DoD Common Access Card (CAC) Issuance Process

Presented by:

Defense Manpower Data Center
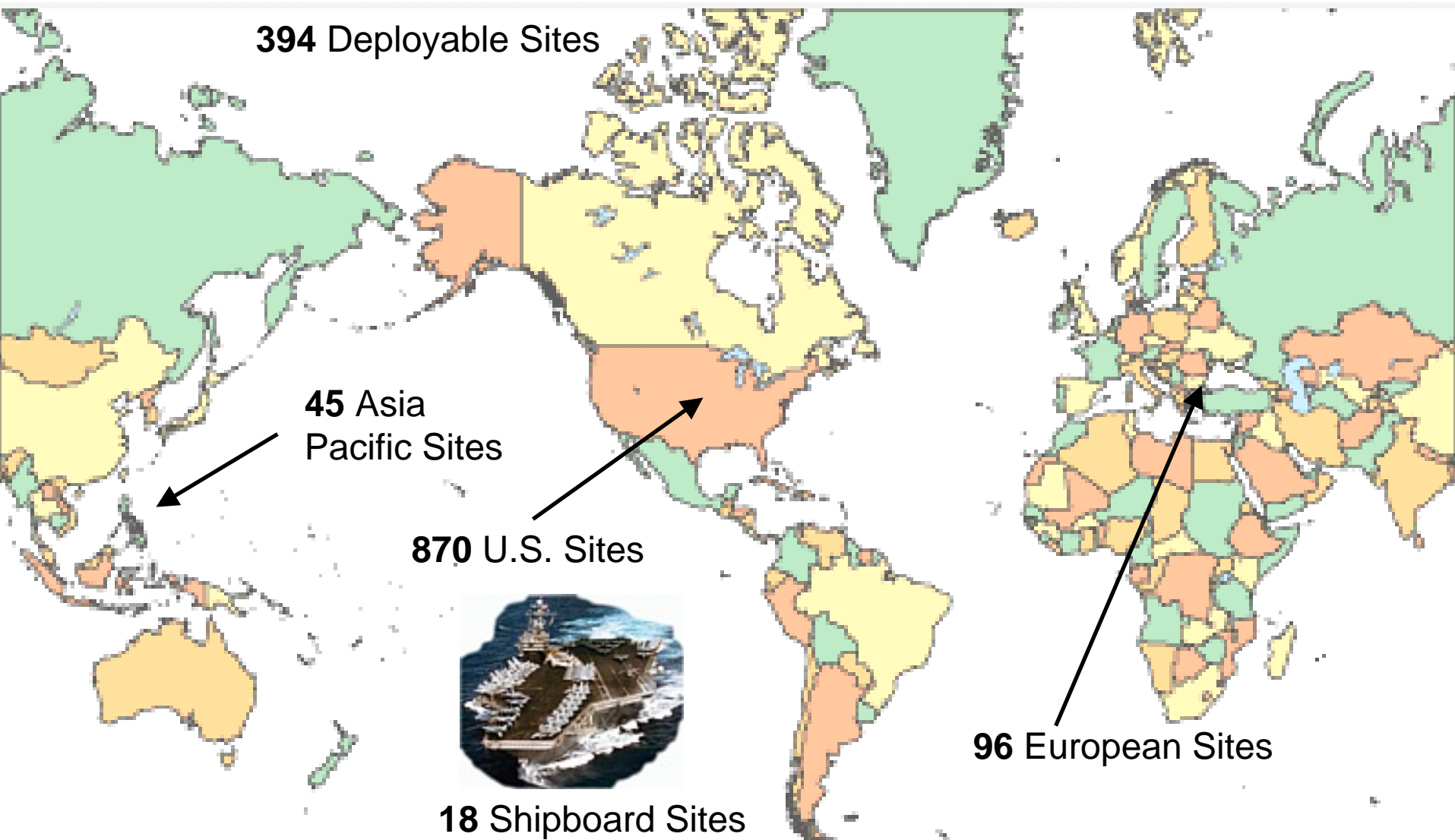
Access Card Office

CAC Issuance

- **Real-time Automated Personnel Identification System (RAPIDS) is smart card issuing system**

- **Defense Enrollment Eligibility Reporting System (DEERS) provides initial data to RAPIDS for card issuance**

- **PKI Local Registration Authority (LRA) integrated into RAPIDS infrastructure**

CAC Issuance

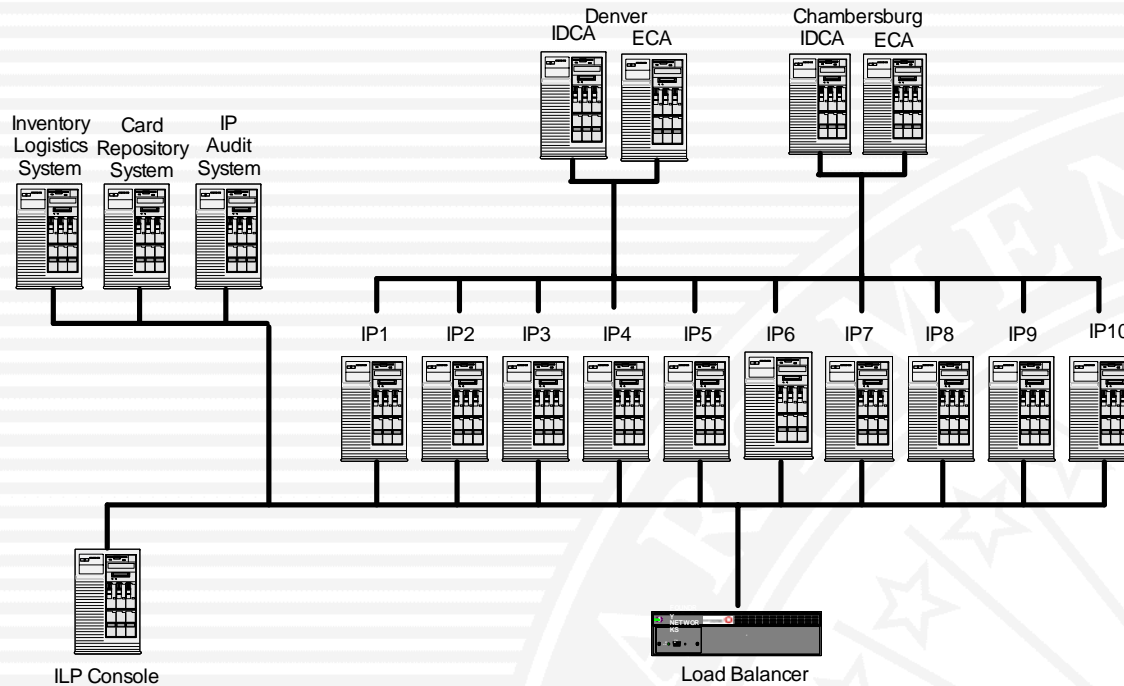- **CACs are issued from over 1,300 issuance sites world-wide from RAPIDS terminals**

