

Fujitsu mPollux

DigiSign

Installation Guide

Fujitsu mPollux Version 2.0

June 2008



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1 INTRODUCTION

This document is an installation and user guide for mPollux DigiSign software. mPollux DigiSign is a software package that enables the use of smart card-based authentication.

1.1 INSTALLATION PACKAGE

The mPollux DigiSign installation package contains the following files:

- DigiSign software
- User documentation

1.2 SUPPORTED PLATFORMS

The supported Linux platforms are:

- SUSE Enterprise Desktop 10.3 SP1
- Linux RedHat Enterprise 5
- Ubuntu 7.10

2 INSTALLING DIGISIGN

The installation procedure follows the typical Linux application installation procedure.

2.1 PREREQUISITES

You must have root rights to your computer in order to install the software.

Assumption is that smart card library `pcsc-lite` package is installed and `pcsc-lite` daemon (`pcscd`) is running before actual mPollux DigiSign client installation starts. If `pcsc-lite` package is not installed, it must be installed otherwise mPollux DigiSign client installation does not succeed. The `pcsc-lite` package installation procedure follows the typical Linux package installation procedure.

mPollux DigiSign client software also needs correct driver for smart card reader. Correct driver can be found from corresponding manufacturer pages.

If needed, one can also try to use the generic USB CCID (Chip/Smart Card Interface Devices) driver for smart card reader <http://rpm.pbone.net/index.php3/stat/4/idpl/5252258/com/pcsc-ccid-1.3.0-15.i586.rpm.html>. The package contains a generic USB CCID (Chip/Smart Card Interface Devices) driver, as well as a driver for the GemPC Twin serial reader. These drivers are meant to be used with the PCSC-Lite daemon from the `pcsc-lite` package.

2.2 RPM AND DPKG PACKAGES UNRESOLVED DEPENDENCIES

Both SUSE and RedHat use RPM packages. RPM packages may sometimes depend on other packages, which mean that they require other packages to be installed to run properly. If you try to install from command line a package which has an unresolved dependency, output similar to the following is displayed:

```
rpm -Uvh mpollux-digisign-client-1.0.0-1495.i586.rpm
```

```
error: Failed dependencies:
```

```
    libpcsc-lite.so.1 is needed by mpollux-digisign-client-1.0.0-1495.i586
```

Find the missing package(s) on the SUSE and RedHat install CD-ROMs or from the FTP sites and add them to the command:

```
rpm -ivh pcsc-lite-1.2.9.i386.rpm mpollux-digisign-client-1.0.0-1495.i586.rpm
```

If you prefer a graphical interface, you can use in SUSE the YaST2 Package Manager, which is a tool for administering and maintaining a SUSE Linux installation.

In RedHat you can use in the Package Management Tool to perform many RPM commands.

Ubuntu uses `dpkg` package management system. `Dpkg` is used to install, remove, and provide information about `.deb` packages.

If you try to install from command line a package which has an unresolved dependency, output similar to the following is displayed:

```
sudo dpkg -i mpollux-digisign-client_1.0.0-1495_i386.deb
```

```
[sudo] password for user1:
```

```
Selecting previously deselected package mpollux-digisign-client.
```

```
(Reading database ... 133374 files and directories currently installed.)
```

```
Unpacking mpollux-digisign-client(from mpollux-digisign-client_1.0.0-1495_i386.deb)
```

```
dpkg: dependency problems prevent configuration of mpollux-digisign-client:
```

```
mpollux-digisign-client depends on pcsd; however:
```

```
Package pcsd is not installed.
```

```
dpkg: error processing mpollux-digisign-client (--install):
```

```
dependency problems - leaving unconfigured
```

```
Errors were encountered while processing:
```

```
mpollux-digisign-client
```

Use the Advanced packaging tool `apt` and install missing package. Add it to the command:

```
sudo apt-get install pcsd
```

If you prefer a graphical interface, you can use Synaptic Package Manager which is a graphical package management program for `apt`. It provides the same features as the `apt-get` command line utility.

2.3 SIGNATURE SERVICE LIMITATION WITH KDE DESKTOP

In the KDE (K Desktop Environment), mpollux digisign applet cannot be added to the system toolbar and therefore user cannot use signature service. If signature service is needed, the mpollux digisign applet can be started from command line using `mpollux_digisign_certloader` program. This makes it possible to use signature service with KDE.

```
[prompt] /usr/bin/mpollux_digisign_certloader
```

2.4 INSTALLING IN SUSE LINUX ENTERPRISE DESKTOP 10.3 SP1

To install mPollux DigiSign client software to Linux SUSE,

1. Install the DigiSign client software by executing command `sudo rpm -Uvh <The DigiSign installation module>.rpm` on the command prompt.
2. After the DigiSign client is installed, update Mozilla Firefox web-browser and Thunderbird e-mail client to use DigiSign PKCS#11 module. See more information in DigiSign User Guide Appendixes.
3. Specify a digital signing and an encryption certificates to Thunderbird e-mail client. See more information in DigiSign Installation and User Guide Appendixes.
4. Check that the PC/SC Smart Card Daemon (`pcscd`) start automatically under each boot. In SUSE open YaST -> System -> System Services and from there check that `pcscd` is specified run at init 5. If not, change `pcscd` run level to 5.

2.5 INSTALLING IN REDHAT ENTERPRISE 5

To install mPollux DigiSign client software to RedHat,

1. Install the DigiSign client software by executing command `sudo rpm -Uvh <The DigiSign installation module>.rpm` on the command prompt.
2. After the DigiSign client is installed, update Mozilla Firefox web-browser and Thunderbird e-mail client to use DigiSign PKCS#11 module. See more information in DigiSign User Guide Appendixes.
3. Specify a digital signing and an encryption certificates to Thunderbird e-mail client. See more information in DigiSign Installation and User Guide Appendixes.
4. Check that the PC/SC Smart Card Daemon (`pcscd`) start automatically under each boot. In RedHat open Service Configuration Utility tool. In command line give command `sudo system-config-services`. It opens `system-config-services` tool and from there check that `pcscd` is specified run at init 5. If not, change `pcscd` run level to 5.

2.6 INSTALLING IN SUSE LINUX UBUNTU 7.10

To install mPollux DigiSign client software to Ubuntu,

1. Install the DigiSign client software by executing command `dpkg -i <The DigiSign installation module>.deb` on the command prompt.
2. After the DigiSign client is installed, update Mozilla Firefox web-browser and Thunderbird e-mail client to use DigiSign PKCS#11 module. See more information in DigiSign User Guide Appendixes.
3. Specify a digital signing and an encryption certificates to Thunderbird e-mail client. See more information in DigiSign Installation and User Guide Appendixes.
4. Check that the PC/SC Smart Card Daemon (pcscd) start automatically under each boot. In Ubuntu use command `sysv-rc-conf --list pcscd`. If pcscd run level is not 5, change run level using command `sysv-rc-conf --level pcscd 5` on. If sysv-rc-conf tool is not installed, tool can install using command `sudo apt-get install sysv-rc-conf`.

3 UNINSTALLATION

3.1 UNINSTALL IN SUSE AND REDHAT

If you want to update DigiSign, you should first remove the old version from your computer.

To uninstall the software, use command `sudo rpm -e <The DigiSign installation package name>` on the command prompt.

3.2 UNINSTALL IN UBUNTU

If you want to update DigiSign, you should first remove the old version from your computer.

To uninstall the software, use command `dpkg -r <The DigiSign installation package name>` on the command prompt.