SETECS OneCARD™

Complete PIV Smart Card System
based on FIPS 201 Standard

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Complete Smart Card System supporting Identification, Authentication, Physical and Logical Access Control Applications, compliant with FIPS 201 Standard

SETECS OneCARD™ Components:

• Middleware
• PIV Card Management System
• Applets
• Logical Access Control Applications
• Smart Card APIs
• Card–Edge interface, PIV client interface, PIV Authentication protocols, IE CSP, Java OFC SC methods, C-language BSI/PIV additional utilities
• Multiple contact and contactless smart cards and readers
- Full smart card life cycle
- Choice of CAC, GSC, or PIV data models for backward compatibility
- Integrated with the SETECS OneMAN™ for identity management, credential authentication and authorization
• Efficient PIV card formatting:
  – Existing applets detected and removed
  – PIV applets loaded and instantiated
SETECS OneCARD™ – Applets

- Fully compliant with CAC, GSC and PIV data models
- Extended with full PKI certificate chain:
  - Four CA certificates and two user certificates stored on the smart card
  - Enables user mobility

PIV mandatory and optional data objects:

Card Capability Container
Card Holder Unique Identifier
X.509 Cert for PIV Authentication
Card Holder Fingerprint I
Card Holder Fingerprint II
Security Object
Card Holder Facial Image
Printed Information
X.509 Cert for PIV Digital Signature
X.509 Cert for PIV Key Management
X.509 Cert for Card Authentication
• Handling full PKI certificate chains
• Support multiple PKI certificate authorities
• Microsoft Windows™ login
• Secure Email (S/MIME) for Microsoft Outlook™
• Secure browser (SSL) for Microsoft Internet Explorer™
• Full PKI certificate chain stored in the card enables user mobility and cross-domain single sign-on protocol
Java OCF object methods:
oneCARD = OneCARD.newInstance();
oneCARD.close();
oneCARD.selectApplet("A0000001162000");
oneCARD.checkPIN("12345678");
.

PIV Client APIs:
pivConnect()
pivDisconnect()
pivSelectCardApplication()
pivLogIntoCardApplication()
.

GSC Basic Services Interface:
gscBsiUtilConnect()
gscBsiUtilDisconnect()
.

PIV Card Application CCI:
SELECT
GET DATA
VERIFY
.

- Four levels of smart card APIs
- Easy integration with complementary access control systems
# PIV Card Features – Status and Plans

<table>
<thead>
<tr>
<th>Feature</th>
<th>Requirement</th>
<th>PIV Card Class</th>
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<tbody>
<tr>
<td><strong>Interfaces</strong></td>
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<tr>
<td></td>
<td>As in existing Card</td>
<td>✔️</td>
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<tr>
<td></td>
<td>Contact</td>
<td>✔️</td>
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<tr>
<td></td>
<td>Contactless</td>
<td>July August</td>
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<tr>
<td><strong>PIV Authentication Elements</strong></td>
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<td></td>
<td>CHUID</td>
<td>✔️ ✔️ ✔️</td>
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<td>PIN</td>
<td>✔️ ✔️ ✔️</td>
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<td>Facial Image</td>
<td>August August</td>
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<td>Fingerprint Biometric</td>
<td>July July</td>
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<tr>
<td></td>
<td>PIV Authentication Key</td>
<td>✔️</td>
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<td>ICAO LDS MRZ</td>
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<tr>
<td><strong>Card Edge</strong></td>
<td>GSC-IS 2.x</td>
<td>✔️ ✔️ ✔️</td>
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<td>SP 800-73</td>
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<td><strong>Middleware Compatibility</strong></td>
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<td>GSC-IS 2.x (No Changes)</td>
<td>✔️ ✔️ ✔️</td>
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SETECS OneCARD™ – PIV Roadmap

PIV – Part 2
- GSC-IS v2.1
- PACS 2.2
- BSI
- CHUID
- Initiation
- Personalization
- Windows™ login

PIV – Part 3
- Data Objects
- PIV Auth protocols
- Certificates
- User login
- Contact cards

PIV – Part 3
- Client APIs
- Data types
- Contactless
- Biometrics (fingerprint authentication)

PIV – Part 3
- Card APIs
- PACS integration
- Facial image authentication

May 05
Jun 05
Jul 05
Aug 05
Sept 05

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• Complete PIV smart card systems with key components - *middleware, applets, PIV card management system, logical access control applications, APIs* - for FIPS 201 implementation

• Available now with timely roadmap for immediate HSPD-12 deployment and API integration with existing systems and processes
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