the Identify request message using EFTS format.

Identify (EFTS Format)

```
<?xml version="1.0" encoding="UTF-8"?>
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:MessageID>TSA34MM222222</wsa:MessageID>
    <wsa:To> https://usvisit.dhs.gov/soap/services/ixm</wsa:To>
    <wsa:ReplyTo>
      <!-- Provide a known URI destination below-->
      <wsa:Address> http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
    </wsa:ReplyTo>
    <wsa:Action>http://visit.dhs.gov/ident/ixm/Identify</wsa:Action>
  </env:Header>
  <env:Body>
    <i:Identify xmlns:i="http://visit.dhs.gov/ident/1.0" xmlns:i-ext="http://visit.dhs.gov/ident/extensions/1.0"
      xmlns:nist="http://fingerprint.nist.gov/itl-1-2000" xmlns:j="http://www.it.ojp.gov/jxdm/3.0.3" >
      <i:IdentifyOptions>
        <i:IdentifyRetainCode>Enroll</i:IdentifyRetainCode>
        <i:IdentityFormat>
          <i:IdentityFormatCode>Summary</i:IdentityFormatCode>
          <i:EncounterBiometricsCode>None</i:EncounterBiometricsCode>
        </i:IdentityFormat>
      </i:IdentifyOptions>
      <i:Encounter>
        <j:ActivityID>
          <j:ID>1029348577123</j:ID>
          <j:IDTypeCodeText>trans</j:IDTypeCodeText>
        </j:ActivityID>
        <j:ActivityTypeText>Other</j:ActivityTypeText>
        <j:ActivityReasonText>Identify</j:ActivityReasonText>
        <j:ActivityDate>2006-02-20-05:00</j:ActivityDate>
        <j:ActivityTime>14:20:22.000-05:00</j:ActivityTime>
        <j:ActivityPrimaryOrganization>
```

Identify (EFTS Format)

```

    <j:OrganizationName>DHS</j:OrganizationName>
    <j:OrganizationUnitName>CBP</j:OrganizationUnitName>
    <j:OrganizationSubunitName>GES</j:OrganizationSubunitName>
</j:ActivityPrimaryOrganization>
<i-ext:ActivityUserLogin>GX5001</i-ext:ActivityUserLogin>
<i-ext:ActivitySiteCode>UNK</i-ext:ActivitySiteCode>
<i:EFTS>
    <j:BinaryObject.Base64>RUZUUyBmb3JtYXQgZmlsZSBnb2VzIGhlcmUu</j:BinaryObject.Base64>
    <j:BinaryFormatText>application/efits</j:BinaryFormatText>
</i:EFTS>
<j:Document>
    <j:DocumentDescriptiveMetadata>
        <j:DocumentID>
            <j:ID>8918273456</j:ID>
            <j:IDTypeCodeText>P</j:IDTypeCodeText>
        </j:DocumentID>
        <j:DocumentExpirationDate>2009-08-13</j:DocumentExpirationDate>
        <i-ext:DocumentIssuerCountryCode.iso3166Alpha3>CAN</i-
ext:DocumentIssuerCountryCode.iso3166Alpha3>
        <i-ext:DocumentIssuedDate>2001-08-13</i-ext:DocumentIssuedDate>
        <i-ext:ClassAdmissionCode>6</i-ext:ClassAdmissionCode>
    </j:DocumentDescriptiveMetadata>
    <j:DocumentSubject.Person>
        <j:PersonName>
            <j:PersonGivenName>JOHN</j:PersonGivenName>
            <j:PersonMiddleName>TEST</j:PersonMiddleName>
            <j:PersonSurName>SMITH</j:PersonSurName>
        </j:PersonName>
        <j:PersonBirthDate>1967-08-13</j:PersonBirthDate>
        <j:PersonAssignedIDDetails>
            <i-ext:PersonID>

```

Identify (EFTS Format)
<pre> <i-ext:ID>111-11-1111</i-ext:ID> <i-ext:IDTypeCodeText>SOC</i-ext:IDTypeCodeText> </i-ext:PersonID> </j:PersonAssignedIDDetails> <j:PersonPhysicalDetails> <j:PersonSexCode>M</j:PersonSexCode> </j:PersonPhysicalDetails> </j:DocumentSubject.Person> </j:Document> </i:Encounter> </i:Identify> </env:Body> </env:Envelope> </pre>

Figure B-2. Identify Message (EFTS Format)

Table B-3 below shows the Identify acknowledgement message returned for every Identify request message sent.

Identify Acknowledgement Message
<pre> <?xml version="1.0" encoding="UTF-8"?> <env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header xmlns:wsa="http://www.w3.org/2005/08/addressing"> <wsa:MessageID>IDENT34MM3333333</wsa:MessageID> <wsa:ReplyTo> <!-- Provide a known URI destination below--> <wsa:Address> http://www.w3.org/2005/08/addressing/anonymous</wsa:Address> </wsa:ReplyTo> <wsa:Action>http://visit.dhs.gov/ident/ixm/IdentifyAcknowledgement</wsa:Action> <wsa:RelatesTo>TSA34MM11111111</wsa:RelatesTo> </env:Header> <env:Body> <i:IdentifyAcknowledgement xmlns:i="http://visit.dhs.gov/ident/1.0" xmlns:i-ext="http://visit.dhs.gov/ident/extensions/1.0" </pre>

Identify Acknowledgement Message
<pre> xmlns:nist="http://fingerprint.nist.gov/itl-1-2000" xmlns:j="http://www.it.ojp.gov/jxdm/3.0.3" > <j:ActivityID> <j:ID>DHS-TSA-100100111111</j:ID> <j:IDTypeCodeText>APPS</j:IDTypeCodeText> </j:ActivityID> <j:ActivityResultDate>2006-02-20-05:00</j:ActivityResultDate> <j:ActivityResultTime>14:20:24.000-05:00</j:ActivityResultTime> <i:EncounterID> <i:ID>43290340230</i:ID> <i:IDTypeCodeText>EID</i:IDTypeCodeText> </i:EncounterID> </i:IdentifyAcknowledgement> </env:Body> </env:Envelope> </pre>

Figure B-3. Identify Acknowledgement Message

Table B-4 below shows a generic SOAP fault sample message.

Generic SOAP Fault Message
<pre> <?xml version="1.0" encoding="UTF-8"?> <env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header xmlns:wsa="http://www.w3.org/2005/08/addressing"> <wsa:MessageID>IDENT34MM3333333</wsa:MessageID> <wsa:ReplyTo> <!-- Provide a requestor URI destination below--> <wsa:Address> http://www.w3.org/2005/08/addressing/anonymous</wsa:Address> </wsa:ReplyTo> <wsa:From> <wsa:Address>http://visit.dhs.gov/soap/services/ixm</wsa:Address> </wsa:From> <wsa:FaultTo> </pre>

Generic SOAP Fault Message

```

        <wsa:Address>http://visit.dhs.gov/soap/services/ixm</wsa:Address>
    </wsa:FaultTo>
    <wsa:Action>http://visit.dhs.gov/ident/ixm/IDENTFault</wsa:Action>
    <wsa:RelatesTo>TSA34MM111111111</wsa:RelatesTo>
</env:Header>
<env:Body>
    <env:Fault>
        <env:Code>
            <env:Value>tns:Receiver</env:Value>
            <env:Subcode>
                <env:Value>ValidationError</env:Value>
            </env:Subcode>
        </env:Code>
        <env:Reason>
            <env:Text xml:lang="EN">This is a free-formatted text element specifying the reason for a fault.</env:Text>
        </env:Reason>
        <env:Detail>
            <ident:FaultDetails xmlns:ident="http://visit.dhs.gov/ident/1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://visit.dhs.gov/ident/1.0 C:\cvs-Q107-Enum\VISIT-
APPSERV\ixm\message\target\constrained-xsd\ident.xsd">
                <ident:ErrorTimestamp>2006-02-20T14:20:22.000-05:00</ident:ErrorTimestamp>
                <ident:FaultDetail>
                    <ident:ErrorCode>1002</ident:ErrorCode>
                    <ident:MessageText>This element stores IDENT specific error message
text</ident:MessageText>
                </ident:FaultDetail>
                <ident:FaultDetail>
                    <ident:ErrorCode>100</ident:ErrorCode>
                    <ident:MessageText>Some IDENT error message here</ident:MessageText>
                </ident:FaultDetail>
            </ident:FaultDetails>
        </env:Detail>
    </env:Fault>
</env:Body>

```

Generic SOAP Fault Message
<pre> </env:Detail> </env:Fault> </env:Body> </env:Envelope> </pre>

Figure B-4. Generic SOAP Fault Message

Table B-5 below shows an Identification sample message, a result of an Identify request.

Identification Message
<pre> <?xml version="1.0" encoding="UTF-8"?> <env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header xmlns:wsa="http://www.w3.org/2005/08/addressing"> <wsa:MessageID>IDENTMM44444444</wsa:MessageID> <wsa:ReplyTo> <!-- Provide a requestor URI destination below--> <wsa:Address> http://www.w3.org/2005/08/addressing/anonymous</wsa:Address> </wsa:ReplyTo> <wsa:Action>http://visit.dhs.gov/ident/ixm/Identification</wsa:Action> <wsa:RelatesTo>TSA34MM11111111</wsa:RelatesTo> </env:Header> <env:Body> <i:Identification xmlns:i="http://visit.dhs.gov/ident/1.0" xmlns:i-ext="http://visit.dhs.gov/ident/extensions/1.0" xmlns:nist="http://fingerprint.nist.gov/itl-1-2000" xmlns:j="http://www.it.ojp.gov/jxdm/3.0.3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://visit.dhs.gov/ident/1.0:\cvs-Q107-Enum\VISIT- APPSERV\ixm\message\target\constrained-xsd\ident.xsd"> <j:ActivityID> <j:ID>DHS-TSA-202320322232</j:ID> <j:IDTypeCodeText>APPS</j:IDTypeCodeText> </j:ActivityID> <j:ActivityResultDate>2006-06-20-05:00</j:ActivityResultDate> </i:Identification> </env:Body> </env:Envelope> </pre>

Identification Message

```

    <j:ActivityResultTime>20:20:24.000-05:00</j:ActivityResultTime>
    <i:EncounterID>
      <i:ID>43290340230</i:ID>
      <i:IDTypeCodeText>EID</i:IDTypeCodeText>
    </i:EncounterID>
    <i:Identity>
      <i:IdentityStatusCode>None</i:IdentityStatusCode>
      <!--If an Enumerator is assigned by IDENT and it matches requirements, then it is provided otherwise it will not
appear.-->
      <i:PersonEnumeratorID>
        <i:ID>WDW398HWK</i:ID>
        <i:IDTypeCodeText>ENUM</i:IDTypeCodeText>
      </i:PersonEnumeratorID>
      <i:EncounterSummary>
        <j:ActivityDate>2004-02-03-05:00</j:ActivityDate>
        <j:ActivityTime>20:20:24.000-05:00</j:ActivityTime>
        <j:ActivityPrimaryOrganization>
          <j:OrganizationName>DHS</j:OrganizationName>
          <j:OrganizationUnitName>CBP</j:OrganizationUnitName>
          <j:OrganizationSubunitName>GES</j:OrganizationSubunitName>
        </j:ActivityPrimaryOrganization>
        <i:EncounterID>
          <i:ID>43290340230</i:ID>
          <i:IDTypeCodeText>EID</i:IDTypeCodeText>
        </i:EncounterID>
        <i:EncounterStatusCode>WatchList</i:EncounterStatusCode>
      </i:EncounterSummary>
    </i:Identity>
  </i:Identification>
</env:Body>
</env:Envelope>

```

Figure B-5. Identification Message (Response)

Attachment C: GJXDM/IXM Mapping to EFTS Format

The following table shows how GJXDM and IXM messaging formats map to EFTS format for the RetrieveCriminalHistory operation. This table is subject to changes.

Data Type Legend: A = Alpha, N = Numeric, AN = Alphanumeric, ANS = Alphanumeric and ASCII Special Characters

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
RetrieveCriminalHistory						
OrganizationORIID ID	<p>CONTROLLING AGENCY IDENTIFIER. In Criminal and Civil transactions, the first instance of this field shall contain the originating agency identifier (ORI) of the organization controlling the transaction when that organization is different than the one submitting the transaction (e.g. state CTA).</p> <p>SOURCE AGENCY. This mandatory ASCII field shall contain the identification of the administration or organization that originally captured the ten-print image contained in the record. Normally, the ORI of the agency that captured the image will be contained in this field.</p>	2.73 14.04	CRI SRC	AN	1 – 3 IXM Max is 1	9 – 9 IXM to EFTS Mapping
EncounterID ID	<p>TRANSACTION CONTROL NUMBER. This mandatory field shall contain the Transaction Control Number as assigned by the originating agency. A unique control identifier shall be assigned to each transaction. For any transaction that requires a response, the respondent shall refer to this identifier in communicating with the originating agency. This field shall be a ten-to-forty byte alphanumeric-special (ANS) field.</p>	1.09	TCN	ANS	1 – 1	10 – 40
TransactionControlNumber ID	<p>TRANSACTION CONTROL REFERENCE. This field shall be used in responses only to refer to the Transaction Control Number of a previous transaction involving an inquiry or other action that required a response. This field is mandatory for such responses. This field shall be a ten-to-forty byte alphanumeric-special (ANS) field.</p>	1.10	TCR	ANS	0 – 1	10 – 40

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Identify						
Activity ActivityID ID	ORIGINATING AGENCY CASE NUMBER. This field contains the one to twenty character Originating Agency Case Identifier (OCA) that has been assigned by the originating agency. This alphanumeric-special (ANS) field may contain any printable 7-bit ASCII character with the exception of the period (“.”). OCA must not begin with a blank.	2.09	OCA	ANS	0 – 1 IXM Min is 1	1 – 20 IXM to EFTS Mapping
Activity ActivityReasonText	REASON FINGERPRINTED. This alphanumeric-special field is used to indicate the purpose of a civil or applicant fingerprint card submission. This field will indicate if the card is submitted for licensing, gun permit, or criminal justice employment, non-criminal justice employment, adoption, naturalization, volunteer background checks, or gaming certification. Commas, blanks, dashes, hyphens and slashes are all allowed as special characters.	2.37	RFP	ANS	1 – 1	1 – 75
Activity ActivityDate	DATE. This mandatory field shall contain the date that the transaction was initiated. The date shall appear as eight digits in the format CCYMMDD. The CCYY characters shall represent the year of the transaction; the MM characters shall be the tens and units values of the month; and the DD characters shall be the day in the month. For example, 19920601 represents June 1, 1992. The complete date shall not exceed the current date.	1.05	DAT	N Date CCYMMDD	1 – 1	8 – 8
Person PersonName PersonGivenName PersonMiddleName PersonSurName	NAME. This alpha-special field contains the name(s) of the subject. The format shall be the surname followed by a comma (,) followed by the given name(s), which are separated by a space. Part IV of the NCIC Code Manual describes in greater detail the manner in which each name is to be entered.	2.18	NAM	AS	1 – 1	3 – 30

