

SETECS OneCARD™

*Complete PIV Smart Card System
based on FIPS 201 Standard*

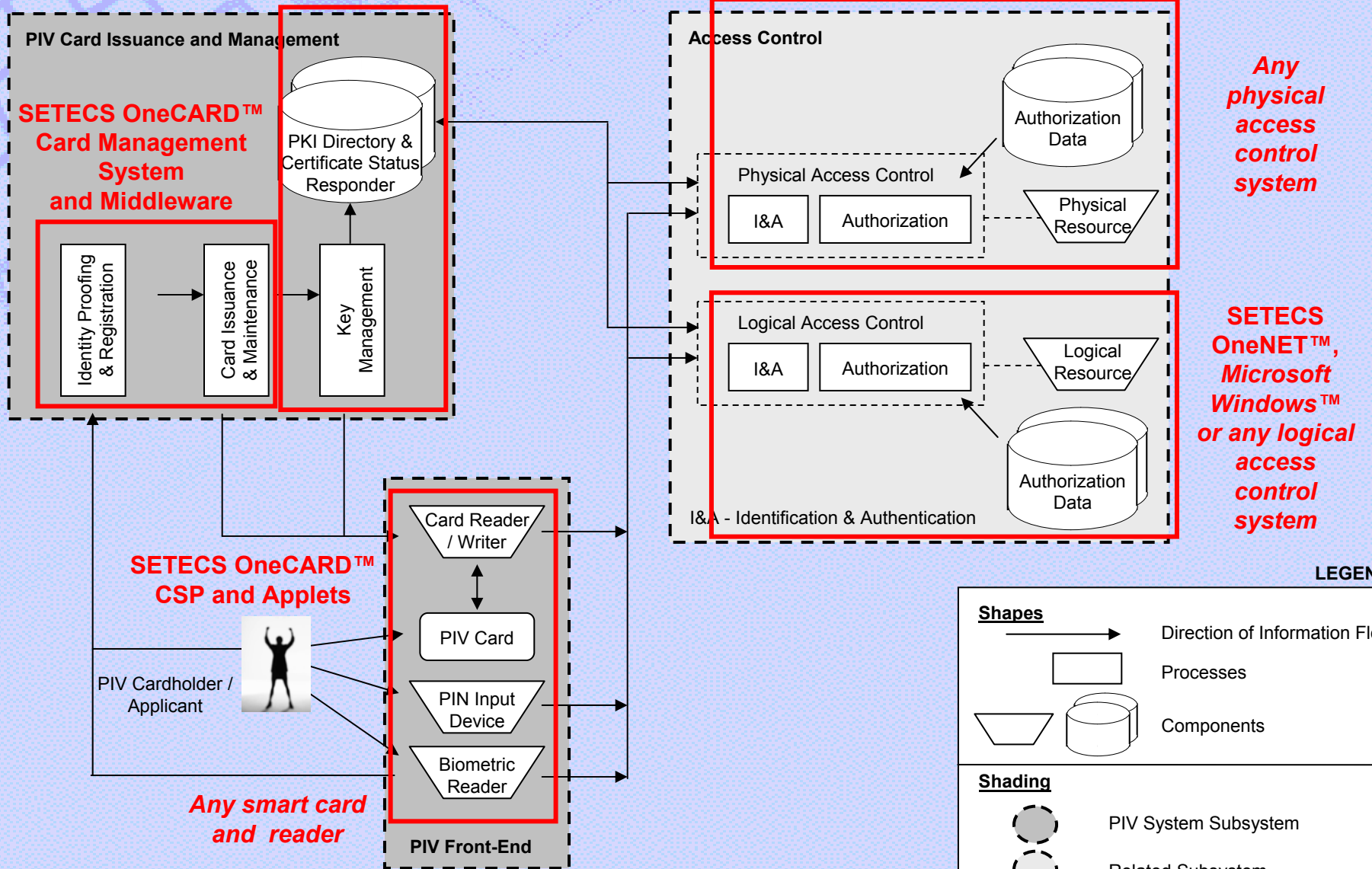
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Complete Smart Card System supporting Identification, Authentication, Physical and Logical Access Control Applications, compliant with FIPS 201 Standard



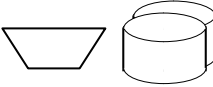


SETECS OneCARD™ Components:

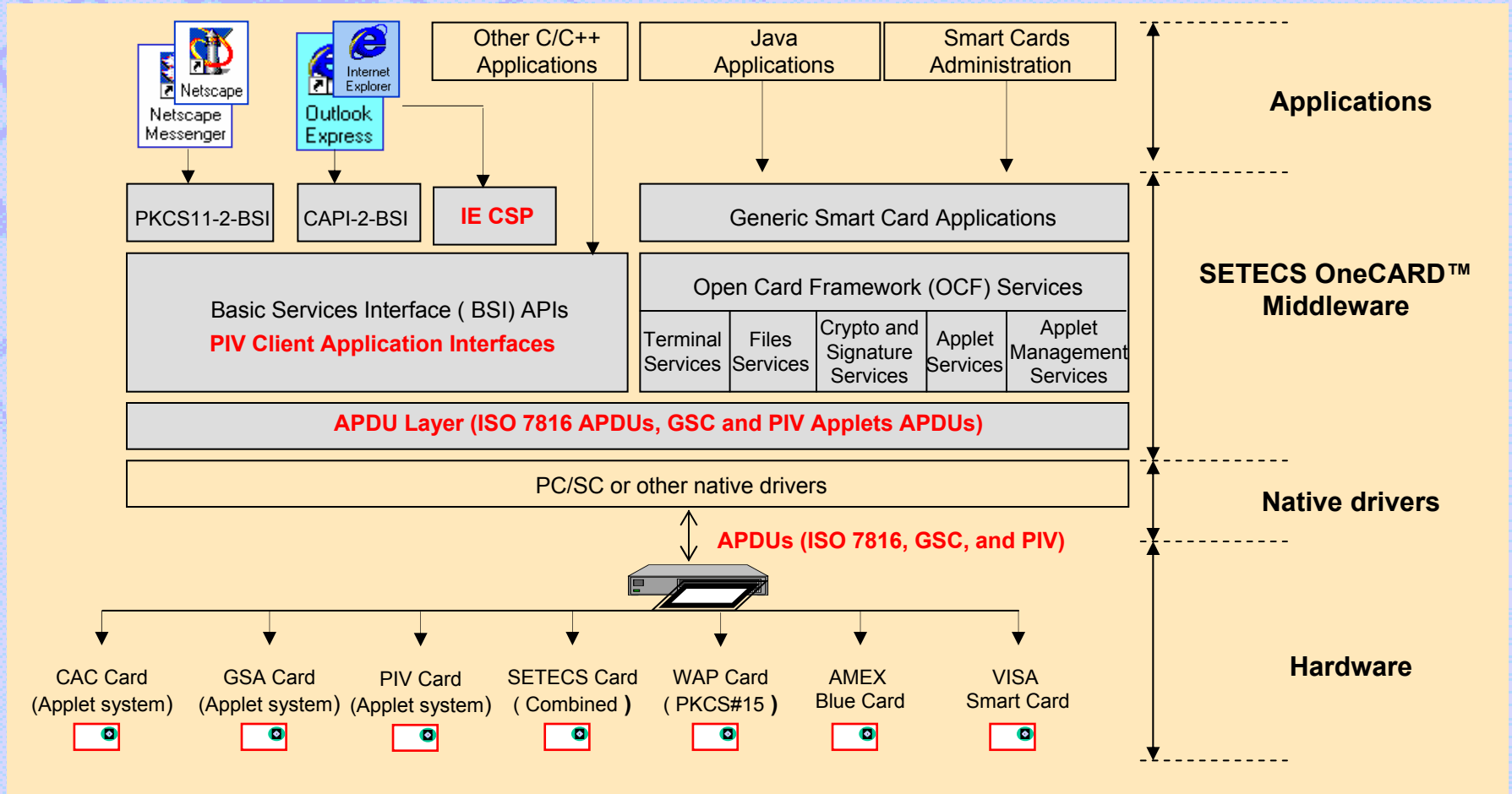
- **Middleware**
- **PIV Card Management System**
- **Applets**
- **Logical Access Control Applications**
- **Smart Card APIs**

