Sentinel Keys Protection Installer (End User) - ReadMe

This readme provides an overview of the Sentinel™ Keys Protection Installer, its installation and information about the Sentinel Keys License Monitor.

This readme is for the application users (or their system administrators) who want to install the Sentinel System Driver and/or Sentinel Keys Server to access the hardware key.

Note: Windows-based developers who wish to integrate these components in their Windows Installer-based setups should refer to the Sentinel Keys Protection Installer Help.

Product Overview

The Sentinel Keys Protection Installer is an integrated installer of the Sentinel System Driver [1] and Sentinel Keys Server [2].

The Sentinel System Driver (version 7.3.0 or higher) is the device driver for communicating with the following USB hardware keys:

- Sentinel Keys

- Sentinel Dual Hardware Keys

- Sentinel UltraPro Keys

- Sentinel SuperPro Keys

- Sentinel Duo Keys (for SuperPro-protected applications on Macintosh)

For network applications, the Sentinel Keys Server is also required. [3]

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1. A daemon program for Linux and kernel extension module (KEXT) for Macintosh
2. A daemon program for Linux and Macintosh
3. For the applications protected using Sentinel UltraPro or SuperPro Keys, Sentinel Protection Server is required

Installation

This section contains details regarding the installation.

Supported Platforms

On Windows

- **Platforms supported by the Sentinel System Driver**
  Windows 98/ME/2000/XP (32-bit and x64)/Server 2003 (32-bit and x64)

- **Platforms supported by the Sentinel Keys Server**
  Windows 2000/XP (32-bit and x64)/Server 2003 (32-bit and x64)

- **WHQL Certification**
  The Sentinel System Driver is Microsoft Windows Hardware Quality Labs (WHQL) certified for Windows 2000/XP (32-bit and x64) /Server 2003 (32-bit and x64).

On Linux

The following platforms are supported by the Sentinel System Driver and Sentinel Keys Server on Linux. Both run as daemon programs:

- Red Hat Enterprise Linux ES/AS version 3.0 and 4.0

- Red Hat Enterprise Linux WS/Desktop version 3.0 and 4.0

- Fedora Core 4 and 5

- SuSe 9.3 and 10.0

On Macintosh

The following platforms are supported by the Sentinel System Driver and Sentinel Keys Server on Macintosh:

- Macintosh 10.3.9 and 10.4.x for PowerPC

- Macintosh 10.4.x for Intel

For Macintosh, If any applications protected using the following Sentinel products are already installed on your system, then this package will upgrade the existing Sentinel System Driver (KEXT/Framework). The upgraded Sentinel System Driver (version 7.3.0 or higher) is backward-compatible:

- Sentinel UltraPro

- Sentinel SuperPro

- Sentinel Protection Installer

The Sentinel System Driver (KEXT) will be installed at: */System/Library/Extensions*. It will over-write any previous installation of the Sentinel System Driver (KEXT).

Note: If you happen to install a lower version of the Sentinel System Driver on your system after install-ing the latest Sentinel System Driver, no warnings will be shown to prevent overwriting of the latest Sentinel System Driver. For example, you may receive and install Sentinel SuperPro or UltraPro Keys from some other vendor after installing Sentinel Key-protected application. In such situations, you will face problem in accessing any or all of these hardware keys. To resolve this issue, you must reinstall the latest version of the Sentinel System Driver. A copy of which can be downloaded from: *http://www.safenet-inc.com/support/index.asp*.

Installation Notes

On Which System I Should Run This Installer?

You must run this installer on the system where the Sentinel Hardware Key is to be attached. This can be a stand-alone system or a network system (wherein multiple applications in the sub-net access the hardware keys concurrently).

You must have Administrator privileges (root user) in order to install this software.

For Windows

Double-click the *setup.exe* provided to launch the installer. Please follow the on-screen instruc-tions to complete the installation.

For Linux

For installation on Linux, a script file and RPMs are provided. Run the *skpi_install.sh* script and choose your options accordingly.