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GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Person PersonBirthDate	DATE OF BIRTH. This field contains the date of birth. It is entered as an eight-digit number in the same format as specified as specified in Section 1.2 of this Attachment. DOB is completely unknown, enter as 00000000. Partial DOBs are not allowed. DOB shall not exceed date of submission after Time-Zone adjustment.	2.22	DOB	N Date CCYYMMDD	1 – 5	8 – 8
Person PersonBirthPlaceCode	PLACE OF BIRTH. The subject's place of birth shall be entered in this field. Indicate in this POB field the state (Mexican, United States), territorial possession, province (Canadian), or country of birth. The appropriate two-letter abbreviation shall be used as listed in Part IV of the NCIC State and Country Data Code Table.	2.20	POB	A	1 – 1	2 – 2 IXM to EFTS Mapping
Person PersonAssignedIDDetails PersonID ID IDTypeCodeText "FBI"	FBI NUMBER. This field contains the subject's FBI number, if known. A valid FBI number shall be no more than nine alphanumeric characters. The FBI number returned in a response is dependent upon the search results (see Section 3.6).	2.14	FBI	AN	0 – 5	1 – 9
Person PersonAssignedIDDetails PersonID ID IDTypeCodeText "SID"	STATE IDENTIFICATION NUMBER. This field contains any known state identification number. The format is the standard two-character abbreviation of the state name, followed by the number. Embedded blanks are not permitted. SIDs from NY, OR, or PA may contain a hyphen in the last position. The SID returned in a response is dependent upon the search results (see Section 3.6).	2.15	SID	ANS	0 – 1	3 – 30
Person PersonAssignedIDDetails PersonID ID IDTypeCodeText "SOC"	SOCIAL SECURITY ACCOUNT NUMBER. This field contains the subject's social security number, if known. This number shall be entered as nine consecutive digits with no embedded punctuation characters. No foreign social security numbers shall be used.	2.16	SOC	N	0 – 4 IXM Max is 1	9 – 9

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Person PersonAssignedIDDDetails PersonID ID IDTypeCodeText [IAFIS Misc ID Number]	MISCELLANEOUS IDENTIFICATION NUMBER. If there are any miscellaneous identification numbers, they shall be entered in this field. The format of the data shall be a two-letter identifying code, followed by a hyphen (-), followed by the number itself. The size of the MNU is limited to 15 characters and as many as four miscellaneous numbers may be included in this field. Each MNU shall be separated from the next by the § separator character.	2.17	MNU	ANS	0 – 4	4 – 16
Person PersonPhysicalDetails PersonHeightMeasure	HEIGHT. This field contains the subject's height as a three-character value. If reported in feet and inches, the first (leftmost) digit is used to show feet while the two rightmost digits are used to show the inches between 00 and 11. If reported in inches then the leftmost character is "N" followed by two digits. If height is unknown, 000 is entered. The allowable range is 400 to 711. Heights outside this range will be clamped at these limits.	2.27	HGT	AN	1 – 1	3 – 3
Person PersonPhysicalDetails PersonWeightMeasure	WEIGHT. In this field the subject's weight in pounds is entered. If weight is unknown, 000 is entered. All weights in excess of 499 pounds will be set to 499 lbs.	2.29	WGT	N	1 – 1	3 – 3
Person PersonPhysicalDetails PersonEyeColorCode	COLOR EYES. For this field, the three-letter code used to indicate the subject's color of eyes.	2.31	EYE	A	1 – 1	3 – 3
Person PersonPhysicalDetails PersonHairColorCode	HAIR COLOR. In this field, the three-letter code used to indicate the subject's color of hair.	2.32	HAI	A	1 – 1	3 – 3
Person PersonPhysicalDetails PersonSexCode	SEX. This field is used to report the gender of the subject.	2.24	SEX	A	1 – 1	1 – 1 IXM to EFTS Mapping
Person PersonPhysicalDetails PersonRaceCode	RACE. This field is used to indicate the race of the subject.	2.25	RAC	A	1 – 1	1 – 1

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Person PersonSocialDetails PersonCitizenshipCode. iso3166Alpha3	COUNTRY OF CITIZENSHIP. This field contains the name of the country of which the subject is a citizen. Entry must be a valid country code from Code Table POB in Part IV of the NCIC State and Country Data Code Table.	2.21	CTZ	A	0 – 1	2 – 2 IXM to EFTS Mapping
Person PersonBiometricDetails PersonFingerprintSet BiometricCaptureDate	DATE PRINTED. This field contains the date that the subject was fingerprinted. DPR shall not exceed date of submission, except when the submission originates from an international contributor located in a time zone earlier than the Eastern Time Zone. This date field shall contain the local date for the region submitting the request. TEN-PRINT CAPTURE DATA. This mandatory ASCII field shall contain the date that the ten-print image was captured. The date shall appear as eight digits in the format CCYMMDD.	2.38 14.05	DPR TCD	N Date CCYMMDD	1 – 1	8 – 8
Person PersonBiometricDetails PersonFingerprintSet Fingerprint BiometricImage BinaryObject.Base64	IMAGE DATA. This field shall contain all of the data from a captured ten-print image. It shall always be assigned field number 999 and must be the last physical field in the record.	14.999 4 [9]	DAT	Binary	1 – 1	2 – ...
Person PersonBiometricDetails PersonFingerprintSet Fingerprint BiometricImage BinaryFormatText	COMPRESSION ALGORITHM. This mandatory ASCII field shall specify the algorithm used to compress grayscale images. An entry of "NONE" in this field indicates that the data contained in this record is uncompressed. For those images that are to be compressed, this field shall contain "WSQ" the preferred method for the compression of ten-print-fingerprint images.	14.11 4 [8]	CGA	A	1 – 1	5 – 7 IXM to EFTS Mapping

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Person PersonBiometricDetails PersonFingerprintSet Fingerprint BiometricImage ImageHeightValue	VERTICAL LINE LENGTH. This mandatory ASCII field shall contain the number of horizontal lines contained in the transmitted image.	14.07 4 [7]	VLL	N	1 – 1	4 – 5
Person PersonBiometricDetails PersonFingerprintSet Fingerprint BiometricImage ImageWidthValue	HORIZONTAL LINE LENGTH. This mandatory ASCII field shall contain the number of pixels contained on a single horizontal line of the transmitted image.	14.06 4 [6]	HLL	N	1 – 1	4 – 5
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintFingerCode	FINGER POSITION. This mandatory tagged-field shall contain finger position code that matches the ten-print image. The decimal code number corresponding to the known or most probable finger position shall be taken from Table 1 and entered as a one- or two-character ASCII subfield. Table 1 also lists the maximum image area that can be transmitted for each of the fourteen possible finger positions.	14.13 4 [4]	FGP	N	1 – 1	2 – 2
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintPatternCode [Single Rolled Print]	AMPUTATED OR BANDAGED. This grouped field contains information about amputated or bandaged fingerprints in an EFTS submission. It is comprised of two subfields, Finger Number (FGP), and Amputated Or Bandaged Code (AMP). This field is to be used anytime there are fewer than ten printable fingers in a ten-print submission. The following example indicates that the third finger is amputated and that the submitter did not, or was unable to, supply a print of the ninth finger. 2.084:038XXB09BUPS	2.84	AMP	A	0 – 9	2 – 2 IXM to EFTS Mapping
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerImpressionTypeCode	IMPRESSION TYPE. This mandatory one-byte ASCII field shall indicate the manner by which the ten-print image information was obtained. The appropriate code selected from Table 2 shall be entered in this field.	14.03 4 [3]	IMP	A	1 – 1	2 – 2 IXM to EFTS Mapping

GJXDM/IXM Elements	EFTS Element	EFTS Tag Number	EFTS Field ID	Data Type	Cardinality Min-Max	Data Length Min-Max
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintFingerSegment FingerprintFingerCode	FINGER POSITION. This mandatory tagged-field shall contain finger position code that matches the ten-print image. The decimal code number corresponding to the known or most probable finger position shall be taken from Table 1 and entered as a one- or two-character ASCII subfield. Table 1 also lists the maximum image area that can be transmitted for each of the fourteen possible finger positions.	14.21A 14.22A	SEG IQM	N	0 – 4 EFTS 14.21,14.22 Exclude Missing Fingers	2 – 2 IXM to EFTS Mapping
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintFingerSegment FingerprintPatternCode [Identification Flat Segment]	AMPUTATED OR BANDAGED. This grouped field contains information about amputated or bandaged fingerprints in an EFTS submission. It is comprised of two subfields, Finger Number (FGP), and Amputated Or Bandaged Code (AMPDCD). This field is to be used anytime there are fewer than ten printable fingers in a ten-print submission. The following example indicates that the third finger is amputated and that the submitter did not, or was unable to, supply a print of the ninth finger. 2.084:038XXB09BUPS	2.84	AMP	A	0 – 9	2 – 2 IXM to EFTS Mapping
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintFingerSegment FingerprintFingerSegmentCo-ordinates	FINGER SEGMENT POSITION(s). This mandatory ASCII field shall contain offsets to the locations of image segments containing the individual fingers within the image. The offsets are relative to the origin, (0,0), which is in the upper left corner of the image. The horizontal offsets (X) are the pixel counts to the right, and the vertical offsets (Y) are the pixel counts down. A finger segment is defined by the FINGER NUMBER, the X coordinates (LEFT, RIGHT) and the Y coordinates (TOP, BOTTOM), of its bounding box	14.21B	SEG	N	0 – 4 Fingers per Segment 4 – 4 Coordinates per Finger EFTS 14.21 Excludes Missing Fingers	1 – 4 IXM to EFTS Mapping
Person PersonBiometricDetails PersonFingerprintSet Fingerprint FingerprintFingerSegment QualityScore	IMAGE QUALITY METRIC. This mandatory ASCII field shall contain the image quality scores for the individual fingers. Each finger score is defined by the FINGER NUMBER and the QUALITY SCORE.	14.22B	IQM	N	0 – 4 Fingers per Segment 4 – 4 Coordinates per Finger EFTS 14.22 Excludes Missing Fingers	1 – 4 IXM to EFTS Mapping

Table C-1: GJXDM/IXM EFTS Mapping

Attachment D: Error Codes and Messages

The following table shows the IXM error messages including the error code, possible error conditions, and additional information about the error. This table is subject to changes.

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-10010	The following fingerprints or segments are missing: [Finger codes..] and no reason for their omission is provided.	One or more fingerprint position numbers are missing but no reason code is given in <i>FingerprintPatternCode</i> field.	Each fingerprint has one finger position number (sequence number). One or more position numbers are missing, but no reason code is given.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10020	Following fingerprints are printed more than once [finger codes..]	One or more fingerprints are printed twice.	There are duplicate finger position numbers in the set.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10030	Following fingerprint segment is printed more than once [finger codes..]	Fingerprint segment is printed twice	There is a duplicate of fingerprint segment	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10034	No fingerprint segments are provided for finger code [finger code].	The segmentation information is missing from the ID flats.	The finger code 13, 14 and 15 (ID flats) must contain the segmentation information in case that only these three images are presented.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10035	Fingerprint segments count for finger code [finger code] must be [count].	The count of segmentation information is over or below from the expected.	13 should contain 4 segments; 14 contain 4 segments; 15 contain 2 segments.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10037	Invalid Person Identifier Type Code [ID Value]	The given Person Identifier is unknown.	The value must conform to the IXM specification.	All
IXM-10038	Invalid Document Type Code [Document Type].	The given document type is unknown.	The value must conform to the IXM specification.	Identify, Verify, PreVerify, IdentifySync, VerifySync (Yes, if doc is provided)

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-10050	Following document information is missing: [Type, Country of Issuance, Last Name, First Name, Number]	Document type, number, Country of Issuance (COI), last name and first name must exist if any document is presented.	All five fields are required if one is presented.	Identify, Verify, PreVerify, IdentifySync, VerifySync (Yes, if doc is provided)
IXM-10060	The submitted photo exceeds the maximum size of 192KB.	Photograph size should be less than or equal to 192KB if presented.	The current Transaction Manager™ can only handle images up to 192KB in size.	Identify, Verify, VerifySync, IdentifySync
IXM-10070	The valid number of fingerprints included in the message is 2, 3 (all should be flats), 10 or 14.	The number of fingerprints included is not valid.	The valid number of fingerprints included in the message is 2 (two fingers for verification), 3 (all should be flats), 10 (individual fingers) and 14 (individual fingers + flats)	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10080	The invalid biometric characteristics of included fingerprints: [impression type value]	The number of fingerprints included is 3 or 14. 3 prints should be all flats. 14 prints should be rolled for 1 to 10 and 11 to 14 should be flats.	The number of fingerprints include is: 3 —all should be flats 14 —the first 1 thru 10 should be rolled; 11 thru 14 be flats.	Identify, Verify, VerifySync, IdentifySync, AddBiometric - Need to update this or create new error for Verify-4 (1 slap) and AddBiometric (2 slaps)
IXM-10110	Following fingerprint code/segments are invalid (must be null/not null) [finger code].	The segment info is missing in 13, 14 and/or 15. The segment info is included in 1 to 10.	The segment info should be presented for finger code 13, 14 and/or 15 where it should be omitted in finger code 1 through 10.	Identify, Verify

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-10112	Fingerprint count is [count]. Valid finger codes are [range] through [range]. Provided finger codes are [the given finger code].	The finger codes do not conform to the valid ID flats.	The count = 14; valid finger code should be 1 through 14. The count = 3; valid finger code should be 13, 14 and 15 The count = 2; valid finger code should be within 1 through 10.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10120	Fingerprint Segment must not be null for finger Codes 13, 14, 15.	The segment information is missing among 13, 14 and/or 15.	The segment information must be presented for finger code: 13, 14 and 15.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10121	The minutiae information must be presented for finger code: 13, 14 and 15.	Fingerprint Minutiae must not be null for finger codes 13, 14, 15.	The minutiae information is missing among 13, 14 and/or 15.	VerifySync, IdentifySync, AddBiometric
IXM-10122	The feedback information must be presented for finger code: 13, 14 and 15.	Fingerprint Feedback must not be null for finger codes 13, 14, 15.	The feedback information is missing among 13, 14 and/or 15.	VerifySync, IdentifySync, AddBiometric
IXM-10130	Following fingerprint code segment has invalid finger print position [the given finger code].	The count of segments does not match the expected number in the finger code.	The finger 13 would have 4 segments; 14 have 4 segments; 15 have 2 segments.	Identify, Verify,
IXM-10140	Finger code [the given finger code] segment must have finger positions from [range] to/and [range].	The invalid fingerprints in the segment info.	The finger code: 13 would have segments 2 through 5. The finger code: 14 would have segments 7 through 10. The finger code: 15 would have segments 1 and 6.	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-10150	At least two good print images must exist.	The count of non-amputated/printable prints is less than 2.	For IDENT to identify/verify the person, at least two prints must exist in the message.	Identify, Verify, IdentifySync, VerifySync (Yes, if doc is provided)

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-11100	Following field [field name] is required. Cannot be blank or null.	The required field is missing.	The required field is missing. In this case, it will be a fingerprint field.	All
IXM-13010	US-VISIT/IDENT is unable to return any data for EID [value].	The given EID was not found in IDENT	The given EID does not return any associated data from the US-VISIT/IDENT database.	Verify, RetrieveIdentity, RetrieveCriminalHistory, VerifySync, IdentifySync, AddBiometric, AddDisposition
IXM-15020	The requesting organization [a] does not match with the organization which submitted the corresponding Identify and Enroll.	The requesting organization has not submitted the corresponding identify and enroll.	The organization who submitted the Identify and Enroll can only submit the corresponding IAFIS Search.	RetrieveCriminalHistory
IXM-17010	Version of Feature Extraction is missing when Minutiae are presented.	Version of Feature Extraction field is empty when Minutiae are presented	The field is mandatory if minutiae are provided	VerifySync, IdentifySync, AddBiometric
IXM-17070	The verification request from US PASS does not contain the document information.	The US PASS verification request must contain the travel document information	ADIS needs the document information to correlate the arrival. Thus, it is assumed that US PASS sends the document information	Verify (Entry specific)
IXM-18010	You do not have sufficient privileges to request the following operation: {0}.	Insufficient privileges are held by the caller for call being made	Sufficient user privileges must exist to access the US-VISIT system	All
IXM-18020	The features provided are not available for this release: {0}	Requested operational features do not exist in this software version	Requested operational feature have not been implemented yet	All