**SETECS OnePKI™
or any other CA Server**

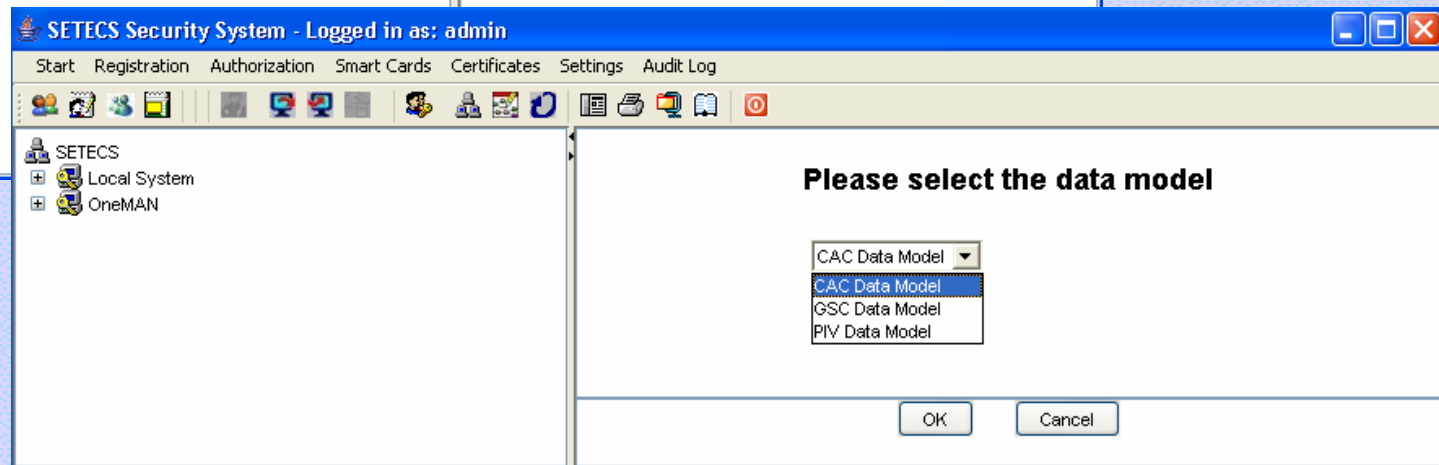
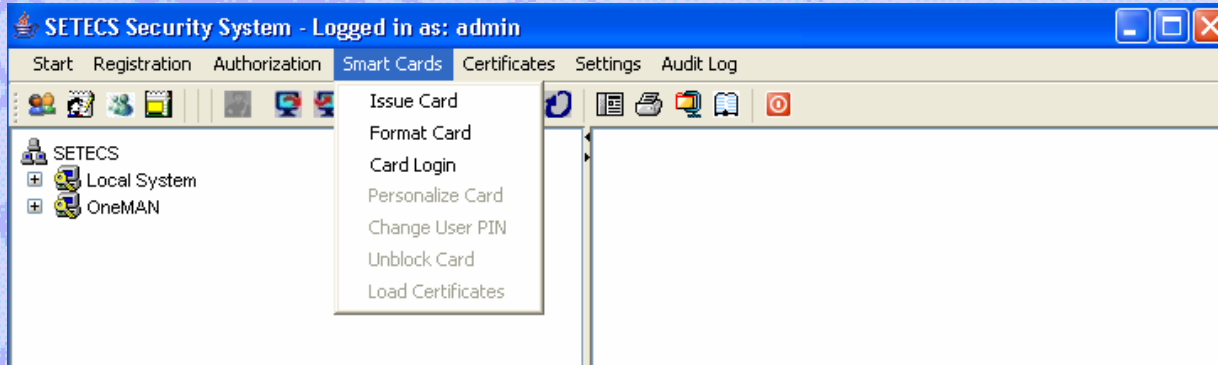