- **Architecture of end-to-end CAC system involves a myriad of systems and networks along with support**

  – Helpdesk

  – Field Service Support and Training

  – Engineering Support

- **Only people vetted and in the authoritative database (DEERS) are issued ID cards**

  – Moving back the fixing of identity

  – DEERS lockdown

DoD Distributed Issuance Infrastructure

394 Deployable Sites

45 Asia Pacific Sites

870 U.S. Sites

96 European Sites

18 Shipboard Sites

1,425 Sites Deployed Worldwide as of June 2005

CAC Issuance Components

Denver IDCA ECA

Chambersburg IDCA ECA

Inventory Logistics System | Card Repository System | IP Audit System

IP1 IP2 IP3 IP4 IP5 IP6 IP7 IP8 IP9 IP10
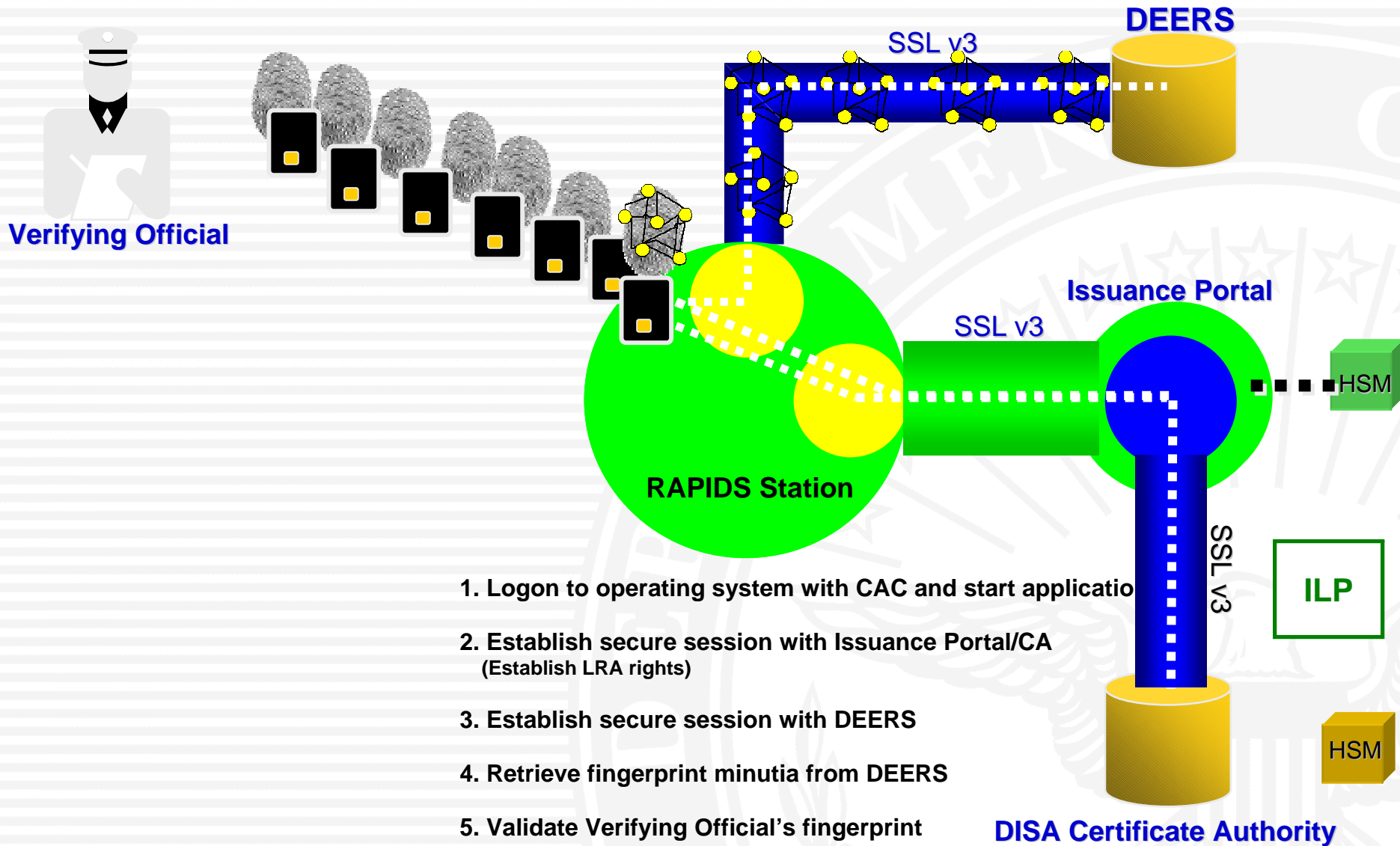
ILP Console

Load Balancer

- **<u>Load Balancer</u> - balances production RAPIDS workstations across the 10 Issuance Portals.**