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error																																				
IXM-18030	The provided images are bad.	Bad Image	Transaction Manager is not able to use the provided images.	Identify, Verify, VerifySync, IdentifySync, AddBiometric																																				
IXM-18050	The site code: [give site code] is not valid.	The provided site code is invalid.	The given site code should be in the list that IDENT maintains.	All																																				
IXM-18060	The country code [give country code] is not valid.	The provided country code is invalid.	The given country code should be in the list that IDENT maintains.	Identify, Verify, PreVerify, IdentifySync, VerifySync (Yes, if doc is provided)																																				
IXM-18070	The organization name [org name], unit name [org unit] and sub unit name [org subunit] are not valid.	The provided organization name, organization unit name and organization sub unit name are invalid	The given set of organization name, unit name and sub unit name should be in the list that IDENT maintains.	All																																				
IXM-18080	Finger print [a] image height [b] is not within allowed limits (minHeight = [c], maxHeight = [d]). [a] Finger Position Code [b] Actual Value [c] Minimum Value [d] Maximum Value	The values of image height are above or below the proper constants.	The proper values are described below. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="background-color: #003366; color: white;">Finger Codes 1-10</th> </tr> <tr> <th style="background-color: #006666; color: white;"></th> <th style="background-color: #006666; color: white;">Height</th> <th style="background-color: #006666; color: white;">Width</th> </tr> </thead> <tbody> <tr> <td>Min</td> <td>256</td> <td>256</td> </tr> <tr> <td>Max</td> <td>750</td> <td>800</td> </tr> <tr> <th colspan="3" style="background-color: #003366; color: white;">Finger Codes 11-12</th> </tr> <tr> <th style="background-color: #006666; color: white;"></th> <th style="background-color: #006666; color: white;">Height</th> <th style="background-color: #006666; color: white;">Width</th> </tr> <tr> <td>Min</td> <td>256</td> <td>256</td> </tr> <tr> <td>Max</td> <td>1000</td> <td>500</td> </tr> <tr> <th colspan="3" style="background-color: #003366; color: white;">Finger Codes 13-15</th> </tr> <tr> <th style="background-color: #006666; color: white;"></th> <th style="background-color: #006666; color: white;">Height</th> <th style="background-color: #006666; color: white;">Width</th> </tr> <tr> <td>Min</td> <td>256</td> <td>256</td> </tr> <tr> <td>Max</td> <td>1500</td> <td>1600</td> </tr> </tbody> </table>	Finger Codes 1-10				Height	Width	Min	256	256	Max	750	800	Finger Codes 11-12				Height	Width	Min	256	256	Max	1000	500	Finger Codes 13-15				Height	Width	Min	256	256	Max	1500	1600	Identify, Verify, VerifySync, IdentifySync, AddBiometric
Finger Codes 1-10																																								
	Height	Width																																						
Min	256	256																																						
Max	750	800																																						
Finger Codes 11-12																																								
	Height	Width																																						
Min	256	256																																						
Max	1000	500																																						
Finger Codes 13-15																																								
	Height	Width																																						
Min	256	256																																						
Max	1500	1600																																						

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-18085	Invalid ID Type Code Text [the given ID type code].	The given Activity ID Type Code Text is unknown.	The value should be a negotiated one.	All
IXM-18090	Finger print [a] image or width [b] is not within allowed limits (minWidth = [c], maxWidth = [d]). [a] Finger Position Code [b] Actual Value [c] Minimum Value [d] Maximum Value	The values of image width are above or below the proper constants.	Please refer to the table above	Identify, Verify, VerifySync, IdentifySync, AddBiometric
IXM-18100	The requesting organization {0}, organization unit {1}, organization sub unit {2} is not approved for Enumerator submission.	Requestor is not approved to submit an Enumerator	Org, Unit, Subunit do not match list of approved Enumerator submitters	Verify, RetrieveIdentity
IXM-18200	US-VISIT/IDENT is unable to locate an EID for the submitted Enumerator: {0}	Enumerator submitted does not match system data	US-VISIT/IDENT unable to match submitted Enumerator to EID	PreVerify, Verify, RetrieveIdentity
IXM-18300	Unable to login to the system using the supplied organization and activity information	Org and activity id do not match allowed list	US-VISIT/IDENT can not validate the submitted Organization and Activity information	All
IXM-18400	The system was unable to obtain the required login information from the supplied XML message.	The XML message did not contain proper login info	The XML message can not be accepted without proper login information	All
IXM-18500	The system can not decompress the finger prints submitted [code={0}, cause={1}].	Fingerprints submitted could not be decompressed	An error occurred while submitted fingerprints were being decompressed	Verify, Identify, AddBiometric

Error Code	Error Message	Error Condition	Additional Information	Services Throwing Error
IXM-18550	The system does not recognize the finger print coordinates submitted.	Invalid finger print coordinates were submitted	US-VISIT/IDENT could not recognize the submitted coordinates	Verify, Identify, AddBiometric
IXM-19000	Schema Validation Failed: [The detail message]	The message fails the schema validation.	The XML message is not valid per the IXM Schema	All
IXM-19010	Follow up with AddBiometrics to address this issue.	Additional prints are required.	A single hand slap was provided but 10-prints are needed.	VerifySync
IXM-19020	Timezones in correlated Date and Time fields do not match each other	The timezone given in the Date where a Time is also given must both be the same timezone.	The timezone given in the Date did not match the Time.	All
IXM-90000	Generic/Unknown error	The generic error text	The generic error text.	All

Table D-1: IXM Error Codes and Messages

Attachment E: EFTS Errors

The following table shows the EFTS error messages including the error code, possible error conditions, and additional information about the error. This table is subject to changes.

Error Code	Error Message	Error Condition	Additional Information
EFTS-10010	Given field [field_name] value [value] exceeds the maximum limit [maximum value]	The length exceeds the maximum limit	Last Name (50), First Name (50)
EFTS-10020	Given field [field_name] value [value] exceeds the maximum limit [minimum_value]	The length is below the minimum limit.	Last Name (1) and First Name (1)
EFTS-11010	The following fields are required do not contain any information: [field_name1, field_name2, ..].	Missing required value	TYPE-1 Version (1.02) Type of Transaction (1.04) Date (1.05) Destination Agency Identifier (1.07) ORI (1.08) Transaction Control Number (1.09) Native Scanning Resolution (1.11) Nominal Transmitting Resolution (1.12) TYPE-2 Image Destination Character (2.002) Retention (2.005) Name (2.018) Place of Birth (2.020) Date of Birth (2.022) Gender (2.023) Race (2.025) Height (2.027) Weight (2.029) Color Eyes (2.031) Hair Color (2.032) Reason Fingerprinted (2.037) Date Fingerprinted (2.038) Controlling Agency Identifier (2.073)
EFTS-11020	The Transaction Control Number provided contains the following invalid special characters: [invalid special characters].	Transaction Control Number (1.09) contains '<' or '>'	These special characters '<' or '>' are not allowed in the field
EFTS-11030	The Transaction Control Reference provided contains the following invalid special characters: [invalid special characters].	Transaction Control Reference (1.10) contains '<' or '>'	These special characters '<' or '>' are not allowed in the field

Error Code	Error Message	Error Condition	Additional Information
EFTS-11040	The first two characters of the Destination Agency Identifier cannot contain non-alpha-characters.	Destination Agency Identifier (1.07) does not start with two alpha-characters	The first two characters must be alpha-characters
EFTS-11050	The first two characters of the ORI cannot contain non-alpha-characters.	ORI (1.08) does not start with two alpha-characters	The first two characters must be alpha-characters
EFTS-11060	The Retention indicator provided is neither Y nor N.	Retention (2.005) <> 'Y' or 'N'	The indicator value should be either 'Y' or 'N'
EFTS-11070	One or more fingerprints are missing, however no Amputated information has been provided.	The Amputated (2.084) field is empty when one or more fingerprints are missing	
EFTS-11080	The format of the State ID number is invalid. An invalid NCIC code has been provided or this submission contains invalid special characters.	State ID Number (2.015) format is incorrect	1) First two characters must be a valid National Crime Information Center (NCIC) code. 2) Hyphen is the only special character allowed. Embedded blanks are prohibited
EFTS-11090	The Name field contains invalid special characters.	Name (2.018) format is incorrect	Comma, hyphen and blank are only special character allowed
EFTS-11100	The Gender code provided is invalid.	Gender (2.023) is invalid	The valid gender codes are F, G, M, N, Y, Z and X
EFTS-11110	The Reason Fingerprinted field contains invalid special characters.	Reason Fingerprinted (2.037) contains invalid characters	Comma, blank, hyphen and slash are the only special character allowed
EFTS-11120	The first two character of the Controlling Agency Identifier are not alpha-characters as required.	Controlling Agency Identifier (2.073) contains no alpha-characters in first two character	Format is two alpha-characters followed by alpha-numeric
EFTS-11130	[Field Name] is not properly formatted. Date fields must conform to the CCYYMMDD format.	Invalid Date format is provided	Following fields must have the CCYYMMDD format: Date (1.04) Date of Birth (2.022) Date Fingerprinted (2.038)
EFTS-11140	The Date provided is in the future.	Date (1.04) exceeds the current date	Date (1.04) should not exceed the current date
EFTS-11150	The Date of Birth provided is in future.	Date of Birth (2.022) exceeds the current date	Date of Birth should not exceed the current date.

Table E-1: EFTS Error Codes and Messages

Attachment F: Messaging Services

Table F-1 below contains the links to attachments that defines the messaging services data elements. The messaging services content column describes the different messaging format contained in the each attachment.

Messaging Services	Messaging Services Content	Attachments
Identify Messaging Service	Identify IdentifyAcknowledgement Identification	F1-IdentifyMessagingService
Verify Messaging Service	Verify Verification	F2-VerifyMessagingService
RetrieveIdentity Messaging Service	RetrieveIdentity Identification	F3-RetrieveIdentityMessagingService
RetrieveCriminalHistory Messaging Service	RetrieveCriminalHistory RetrieveCriminalHistoryAcknowledgement CriminalHistory	F4-RetrieveCriminalHistoryMessagingService
PreVerify Messaging Service	PreVerify PreVerification	F5-PreVerifyMessagingService
AddBiometric Messaging Service	AddBiometrics BiometricsAdded	F6-AddBiometrics-AddDispositionMessagingService
AddDisposition Messaging Service	AddDisposition DispositionAdded	F6-AddBiometrics-AddDispositionMessagingService
IdentifySync Messaging Service	IdentifySync IdentificationSync	F7-IdentifyMessagingService
VerifySync Messaging Service	VerifySync VerificationSync	F8-VerifyMessagingService
AddDerogatoryInformation Messaging Service	AddDerogatoryInformation DerogatoryInformationAdded	F9 AddDerogatoryInformation Messaging Service
DeactivateDerogatoryInformation Messaging Service	DeactivateDerogatoryInformation DerogatoryInformationDeactivated	F10 DeactivateDerogatoryInformation Messaging Service
DeleteEncounters Messaging Service	DeleteEncounters DeleteEncountersAcknowledgement EncountersDeleted	F11 DeleteEncounters Messaging Service

Messaging Services	Messaging Services Content	Attachments
Notification Messages	DerogatoryUpdateNotification EncounterNotification EnumeratorNotification EnumeratorReassignNotification	F12-NotificationMessaging Service

Table F-1: Messaging Services Links

Identify Messaging Service

This attachment contains the following tables:

Table F1-1: Identify Element Definition 75
 Table F1-2: Identify Acknowledgement Element Definition 76
 Table F1-3: Identification Element Definition..... 151

Table F1-1 below shows the element definition for an Identify request operation.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Identify	required				
Content: (IdentifyOptions?, Encounter)					
IdentifyOptions	optional				
Content: (IdentifyRetainCode, DisableEnumeration?, IdentityFormat?)					
IdentifyRetainCode	required	string		Enroll Biometrically identify the person, enrolling into the system when necessary. Identify Biometrically identify the person, but do not retain biometrics when biometrics are not matched. Identify Assign Biometrically identify the person, but don't retain any information when biometrics are not matched. Identify Only Biometrically identify the person, but don't retain any information.	A code indicating if the submitted fingerprints should be retained within the biometric store.
DisableEnumeration	optional	boolean			Specifies whether or not a Person Enumerator Identifier should be generated
IdentityFormat	optional				
Content: (IdentityFormatCode, IdentityMaximumLength?, IdentityOrderingCode?, EncounterBiometricsCode)					
IdentityFormatCode	required	string		Nil Return no PII, no identity status, and no EID. None Only return the identity status. List List the encounter identifiers. Summary Summarize the encounter information. Detail Return the detailed encounter history.	A code indicating the amount of detail to include when returning associated encounters.
IdentityMaximumLength	optional	positive integer			The maximum number of associated encounters to return. This is only applicable if the FormatCode is not "None".
IdentityOrderingCode	optional	string		Derogatory All Orders encounters by Derogatory information. The number of encounters	A code indicating the ordering of the Identity information. This is only applicable if the

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				is not limited by IdentityMaximumLength. Derogatory First Orders encounters by Derogatory information. The number of encounters is limited by IdentityMaximumLength. Oldest First Orders encounters by date in ascending order. The number of encounters is limited by IdentityMaximumLength. Newest First Orders encounters by date in descending order. The number of encounters is limited by IdentityMaximumLength.	FormatCode is not "None". This code is useful when the IdentityMaximumLength is provided.
EncounterBiometricsCode	required	string		None No biometric information. Digital Image Include photographs or images of the person. All Include all biometric details.	A code indicating the level of biometric detail which should be included. This is only applicable if the FormatCode is "Detail".
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?),((Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U	A code identifying the race of a person.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				UNKNOWN W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb	A code identifying a finger of a person that

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORI ID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC	A textual code representing the type of identifier assigned.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink	A code identifying the color of a person's hair.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64			A binary encoding of

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		binary			data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
application software					
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				(EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/ebts An Electronic Biometric Transmission Specification (EBTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64			A binary encoding of

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		binary			data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
application software					
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI	A name of a high-level division of an organization, e.g., department, agency.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ²	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown	A code identifying the color of a person's hair.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				(EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitallImage*, PersonFingerprintSet?, PersonIrisFeatures?)					

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-		Digits = 2	An NFIQ image quality

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		negative integer			score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCICCode	optional	token			A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string			A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ²	A textual code representing the type of identifier assigned.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					state or country of a person's birth.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonFingerprintSet	optional				duration of capture A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z /hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ²	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U. S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN	A code identifying the color of a person's eyes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific,	A code identifying a type of physical feature.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal	A code identifying an

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g.,	A code identifying a general pattern of a

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				bandaged) XX Missing/Amputated Finger	persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORI ID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI	A textual code representing the type of identifier assigned.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	

¹This is an extension of an existing GJXDM element.

²These enumerated values are an application constraint.

Table F1-1: Identify Element Definition

Table F1-2 below shows the element definition for an Identify Acknowledgement operation.

IdentifyAcknowledgement Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
IdentifyAcknowledgement	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(EncounterID?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string			A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
EncounterID	optional				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.	

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F1-2: Identify Acknowledgement Element Definition

Table F1-3 below shows the element definition for Identification, a result of the Identify operation.

