Evolution of the DoD CAC Program

Prepared for

NIST

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Background

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MEMO FROM:
  Dr. John Hamre
  (Deputy Secretary of Defense)

Create a Common Access Card!

Requirements for Convergence of Three Separate Initiatives

Smart Card
•Pilot Studies
•Business Process
Re-engineering
•No $

E-Business
•Non-repudiation
for digital
signatures

PKI
•Hardware token

Common Access Card (CAC)

CAC Attributes

- **Barcode**

  – **Code 39 barcode**

  – **Two-dimensional PDF 417 barcode**

- **Magnetic stripe**

- **Integrated Circuit Chip (ICC)**

- **Digital photograph**

Current Status

Card Issuance

- **Over 2.83 M cards issued**
- **Issuing between 10-14,000 cards per day**
- **1,500 issuance workstations issuing in 15+ countries worldwide**
- **150,000 + workstations with logical access/log-on**

Next Generation Testing

- **64K chip**
- **Contactless technologies (14443)**
- **Biometrics**

Its Evolution not Revolution…

Application Strategy

Data Centric - focus of pilots

PKI

Web Centric - focus of future

- **Eliminates issue - data synchronization**

- **Reduces rush to and expense of higher capacity cards**

- **Mitigates warfighter concerns over data availability to captor**

- **Mitigates card holders' concerns over privacy**

- **Must balance with communications availability**

Focus on User Assistance

- **CAC PIN Reset (CPR)** – **Army/DMDC developed application**

- **User Maintenance Portal (UMP)/Post Issuance Portal (PIP)** – **Web-centric approach to adding applications to the CAC**

Moves card maintenance as close to user's desktops as possible

- **Contractor Verification System (CVS)** – **Improved identity management for contractors**

- **Integration Logistics Portal (ILP)** – **Automated tool for inventory and logistic management of CAC cardstock**

- **Developers Kits**

Two Components of DoD Identity Management

(Defense Cross-credential Identification System (DCIS) Proof of Concept)

DoD National Visitors Center

Authenticate
DoD **ID Credential** holders at DoD bases and facilities for physical access

DoD Cross-Credentialing

Authenticate
Federated Commercial and government **ID Credentials** Holders within DoD and DoD ID Credentials holders at federated facilities and facilities

Features:

- **Secure Web-based access within DoD and between Partners**
- **Signed delivery of authentication data including biometrics**
- **Trust server can be scaled to add federated partners quickly**
- **Standards based using signed XML**

Future Enhancements/Testing

- **Central issuance**

- **RAPIDS ATM**

- **Applet changes (Access Control)**

- **64K**

- **Contactless**

- **Biometrics**

Applications

- **PKI authentication, encryption, digital signatures**

- **Defense Travel System (DTS)**

- **Voting Over the Internet (VOI)**

- **Reserve training**

  – **Attendance**

  – **Backend to pay**

- **Manifesting**

- **Dining facilities**

        * *More applications being developed/tested*

DMDC

As DoD Identity Management Systems Advance, so Must…

Interoperability/Standards

- **GSC-IS is a _BIG_ step for contact/contactless smart cards**

- **Movement to ISO would be a _GIANT_ step**

- **Next we need to move the biometrics industry in the same direction**

NIST IS CRITICAL!

Supporting Infrastructure Vendors Need to Join the March Towards Interoperability

- **Operating systems vendors**
- **Reader industry**
  - **Contact**
  - **Contactless**
- **PDAs**
- **Point of sale (POS) terminals**
- **Computer vendors**
- **Others**

Why is This Important?

- **Can reduce our costs**
- **Designs can increase market volume**
- **Identity management is a critical function**
- **Technology can make it happen**
- **Standards/interoperability make all of this affordable**

Standards Based

A common policy on identity proofing, interoperability requirements and technology standards for physical/logical access needs to be defined

- Will this credential be able to be read outside of your facility, campus, building, room?
- Should you care?
- Multiple identity credentials vs. one identity credential
- Improve security

Affordability/Widespread Implementations

Questions?

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