- **<u>Issuance Portal (IP)</u> - dedicated to the initialization and issuance of the CAC, the applications that reside on the CAC, and the keys and credentials needed to securely use/issue the CAC.**

CAC Issuance Components

- **<u>Card Repository System (CRS)</u> - Manages the real estate and the capabilities of the Integrated Circuit Chips of the CACs**

- **<u>Inventory Logistics Portal (ILP)</u> - Manages the logistics of maintaining and replenishing CAC stock inventory quantities for individual CAC issuing sites and the DMDC organization**

- **<u>IP Audit System</u> - Records the commands requested by a RAPIDS system and the outcome of those commands**

- **<u>Inventory Logistics Console (ILC)</u> - Provides DMDC management and SSM's the ability to maintain the ILP through the use of a GUI**

Authenticate User

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

Verifying Official

RAPIDS Station

SSL v3

ILP

1. Logon to operating system with CAC and start applicatio

2. Establish secure session with Issuance Portal/CA
   (Establish LRA rights)

3. Establish secure session with DEERS

4. Retrieve fingerprint minutia from DEERS

5. Validate Verifying Official's fingerprint

HSM

DISA Certificate Authority

Capture Data & Print Card

DEERS

SSL v3

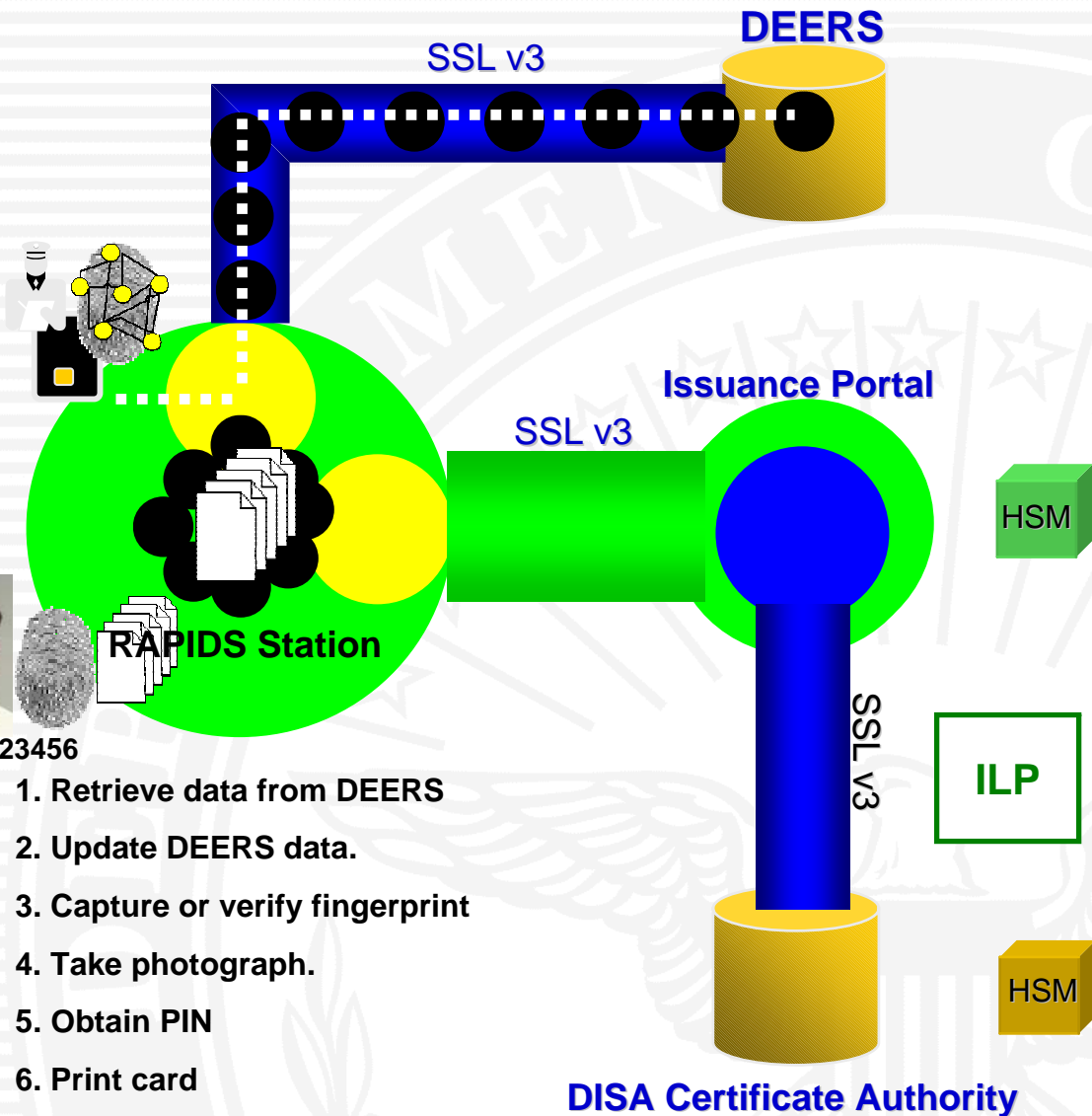**Issuance Portal**

SSL v3

HSM

SSL v3

ILP

RAPIDS Station

HSM

123456

1. Retrieve data from DEERS

2. Update DEERS data.

3. Capture or verify fingerprint

4. Take photograph.

5. Obtain PIN

6. Print card

7. Verify bar code(s)

DISA Certificate Authority

8

Armed Forces of the United States

Air Force

Active Duty

Parker IV, Christopher J.