Tip: You can use the *skpi_uninstall.sh* script to uninstall the program.

For Macintosh

Double-click the *SentinelKeysProtectionInstaller.pkg* provided to launch the installer. Please follow the on-screen instructions to complete the installation.

Before completing the installation, plug in the hardware key to load the Sentinel System Driver (KEXT). Else, restart the system after installation.

Note: The uninstallation script available with the Sentinel Keys Protection Installer (at: /Applications/ SafeNet Sentinel/Sentinel Keys /<version>/Sentinel Keys Protection Installer/English/) will unin-stall both the Sentinel System Driver and Sentinel Keys Server.

Installed Components

Component Name	Installation Path
Sentinel System Driver	❑ **On Windows:** - On Windows 32-bit: *<OS Drive>\Program Files\Common Files\ Safenet Sentinel\Sentinel System Driver* - On Windows x64: *<OS Drive>\Program Files(x86)\Common Files\ Safenet Sentinel\Sentinel System Driver* ❑ **On Linux:** */opt/safenet_sentinel/common_files/ sentinel_usb_daemon* ❑ **On Macintosh:** */System/Library/Extensions/*
Sentinel Keys Server[a]	❑ **On Windows:** - On Windows 32-bit: *<OS Drive>\Program Files\Common Files\ Safenet Sentinel\Sentinel Keys Server* - On Windows x64: *<OS Drive>\Program Files(x86)\Common Files\ Safenet Sentinel\Sentinel Keys Server* ❑ **On Linux:** */opt/safenet_sentinel/common_files/ sentinel_keys_server* ❑ **On Macintosh:** */Applications/Safenet Sentinel/Common Files/ Sentinel Keys Server*

a. The Sentinel Keys Server installation also contains the files required for canceling licenses (using the Sentinel Keys License Monitor) and configuring the Sentinel Keys Server.

Important Information for Macintosh 10.3.9

If you used the Sentinel Keys Protection Installer to install the Sentinel Keys Server, by default, the installer makes an entry in the system firewall to allow the socket communication—regardless of whether the system firewall is on or off.

However, on Macintosh 10.3.9, this entry will not take place automatically. In that case, you need to manually add the ports in *System Preferences/Sharing/Firewall*. The default ports used by the Sentinel Keys Server and Sentinel Keys License Monitor are 7001 and 7002, respectively.

About the Sentinel Keys License Monitor

Sentinel Keys License Monitor shows the details of the Sentinel keys attached to a system and clients accessing them, via a Web browser. It is a convenient way to view and track the license activity and analyze application usage. You can view the following details about the keys connected to a system:

- Serial number, hardware key type, hard limit and licenses-in-use of the keys attached.
- User limit and other details of the licenses used by a key.
- Information about the clients (such as, the user name, login time, and client process ID) who have currently obtained licenses from the key.
- Cancel the current license sessions.

Prerequisites for Launching the Sentinel Keys License Monitor

Here are the specific requirements:

- Sentinel Keys Server must be running on the system where the key is attached.
- The client must have Java Runtime Environment (JRE) 1.5 or higher.
- The client must be running Internet Explorer version 5.0 (or higher)/ Netscape Navigator version 4.6 (or higher)/Mozilla FireFox version 1.0 (or higher)/FireFox version 1.0.or higher/Safari version 1.3 (or higher).

Steps for Launching the Sentinel Keys License Monitor

1. Open the Web browser on the system.

2. In the **Address Bar**, type the name or IP address of the system (where the hardware key is attached and Sentinel Keys Server is running) in the following format:

   ```
   http://IP address (or system name):HTTP port number.
   ```

   For example,

   ```
   http://198.168.100.254:7002
   ```

3. Press the **Enter** key. The Sentinel Keys License Monitor Web page (an example is shown below) is displayed.

For details on using the Sentinel Keys License Monitor, please refer the System Administrator's Help.