Identification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
Identification	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(EncounterID?, SubmittedEnumeratorStatus?, Identity?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string			A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time that a result of an activity or process occurred.	
EncounterID	optional				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.	
SubmittedEnumeratorStatus	optional	string		Active This status allows external users to collect the enumerator and search an identity by the enumerator. Reference Only This status allows external users to only search or verify an identity from US-VISIT/IDENT. This enumerator will not be distributed to the external users. Deactivated This status allows external users to only search but not verify an identity from US-VISIT/IDENT. This enumerator can be reactivated upon receipt of 10-fingerprints through the Identify service. Deleted This status does not allow external users to search or verify an identity. Rescinded This status does not allow external users to search or verify an identity. Upon usage, the users will be prompted that the enumerator was deleted upon IDENT	The status of the submitted enumerator (refer to submitted message for the enumerator).	

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				maintenance activity.	
Identity	optional				
Content: (IdentityStatusCode, PersonEnumeratorID?, (EncounterID* EncounterSummary* Encounter*)?)					
IdentityStatusCode	required	string		<p>WatchList High risk. This indicates the need for further investigation.</p> <p>Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList.</p> <p>Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits.</p> <p>Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant.</p> <p>None Lowest risk. There is no applicable derogatory information.</p>	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonEnumeratorID	optional				An IDENT generated unique identifier for an person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	zero or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterSummary	zero or more				A summary of an activity where the person is encountered, and biometrics are

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has	The status of this individual encounter as an aggregation of any associated derogatory information.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				<p>been used to indicate a higher level of attention than Recidivist, but not a WatchList.</p> <p>Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits.</p> <p>Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant.</p> <p>None Lowest risk. There is no applicable derogatory information.</p>	
Encounter	zero or more				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, EncounterStatusCode?, (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		<p>Application Part of applicant screening process.</p> <p>Entry Related to a person entering the country at a POE.</p> <p>Exit Related to a person exiting the country at a POE.</p> <p>Enforcement Related to an activity by law enforcement.</p> <p>National Security Related to an activity involving national security.</p> <p>Datashare Related to sharing of encounter and derogatory information data between groups.</p> <p>Other All other activities.</p>	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in	A code that identifies the unit of measure of a height of a person.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A	A code identifying the

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					audio recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)						
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.	
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time a biometric sample was collected.	
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.	
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.	
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))						
BiometricImage	required				A picture of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.	
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false	

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative			Defines the upper left corner of the bounding

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History	The status of this individual encounter as an aggregation of any associated derogatory information.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black	A code identifying the color of a person's hair.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	sound, or video. A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/efts An Electronic Biometric Transmission Specification (EFTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)						
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.	
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time a biometric sample was collected.	
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.	
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.	
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))						
BiometricImage	required				A picture of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.	
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false	

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	otherwise. A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative			Defines the upper left corner of the bounding

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIO image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ²	A name of a high-level division of an organization, e.g., department, agency.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX	A code identifying the color of a person's eyes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonHairColorCode	optional	token		UNKNOWN BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g.,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1	

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
s FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged)	A code identifying a general pattern of a persons fingerprint.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				XX Missing/Amputated Finger	
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic	A format of a binary object, e.g.,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	"image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCICCode	optional	token			A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string			A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ²	A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray	A code identifying the color of a person's hair.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS)	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2	A code identifying a finger of a person that has been printed or has attempted to have been

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound	A code that identifies the unit of measure of the weight of a person.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
s FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F1-3: Identification Element Definition

Attachment F2: Verify Messaging Service

This attachment contains the following tables:

Table F2-1: Verify Element Definition43

Table F2-2: Verification Element Definition 122

Table F2-1 below shows the element definition for a Verify request operation.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Verify	required				
Content: (VerifyOptions?, (EncounterID PersonEnumeratorID), Encounter)					
VerifyOptions	optional				
Content: (VerifyRetainCode, DisableEnumeration?, IdentityFormat?)					
VerifyRetainCode	required	string		Enroll Biometrically identify the person, enrolling into the system when necessary. Verify Biometrically identify the person and retain the information within the system. Verify Assign Biometrically verify the person, but don't retain any information when biometrics are not matched. Verify Only Biometrically verify the person, but don't retain any information.	A code indicating if the submitted fingerprints should be retained within the biometric store.
DisableEnumeration	optional	boolean			Specifies whether or not a Person Enumerator Identifier should be generated
IdentityFormat	optional				
Content: (IdentityFormatCode, IdentityMaximumLength?, IdentityOrderingCode?, EncounterBiometricsCode)					
IdentityFormatCode	required	string		Nil Return no PII, no identity status, and no EID. None Only return the identity status. List List the encounter identifiers. Summary Summarize the encounter information. Detail Return the detailed encounter history.	A code indicating the amount of detail to include when returning associated encounters.
IdentityMaximumLength	optional	positive integer			The maximum number of associated encounters to return. This is only applicable if the FormatCode is not "None".
IdentityOrderingCode	optional	string		Derogatory All Orders encounters by Derogatory information. The number of encounters is not limited by IdentityMaximumLength. Derogatory First Orders encounters by Derogatory information.	A code indicating the ordering of the Identity information. This is only applicable if the FormatCode is not "None". This code is useful when the IdentityMaximumLength is provided.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				The number of encounters is limited by IdentityMaximumLength. Oldest First Orders encounters by date in ascending order. The number of encounters is limited by IdentityMaximumLength. Newest First Orders encounters by date in descending order. The number of encounters is limited by IdentityMaximumLength.	
EncounterBiometricsCode	required	string		None No biometric information. Digital Image Include photographs or images of the person. All Include all biometric details.	A code indicating the level of biometric detail which should be included. This is only applicable if the FormatCode is "Detail".
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonEnumeratorID	required				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, (Person EBTS EFTS PersonBiometricDetails), Document*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a	A type of activity or process that occurred.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast	A name of a high-level division of an organization, e.g., department, agency.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U. S. PASS ²	A name of a subdivision of a high-level division of an organization, e.g., division.
ActivityReporter	optional				A person who reported or observed an incident or an activity.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file.	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle,

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	weight of a person. A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN	A code identifying the race of a person.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is	A code identifying an angle of a person's face in a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb	A code identifying a finger of a person that has been printed or has attempted to

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSO image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

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Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic	A code that identifies the unit of measure of the weight of a person.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is	A code identifying an angle of a person's face in a photograph.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the side.	
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is	A code identifying an angle of a person's face in a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F2-1: Verify Element Definition

Table F2-2 below shows the element definition for Verification, a result of the Verify operation.

Verification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
Verification	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(VerificationStatusCode, EncounterID?, SubmittedEnumeratorStatus?, Identity?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
VerificationStatusCode	required	string		Match The person matched the specified candidate identity. Potential Mismatch The person may be a mismatch, but manual verification is required before a determination can be made. Mismatch The person did not match the specified candidate identity.		
EncounterID	optional				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.	
SubmittedEnumeratorStatus	optional	string		Active This status allows external users to collect the enumerator and search an identity by the enumerator. Reference Only This status allows external users to only search or verify an identity from US-VISIT/IDENT. This enumerator will not be distributed to the external users. Deactivated This status allows external users to only search but not verify an identity from US-VISIT/IDENT. This enumerator can be	The status of the submitted enumerator (refer to submitted message for the enumerator).	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				reactivated upon receipt of 10-prints through the Identify service. Deleted This status does not allow external users to search or verify an identity. Rescinded This status does not allow external users to search or verify an identity. Upon usage, the users will be prompted that the enumerator was deleted upon IDENT maintenance activity.	
Identity	optional				
Content: (IdentityStatusCode?, PersonEnumeratorID?, (EncounterID* EncounterSummary* Encounter)?)					
IdentityStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonEnumeratorID	optional				An IDENT generated unique identifier for an person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	zero or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterSummary	zero or more				A summary of an activity where the person is encountered, and biometrics are captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT	A name of a high-level division of an organization, e.g., department, agency.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT	A name of a subdivision of a high-level division of an organization, e.g., division.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The status of this individual encounter as an aggregation of any associated derogatory information.
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID?, ActivityTypeText?, ActivityReasonText?, ActivityDate?, ActivityTime?, ActivityCommentText?, ActivityPrimaryOrganization?, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode?, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, EncounterStatusCode?, (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	optional				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityTypeText	optional	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	optional	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	optional				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and	A name of a high-level division of an organization, e.g., department, agency.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien	A name of a subdivision of a high-level division of an organization, e.g., division.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK	A code identifying the color of a person's eyes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	optional	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy.	The status of this individual encounter as an aggregation of any associated derogatory information.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK	A code identifying the color of a person's eyes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file.	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebfts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic,

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	sound, or video. A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64			A binary encoding of

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		binary			data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS)	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g.,	A code identifying a general pattern of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				bandaged) XX Missing/Amputated Finger	persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement.	A type of activity or process that occurred.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ²	A name of a high-level division of an organization, e.g., department, agency.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	A name of a subdivision of a high-level division of an organization, e.g., division.
ActivityReporter	optional				A person who reported or observed an incident or an

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ²	A textual code representing the type of identifier assigned.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown	A code identifying the color of a person's hair.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
s FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits	A format of a binary

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the time of entry
ChargeNCICCode	optional	token	1..20		A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string	1..200		A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T	A textual code representing the type of identifier assigned.

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Name	Cardinality	Data Type	Length	Format/Value	Description
				Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W	A code identifying the race of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					(0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z /hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					

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Name	Cardinality	Data Type	Length	Format/Value	Description
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO	A name of a subdivision of a high-level division of an organization, e.g., division.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W	A code identifying the race of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					(0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORI ID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F2-2: Verification Element Definition

Attachment 3: RetrieveIdentity Messaging Service

This attachment contains the following tables:

Table F3-1: RetrieveIdentity Element Definition 16
 Table F3-2: Identification Element Definition 82

Table F3-1 below shows the element definition for a RetrieveIdentity request operation.

RetrieveIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
RetrieveIdentity	required				
Content: (RetrieveOptions?, (EncounterID PersonEnumeratorID), Activity)					
RetrieveOptions	optional				
Content: (IdentityFormat?)					
IdentityFormat	optional				
Content: (IdentityFormatCode, IdentityMaximumLength?, IdentityOrderingCode?, EncounterBiometricsCode)					
IdentityFormatCode	required	string		Nil Return no PII, no identity status, and no EID. None Only return the identity status. List List the encounter identifiers. Summary Summarize the encounter information. Detail Return the detailed encounter history.	A code indicating the amount of detail to include when returning associated encounters.
IdentityMaximumLength	optional	positive integer			The maximum number of associated encounters to return. This is only applicable if the FormatCode is not "None".
IdentityOrderingCode	optional	string		Derogatory All Orders encounters by Derogatory information. The number of encounters is not limited by IdentityMaximumLength. Derogatory First Orders encounters by Derogatory information. The number of encounters is limited by IdentityMaximumLength. Oldest First Orders encounters by date in ascending order. The number of encounters is limited by IdentityMaximumLength. Newest First Orders encounters by date in descending order. The number of encounters is limited by IdentityMaximumLength.	A code indicating the ordering of the Identity information. This is only applicable if the FormatCode is not "None". This code is useful when the IdentityMaximumLength is provided.
EncounterBiometricsCode	required	string		None No biometric information. Digital Image Include photographs or images of the person. All Include all biometric	A code indicating the level of biometric detail which should be included. This is only applicable if the FormatCode is "Detail".

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				details.	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonEnumeratorID	required				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
Activity	required				Details about an activity or process that occurs. An activity may encompass a period of time and multiple occurrences.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups.	A type of activity or process that occurred.

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Retrieval Identity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY	A name of a subdivision of a high-level division of an organization, e.g., division.

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RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEENTRY US-VISIT Seaport Entry Client ² SEEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same

Retrieval Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two	A code that identifies the unit of measure of a height of a person.

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Retrieval Identity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I	A code identifying the race of a person.

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RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				AMERICAN INDIAN U UNKNOWN W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel

Retrieval Identity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSO image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for	A format of a binary object, e.g., "image/jpeg".

Retrieval Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Retrieval Identity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated).	A format of a binary object, e.g., "image/jpeg".

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs

RetrievalIdentity Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F3-1: RetrievalIdentity Element Definition

Table F3-2 below shows the element definition for Identification, a result of the RetrieveIdentity operation.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Identification	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(EncounterID?, SubmittedEnumeratorStatus?, Identity?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
SubmittedEnumeratorStatus	optional	string		Active This status allows external users to collect the enumerator and search an identity by the enumerator. Reference Only This status allows external users to only search or verify an identity from US-VISIT/IDENT. This enumerator will not be distributed to the external users. Deactivated This status allows external users to only search but not verify an identity from US-VISIT/IDENT. This enumerator can be reactivated upon receipt of 10-prints through the Identify service. Deleted This status does not allow external users to search or verify an identity. Rescinded This status does not allow external users to search or verify an identity. Upon usage, the users will be prompted that the enumerator was deleted upon IDENT maintenance activity.	The status of the submitted enumerator (refer to submitted message for the enumerator).
Identity	optional				
Content: (IdentityStatusCode?, PersonEnumeratorID?, (EncounterID* EncounterSummary* Encounter?)					
IdentityStatusCode	optional	string		WatchList	The aggregated status of biometrically linked

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				<p>High risk. This indicates the need for further investigation.</p> <p>Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList.</p> <p>Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits.</p> <p>Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant.</p> <p>None Lowest risk. There is no applicable derogatory information.</p>	encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonEnumeratorID	optional				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	zero or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterSummary	zero or more				A summary of an activity where the person is encountered, and biometrics are captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	<i>CCYY-MM-DD</i>	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA	A name of an organization.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or	The status of this individual encounter as an aggregation of any associated derogatory information.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID?, ActivityTypeText?, ActivityReasonText?, ActivityDate?, ActivityTime?, ActivityCommentText?, ActivityPrimaryOrganization?, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode?, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, EncounterStatusCode?, (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	optional				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	optional	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	optional	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	optional	time	8..18	hh:mm:ss(.sss)?(Z hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	optional				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ²	A name of an organization.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹	A code identifying the color of a person's hair.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
lpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
lpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/ebts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated).	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left little	
entCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
yScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
eQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	optional	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The status of this individual encounter as an aggregation of any associated derogatory information.
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN	A code identifying the race of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				U UNKNOWN W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166A	zero or	token	1..3		A code identifying a country that assigns

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
lpha3	more				rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166A	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerImpressionTypeCode	required	token		Thumbs ¹ 0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS)	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z /hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP	A code identifying a general pattern of a

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftwar e	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsqa A WSQ image. Used for fingerprint images application/x-mmt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ²	A name of an organization.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
6Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
6Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
Indicator	ImagesConcatenate	optional	boolean		Indicates whether or not images are concatenated.
Indicator	CaptureDevicePlaten	optional	boolean		True if capture device platen is dirty, false otherwise.
	FingerprintFingerCode	required	token	1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
Code	FingerprintImpressionTypeC	required	token	0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
Element	FingerprintFingerSegm	0..4			The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
Code	FingerprintFingerCo	required	token	1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				7 Left index 8 Left middle 9 Left ring 10 Left little	
gmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
alityScore	required	non-negative integer		Digits = 2	An NFIO image quality score value for submitted image.
mageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
e64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
e	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
e	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVendorNameText	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LL.D, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCICCode	optional	token	1..20		A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string	1..200		A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
3166Alpha3 DocumentIssuerCountryCode.iso	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g.	A code that identifies the unit of measure of a height of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				six feet two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK	A code identifying the race of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				I AMERICAN INDIAN U UNKNOWN W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
6Alpha3 PersonCitizenshipCode.iso3166Alpha3*	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
6Alpha3 PersonNationalityCode.iso3166Alpha3*	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
dIndicator	ImagesConcatenate	optional	boolean		Indicates whether or not images are concatenated.
Indicator	CaptureDevicePlaten	optional	boolean		True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				15 Left and Right Thumbs ¹	
ode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
ent	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
de	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
gmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
alityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
mageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
e64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSO image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
e	BinaryCaptureDat	optional	date	10 <i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
e	BinaryCaptureTim	optional	time	8..18 <i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ode	FingerprintPatternC	required	token	UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
	FingerprintFingerCode	required	token	1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
	FingerprintPatternCode	required	token	UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots. image/wsqr A WSQ image. Used for fingerprint images application/x-mmt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA	A name of an organization.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
6Alpha3	PersonCitizenshipCode.iso3166Alpha3*	zero or more	token	1..3	A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
6Alpha3	PersonNationalityCode.iso3166Alpha3?	optional	token	1..3	A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerprintImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
Indicator	ImagesConcatenate	optional	boolean		Indicates whether or not images are concatenated.
Indicator	CaptureDevicePlaten	optional	boolean		True if capture device platen is dirty, false otherwise.
	FingerprintFingerCode	required	token	1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
Code	FingerprintImpressionTypeC	required	token	0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
Element	FingerprintFingerSegm	0..4			The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
Code	FingerprintFingerCo	required	token	1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				7 Left index 8 Left middle 9 Left ring 10 Left little	
gmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
alityScore	required	non-negative integer		Digits = 2	An NFIO image quality score value for submitted image.
mageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
e64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
e	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
e	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVendorNameText, SoftwareVersionNumber	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F3-2: Identification Element Definition

Attachment F4: RetrieveCriminalHistory Messaging Service

This attachment contains the following tables:

Table F4-1: RetrieveCriminalHistory Element Definition.....	14
Table F4-2: Retrieve Criminal History Acknowledgement Element Definition	15
Table F4-3: RetrieveCriminalHistory Element Definition.....	17

Table F4-1 below shows the element definition for a RetrieveCriminalHistory request operation.