Pay Grade
E5

Rank
SSGT

Issue Date
2000SEP19

Expiration Date
2003SEP18

Geneva Conventions Identification Card

Medical
Blood Type: O+
Organ Donor: Yes

Date of Birth
1999DEC01

Social Security Number
XXX-XX-XXXX

Geneva Conventions
Category **IV**

DoDCIO/OUSD(P&R)   OCT 2000   Property of the US Government

Create Channel & Install Applets

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**

DEERS

SSL v3

Issuance Portal

SSL v3

Global Platform Secure Channel

HSM

RAPIDS Station

SSL v3

ILP

| ID | Generic Container | PKI |

Card Application Managers (CAMs)
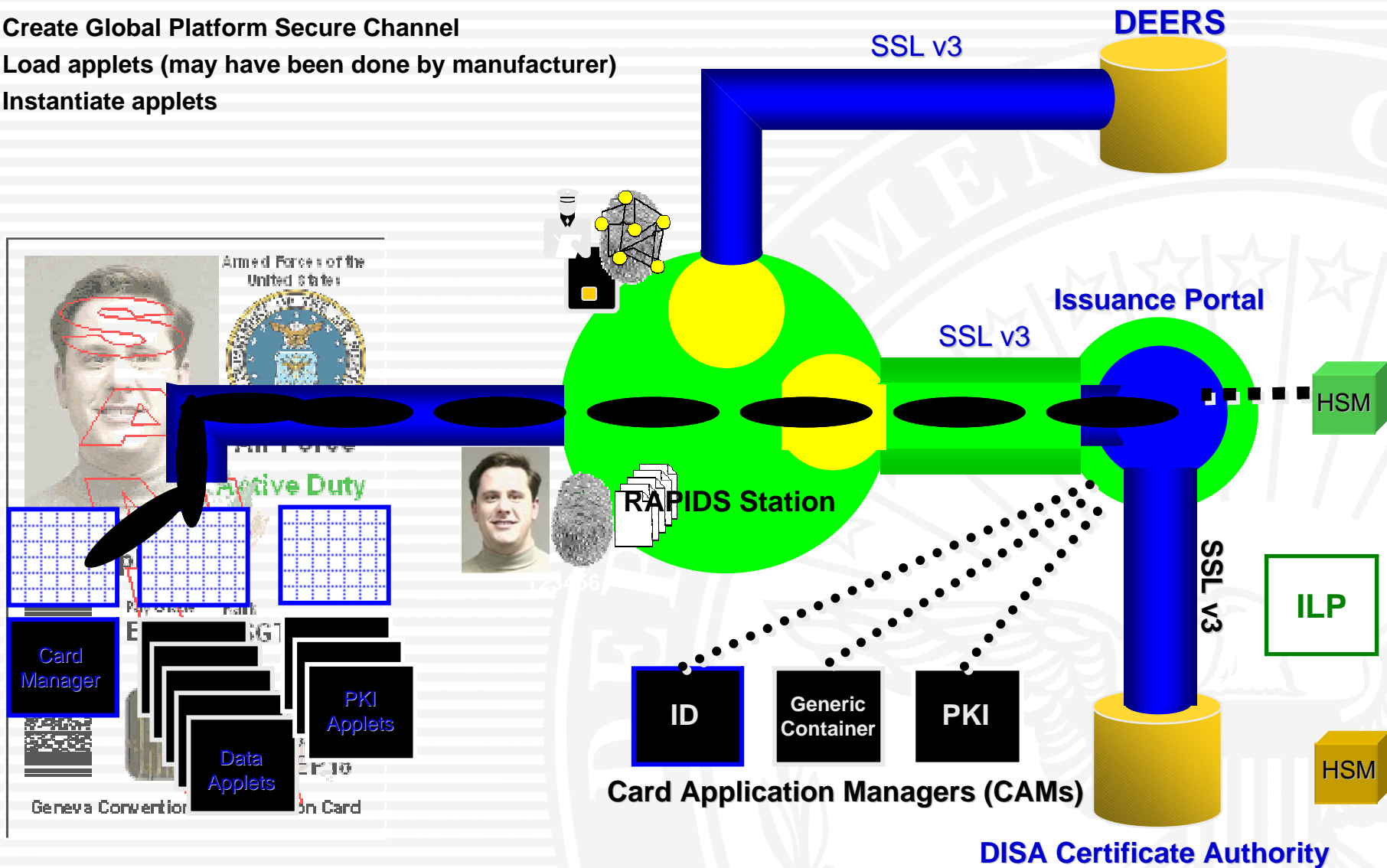
HSM

DISA Certificate Authority

9
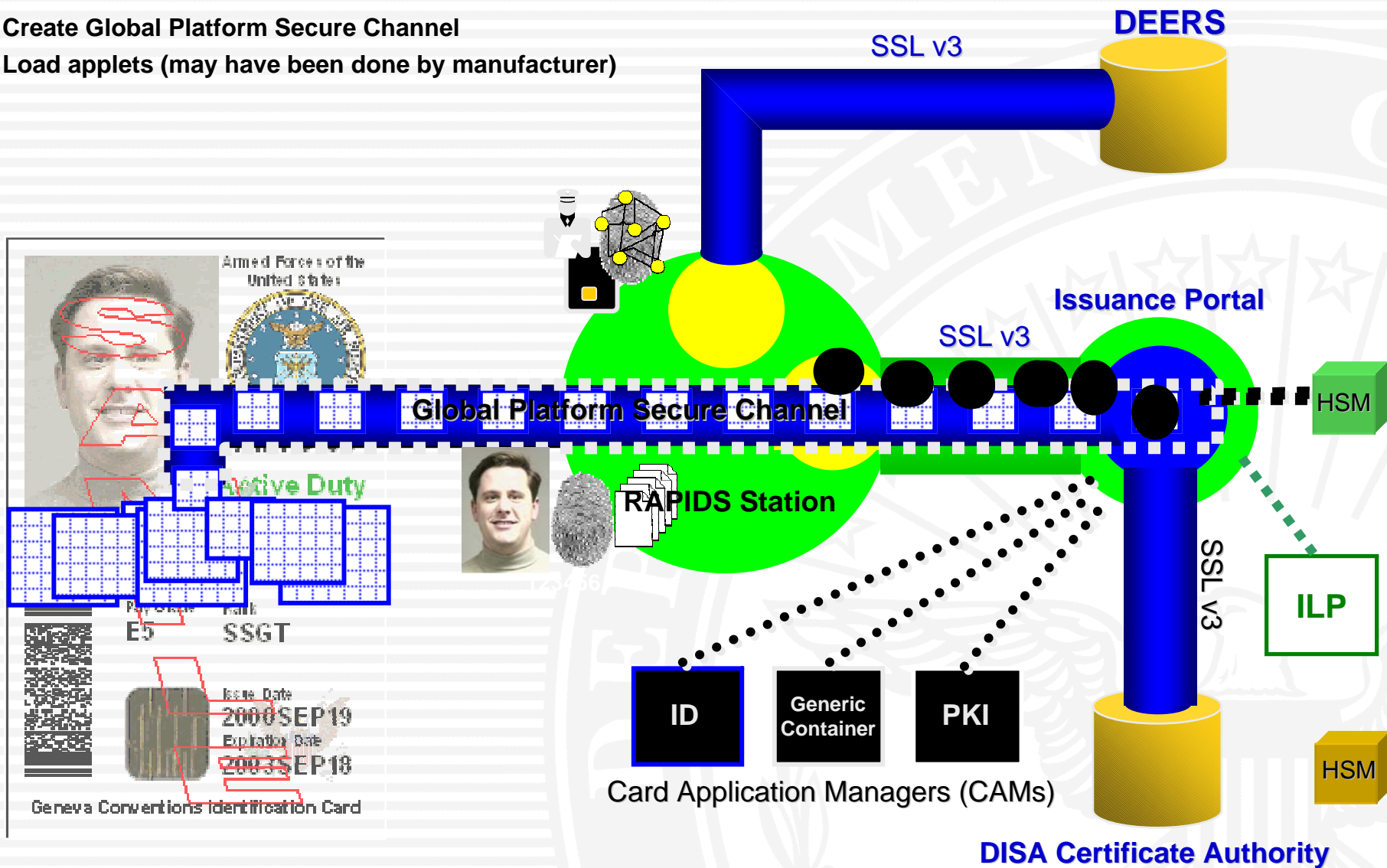
Instantiate Applets

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

RAPIDS Station

ILP

Card Manager

PKI Applets

Data Applets

ID	Generic Container	PKI

Card Application Managers (CAMs)

SSL v3

HSM

DISA Certificate Authority

10

Set PIN

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
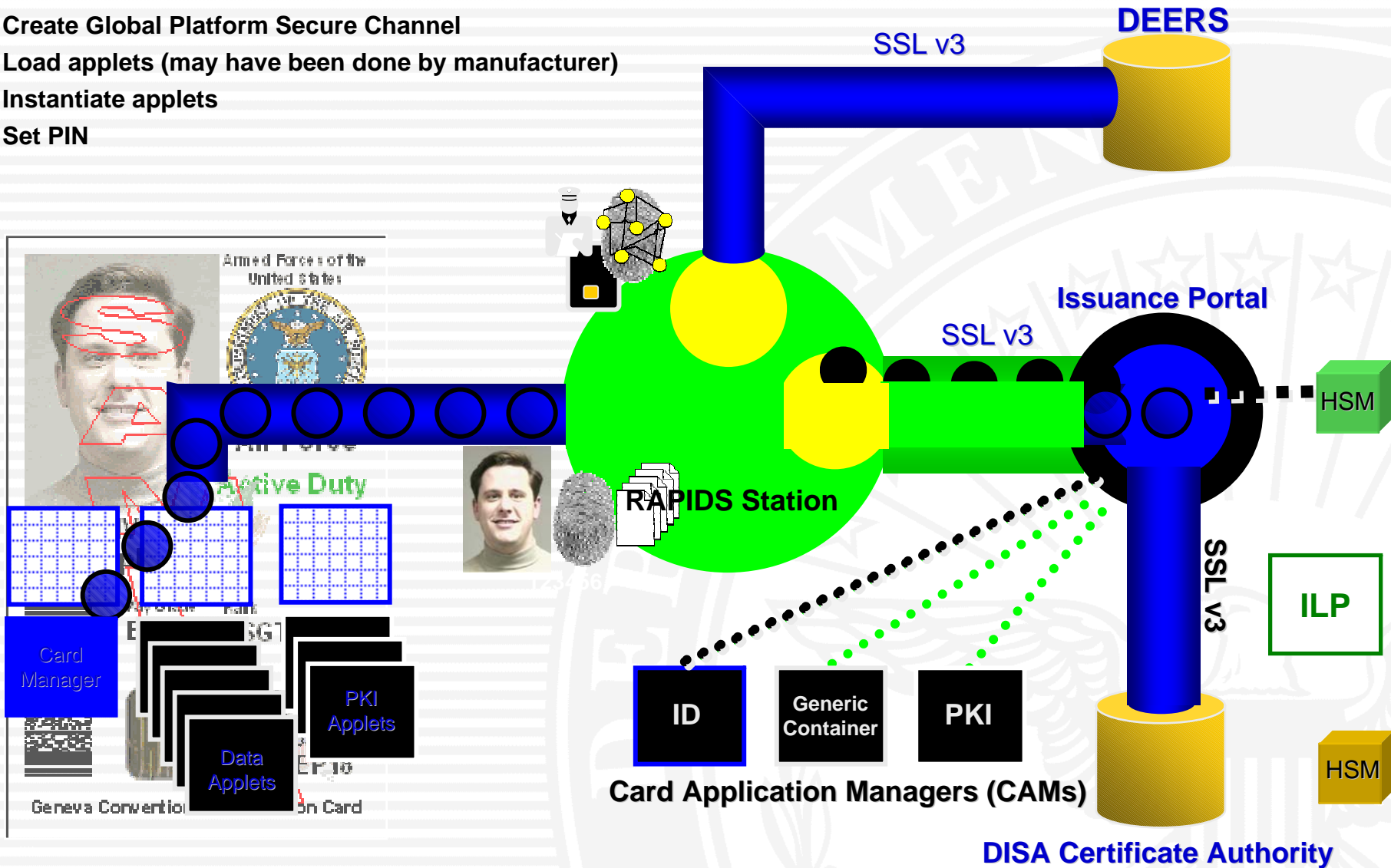3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**
5. **Set PIN**