LEGEND

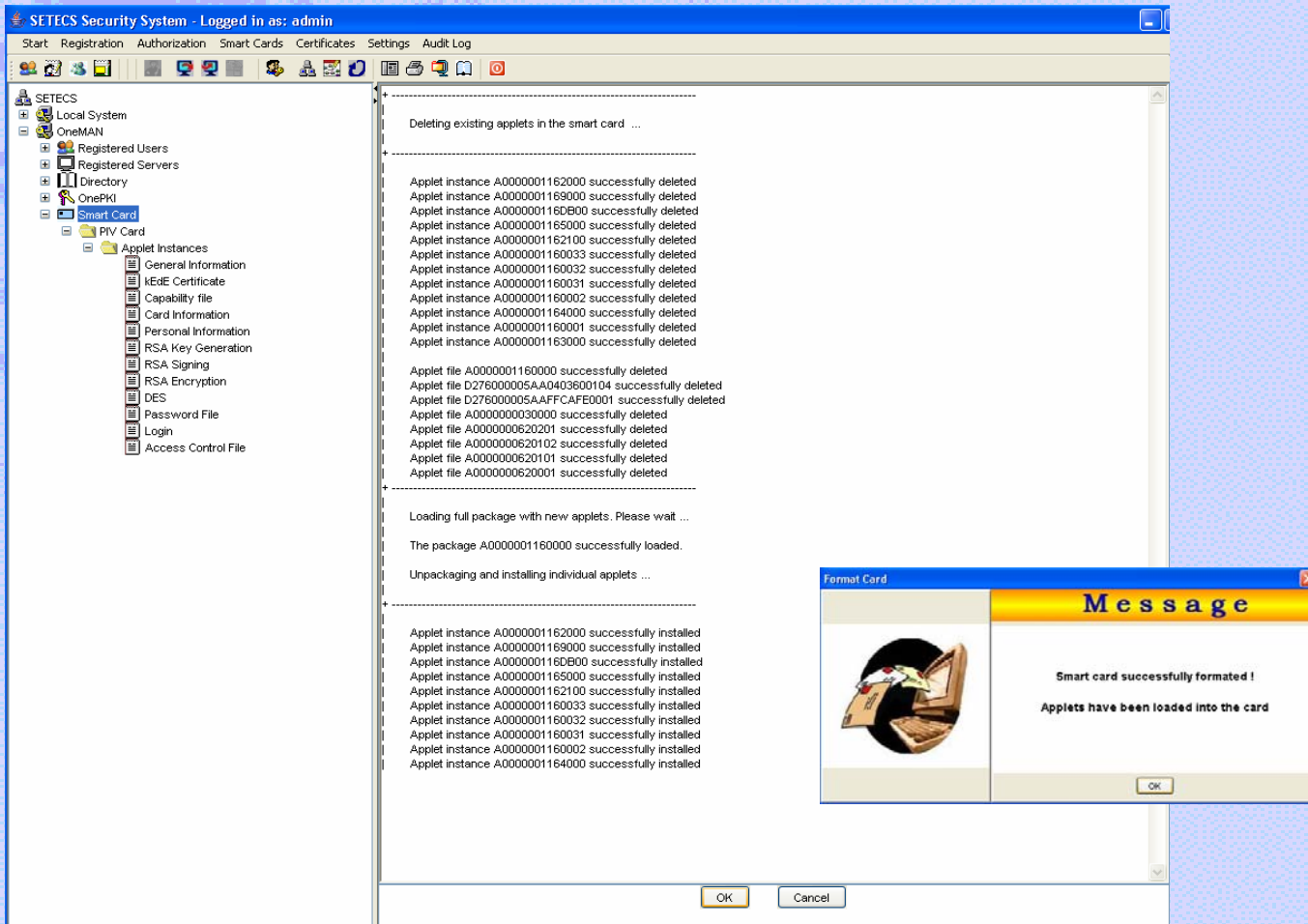
<u>Shapes</u>	
	Direction of Information Flow
	Processes
	Components
<u>Shading</u>	
	PIV System Subsystem
	Related Subsystem