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
RetrieveCriminalHistory	required				
Content: (EncounterID, OrganizationORIID, TransactionControlNumber?, CaseTrackingID?, Activity)					
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
OrganizationORIID	required				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
TransactionControlNumber	optional				The Transaction Control Number provided by the FBI. This field indicates that the transaction is a resubmission (e.g. Transaction Control Reference).
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
CaseTrackingID	optional				A number used to track a case.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		OCA A Case Identifier to be passed in the OCA field of an EFTS file.	A textual code representing the type of identifier assigned.
Activity	required				Details about an activity or process that occurs. An activity may encompass a period of time and multiple occurrences.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application	A type of activity or process that occurred.

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor	A name of a high-level division of an organization, e.g., department, agency.

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AI REENTRY US-VISIT Airport Entry Client ² AI REXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ²	A name of a subdivision of a high-level division of an organization, e.g., division.

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in	A code that identifies the unit of measure of a

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F	A code identifying the gender or sex of a

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for	A format of a binary object, e.g., "image/jpeg".

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
a3 PersonCitizenshipCode.iso3166Alph	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
a3 PersonNationalityCode.iso3166Alph	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used	A format of a binary object, e.g., "image/jpeg".

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				for fingerprint images application/x-mmt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	
Coordinates	FingerprintFingerSegment	required			The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
	@left	required	non-negative integer		Defines the upper left corner of the bounding box.
	@top	required	non-negative integer		Defines the upper left corner of the bounding box.
	@right	required	non-negative integer		Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
	@bottom	required	non-negative integer		Defines the bottom right corner of the bounding box, by providing the pixels count down.
ore	FingerprintImageQualitySc	required	non-negative integer	Digits = 2	An NFIQ image quality score value for submitted image.
ualityScore	VendorFingerprintImageQ	optional	non-negative integer	Digits = 2	A vendor specific image quality score value for submitted image.
	BiometricBinary	zero or more			A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
	BinaryObject.Base64	required	base-64 binary		A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
	BinaryFormatText	required	string	application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
	BinaryCaptureDate	optional	date	10 CCYY-MM-DD	A date on which the data represented by the

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z /hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					

RetrieveCriminalHistory Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F4-1: RetrieveCriminalHistory Element Definition

Table F4-2 below shows the element definition of Acknowledgement of a Retrieve Criminal History operation.

RetrieveCriminalHistoryAcknowledgement Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
RetrieveCriminalHistoryAcknowledgement	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F4-2: Retrieve Criminal History Acknowledgement Element Definition

Table F4-3 below shows the element definition for CriminalHistory, a result of the RetrieveCriminalHistory operation.

CriminalHistory Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
CriminalHistory	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(TransactionControlNumber, PersonName, PersonAssignedIDDetails?, CriminalHistoryText?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
TransactionControlNumber	required				The Transaction Control Number provided by the FBI. This field indicates that the transaction is a resubmission (e.g. Transaction Control Reference).	
Content: (ID, IDTypeCodeText)						
ID	required	string			A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.	
PersonName	required				A name by which a person is known.	
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)						
PersonGivenName	required	string	1..50		A first name of a person.	
PersonMiddleName	optional	string	1..50		A middle name of a person.	
PersonSurName	required	string	1..50		A last name or family name of a person.	
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).	
PersonAssignedIDDetails	optional				A list of any identifiers issued by Automated Fingerprint Identification System (AFIS) based on submitted fingerprints related identifiers, including FBI and State.	
Content: (PersonID+)						
PersonID	one or more					
Content: (ID, IDTypeCodeText)						
ID	required	string	1..25		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.	
CriminalHistoryText	optional	string	4..200000		The RAP sheet returned from the FBI.	

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F4-2: RetrieveCriminalHistory Element Definition

Attachment F5: PreVerify Messaging Service

This attachment contains the following tables:

Table F5-1: PreVerify Element Definition..... 35

Table F5-2: PreVerification Element Definition..... 38

Table F5-1 below shows the element definition for a PreVerify request operation.

PreVerify Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
PreVerify	required					
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(FingerprintID EncounterID), Document?) Document)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.	
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.	
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.	
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.	
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.	
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)						
OrganizationName	required	string		CA State of California ²	A name of an organization.	

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PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ	A name of a subdivision of a high-level division of an organization, e.g., division.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0..10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).

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PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR	A code identifying the color of a person's eyes.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.

PreVerify Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.	
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)						
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.	
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel	
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels	
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.	
CaptureDuration	optional	duration			A specific range or duration of capture	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?,						

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ClientApplicationSoftware?					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative		Digits = 2	An NFIO image quality score value for submitted image.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
VendorFingerprintImageQualityScore	optional	integer non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

PreVerify Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
Vessel	required				Doco goes here.	
Content: (CarrierIdentification, VesselRegistrationIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
CarrierIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
VesselRegistrationIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
FingerprintID	required				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	

PreVerify Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
IDTypeCodeText	required	string		FIN An IDENT generated unique identifier for a fingerprint.	A textual code representing the type of identifier assigned.	
EncounterID	required				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.	
Document	optional				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.	
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)						
DocumentDescriptiveMetadata	required				Details about general document descriptors.	
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)						
DocumentID	required				A unique and unambiguous reference to the resource within a given context.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.	
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or	

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ²	A textual code representing the type of identifier assigned.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE	A code identifying the color of a person's hair.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated).	A format of a binary object, e.g., "image/jpeg".

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS)	A format of a binary object, e.g., "image/jpeg".

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain	

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots	A format of a binary object, e.g., "image/jpeg".

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				(Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					

PreVerify Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.	
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.	
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.	
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.	
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ImageQualitySoftware	optional				Contains the image quality software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ImageSegmentationSoftware	optional				Contains the image segmentation software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ClientApplicationSoftware	optional				Contains the client application software	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.	
Content: (BiometricImage)						
BiometricImage	required				A picture of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efts An Electronic	A format of a binary object, e.g., "image/jpeg".	

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Document	required				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T	A textual code representing the type of identifier assigned.

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PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName(0..10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
the identity, or verify the claimed identity, of a person.					
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "Image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIO image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					

PreVerify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F5-1: PreVerify Element Definition

Table F5-2 below shows the element definition for PreVerification, a result of the PreVerify operation.

PreVerification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
PreVerification	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(FingerprintCaptureTechniqueCategoryCode, ServiceOperationCode, (EncounterID, IdentityStatusCode, PersonAssignedIDDetails, FingerprintAnnotationDetails(0,10))?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
FingerprintCaptureTechniqueCategoryCode	required	string		4-Prints Single hand left slap 10-Prints Left and right slap and two thumbs	A classification of the manner in which the fingerprint is taken.	
ServiceOperationCode	required	string		AddBiometrics Provides additional biometric information to existing biometric encounter. IdentifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject). PreVerify Given a biographic encounter and identity claim such as an FIN, and/or Document, compare stored biographic associated with identity claim. If matched, specifies what prints to capture via the VerifySync service. If not matched, initiate the IdentifySync service. VerifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject).	Specifies the SOAP action to perform	

PreVerification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
IdentityStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonAssignedIDDetails	required				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
FingerprintAnnotationDetails	0..10				A representation of the fingerprint annotation characteristics for a set of person fingerprints.
Content: (FingerprintFingerCode, FingerprintPatternCode)					

PreVerification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F5-2: PreVerification Element Definition

Attachment F6: AddBiometrics and AddDisposition Messaging Service

This attachment contains the following tables:

Table F6-1: AddBiometrics Element Definition	21
Table F6-2: BiometricsAdded Element Definition	22
Table F6-3: AddDisposition Element Definition	37
Table F6-4: DispositionAdded Element Definition	39

Table F6-1 below shows the element definition for an AddBiometrics request operation.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
AddBiometrics	required				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID, PersonBiometricDetails)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ²	A name of a subdivision of a high-level division of an organization, e.g., division.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				G11 IDENT Generic 1: 1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W	A code identifying the race of a person.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonPhysicalFeature	zero or more			WHITE	Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category. e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file.	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerprintImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsqs A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image

AddBiometrics Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
					capture equipment.	
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.	
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.	
ext CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.	
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ImageQualitySoftware	optional				Contains the image quality software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ImageSegmentationSoftware	optional				Contains the image segmentation software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
ClientApplicationSoftware	optional				Contains the client application software	
Content: (SoftwareVendorNameText, SoftwareVersionNumber)						
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name	
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number	
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.	
Content: (BiometricImage)						
BiometricImage	required				A picture of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric	A format of a binary object, e.g., "image/jpeg".	

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					

AddBiometrics Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
CarrierIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
FlightIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
Vessel	required				Doco goes here.	
Content: (CarrierIdentification, VesselRegistrationIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
CarrierIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqs A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
				A Feedback binary file. Used for fingerprint feedback		
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel	
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels	
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.	
CaptureDuration	optional	duration			A specific range or duration of capture	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)						
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.	
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.	
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.	
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.	
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))						
BiometricImage	required				A picture of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".	

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

AddBiometrics Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
				3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little		
notes		FingerprintFingerSegmentCoordinates	required		The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.	
		@left	required	non-negative integer	Defines the upper left corner of the bounding box.	
		@top	required	non-negative integer	Defines the upper left corner of the bounding box.	
		@right	required	non-negative integer	Defines the bottom right corner of the bounding box, by providing the pixels count to the right.	
		@bottom	required	non-negative integer	Defines the bottom right corner of the bounding box, by providing the pixels count down.	
		FingerprintImageQualityScore	required	non-negative integer	Digits = 2 An NFIQ image quality score value for submitted image.	
core		VendorFingerprintImageQualityScore	optional	non-negative integer	Digits = 2 A vendor specific image quality score value for submitted image.	
		BiometricBinary	zero or more		A binary representation of a biometric sample.	
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)						
		BinaryObject.Base64	required	base-64 binary	A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
		BinaryFormatText	required	string	application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqs A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images	A format of a binary object, e.g., "image/jpeg".

AddBiometrics Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F6-1: AddBiometrics Element Definition

Table F6-2 below shows the element definition for BiometricsAdded, a result of the AddBiometrics operation.

BiometricsAdded Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricsAdded	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F6-2: BiometricAdded Element Definition

Table F6-3 below shows the element definition for an AddDisposition request operation.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
AddDisposition	required				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID, PrimaryDispositionText, (ServiceRequesterMetric?)*)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration	A name of a high-level division of an organization, e.g., department, agency.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ¹ ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDENTRY US-VISIT US Arrival	A name of a subdivision of a high-level division of an organization, e.g., division.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ²	A textual code representing the type of identifier assigned.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray	A code identifying the color of a person's hair.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used	A format of a binary object, e.g., "image/jpeg".

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission	A format of a binary object, e.g., "image/jpeg".

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images. application/x-mnt A Minutiae binary file. Used for fingerprint minutiae. application/x-fbk A Feedback binary file. Used for fingerprint feedback.	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerprintImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission	A format of a binary object, e.g., "image/jpeg".

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images. application/x-mnt A Minutiae binary file. Used for fingerprint minutiae. application/x-fbk A Feedback binary file. Used for fingerprint feedback.	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2	

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIO image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg	A format of a binary object, e.g., "image/jpeg".

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots. image/wsqr A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used	A format of a binary object, e.g., "image/jpeg".

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				for mug shots. image/wsqr A WSQ image. Used for fingerprint images application/x-mmt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					

AddDisposition Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PrimaryDispositionText	required	string		Admissible Admissible to U.S Secondary Send to Secondary	Specifies a disposition for a traveler.
ServiceRequesterMetric	optional				Specifies the service requester transaction performance metric information
Content: (MessageID, ServiceOperationCode, ServiceOperationDuration)					
MessageID	required	string	1..41		SOAP unique message identifier
ServiceOperationCode	required	string		AddBiometrics Provides additional biometric information to existing biometric encounter. IdentifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject). PreVerify Given a biographic encounter and identity claim such as an FIN, and/or Document, compare stored biographic associated with identity claim. If matched, specifies what prints to capture via the VerifySync service. If not matched, initiate the IdentifySync service. VerifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject).	Specifies the SOAP action to perform
ServiceOperationDuration	required	duration			Specifies the duration of service performance

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F6-3: AddDisposition Element Definition

Table F6-4 below shows the element definition for a DispositionAdded, a result of AddDisposition request operation.