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

RAPIDS Station

ILP

SSL v3

HSM

ID

Generic Container

PKI

Card Application Managers (CAMs)

DISA Certificate Authority

Card Manager

PKI Applets

Data Applets
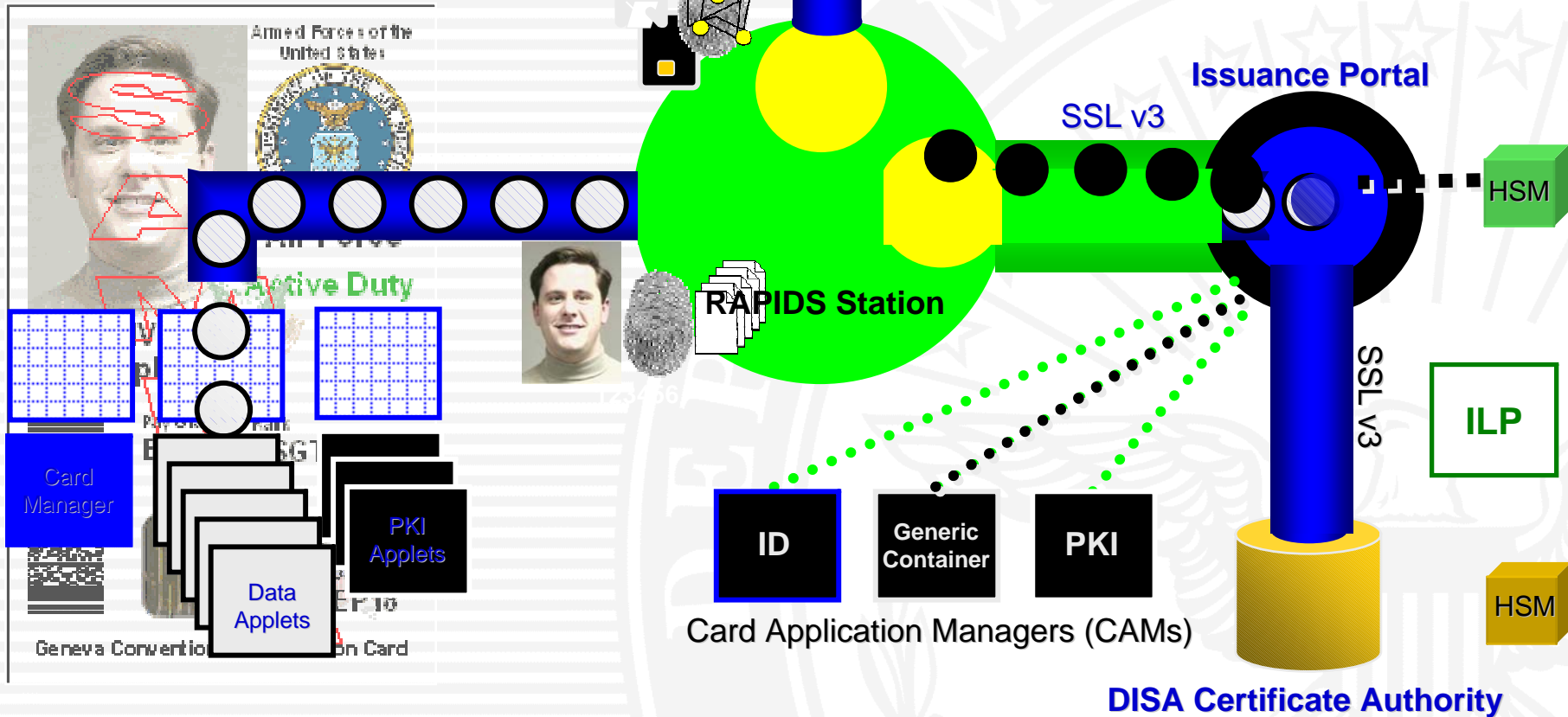
11

Set Generic Container Applet Data

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**
5. **Set PIN**
6. **Populate data applets**

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

RAPIDS Station

SSL v3

ILP

HSM

ID

Generic Container

PKI

Card Application Managers (CAMs)