Sentinel Keys License Monitor - Key Information Page

Sentinel Keys License Monitor - License Information Page

Client Information Page (When the Cancel License Option is Not Available)
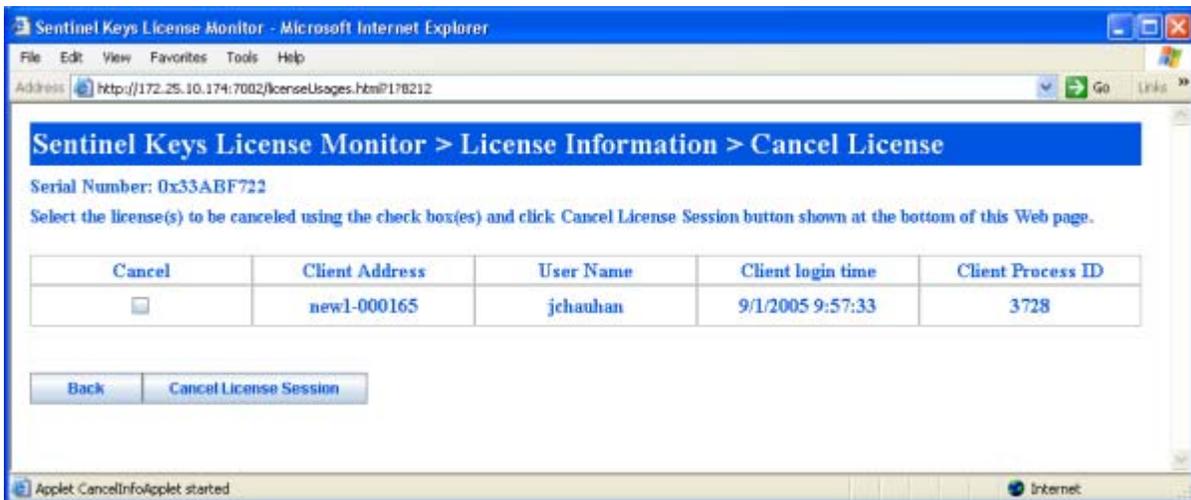
Client Information Page (When the Cancel License Option is Available)

Canceling a License

If desired, a system administrator can cancel the licenses issued to the clients from a Sentinel Key. This need might arise in situations when some other privileged client needs a license or an application terminates without releasing the license acquired.

Please follow the steps given below to cancel the licenses in the Sentinel Keys License Monitor:

1. On the system where Sentinel Keys Server is installed, run the Password Generation utility[4] to generate the *sntlpass.dat* file. It is available at the following path:

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4. The *PwdGenUtility.exe* for Windows and *PwdGenUtility* for Linux and Macintosh

> ❑ **For Windows 32-bit:** *<OS drive>:\Program Files\Common Files\SafeNet Sentinel\Sentinel Keys Server*
>
> ❑ **For Windows x64:** *<OS drive>:\Program Files(x86)\Common Files\SafeNet Sentinel\Sentinel Keys Server*
>
> ❑ **For Linux:** */opt/safenet_sentinel/common_files/sentinel_keys_server*
>
> ❑ **For Macintosh:** */Applications/Safenet Sentinel/Common Files/Sentinel Keys Server*
>
> Do remember the password; it will be required for authenticating the cancel license request (see step 7).

2. Restart the Sentinel Keys Server.

3. Launch the Sentinel Keys License Monitor. The main page (keys information) will appear.

4. Select the Sentinel Key whose licenses are to be canceled. The license information page will appear.

5. Select the license#. The client information page will appear.

6. Select the **Cancel** check box(es) for the licenses to be canceled. You can cancel up to 10 licenses at a time.

7. Click the **Cancel License Session** button given at the bottom of the page. A dialog box will appear prompting you to provide the same password specified in step 1.

8. Click **OK**. Verify for the license(s) canceled.

Note: The Sentinel Keys License Monitor will not prompt you for any errors encountered while canceling a license. However, a license will not be canceled if there is excessive traffic in the network or you specified a wrong password in step 7.

Getting Help

If you have questions, need additional assistance, or encounter a problem, please contact your software provider.