DispositionAdded Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
DispositionAdded	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(ServiceProviderMetric?)*						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
ServiceProviderMetric	optional				Specifies the service provider transaction performance metric information	
Content: (MessageID, ServiceOperationCode, ServiceOperationDuration)						
MessageID	required	string	1..41		SOAP unique message identifier	
ServiceOperationCode	required	string			<p>AddBiometrics Provides additional biometric information to existing biometric encounter.</p> <p>IdentifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a new subject).</p> <p>PreVerify Given a biographic encounter and identity claim such as an FIN, and/or Document, compare stored biographic associated with identity claim. If matched, specifies what prints to capture via the VerifySync service. If not matched, initiate the IdentifySync service.</p> <p>VerifySync Searches the entire population of stored biometrics to find a previous encounter with the matching biometrics. If a previous encounter is found, this new biometric encounter is retained and associated with it. If no previous encounter is found, the new biometric encounter is enrolled (indicating a</p>	

DispositionAdded Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				new subject).	
ServiceOperationDuration	required	duration			Specifies the duration of service performance

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F6-4: DispositionAdded Element Definition

Attachment F7: IdentifySync Messaging Service

This attachment contains the following tables:

Table F7-1: Identify Element Definition 76

Table F7-2: Identification Element Definition..... 153

Table F7-1 below shows the element definition for an Identify request operation.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Identify	required				
Content: (IdentifyOptions?, Encounter)					
IdentifyOptions	optional				
Content: (IdentifyRetainCode, DisableEnumeration?, IdentityFormat?)					
IdentifyRetainCode	required	string		Enroll Biometrically identify the person, enrolling into the system when necessary. Identify Biometrically identify the person, but do not retain biometrics when biometrics are not matched. Identify Assign Biometrically identify the person, but don't retain any information when biometrics are not matched. Identify Only Biometrically identify the person, but don't retain any information.	A code indicating if the submitted fingerprints should be retained within the biometric store.
DisableEnumeration	optional	boolean			Specifies whether or not a Person Enumerator Identifier should be generated
IdentityFormat	optional				
Content: (IdentityFormatCode, IdentityMaximumLength?, IdentityOrderingCode?, EncounterBiometricsCode)					
IdentityFormatCode	required	string		Nil Return no PII, no identity status, and no EID. None Only return the identity status. List List the encounter identifiers. Summary Summarize the encounter information. Detail Return the detailed encounter history.	A code indicating the amount of detail to include when returning associated encounters.
IdentityMaximumLength	optional	positive integer			The maximum number of associated encounters to return. This is only applicable if the FormatCode is not "None".
IdentityOrderingCode	optional	string		Derogatory All Orders encounters by Derogatory information. The number of encounters is not limited by	A code indicating the ordering of the Identify information. This is only applicable if the FormatCode is not "None". This code is

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				IdentityMaximumLength. Derogatory First Orders encounters by Derogatory information. The number of encounters is limited by IdentityMaximumLength. Oldest First Orders encounters by date in ascending order. The number of encounters is limited by IdentityMaximumLength. Newest First Orders encounters by date in descending order. The number of encounters is limited by IdentityMaximumLength.	useful when the IdentityMaximumLength is provided.
EncounterBiometricsCode	required	string		None No biometric information. Digital Image Include photographs or images of the person. All Include all biometric details.	A code indicating the level of biometric detail which should be included. This is only applicable if the FormatCode is "Detail".
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?), (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person	A code that identifies the unit of measure of a height of a person.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A	A code identifying the

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt	A format of a binary object, e.g., "image/jpeg".

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint	A format of a binary object, e.g.,

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	"image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated).	A format of a binary object, e.g., "image/jpeg".

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL	A code identifying the color of a person's eyes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				MULTICOLORED PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side	A code identifying an angle of a person's face in a photograph.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				The object in the image is facing the side.	
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0,

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX	A code identifying a general pattern of a persons fingerprint.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Missing/Amputated Finger	
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal	A code identifying an angle of a person's face
				The object in the image	

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ²	A name of a subdivision of a high-level division of an organization, e.g., division.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr,

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet	A code that identifies the unit of measure of a height of a person.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I	A code identifying the race of a person.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				AMERICAN INDIAN U UNKNOWN W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots.	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "Image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IidentificationID	required	string			

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FlightIDentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIDentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIDentification	required				
Content: (IdentificationID)					

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCICCode	optional	token			A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string			A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN	A code identifying the color of a person's hair.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture,

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative			Defines the bottom right corner of the

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer			A height of image in pixel

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					

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Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field	A name of a subdivision of a high-level division of an organization, e.g., division.

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IDENT Exchange Messages Specification – v3.1

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU	A code identifying the color of a person's eyes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "Image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left index 8 Left middle 9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recorded.
BinaryCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric	A format of a binary object, e.g., "image/jpeg".

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer			A height of image in pixel
ImageWidthValue	optional	integer			A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to

Identify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F7-1: Identify Element Definition

Table F7-2 below shows the element definition for Identification, a result of the Identify operation.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Identification	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(EncounterID?, SubmittedEnumeratorStatus?, Identity?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
SubmittedEnumeratorStatus	optional	string		Active This status allows external users to collect the enumerator and search an identity by the enumerator. Reference Only This status allows external users to only search or verify an identity from US-VISIT/IDENT. This enumerator will not be distributed to the external users. Deactivated This status allows external users to only search but not verify an identity from US-VISIT/IDENT. This enumerator can be reactivated upon receipt of 10-prints through the Identify service. Deleted This status does not allow external users to search or verify an identity. Rescinded This status does not allow external users to search or verify an identity. Upon usage, the users will be prompted that the enumerator was deleted upon IDENT maintenance activity.	The status of the submitted enumerator (refer to submitted message for the enumerator).

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Identity	optional				
Content: (IdentityStatusCode, PersonEnumeratorID?, (EncounterID* EncounterSummary* Encounter*)?)					
IdentityStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonEnumeratorID	optional				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	zero or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterSummary	zero or more				A summary of an activity where the person is encountered.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					and biometrics are captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AI REENTRY US-VISIT Airport Entry	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk.	The status of this individual encounter as an aggregation of any associated derogatory information.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
Encounter	zero or more				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, EncounterStatusCode?, (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ²	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch	A code that identifies the unit of measure of

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE	A code identifying the gender or sex of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqs A WSQ image. Used for fingerprint images	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				8 Left middle 9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	optional	string		WatchList High risk. This	The status of this individual encounter as

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				<p>indicates the need for further investigation.</p> <p>Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList.</p> <p>Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits.</p> <p>Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant.</p> <p>None Lowest risk. There is no applicable derogatory information.</p>	an aggregation of any associated derogatory information.
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name. (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK	A code identifying the

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?,					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative			Defines the bottom right corner of the

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		integer			bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS)	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerImpressionTypeCode	required	token		Left and Right Thumbs ¹ 0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	sound, or video. A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security	A type of activity or process that occurred.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRI VAL United States Arrival ² US PASS U.S. PASS ²	A name of a subdivision of a high-level division of an organization, e.g., division.
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LL.D, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LL.D, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP	A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK	A code identifying the color of a person's hair.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1	A code identifying a

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCICCode	optional	token			A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string			A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					target or intended recipient of a document.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LL.D, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LL.D, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ²	A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY	A code identifying the color of a person's hair.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file.	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-minutiae A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string			A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string			A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT	A name of a subdivision of a high-level division of an organization, e.g., division.

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string			A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token			A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic	A code that identifies the unit of measure of a height of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M	A code identifying the gender or sex of a person.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt	A format of a binary object, e.g., "image/jpeg".

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate, BinaryCaptureTime)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	required	date	10	CCYY-MM-DD	A date on which the data represented by

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae	A format of a binary object, e.g., "image/jpeg".

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Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes,

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ²	A textual code representing the type of identifier assigned.

Identification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F7-2: Identification Element Definition

Attachment F8: VerifySync Messaging Service

This attachment contains the following tables:

Table F8-1: Verify Element Definition	43
Table F8-2: Verification Element Definition	122

Table F8-1 below shows the element definition for a Verify request operation.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Verify	required				
Content: (VerifyOptions?, (EncounterID PersonEnumeratorID), Encounter)					
VerifyOptions	optional				
Content: (VerifyRetainCode, DisableEnumeration?, IdentityFormat?)					
VerifyRetainCode	required	string		Enroll Biometrically identify the person, enrolling into the system when necessary. Verify Biometrically identify the person and retain the information within the system. Verify Assign Biometrically verify the person, but don't retain any information when biometrics are not matched. Verify Only Biometrically verify the person, but don't retain any information.	A code indicating if the submitted fingerprints should be retained within the biometric store.
DisableEnumeration	optional	boolean			Specifies whether or not a Person Enumerator Identifier should be generated
IdentityFormat	optional				
Content: (IdentityFormatCode, IdentityMaximumLength?, IdentityOrderingCode?, EncounterBiometricsCode)					
IdentityFormatCode	required	string		Nil Return no PII, no identity status, and no EID. None Only return the identity status. List List the encounter identifiers. Summary Summarize the encounter information. Detail Return the detailed encounter history.	A code indicating the amount of detail to include when returning associated encounters.
IdentityMaximumLength	optional	positive integer			The maximum number of associated encounters to return. This is only applicable if the FormatCode is not "None".
IdentityOrderingCode	optional	string		Derogatory All Orders encounters by Derogatory information. The number of encounters is not limited by IdentityMaximumLength. Derogatory First Orders encounters by Derogatory information.	A code indicating the ordering of the Identity information. This is only applicable if the FormatCode is not "None". This code is useful when the IdentityMaximumLength is provided.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				The number of encounters is limited by IdentityMaximumLength. Oldest First Orders encounters by date in ascending order. The number of encounters is limited by IdentityMaximumLength. Newest First Orders encounters by date in descending order. The number of encounters is limited by IdentityMaximumLength.	
EncounterBiometricsCode	required	string		None No biometric information. Digital Image Include photographs or images of the person. All Include all biometric details.	A code indicating the level of biometric detail which should be included. This is only applicable if the FormatCode is "Detail".
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonEnumeratorID	required				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, (Person EBTS EFTS PersonBiometricDetails), Document*, PersonAssignedIDDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a	A type of activity or process that occurred.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast	A name of a high-level division of an organization, e.g., department, agency.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U. S. PASS ²	A name of a subdivision of a high-level division of an organization, e.g., division.
ActivityReporter	optional				A person who reported or observed an incident or an activity.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file.	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots. image/wsqr A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for	A format of a binary object, e.g., "image/jpeg".

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle,

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	weight of a person. A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN	A code identifying the race of a person.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				W WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is	A code identifying an angle of a person's face in a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb	A code identifying a finger of a person that has been printed or has attempted to

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSO image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Containst the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.

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Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	A textual code representing the type of identifier assigned.
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic	A code that identifies the unit of measure of the weight of a person.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is	A code identifying an angle of a person's face in a photograph.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the side.	
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is	A code identifying an angle of a person's face in a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
PersonAssignedIDDDetails	optional				A set of details about identifications issued to a

Verify Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (PersonID+)					
PersonID	one or more				person.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F8-1: Verify Element Definition

Table F2-2 below shows the element definition for Verification, a result of the Verify operation.

Verification Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
Verification	required					
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(VerificationStatusCode, EncounterID?, SubmittedEnumeratorStatus?, Identity?)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.	
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.	
VerificationStatusCode	required	string			<p>Match The person matched the specified candidate identity.</p> <p>Potential Mismatch The person may be a mismatch, but manual verification is required before a determination can be made.</p> <p>Mismatch The person did not match the specified candidate identity.</p>	
EncounterID	optional				An IDENT generated unique identifier for an encounter.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..20		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string			<p>EID An IDENT generated unique identifier for an encounter.</p>	
SubmittedEnumeratorStatus	optional	string			<p>Active This status allows external users to collect the enumerator and search an identity by the enumerator.</p> <p>Reference Only This status allows external users to only search or verify an identity from US-VISIT/IDENT. This enumerator will not be distributed to the external users.</p> <p>Deactivated This status allows external users to only search but not verify an identity from US-VISIT/IDENT. This enumerator can be</p>	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				reactivated upon receipt of 10-prints through the Identify service. Deleted This status does not allow external users to search or verify an identity. Rescinded This status does not allow external users to search or verify an identity. Upon usage, the users will be prompted that the enumerator was deleted upon IDENT maintenance activity.	
Identity	optional				
Content: (IdentityStatusCode?, PersonEnumeratorID?, (EncounterID* EncounterSummary* Encounter)?)					
IdentityStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.
@potential	optional	boolean			True if identity status code is potential, false otherwise.
PersonEnumeratorID	optional				An IDENT generated unique identifier for an person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.

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Name	Cardinality	Data Type	Length	Format/Value	Description
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	zero or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterSummary	zero or more				A summary of an activity where the person is encountered, and biometrics are captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT	A name of a high-level division of an organization, e.g., department, agency.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT	A name of a subdivision of a high-level division of an organization, e.g., division.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The status of this individual encounter as an aggregation of any associated derogatory information.
Encounter	required				An activity where the person is encountered, and biometrics are captured.
Content: (ActivityID?, ActivityTypeText?, ActivityReasonText?, ActivityDate?, ActivityTime?, ActivityCommentText?, ActivityPrimaryOrganization?, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode?, ActivityTerminal?, ConveyanceDetails?)(EncounterID?, EncounterStatusCode?, (Person EBTS EFTS PersonBiometricDetails), DerogatoryInformation*, Document*, Comment*, PersonAssignedIDDetails?)					
ActivityID	optional				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityTypeText	optional	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	optional	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	optional				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and	A name of a high-level division of an organization, e.g., department, agency.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien	A name of a subdivision of a high-level division of an organization, e.g., division.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK	A code identifying the color of a person's eyes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	optional	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	optional				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	optional	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy.	The status of this individual encounter as an aggregation of any associated derogatory information.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
Person	required				Describes inherent and frequently associated characteristics of a person.
Content: (PersonName, PersonAlternateName(0,10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK	A code identifying the color of a person's eyes.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
EBTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file.	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
EFTS	required				
Content: (BinaryObject.Base64, BinaryFormatText)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebfts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
PersonBiometricDetails	required				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic,

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	sound, or video. A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64			A binary encoding of

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		binary			data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS)	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g.,	A code identifying a general pattern of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				bandaged) XX Missing/Amputated Finger	persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
DerogatoryInformation	zero or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement.	A type of activity or process that occurred.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ²	A name of a high-level division of an organization, e.g., department, agency.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	A name of a subdivision of a high-level division of an organization, e.g., division.
ActivityReporter	optional				A person who reported or observed an incident or an

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ²	A textual code representing the type of identifier assigned.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown	A code identifying the color of a person's hair.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain	

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
s FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits	A format of a binary

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IdentificationID	required	string			
FlightIDentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIDentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country
EntryStatusText	optional	string	1..22		Migration status at

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the time of entry
ChargeNCICCode	optional	token	1..20		A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string	1..200		A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.
Document	zero or more				Details about inherent and frequently used characteristics of a document. Format or media is irrelevant in defining a document, however they are characteristics of a document. Documents are considered unique resources.
Content: (DocumentDescriptiveMetadata, DocumentSubject.Person?)					
DocumentDescriptiveMetadata	required				Details about general document descriptors.
Content: (DocumentID, DocumentExpirationDate?, DocumentIssuerCountryCode.iso3166Alpha3, DocumentIssuedDate?, ClassAdmissionCode?)					
DocumentID	required				A unique and unambiguous reference to the resource within a given context.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		A Permanent Resident Card Prior to 1998 ² S Social Security Number ² B Border Crossing Card ² C Permanent Resident Card (Legacy IDENT) ² F Facilitation Document ² I INSPASS Document ² M Military ² P Passport ² T	A textual code representing the type of identifier assigned.

