Getting started with MyEID cards and tokens

Introduction

MyEID cards can be used in Windows, Linux, and Mac OS X environments. You need middleware software to initialize and use the cards. Initialization means creating the initial structure to the cards with desired PIN and PUK codes that protect the card. For this you can use the following free software:

- MyEID MiniDriver and Minidriver Utility
- OpenSC

After initialization, you need to generate or upload an RSA key pair to the card and install a certificate. In Windows environment, the simplest way is to obtain a key pair and a certificate from your Windows domain's CA using Microsoft Certificate Services.

MyEID Minidriver

A minidriver for MyEID cards is available from Aventra. The minidriver integrates MyEID cards tightly with Windows. The minidriver works together with Microsoft Base Smart Card Crypto Provider, which provides cryptographic functionality for applications via CryptoAPI. The minidriver is a lightweight software component that provides lower level interface to the card for the Base CSP. The minidriver provides support also for Cryptography API: Next Generation (CNG). Only one 250kb DLL needs to be installed on the computer.

The minidriver has passed Microsoft's Windows Hardware Certification Program.

The minidriver can be used with the following Windows versions: XP, Vista, 7, 8, 8.1, 10, 2003 Server, 2008 Server and 2012 Server.

The minidriver is automatically installed from Windows Update on Windows 7 or 8/8.1 when inserting a MyEID card for the first time. If you are using an older version of Windows or cannot use Windows Update, The latest version of the minidriver can be freely downloaded from our web site at http://aventra.fi/downloads

Download and install also MyEID Minidriver Utility. With this program you can initialize the card's file structure and perform other management tasks, for example import PKCS#12 files and unblock a blocked PIN.

OpenSC

OpenSC is an open source project that has support for MyEID cards. You can use OpenSC in Windows, Linux, and Mac OS environments. The latest version can be downloaded from the project's website https://github.com/OpenSC/OpenSC/wiki.

OpenSC includeds a PKCS#11 module, a minidriver for Windows, and some tools to initialize and manage the cards.

Please read the information at https://github.com/OpenSC/OpenSC/wiki/Aventra-MyEID-PKI-card about initializing and using MyEID cards with OpenSC.

Other solutions

For personalising large quantities of MyEID cards, we recommend Active Process Manager software. Please contact sales@aventra.fi for more information.

Fujitsu's mPollux DigiSign Client middleware is compatible with MyEID and includes a set of tools for card management and usage.

Note: New MyEID ATR

ATR of MyEID cards have been changed. The third byte of the ATR, named TA1, has been changed from 18h to 96h to allow faster communication speed. Consequently, also the last checksum byte (TCK) has changed.

New ATR: 3BF596 00008131FE454D7945494414

Old ATR: 3BF518 00008131FE454D7945494499A

All the software presented in this document recognize both versions, so in normal usage this change does not cause compatibility issues. However, please note that OpenSC versions older than 0.16 do not recognize the new ATR directly. If you have written your own software that communicates with the card directly, please note this change if the card is recognized from the ATR.

If you have any technical questions, you can contact us at support@aventra.fi