

Public PIV Workshop: Update on U.S. Government Smart Card Standards Efforts

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National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce

Standardization work

- Based on NISTIR 6887 Government Smart Card Interoperability Specification v2.1
- U.S. Body - ANSI International Committee for Information Technology Standards (INCITS) B10 Committee, Identification Cards and Related Devices

http://www.incits.org/tc_home/b10.htm

- International body - ISO Subcommittee 17, Cards and Personal Identification

<http://www.sc17.org>

ISO/IEC JTC 1/ SC 17

- Ballot on US new work item on smart card interoperability approved by NBs
- Work assigned to new task force
 - ⊕ ISO/IEC JTC 1/SC 17/WG 4 Task Force 9, Chaired by US
 - ⊕ Very good WG4 national body involvement
- TF9 scope
 - ⊕ New suite of standards to support interoperability
 - ⊕ Includes identification, signature, and authentication services
- New ICC standard: ISO WD 24727, 3 parts
- Aggressive timeline: CD candidate required by Mar '05

Current Situation

- GSC-ISv2.1 (NISTIR 6887 2003 Edition)
- Formal standardization
- PIV FIPS, short timeframe

GSC-ISv2.1 Issues

- Major step forward but...
- Ambiguities allow divergent implementations
- NIST GSC Reference Implementation provides one interpretation
- Card Capability Container was a bridge to legacy cards 4 years ago

PIV Implications

- Streamlined, clearly defined card platform
- Expand contactless/physical access module
- Pluggable data models
- Card management functions
- Complicated balancing act
 - ⊕ GSC-ISv2.1
 - ⊕ Existing federal deployments
 - ⊕ Formal standards work (ANSI/ISO)

Current PIV Strawman

- Simplified GSC core + card management
- Supports filesystem and VM cards
- Single ISO compliant card edge
- No Card Capability Container
- Core credential set managed by 7816-15
- Aligned with formal standards
- Starting point for discussion!

Conclusion

- GSC must evolve
- PIV needs a card platform specification that is:
 - ⊕ Clear, simple, easily implementable
 - ⊕ Based on GSC
 - ⊕ Standards compliant
 - ⊕ Interoperable