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Reentry Permit Refugee ² V Visa ² VI Immigrant Visa ² VN Non-Immigrant Visa ² C1 Permanent Resident Card ² A1 Alien Registration Card ² TR DHS Re-entry Permit ² TP Refugee Travel Document (Re-entry Permit prior to 2003) ²	
DocumentExpirationDate	optional	date	10	CCYY-MM-DD	A date a document should be removed from a registry or index.
DocumentIssuerCountryCode.iso3166Alpha3	required	token	1..3		A code identifying the country which issued the document.
DocumentIssuedDate	optional	date	10	CCYY-MM-DD	The date that the document was issued to the document holder.
ClassAdmissionCode	optional	string	1..10		A code used by INS to categorize legal immigration by major class of admission
DocumentSubject.Person	optional				A person or organization that is a target or intended recipient of a document.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W	A code identifying the race of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQA image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					(0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
Comment	zero or more				
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO	A name of a subdivision of a high-level division of an organization, e.g., division.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W	A code identifying the race of a person.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				WHITE	
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)()					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is

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Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured, e.g., an image taken or an audio recorded.
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?())					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinate	required				The coordinates of the bounding box for an individual finger, relative to the origin

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					(0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORI ID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					

Verification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F8-2: Verification Element Definition

Attachment F9: AddDerogatoryInformation Messaging Service

This attachment contains the following tables:

Table F9-1: AddDerogatoryInformation Element Definition35
 Table F9-2: DerogatoryInformationAdded Element Definition36

Table F9-1 below shows the element definition for an AddDerogatoryInformation request operation.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
AddDerogatoryInformation					
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID, DerogatoryInformation+)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and	A name of a subdivision of a high-level division of an organization, e.g., division.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents	A code that identifies the unit of measure of a height of a person.

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AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	A code identifying the color of a person's eyes.
PersonHairColorCode	optional	token		BAL Bald' BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A	A code identifying

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts	A format of a binary object, e.g., "image/jpeg".

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-		Digits = 2	An NFIQ image

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
		negative integer			quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for hte image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg	A format of a binary object, e.g., "image/jpeg".

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
DerogatoryInformation	one or more				Contains derogatory information
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryTypeText, DerogatoryExpirationDate?, Apprehension?)					
ActivityID	required				An identifier that uniquely refers to an activity or

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ²	A name of a high-level division of an organization, e.g.,

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ²	A name of a subdivision of a high-level division of an organization, e.g., division.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName{0,10}, PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN	A code identifying the color of a person's eyes.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald ¹ BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM	A code identifying

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z /hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)					
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1,14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)					
BiometricCaptureDate	required	date	10	<i>CCYY-MM-DD</i>	A date a biometric sample was collected.
BiometricCaptureTime	required	time	8..18	<i>hh:mm:ss(.sss)?(Z/-hh:mm)?</i>	A time a biometric sample was collected.
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerprintImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification	A format of a binary object, e.g., "image/jpeg".

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				(EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification	A format of a binary object, e.g., "image/jpeg".

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				(EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
TotalCaptureDuration	optional	duration			A total range or duration of capture

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae. application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
Flight	required				Doco goes here.
Content: (CarrierIdentification, FlightIdentification)					

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
FlightIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
Vessel	required				Doco goes here.
Content: (CarrierIdentification, VesselRegistrationIdentification)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryExpirationDate	optional	date	10	CCYY-MM-DD	Expiration date of derogatory information
Apprehension	optional				Contains apprehension information
Content: (ApprehensionAgentName?, ApprehensionDate, ApprehensionTime, ApprehensionLocationText?, ApprehensionMethod?, IllegallyStayDuration?, EntryStatusText?, ChargeNCICCode?, ChargeDispositionDescriptionText?)					
ApprehensionAgentName	optional				Name of person performing the apprehension activity
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
ApprehensionDate	required	date	10	CCYY-MM-DD	Date of apprehension
ApprehensionTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	Time of apprehension
ApprehensionLocationText	optional	string	1..50		Location of apprehension
ApprehensionMethod	optional	string	1..3		Method of apprehension
IllegallyStayDuration	optional	string	1..5		Length of time illegally in the country

AddDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EntryStatusText	optional	string	1..22		Migration status at the time of entry
ChargeNCI CCode	optional	token	1..20		A code that identifies an offense within the National Crime Information Center (NCIC) system.
ChargeDispositionDescriptionText	optional	string	1..200		A description of the result of processing a charge. For an arrest charge, this may be a law enforcement agency action, such as custody only, turned over to another agency, referred or not referred for prosecution. For a court case charge, this may be dismissal, or any penalties, sanctions, or sentence assessed as a result of a finding or negotiated resolution in the case.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F9-1: AddDerogatoryInformation Element Definition

Table F9-2 below shows the element definition for DerogatoryInformationAdded, a result of the AddDerogatoryInformation operation.

DerogatoryInformationAdded Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DerogatoryInformationAdded	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)(DerogatoryInformationID+)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.
DerogatoryInformationID	one or more				An IDENT generated unique identifier for derogatory information associated with an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		DIID An IDENT generated unique identifier for derogatory information.	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F9-2: DerogatoryInformationAdded Element Definition

Attachment F10: DeactivateDerogatoryInformation Messaging Service

This attachment contains the following tables:

Table F10-1: DeactivateDerogatoryInformation Element Definition 14
 Table F10-2: DerogatoryInformationDeactivated Element Definition 15

Table F10-1 below shows the element definition for a DeactivateDerogatoryInformation request operation.

DeactivateDerogatoryInformation Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
DeactivateDerogatoryInformation	required					
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORIID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(DerogatoryInformationID+)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.	
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.	
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.	
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.	
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.	
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)						
OrganizationName	required	string		CA State of California ²	A name of an organization.	

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ²	A name of a subdivision of a high-level division of an organization, e.g., division.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0..10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.

DeactivateDerogatoryInformation Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)						
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.	
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel	
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels	
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.	
CaptureDuration	optional	duration			A specific range or duration of capture	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)						
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.	
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.	
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics	

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsqa A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g.,	A code identifying a general pattern of a persons fingerprint.

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				bandaged) XX Missing/Amputated Finger	
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?,					

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/efts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

DeactivateDerogatoryInformation Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
Flight	required				Doco goes here.	
Content: (CarrierIdentification, FlightIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
CarrierIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
FlightIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
Vessel	required				Doco goes here.	
Content: (CarrierIdentification, VesselRegistrationIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship	

DeactivateDerogatoryInformation Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
DerogatoryInformationID	one or more				An IDENT generated unique identifier for derogatory information associated with an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		DIID An IDENT generated unique identifier for derogatory information.	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F10-1: DeactivateDerogatoryInformation Element Definition

Table F10-2 below shows the element definition for DerogatoryInformationDeactivated, a result of the DeactivateDerogatoryInformation operation.

DerogatoryInformationDeactivated Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DerogatoryInformationDeactivated	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F10-2: DerogatoryInformationDeactivated Element Definition

Attachment F11: DeleteEncounters Messaging Service

This attachment contains the following tables:

Table F11-1: DeleteEncounters Element Definition	14
Table F11-2: DeleteEncountersAcknowledgement Element Definition	15
Table F11-3: EncountersDeleted Element Definition	16

Table F11-1 below shows the element definition for a DeleteEncounters request operation.

DeleteEncounters Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
DeleteEncounters	required					
Content: (ActivityID, ActivityTypeText, ActivityReasonText?, ActivityDate, ActivityTime, ActivityCommentText?, ActivityPrimaryOrganization, ActivityReporter?, OrganizationORID?, ActivityPriority?, ActivityUserLogin?, ActivitySiteCode, ActivityTerminal?, ConveyanceDetails?)(EncounterID+)						
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.	
Content: (ID, IDTypeCodeText)						
ID	required	string	1..40		A value that identifies an entity within the identifier domain.	
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.	
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.	
ActivityReasonText	optional	string	1..75		A reason why an activity or process occurred.	
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.	
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?[Z]-hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.	
ActivityCommentText	optional	string	1..4000		A note or comment about an activity.	
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.	
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)						
OrganizationName	required	string		CA State of California ² DHS	A name of an organization.	

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ	A name of a subdivision of a high-level division of an organization, e.g., division.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityReporter	optional				A person who reported or observed an incident or an activity.
Content: (PersonName, PersonAlternateName(0..10), PersonBirthDate?, PersonBirthPlaceCode?, PersonAssignedIDDetails?, PersonPhysicalDetails?, PersonSocialDetails?, PersonBiometricDetails?)					
PersonName	required				A name by which a person is known.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonAlternateName	0..10				An alternate name used by a person. Sometimes referred to as an AKA.
Content: (PersonGivenName, PersonMiddleName?, PersonSurName, PersonSuffixName?)					
PersonGivenName	required	string	1..50		A first name of a person.
PersonMiddleName	optional	string	1..50		A middle name of a person.
PersonSurName	required	string	1..50		A last name or family name of a person.
PersonSuffixName	optional	string	1..5		A component that is appended after the family name that distinguishes members of a family with the same given, middle, and last name, (e.g., Jr, Sr, III), or otherwise qualifies the name (e.g., MD, LLD, PhD).
PersonBirthDate	optional	date	10	CCYY-MM-DD	A date a person was born.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
PersonBirthPlaceCode	optional	token	1..2		A code identifying the state or country of a person's birth.
PersonAssignedIDDetails	optional				A set of details about identifications issued to a person.
Content: (PersonID+)					
PersonID	one or more				
Content: (ID, IDTypeCodeText)					
ID	required	string	1..25		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..25	AR Alien Registration Number ² CRN Civil Record Number ² FBI FBI Number ² SID State ID ² SOC Social Security Number ² USP US PASS Identifier ²	A textual code representing the type of identifier assigned.
PersonPhysicalDetails	optional				A set of details about the physical appearance of a person.
Content: (PersonHeightMeasure?, PersonWeightMeasure?, PersonEyeColorCode?, PersonHairColorCode?, PersonSexCode?, PersonRaceCode?, PersonPhysicalFeature*)					
PersonHeightMeasure	optional	decimal			A measurement of the height of a person.
@personHeightUnitCode	optional	string		in inch ncic An NCIC formatted three-digit person height field. The first digit represents the height of the person in feet, the second two digits represent the remainder of the height in inches, e.g. six feet two inches is represented as "602".	A code that identifies the unit of measure of a height of a person.
PersonWeightMeasure	optional	decimal			A measurement of the weight of a person.
@personWeightUnitCode	optional	string		lb pound ncic An NCIC formatted three-digit person weight field, where the three digits represents the weight of the person in pounds.	A code that identifies the unit of measure of the weight of a person.
PersonEyeColorCode	optional	token		BLK BLACK BLU BLUE BRO BROWN GRN GREEN GRY GRAY HAZ HAZEL MAR MAROON MUL MULTICOLORED	A code identifying the color of a person's eyes.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PNK PINK XXX UNKNOWN	
PersonHairColorCode	optional	token		BAL Bald BLK Black BLN Blond or Strawberry BLU Blue BRO Brown GRN Green GRY Gray or Partially Gray ONG Orange PLE Purple PNK Pink RED Red or Auburn SDY Sandy WHI White XXX UNKNOWN OR COMPLETELY BALD	A code identifying the color of a person's hair.
PersonSexCode	optional	token		F FEMALE M MALE U UNKNOWN - FOR UNIDENTIFIED ONLY	A code identifying the gender or sex of a person.
PersonRaceCode	optional	token		A ASIAN B BLACK I AMERICAN INDIAN U UNKNOWN W WHITE	A code identifying the race of a person.
PersonPhysicalFeature	zero or more				Details about a physical feature of a person. Includes scars, marks, and tattoos.
Content: (PhysicalFeatureTypeText?, PhysicalFeatureTypeCode?, PhysicalFeatureDescriptionText?, PhysicalFeatureImage?)					
PhysicalFeatureTypeText	optional	string			A type of physical feature within a category, e.g., for a tattoo type, this could be animal, flag.
PhysicalFeatureTypeCode	optional	token		ART ARM Arm, nonspecific, artificial ART BRST Breast, nonspecific, artificial ART BRSTS Breast implant, left and right ... Skipping 847 values	A code identifying a type of physical feature.
PhysicalFeatureDescriptionText	optional	string			A description of a physical feature.
PhysicalFeatureImage	optional				A digital image of a physical feature, e.g., tattoo.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.
CaptureDuration	optional	duration			A specific range or duration of capture
PersonSocialDetails	optional				A set of details about the social characteristics of a person.
Content: (PersonCitizenshipCode.iso3166Alpha3*, PersonNationalityCode.iso3166Alpha3?)					
PersonCitizenshipCode.iso3166Alpha3	zero or more	token	1..3		A code identifying a country that assigns rights, duties, and privileges to a person due to the person's birth or naturalization in that country.
PersonNationalityCode.iso3166Alpha3	optional	token	1..3		A code identifying the country in which a person was born.
PersonBiometricDetails	optional				A set of details about measurable biological or behavioral characteristics, which can reliably recognize the identity, or verify the claimed identity, of a person.

DeleteEncounters Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
Content: (PersonDigitalImage*, PersonFingerprintSet?, PersonIrisFeatures?)						
PersonDigitalImage	zero or more				A photograph or image of a person in a digital format.	
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)(ImageHeightValue?, ImageWidthValue?, ImagePoseCode?, CaptureDuration?)						
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.	
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".	
BinaryCaptureDate	optional	date	10	CCYY-MM-DD	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
BinaryCaptureTime	optional	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.	
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel	
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels	
ImagePoseCode	optional	token		Frontal The object in the image is facing the front. Oblique The object in the image is facing a quarter view. Side The object in the image is facing the side.	A code identifying an angle of a person's face in a photograph.	
CaptureDuration	optional	duration			A specific range or duration of capture	
PersonFingerprintSet	optional				A representation or an encoding of the identifying characteristics of a set of a persons fingerprints.	
Content: (BiometricCaptureDate, BiometricCaptureTime, BiometricCaptureSiteCode?, Fingerprint{1..14}, TotalCaptureDuration?, ImageCapture?, ImageFeatureExtractionSoftware?, ImageQualitySoftware?, ImageSegmentationSoftware?, FingerprintCompressionSoftware?, ClientApplicationSoftware?)						
BiometricCaptureDate	required	date	10	CCYY-MM-DD	A date a biometric sample was collected.	
BiometricCaptureTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time a biometric sample was collected.	
BiometricCaptureSiteCode	optional	token	1..10		The site where the biometrics	

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					were collected if different from where the Activity took place.
Fingerprint	1..14				A representation or an encoding of the identifying characteristics of a persons fingerprints.
Content: ((BiometricImage, FingerprintFingerCode, FingerImpressionTypeCode, (FingerprintFingerSegment{0,4})?) (FingerprintFingerCode, FingerprintPatternCode))					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?, CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	
FingerImpressionTypeCode	required	token		0 Live-scan plain 1 Live-scan rolled 2 Nonlive-scan plain 3 Nonlive-scan rolled	
FingerprintFingerSegment	0..4				The segment information for an individual finger
Content: (FingerprintFingerCode, ((FingerprintFingerSegmentCoordinates, FingerprintImageQualityScore, VendorFingerprintImageQualityScore?, BiometricBinary*) (FingerprintPatternCode)))					
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintFingerSegmentCoordinates	required				The coordinates of the bounding box for an individual finger, relative to the origin (0, 0) which is in in the top left corner.
@left	required	non-negative integer			Defines the upper left corner of the bounding box.
@top	required	non-negative integer			Defines the upper left corner of the bounding box.
@right	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count to the right.
@bottom	required	non-negative integer			Defines the bottom right corner of the bounding box, by providing the pixels count down.
FingerprintImageQualityScore	required	non-negative integer		Digits = 2	An NFIQ image quality score value for submitted image.
VendorFingerprintImageQualityScore	optional	non-negative integer		Digits = 2	A vendor specific image quality score value for submitted image.
BiometricBinary	zero or more				A binary representation of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, BinaryCaptureDate?, BinaryCaptureTime?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
BinaryFormatText	required	string		application/efits An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
BinaryCaptureDate	optional	date	10	<i>CCYY-MM-DD</i>	A date on which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
BinaryCaptureTime	optional	time	8..18	<i>hh:mm:ss(.sss)?(Z -hh:mm)?</i>	A time at which the data represented by the binary object is captured, e.g., an image taken or an audio recorded.
FingerprintPatternCode	required	token		UP Unable to Print (e.g., bandaged) XX Missing/Amputated Finger	A code identifying a general pattern of a persons fingerprint.
FingerprintFingerCode	required	token		1 Right thumb 2 Right index 3 Right middle 4 Right ring 5 Right little 6 Left thumb 7 Left index 8 Left middle 9 Left ring 10 Left little 11 Plain Right Thumb ¹ 12 Plain Left Thumb ¹ 13 Plain Right Four Fingers ¹ 14 Plain Left Four Fingers ¹ 15 Left and Right Thumbs ¹	A code identifying a finger of a person that has been printed or has attempted to have been printed, e.g., right thumb, left index.
FingerprintPatternCode	required	token		UP Unable to Print (e.g.,	A code identifying a general pattern of a persons fingerprint.