Card Manager

PKI Applets

Data Applets

DISA Certificate Authority
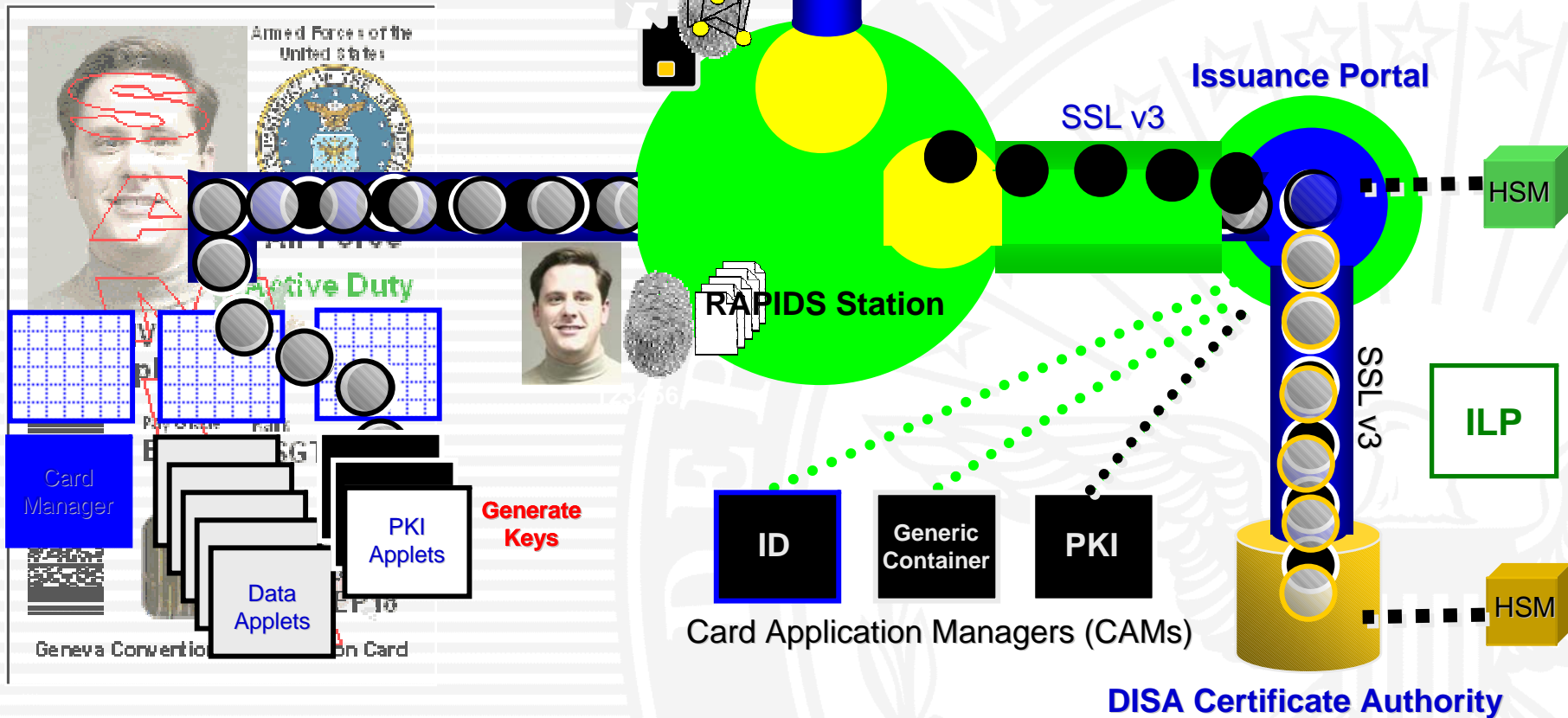
ID Certificate

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**
5. **Set PIN**
6. **Populate data applets**
7. **Request PKI certificates**

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

RAPIDS Station

SSL v3

ILP

Card Manager

PKI Applets

Generate Keys

Data Applets

| ID | Generic Container | PKI |

Card Application Managers (CAMs)

HSM
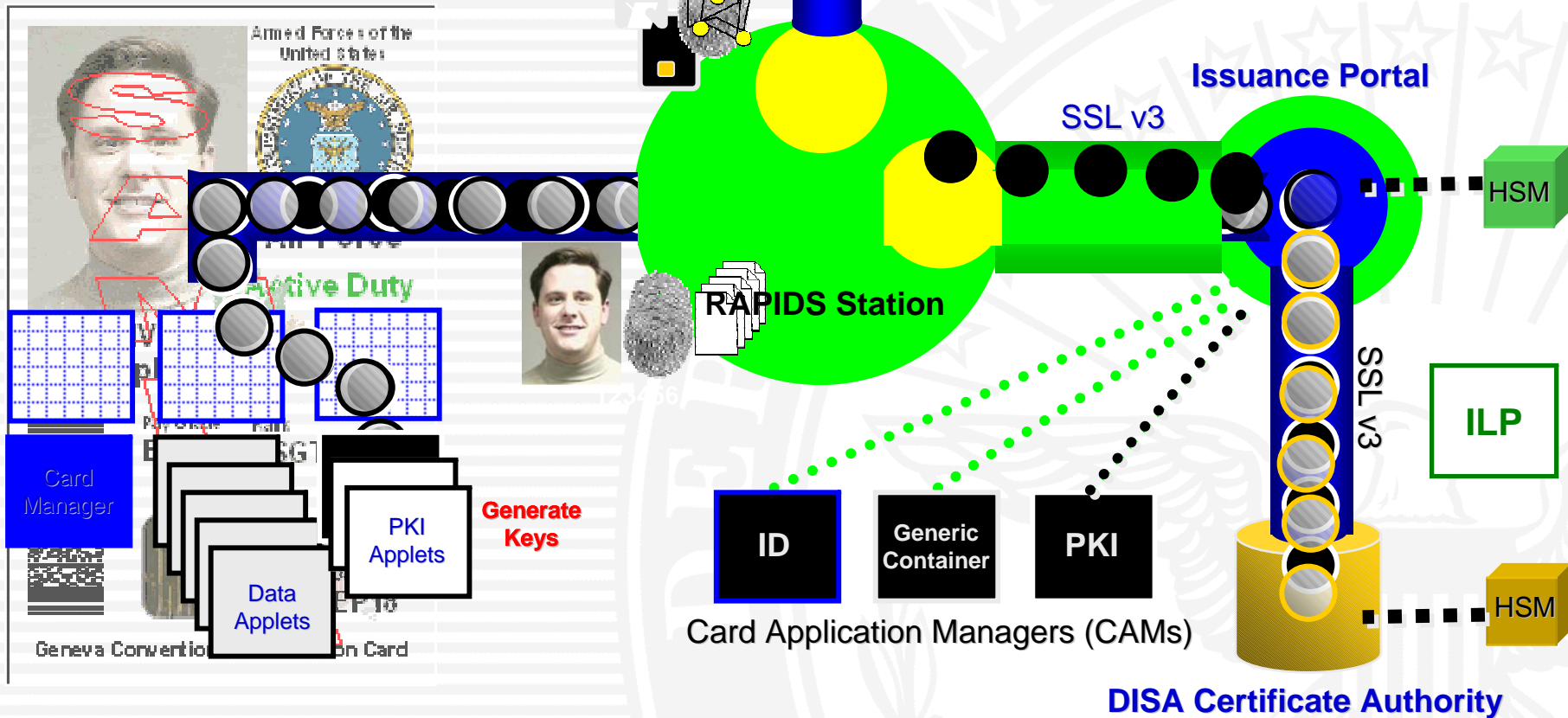
DISA Certificate Authority

13

Email Signing Certificate

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**
5. **Set PIN**
6. **Populate data applets**
7. **Request PKI certificates**