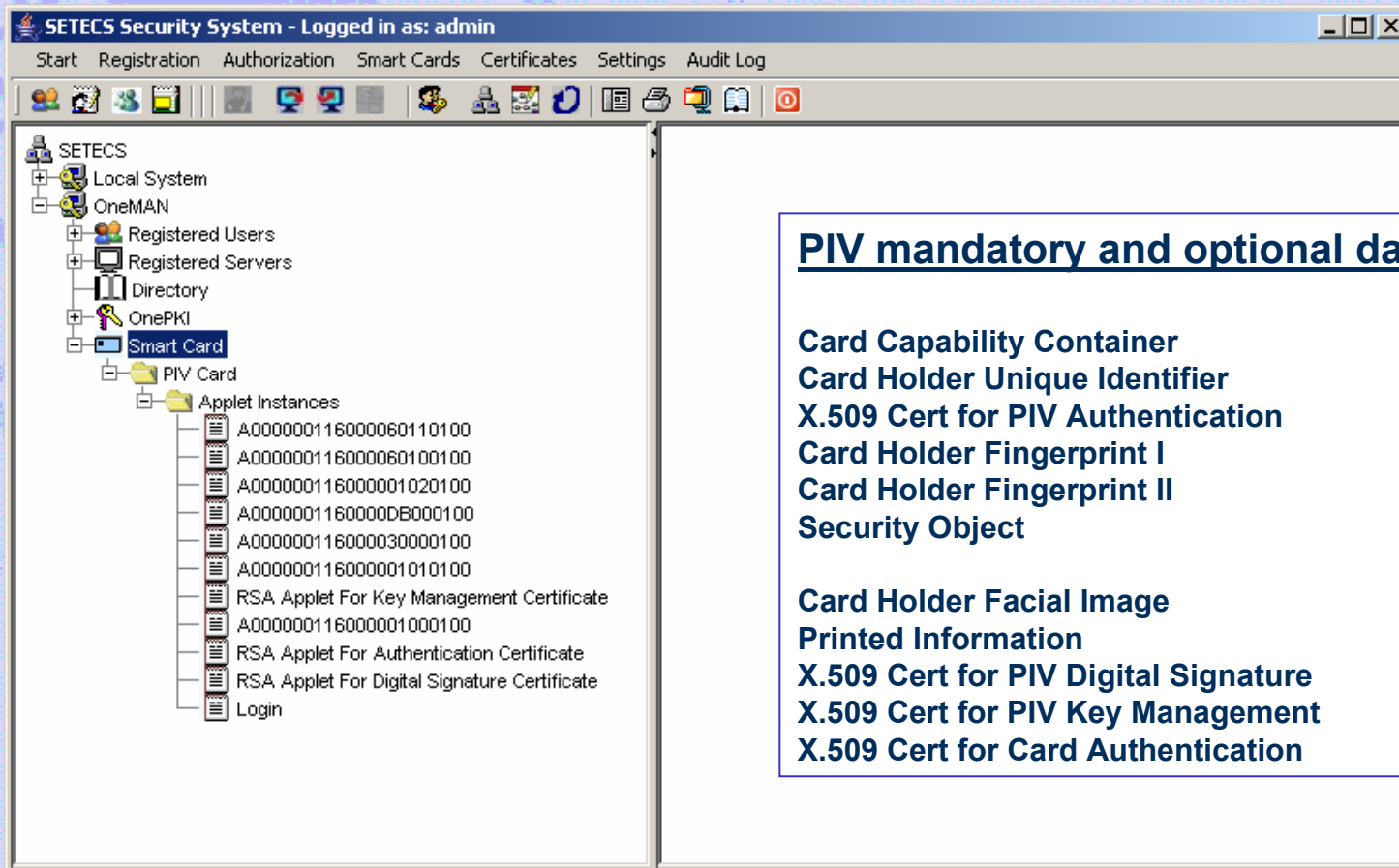
- Card-Edge interface, PIV client interface, PIV Authentication protocols, IE CSP, Java OFC SC methods, C-language BSI/PIV additional utilities
- Multiple contact and contactless smart cards and readers