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				bandaged) XX Missing/Amputated Finger	
TotalCaptureDuration	optional	duration			A total range or duration of capture
ImageCapture	optional				The equipment used to capture the biometric image.
Content: (CaptureDeviceMakeText, CaptureDeviceModelText, CaptureDeviceSerialNumberText, CaptureDeviceFirmwareVersionText?)					
CaptureDeviceMakeText	required	string	1..25		The text that describes the manufacturer's make of the image capture equipment.
CaptureDeviceModelText	required	string	1..25		The text that describes the manufacturer's model for the image capture equipment.
CaptureDeviceSerialNumberText	required	string	1..50		The text that describes the serial number for the image capture equipment.
CaptureDeviceFirmwareVersionText	optional	string	1..50		The text that describes the firmware version for the image capture equipment.
ImageFeatureExtractionSoftware	optional				Contains the image feature extraction and minutiae software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageQualitySoftware	optional				Contains the image quality software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ImageSegmentationSoftware	optional				Contains the image segmentation software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
FingerprintCompressionSoftware	optional				Contains the fingerprint compression software information
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
ClientApplicationSoftware	optional				Contains the client application software
Content: (SoftwareVendorNameText, SoftwareVersionNumber)					
SoftwareVendorNameText	required	string	1..50		Specifies the software code vendor name
SoftwareVersionNumber	required	string	1..50		Specifies the software vendor code version number
PersonIrisFeatures	optional				A representation or an encoding of the identifying characteristics of a person's iris features.
Content: (BiometricImage)					
BiometricImage	required				A picture of a biometric sample.
Content: (BinaryObject.Base64, BinaryFormatText, ImageHeightValue?, ImageWidthValue?, CaptureDuration?, ImagesConcatenatedIndicator?,					

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
CaptureDevicePlatenIndicator?)					
BinaryObject.Base64	required	base-64 binary			A binary encoding of data, e.g., a binary encoding of a picture, photo, image, graphic, sound, or video.
BinaryFormatText	required	string		application/efts An Electronic Fingerprint Transmission Specification (EFTS) file. application/ebts An Electronic Biometric Transmission Specification (EBTS) file. image/jpg A JPEG image. Used for mug shots (Deprecated). image/jpeg A JPEG image. Used for mug shots. image/wsq A WSQ image. Used for fingerprint images application/x-mnt A Minutiae binary file. Used for fingerprint minutiae application/x-fbk A Feedback binary file. Used for fingerprint feedback	A format of a binary object, e.g., "image/jpeg".
ImageHeightValue	optional	integer		Range = 0..	A height of image in pixel
ImageWidthValue	optional	integer		Range = 0..	A width of image in pixels
CaptureDuration	optional	duration			A specific range or duration of capture
ImagesConcatenatedIndicator	optional	boolean			Indicates whether or not images are concatenated.
CaptureDevicePlatenIndicator	optional	boolean			True if capture device platen is dirty, false otherwise.
OrganizationORIID	optional				A unique identifier assigned to a justice-related organization by the federal government. Sometimes referred to as ORI, ORI code, Originating Agency Code.
Content: (ID, IDTypeCodeText)					
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string			A textual code representing the type of identifier assigned.
ActivityPriority	optional	non-negative integer		Default = 4 Range = 0..9	Priority of the activity, with 0-4 as gradient normal, 4 as the default, and 5-9 as gradient expedited priority.
ActivityUserLogin	optional	token	1..20		The agent which collected the activity information.
ActivitySiteCode	required	token	1..10		
ActivityTerminal	optional	token	1..64		The terminal used to collect the activity information.
ConveyanceDetails	optional				The mechanism that the individual used to conduct the activity.
Content: (Flight Vessel)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.

DeleteEncounters Element						
Name	Cardinality	Data Type	Length	Format/Value	Description	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
Flight	required				Doco goes here.	
Content: (CarrierIdentification, FlightIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
CarrierIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
FlightIdentification	required					
Content: (IdentificationID)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.	
IdentificationID	required	string				
Vessel	required				Doco goes here.	
Content: (CarrierIdentification, VesselRegistrationIdentification)						
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.	
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.	
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship	

DeleteEncounters Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
					between the context and the value of the object.
CarrierIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
VesselRegistrationIdentification	required				
Content: (IdentificationID)					
@id	required	ID			The id attribute is used to define XML IDs for NIEM objects. These IDs may be targets of reference elements, metadata attributes, and link metadata attributes.
@metadata	required	IDREFS			The attribute metadata allows an object to point to metadata that affects itself.
@linkMetadata	required	IDREFS			The linkMetadata attribute allows an element to point to metadata that affects the relationship between the context and the value of the object.
IdentificationID	required	string			
EncounterID	one or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-1: DeleteEncounters Element Definition

Table F11-2 below shows the element definition for an DeleteEncountersAcknowledgement operation.

DeleteEncountersAcknowledgement Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DeleteEncountersAcknowledgement	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-1: DeleteEncountersAcknowledgement Element Definition

Table F11-3 below shows the element definition for EncountersDeleted, a result of the DeleteEncounters operation.

EncountersDeleted Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EncountersDeleted	required				
Content: (ActivityID, ActivityResultDate, ActivityResultTime)					
ActivityID	required				An identifier that uniquely refers to an activity or process that occurred.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..40		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string	1..20		A textual code representing the type of identifier assigned.
ActivityResultDate	required	date	10	CCYY-MM-DD	A date that a result of an activity or process occurred.
ActivityResultTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time that a result of an activity or process occurred.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-2: EncountersDeleted Element Definition

F12: Notification Messaging Service

This attachment contains the following tables:

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Table F11-2: EncounterNotification Element Definition.....	11
Table F11-3: EnumeratorNotification Element Definition	12
Table F11-4: EnumeratorReassignNotification Element Definition.....	13

Table F11-1 below shows the element definition for a DerogatoryUpdateNotification operation.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
DerogatoryUpdateNotification	required				Notifies other agencies and organizations when derogatory information associated with a subject has been updated (e.g. promoted, demoted, etc?)
Content: (AcknowledgementDate, AcknowledgementTime)(NotificationTypeCode, SubscriberOrganization, ActivityTypeText, EncounterID+, PersonEnumeratorID?, IdentityStatusCode, DerogatoryUpdateInformation+)					
AcknowledgementDate	required	date	10	CCYY-MM-DD	The date that the request is ready for process in the US-VISIT/IDENT system.
AcknowledgementTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	The time that the request is ready for process in the US-VISIT/IDENT system.
NotificationTypeCode	required	string		Promote Derogatory promote message Demote Derogatory demote message Update Derogatory update message	The code identifying the type of notification activity.
SubscriberOrganization	required				The organization associated with the notification activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA	A name of a high-level division of an organization, e.g., department, agency.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ²	A name of a subdivision of a high-level division of an organization, e.g., division.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	A type of activity or process that occurred.
EncounterID	one or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonEnumeratorID	optional				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
IdentityStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has	The aggregated status of biometrically linked encounters. The linked encounters represent an identified individual.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	
@potential	optional	boolean			True if identity status code is potential, false otherwise.
DerogatoryUpdateInformation	one or more				Contains the derogatory updated information
Content: (DerogatoryProcessStatusCode, DerogatoryInformationSummary)					
DerogatoryProcessStatusCode	required	string		Add Derogatory information was added. Delete Derogatory information was deleted. Update Derogatory information was updated.	A code that indicates the Derogatory Information status that resulted from a derogatory activity.
DerogatoryInformationSummary	required				
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, DerogatoryInformationID, DerogatoryTypeText, DerogatoryStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of	A name of a high-level division of an organization, e.g., department, agency.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ²	A name of a subdivision of a high-level division of an organization, e.g., division.

DerogatoryUpdateNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
DerogatoryInformationID	required				An IDENT generated unique identifier for derogatory information associated with an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		DIID An IDENT generated unique identifier for derogatory information.	A textual code representing the type of identifier assigned.
DerogatoryTypeText	required	string	1..10		A type of derogatory information.
DerogatoryStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The status of biometrically linked encounters at which the owning ActivityPrimaryOrganization preceives the Derogatory Information.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-1: DerogatoryUpdateNotification Element Definition

Table F11-2 below shows the element definition for an EncounterNotification operation.

EncounterNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EncounterNotification	required				Notifies other agencies and organizations when an encounter occurs with a subject.
Content: (AcknowledgementDate, AcknowledgementTime)(SubscriberOrganization, ActivityTypeText, EncounterID+, PersonEnumeratorID?, EncounterSummary+)					
AcknowledgementDate	required	date	10	CCYY-MM-DD	The date that the request is ready for process in the US-VISIT/IDENT system.
AcknowledgementTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	The time that the request is ready for process in the US-VISIT/IDENT system.
SubscriberOrganization	required				The organization associated with the notification activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ² ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	A name of a high-level division of an organization, e.g., department, agency.
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY	A name of a subdivision of a high-level division of an organization, e.g., division.

EncounterNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANDEENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ² PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
ActivityTypeText	required	string		Application Part of applicant screening process. Entry Related to a person entering the country at a POE. Exit Related to a person exiting the country at a POE. Enforcement Related to an activity by law enforcement. National Security Related to an activity	A type of activity or process that occurred.

EncounterNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				involving national security. Datashare Related to sharing of encounter and derogatory information data between groups. Other All other activities.	
EncounterID	one or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
PersonEnumeratorID	optional				An IDENT generated unique identifier for a person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterSummary	one or more				A summary of an activity where the person is encountered, and biometrics are captured.
Content: (ActivityDate, ActivityTime, ActivityPrimaryOrganization, EncounterID, EncounterStatusCode)					
ActivityDate	required	date	10	CCYY-MM-DD	A date of an activity that occurs at a singular point in time or a start date of an activity that occurs over a period of time.
ActivityTime	required	time	8..18	hh:mm:ss(.sss)?(Z/-hh:mm)?	A time of an activity that occurs at a singular point in time or a start time of an activity that occurs over a period of time.
ActivityPrimaryOrganization	required				The organization primarily associated with the activity.
Content: (OrganizationName, OrganizationUnitName?, OrganizationSubunitName?)					
OrganizationName	required	string		CA State of California ² DHS Department of Homeland Security ² DOJ Department of Justice ² DOS Department of State ² INTERPOL Interpol ²	A name of an organization.
OrganizationUnitName	optional	string		CBP Customs and Border Protection ² CIS Citizenship and Immigration Services ² CON-AFF Consular Affairs ² DOJ Department of Justice ² FBI Federal Bureau of Investigation ²	A name of a high-level division of an organization, e.g., department, agency.

EncounterNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				ICE Immigration and Customs Enforcement ² TSA Transportation Security Administration ² US-VISIT United States Visitor and Immigration Status Indicator Technology ² US MARSHAL United States Marshal ² USCG United States Coast Guard ² USSS United States Secret Service ²	
OrganizationSubunitName	optional	string		AFSP Alien Flight Student Program ² ASC Application Support Center ² ASY Asylum ² AVW Aviation Worker ² AIRENTRY US-VISIT Airport Entry Client ² AIREXIT US-VISIT Airport Exit Client ² BCC Border Crossing Card ² BP Border Patrol ² BSC Biometric Support Center ² DNR Detentions and Deportations and Removal ² G11 IDENT Generic 1:1 ² GES Global Enrollment Services ² OFO Office of Field Operations ² SSJ Sector San Juan ² INV Investigation ² IV Immigrant Visa ² LA Los Angeles County ² LANENTRY US-VISIT US Arrival Client ² LANDEXIT US-VISIT Land Exit Client ² NIV Non-Immigrant Visa ² OM Operations and Maintenance ²	A name of a subdivision of a high-level division of an organization, e.g., division.

EncounterNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
				PMO Program Management Office ² SAR Special Alien Registration ² SEAENTRY US-VISIT Seaport Entry Client ² SEAEXIT US-VISIT Seaport Exit Client ² US ARRIVAL United States Arrival ² US PASS U.S. PASS ²	
EncounterID	required				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.
EncounterStatusCode	required	string		WatchList High risk. This indicates the need for further investigation. Alert Medium high risk. Historically, this has been used to indicate a higher level of attention than Recidivist, but not a WatchList. Recidivist Medium risk. Historically, this has been used to indicate that a pattern of behavior indicates a potential to return to criminal habits. Derogatory History Low risk or Noteworthy. Some derogatory information is associated. Historically this has indicated a past or expired want or warrant. None Lowest risk. There is no applicable derogatory information.	The status of this individual encounter as an aggregation of any associated derogatory information.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-2: EncounterNotification Element Definition

Table F11-3 below shows the element definition for an EnumeratorNotification operation.

EnumeratorNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EnumeratorNotification	required				
Content: (AcknowledgementDate, AcknowledgementTime)(PersonEnumeratorID, EncounterID+)					
AcknowledgementDate	required	date	10	CCYY-MM-DD	The date that the request is ready for process in the US-VISIT/IDENT system.
AcknowledgementTime	required	time	8..18	hh:mm:ss(.sss)?(Z -hh:mm)?	The time that the request is ready for process in the US-VISIT/IDENT system.
PersonEnumeratorID	required				An IDENT generated unique identifier for an person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	one or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-3: EnumeratorNotification Element Definition

Table F11-4 below shows the element definition for an EnumeratorReassignNotification operation.

EnumeratorReassignNotification Element					
Name	Cardinality	Data Type	Length	Format/Value	Description
EnumeratorReassignNotification	required				
Content: (AcknowledgementDate, AcknowledgementTime)(PersonEnumeratorID{2}, EncounterID+)					
AcknowledgementDate	required	date	10	CCYY-MM-DD	The date that the request is ready for process in the US-VISIT/IDENT system.
AcknowledgementTime	required	time	8..18	hh:mm:ss(.sss)?(Z /hh:mm)?	The time that the request is ready for process in the US-VISIT/IDENT system.
PersonEnumeratorID	2				An IDENT generated unique identifier for an person.
Content: (ID, IDTypeCodeText)					
@new	optional	boolean			Specifies whether or not the Person Enumerator Identifier is newly assigned
@usable	optional	boolean			Specifies whether or not the Person Enumerator Identifier is usable
ID	required	string			A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		ENUM	A textual code representing the type of identifier assigned.
EncounterID	one or more				An IDENT generated unique identifier for an encounter.
Content: (ID, IDTypeCodeText)					
ID	required	string	1..20		A value that identifies an entity within the identifier domain.
IDTypeCodeText	required	string		EID An IDENT generated unique identifier for an encounter.	A textual code representing the type of identifier assigned.

¹ This is an extension of an existing GJXDM element.

² These enumerated values are an application constraint.

Table F11-4: EnumeratorReassignNotification Element Definition