

**SETECS**

Secure Transactions and Electronic Commerce Systems

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## SETECS® OneCARD™ PIV Card Management System

### Overview – System Roles and Components

SETECS® OneCARD™ PIV Card Management System (CMS) is the complete system to issue, activate and manage PIV cards. It supports all five standard PIV roles:

**PIV Sponsor**, whose role is to register PIV applicants and create their card requests,  
**PIV Registrar**, whose role is to capture applicant's photo and fingerprints and enroll the into the system for issuance of the card,  
**PIV Card Issuer**, whose role is to issue PIV cards based on PIV requests created by PIV Registrars,  
**PIV Card Manager**, who activates issued cards and manages their post-issuance (suspension, termination, etc.), and  
**PIV Approval Authority**, the person in charge of authorizing PIV roles.

In order to support functions of these roles, PIV CMS has the following five components:

**SETECS® OneCARD™ Sponsor Station**, used by PIV Sponsor,  
**SETECS® OneCARD™ Registrar Station**, used by PIV Registrar,  
**SETECS® OneCARD™ Issuer Station**, used by PIV Issuer,  
**SETECS® OneCARD™ Card Management Station**, used by PIV Card Manager,  
**SETECS® OneCARD™ CMS Server**

For their full functioning and operation, these components need also additional security management components, as follows:

**SETECS® OneMAN™ Identity Management Server**, where all applicants are registered in the IDMS,  
**SETECS® OnePKI™ Certificate Authority Server**, which issues X.509 certificates for PIV cards, and  
**Database server**, some standard SQL database server, like MySQL or Microsoft SQL Server.

SETECS® provides all five PIV CMS components and the first two supporting servers.

### Run-Time Packages

PIV CMS system comes in three run-time packages:

SETECS\_OneCARD\_Enrollment\_Station, which includes Sponsor, Registrar, and Card Management stations  
SETECS\_OneCARD\_Issuing\_Station, and  
SETECS\_OneCARD\_Server

Issuing Station and the Server must be installed on the same machine. To activate all four stations, PIV card is needed. SETECS® provides an initial Security Administrator's card, which is then used to activate initially the system, issue new PIV cards, so that their owners can later be declared as additional system administrators.

## Setup Procedure

After installing all three run-time directories, the components must be configured to reflect deployment environment.

### Specific for CGS:

Accompanied to this document are four files: SSConfiguration.file, ApplicationServers.xml, server-config.file, and Photo\_Jakke\_Valaikivi.jpg.

- (1) Copy **SSConfiguration.file** to both Stations, directory  
C:/SETECS ... Station/workspace/Workstation/Configuration
- (2) Copy **ApplicationServers.xml** file to the Enrollment Station, directory  
C:/SETECS\_OneCARD\_Enrollment\_Station/workspace/OneCARD/Configuration  
Open it with Wordpad and change three IP numbers to the IP number of the local machine where OneCARD Server is installed
- (3) Check the same directory of the Issuing Station and if the file is there, remove it
- (4) Copy **server-config.file** to the OneCARD Server, directory  
C:/SETECS\_OneCARD\_Server/workspace
- (5) Copy **Photo** to any local directory.
- (6) For convenience, create folder "SETECS" on the desktop, create four shortcuts in it, as follows:  
  
**PIV E Station**, direct it to setecs.exe in the Enrollment Station directory  
**PIV I Station**, direct it to setecs.exe in the Issuing Station directory  
**Start CMS Server**, direct it to Start\_OneCARD\_Server.bat file  
in the Server directory  
**Stop CMS Server**, direct it to Stop\_OneCARD\_Server.bat file  
in the Server directory
- (7) Connect two smart card readers and check  
(right-click on My Computer, then Properties, then Hardware Devices,  
then Smart Card Readers) that they are recognized by Windows

## Activation and Issuing of the Card

Start Server by double-clicking on "Start" button. If OK, popup message will appear and server's ("S") icon will appear in the taskbar. If not, check SETECS.log in Server's log directory

### PIV Sponsor

Enter Security Administrator's PIV card into one reader and start Enrollment Station:

Drop down PIV Sponsor, select Register PIV Applicant. Select "Alexis Bor" from the IDMS. In the form fill only mandatory data, enter any, arbitrary values ("city" for City, 111-33-5555 for SSN, etc.),

Drop down PIV Sponsor, select Create PIV Request, enter mandatory fields

### PIV Registrar

Immediately after two sponsor's steps

Drop down PIV Registrar, then Create PIV Request. Press Import Photo, find Photo file submitted by SETECS, import it. Then "Capture Two Fingerprints", press left finger first twice, then right finger twice, then verify using right finger. Approve request

**PIV Issuer**

Enter Security Administrator's PIV card into one reader and start Issuer Station:

After the panel is displayed insert new, blank card (with Big Button !) into Precise Biometrics reader.

Drop down PIV Issuer, select Personalize card. When OK select Print Card. If local Card printer is OK (default printer), pull the card from PB reader, put it into Input hopper to print. If printer is not OK, just to complete the cycle, specify PDF as default printer, the system will print JavaPrinting.pdf file, which is printed image of the card. Confirm that printing was OK.

**PIV Card Manager**

Immediately after the card was issued, switch back to Enrollment Station:

Insert newly issued card in the second reader, drop down PIV Manager, Activate Card. Verify fingerprint, specify new PIN, select all four certificates. Wait until all four certificates are issued and loaded in the card, pull out the card.

The card has been issued, activated and ready to be used.