- 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

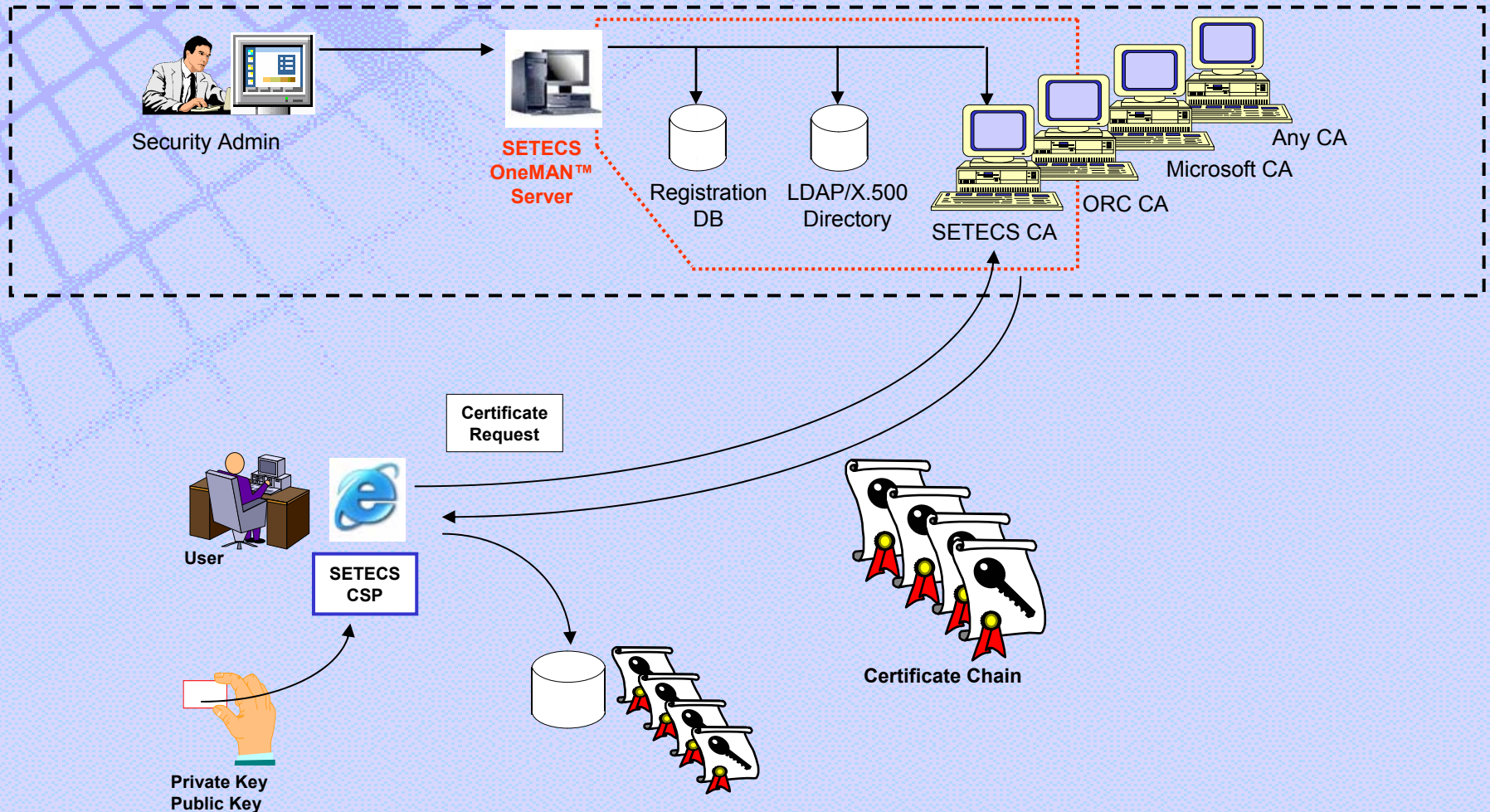


The screenshot shows the SETECS Security System interface, logged in as 'admin'. The main window displays a tree view of the system's structure. The 'Smart Card' folder is expanded, showing a 'PIV Card' folder, which in turn contains an 'Applet Instances' folder. This folder lists several applets, including RSA Applets for Key Management, Authentication, and Digital Signature Certificates, as well as a Login applet. A text box on the right side of the interface lists the PIV mandatory and optional data objects supported by the system.

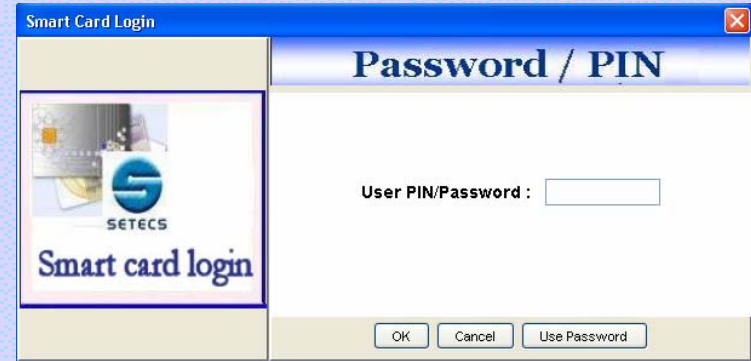
PIV mandatory and optional data objects:

- 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

- 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



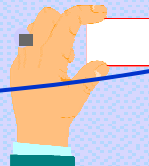
- Handling full PKI certificate chains
- Support multiple PKI certificate authorities



