

# How a State Documents Deployment of CVISN Core Capabilities

28 February 2008

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# Outline

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CVISN Core Capability Requirements

Roles & Responsibilities

Process Steps

CVISN Core Checklist

Interoperability Testing

CVIEW-SAFER Interface Testing

Additional Information & Support

# CVISN Core Capability Requirements

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- Detailed requirements are listed in CVISN Core Checklist
  - Published as Appendix A of COACH, Part 1 document
- Requirements organized into three categories
  - Safety
  - Credentials
  - Electronic Screening

# Roles & Responsibilities

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- State CVISN Program Manager – Coordinate and directs State activities
  - Coordinate with FMCSA
  - Directs State development and testing activities
- FMCSA Division Office – Provides assistance to States and represents FMCSA during process
- FMCSA ITS/CVO Service Center – Provides assistance to FMCSA Division Offices and States
- FMCSA Headquarters – Final review and acceptance
- JHU/APL – Technical support to States and FMCSA

# Process Steps

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1. FMCSA introduces process and concepts to State
2. The State is ready to perform testing and informs FMCSA
3. FMCSA, State and JHU/APL review test plans if requested
4. The State executes testing and sends completed CVISN Core checklist to FMCSA for review
5. FMCSA recognizes State accomplishments with letters of acceptance and plaques

# 1. Introduce Concepts

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- State's FMCSA Division Office works with the State to introduce the concepts of certifying CVISN core capabilities, which includes planning to execute appropriate testing
- Copies of this training material are available
- If needed, support and assistance for this introduction is available from the ITS/CVO Service Center Specialist

## 2. State is Ready

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- The State is ready to conduct interoperability tests and SAFER Interface testing
- The State CVISN Program Manager informs the FMCSA Division Office, Service Center and Headquarters

### 3. Review Test Plans

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- ITS/CVO Service Center Specialist and APL discuss with the FMCSA Division Office and the State CVISN Program Manager the plans for interoperability testing and certification testing
- ITS/CVO Service Center Specialist and APL provide technical assistance, as needed



## 4. Execute Testing and Complete Checklist

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- The State executes the CVISN Interoperability tests, customized to match their own system implementations.
- The State conducts CVIEW-SAFER Interface testing with Volpe.
- The State sends the completed CVISN Core checklist to the FMCSA Division Office for review.
- The FMCSA Division Office forwards the completed checklist to headquarters and APL for final review.

## 5. FMCSA Recognizes State Accomplishment

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- The State and FMCSA agree the CVISN checklist has been finalized and necessary requirements met.
- FMCSA sends letters of acceptance signed by the FMCSA Administrator and plaques to the FMCSA Division Office, the CVISN program manager and senior executive from the CVISN State lead agency.
- The letters will acknowledge that the State has completed CVISN core deployment.
- FMCSA Administrator will also provide letters to recognize other organizations (industry, private/public partnerships) for their contributions.

# CVISN Core Checklist

- Consists of CVISN Core Requirements organized by the three major functional areas
  - The checklist provides a column to check off compliance and a column for comments
  - Interoperability and SAFER Interface tests are used to demonstrate completion of selected requirements
- **Safety**
    - Inspections
    - CVIEW
    - Compliance reviews
  - **Credentials**
    - Administration process
    - Clearinghouses
    - Sharing data via CVIEW/SAFER
  - **Screening**
    - Screening sites
    - Enrollment
    - Use of snapshots

# Interoperability Testing

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- Purpose: To verify that State systems conform with CVISN architecture
- End-to-End Interoperability tests
  - Verify data flow and data usage among selected systems
  - Used to demonstrate completion of selected requirements of CVISN Core Checklist

# Interoperability Testing: Process

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- State develops a test plan
  - Based on State business processes and recommended tests
  - Plan focuses on required End-to-End tests
- State reviews plan with ITS/CVO Service Center Specialist and APL if needed
- State executes the tests and uses the results to complete the CVISN Core Checklist