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

SSL v3

ILP

RAPIDS Station

Card Manager

PKI Applets

Generate Keys

Data Applets

ID

Generic Container

PKI

Card Application Managers (CAMs)

HSM

DISA Certificate Authority
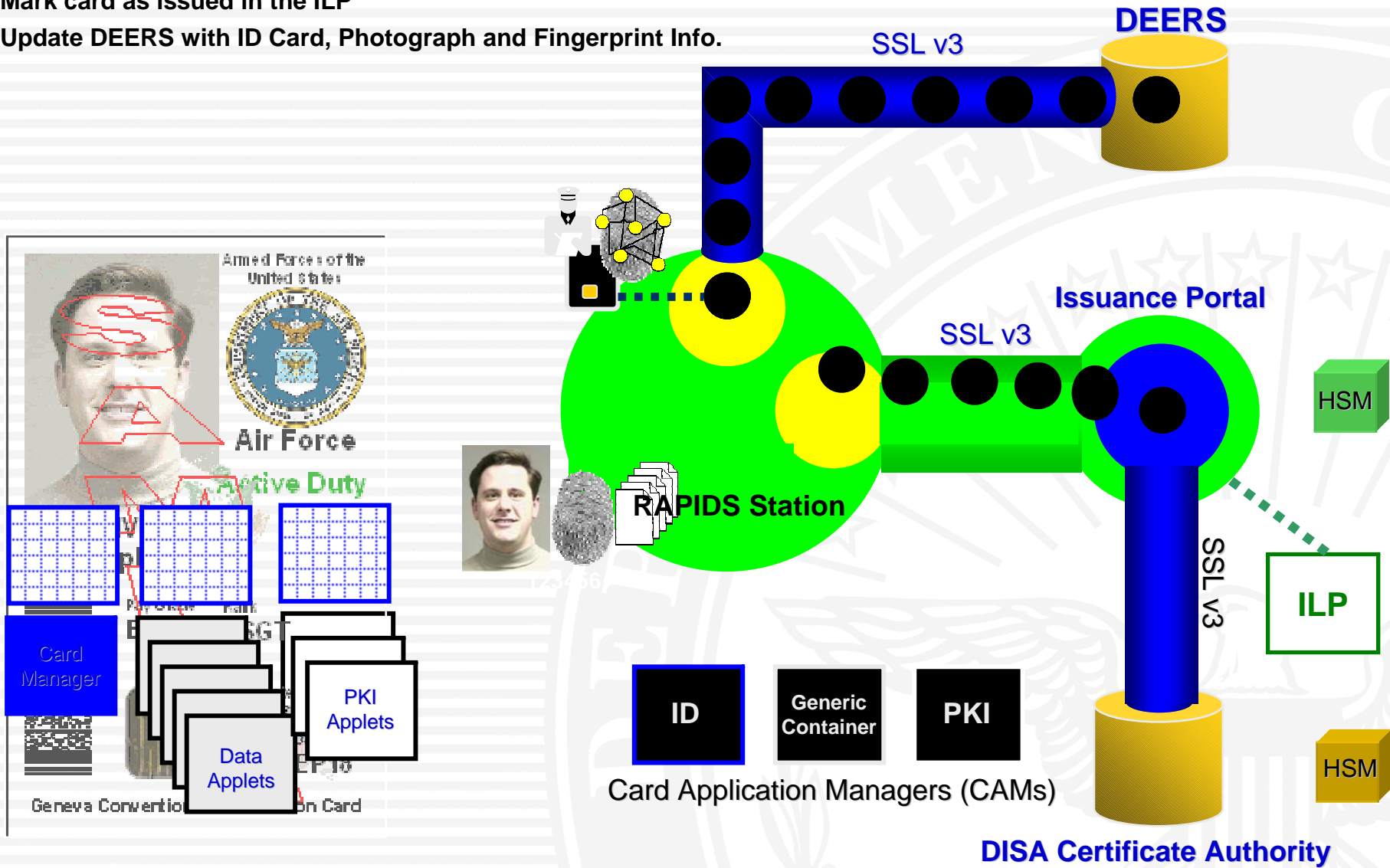
14

DMDC

Email Encryption Certificate

1. **Check card status and site in ILP**
2. **Create Global Platform Secure Channel**
3. **Load applets (may have been done by manufacturer)**
4. **Instantiate applets**
5. **Set PIN**
6. **Populate data applets**
7. **Request PKI certificates**

DEERS

SSL v3

Issuance Portal

SSL v3

RAPIDS Station

HSM

SSL v3

ILP

Card Manager

PKI Applets

Data Applets

ID

Generic Container

PKI

Card Application Managers (CAMs)

HSM

DISA Certificate Authority

15

Post Processing

8. Mark card as issued in the ILP

9. Update DEERS with ID Card, Photograph and Fingerprint Info.

DEERS

SSL v3

Issuance Portal

SSL v3

HSM

RAPIDS Station

SSL v3

ILP

| ID | Generic Container | PKI |

Card Application Managers (CAMs)

HSM

DISA Certificate Authority

16

Questions?

cacsupport@osd.pentagon.mil

www.dmdc.osd.mil/smartcard