User



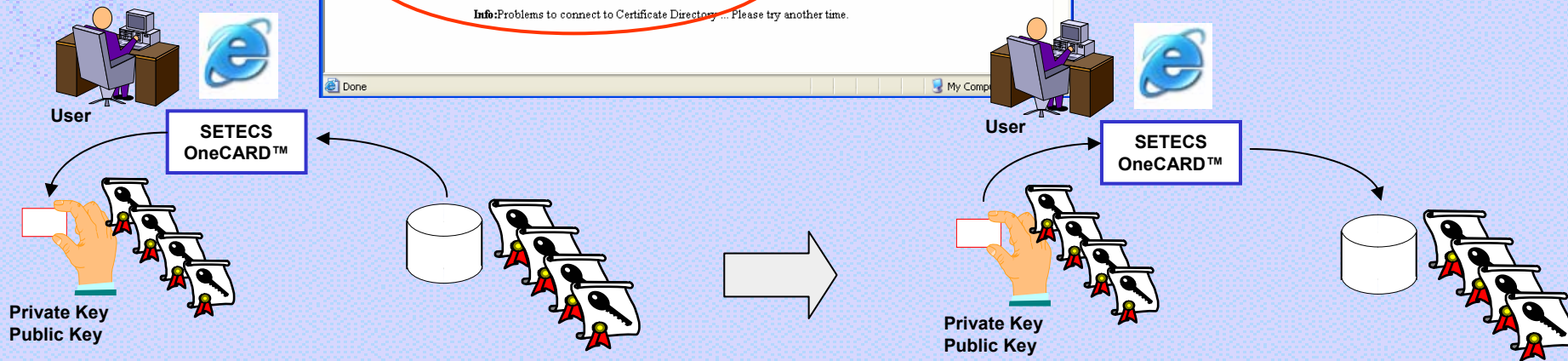
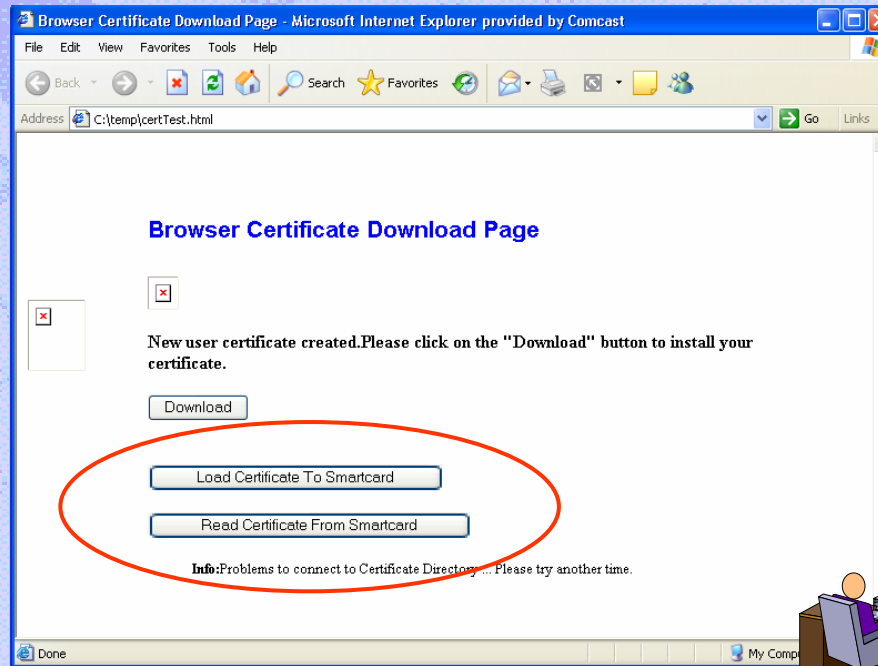
SETECS Client



- Microsoft Windows™ login
- Secure Email (S/MIME) for Microsoft Outlook™
- Secure browser (SSL) for Microsoft Internet Explorer™



Biometrics



- 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.chekPIN("12345678");
. . .
```

PIV Client APIs:

```
pivConnect()
pivDisconnect()
pivSelectCardApplication()
pivLogIntoCardApplication()
. . .
```

GSC Basic Services Interface:

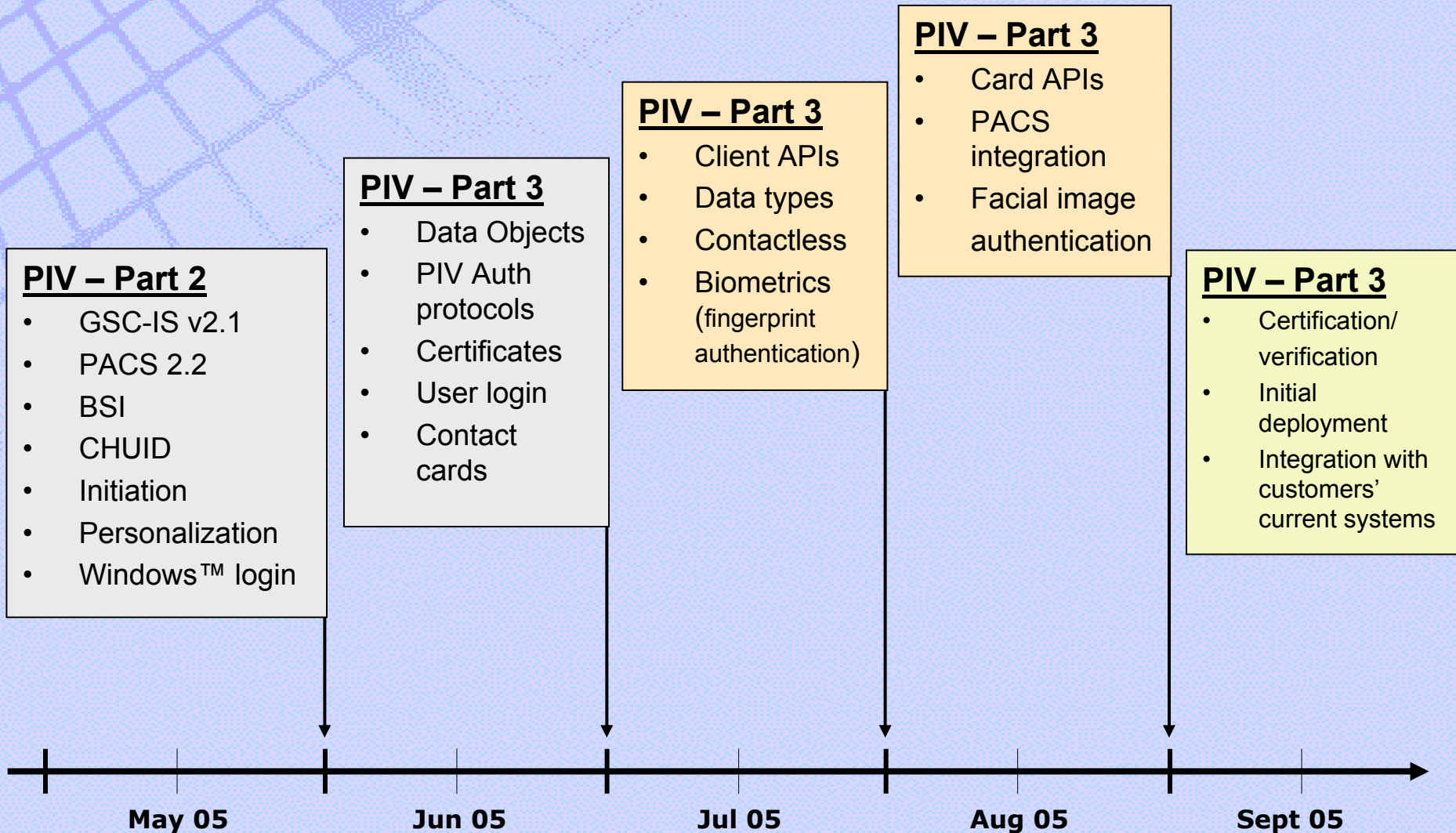
```
gscBsiUtilConnect()
gscBsiUtilDisconnect()
. . .
```

PIV Card Application CCI:

```
SELECT
GET DATA
VERIFY
. . .
```

- Four levels of smart card APIs
- Easy integration with complementary access control systems

Feature	Requirement	PIV Card Class		
		Initial	Trans	Full
Interfaces	As in existing Card	✓		
	Contact		✓	✓
	Contactless		July	August
PIV Authentication Elements	CHUID	✓	✓	✓
	PIN	✓	✓	✓
	Facial Image		August	August
	Fingerprint Biometric		July	July
	PIV Authentication Key			✓
	ICAO LDS MRZ			N/A
Card Edge	GSC-IS 2.x	✓	✓	
	SP 800-73			August
Middleware Compatibility	GSC-IS 2.x (No Changes)	✓	✓	
	SP 800-73			August



- 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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