# Interoperability Testing: End-to-End Tests

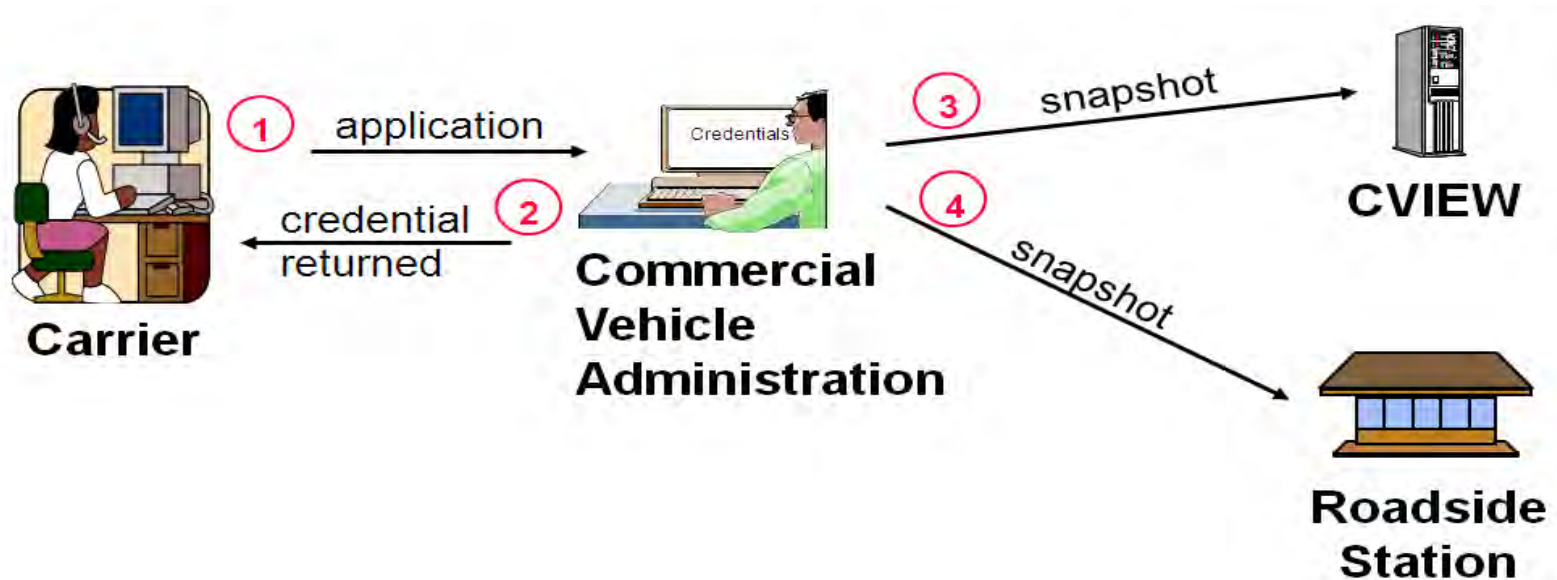
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- The following slides show examples of the concept for end-to-end testing for
  - Credentials Administration
  - Safety Data Exchange
  - Electronic Screening

# Interoperability Testing: End-to-End Tests

## Credentials Administration

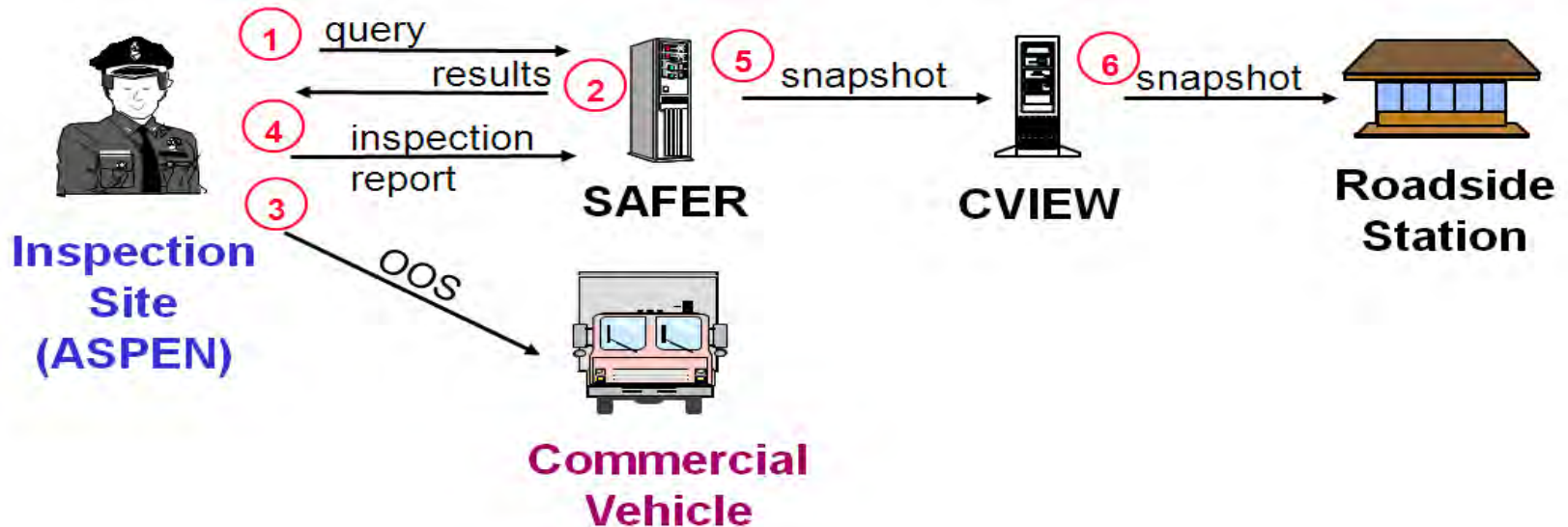
Carrier enters a credential application via web site or other application, the application is processed and data is updated in CVIEW (and then SAFER via CVIEW) and at the roadside.



# Interoperability Testing: End-to-End Tests

## Safety Data Exchange

A vehicle is placed Out-of-Service (OOS) by an enforcement officer using ASPEN. The inspection report is sent to SAFER, SAFER sends inspection snapshot to CVIEW, and the CVIEW sends an inspection snapshot to the roadside.

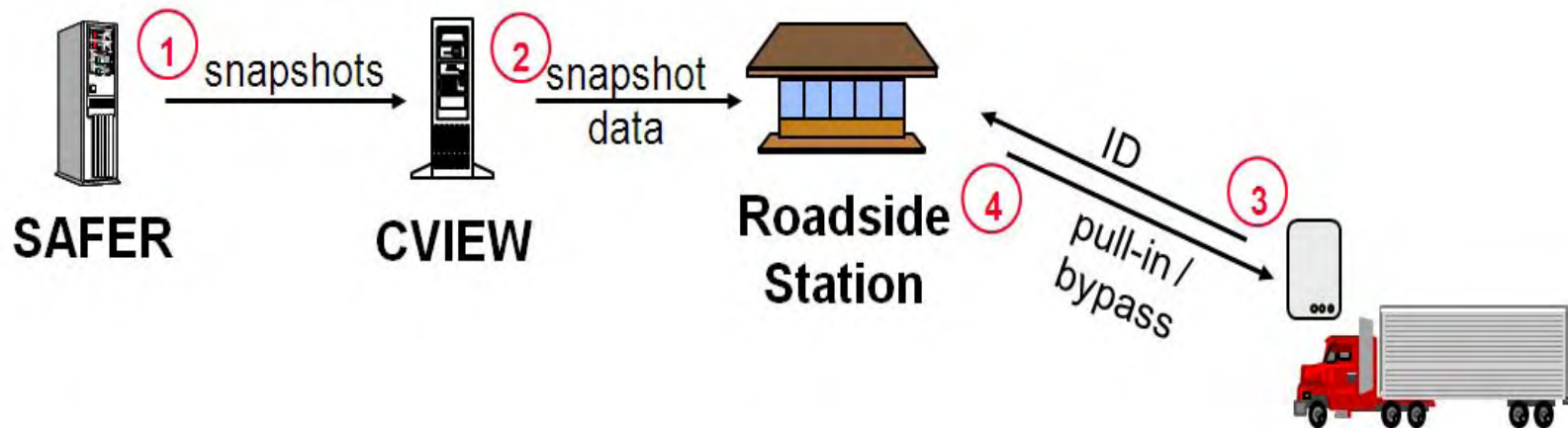




# Interoperability Testing: End-to-End Tests

## Electronic Screening

A vehicle equipped with a valid transponder is identified as it approaches a check station. The transponder ID is correlated to information on that vehicle stored in the roadside database. A screening decision is made based on SAFER snapshots for that vehicle, and the vehicle is signaled to by-pass or pull-in as appropriate.



# CVIEW-SAFER Interface Testing

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- Demonstrates completion of Item 4.2.9 of CVISN Core Checklist
  - *“Implement the CVIEW (or equivalent) system for exchange of intrastate and interstate data within state and connection to SAFER for exchange of interstate data through snapshots...”*
- XML interface is tested using SAFER Interface Certification Procedure coordinated through Volpe Transportation Center
  - See SAFER Interface Certification Procedure found on the CVISN website <http://www.fmcsa.dot.gov/facts-research/cvisn/certification.htm/>
  - Contact Volpe technical support for additional information

# Additional Information & Support

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- FMCSA Headquarters:
  - Jonathan Mueller 202-366-9409, [jon.mueller@dot.gov](mailto:jon.mueller@dot.gov)
  - Quon Kwan 202-385-2389, [quon.kwan@dot.gov](mailto:quon.kwan@dot.gov)
- Volpe Technical Support
  - Jingfei Wu, 617-374-2353, [jingfei.wu@dot.gov](mailto:jingfei.wu@dot.gov)
- JHU/APL
  - Mary Stuart (240-228-7001), [mary.stuart@jhuapl.edu](mailto:mary.stuart@jhuapl.edu)
  - Valerie Barnes (717-352-0131), [valerie.barnes@jhuapl.edu](mailto:valerie.barnes@jhuapl.edu)
- CVISN Website: <http://www.fmcsa.dot.gov/facts-research/cvisn/index.htm/>
- CVISN SharePoint Collaboration Site: <https://partners.jhuapl.edu/BA/hp/cvisn> - [CVISN Collaboration](#)