

# Sentinel CLOUD SERVICES™

## Installation Guide

Version 3.4



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## About This Document

This document provides installation information about *Sentinel® Cloud Services*.

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**Note:** For information on supported platforms for Sentinel Cloud Services, refer to *Release Notes*.

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## Sentinel Cloud Services Media Contents

This section lists the contents of the media provided to a software provider.

Directory/File	Contents
<b>Windows</b>	
Installer	Contains the installer, <i>Sentinel Cloud Runtime.exe</i> , for installing SDK components of Sentinel Cloud Services on Windows. This is a common installer for all the supported interfaces - Java, .NET, and C. For information of SDK components installed by installer, See <i>"Installed Components"</i> on page 3.
<i>Manuals</i>	Contains the product documentation.
<i>ReleaseNotes.pdf</i>	Document containing product overview, summary of new features, and list of enhancements.
<b>Linux</b>	
<i>Sentinel Cloud Services (Linux).tar</i>	Contains all the required components for deploying C and Java Run-times on Linux.

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**Note:** Sentinel Cloud Services installer supports Unicode character encoding.

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## Installing Sentinel Cloud Services on Windows

### Specific Requirements

Given below are the requirements you need to ensure before installing *Sentinel Cloud Services*.

- JRE 6 should be installed on the system where you want to install *Sentinel Cloud Services* Java SDK.

You can download JRE from <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.

- You should have the following items in place: Vendor ID, Vendor Code, Secret Key, and Secret Key ID.

You receive these items in a provisioning e-mails from SafeNet on purchase of Sentinel Cloud Services.

- You should have complete read/write permissions for the folder where you want to install Sentinel Cloud Run-time.

### Modifying *installer.config* File

The *installer.config* configuration file is available with *Sentinel Cloud Services* software package, in the *Installer* folder. You need to update settings in this file by the vendor details you receive in SafeNet e-mails:

- **SecretKey:** Denoted by Shared Key in SafeNet e-mails. You receive this as a password-protected zip file.
- **SecretKeyID:** Denoted by Shared Key ID in SafeNet e-mails.
- **VendorID:** Unique identifier assigned to each software vendor by SafeNet.
- **VendorCodeFilePath:** It is the absolute path of the *.hvc* file. You need to extract the *.hvc* file from the password-protected zip file to a location on your system, specify this location in the *VendorCodeFilePath* property.

### Installation

A common setup for Java, .NET, and C SDK is available in the *Sentinel Cloud Services* media, by the name *Sentinel Cloud Runtime.exe*. Double-click the setup to launch a self-extracting installer. Follow the on-screen instructions to complete the installation.

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**Note:** On Windows 7 and Windows Server 2008, you need to run installer as Administrator.

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#### *Installation Notes*

- The default installation directory for *Sentinel Cloud Services Run-time* is *C:\Program Files\SafeNet Sentinel\Sentinel Cloud Services\*. You can specify a different directory during the installation.
- You will need to specify the location of *installer.config* configuration file during installation.

- The default **Setup Type** is **Complete** that installs all available SDKs (Java, .NET, and C). If you want to specify which SDKs you want to install, you need to use the **Setup Type** as **Custom**.
- On Windows, you can access Sentinel Cloud Services by using **Start > All Programs > SafeNet Sentinel > Sentinel Cloud Services**.

**Note:** If you want to reinstall the SDK components with updated vendor details, uninstall the SDK, and reinstall with changed vendor details.

## Installed Components

The directory structure of the installed components is described below:

Directory	Contents
<b>Configurations</b>	Stores client configuration file, <i>SentinelCloudRuntime.properties</i> , that contains Run-time configuration settings, for all supported interfaces.
<b>Documentation</b>	Contains Sentinel Cloud documents.
<b>Redistributables</b>	Contains redistributable components, such as customized License Manager Server, that the software provider can distribute to customers for on-premise deployments.
<b>RunTimes</b>	Contains jars or library files
<i>/Java SDK</i>	<ul style="list-style-type: none"> <li>□ <i>\Jars</i>: Contains the jar files.</li> <li>□ <i>\Third party libraries</i>: Contains the third party jar files.</li> </ul>
<i>/Dot Net SDK</i>	<ul style="list-style-type: none"> <li>□ <i>\Library</i>: Contains the main library of Cloud Run-time and XML based configuration file.</li> <li>□ <i>\External Libraries</i>: Contains the third party libraries.</li> </ul>
<i>/C SDK</i>	<ul style="list-style-type: none"> <li>□ <i>\include</i>: Contains the header files.</li> <li>□ <i>\Win32</i>: Contains C Run-time and third-party libraries for Windows 32-bit platform.</li> <li>□ <i>\Win64</i>: Contains C Run-time and third-party libraries for Windows 64-bit platform.</li> </ul>

Directory	Contents
<b>Samples</b>	
<i>/Java SDK</i>	Stores source code of demo application including project file, class path settings, resources, targets, ant files, on-premise configurations, etc.  <i>Note:</i> For more information about Java sample contents, refer to <i>Java Demo Application ReadMe</i> available in this folder.
<i>/Dot Net SDK</i>	Stores source code of sample application that include source file, class path settings, resources, targets, ant files, etc.  <i>Note:</i> For more information about .NET sample, refer to <i>.NET Reference Application ReadMe</i> available in this folder.
<i>/C SDK</i>	Contains the source code and workspace of sample application.  <i>Note:</i> For more information about C sample code, refer to <i>C Reference Application ReadMe</i> available in this folder.
<b>Sentinel Cloud Connect WebServices</b>	Stores Python sample application and XML schema for Cloud Connect Web services.  <i>Note:</i> For more information about Python sample contents, refer to <i>Cloud Connect Web Services Python Sample ReadMe</i> available in this folder.

## Installing Sentinel Cloud Run-time at Customer's Site

The on-premise Run-time environment is required for your protected software to run at the customer's site. The components required to install on-premise Run-time environment are available in the *\Redistributables* folder. To install the on-premise Run-time environment:

Open command prompt, navigate to the *Redistributables* directory, and run the following command: `haspdinst.exe -i`

A message is displayed informing you that the on-premise Run-time environment has been successfully installed.



# Installing Sentinel Cloud Services on Linux

## Specific Requirements

Before installing Cloud SDK on Linux, ensure that you have the Vendor ID, Vendor Code, Secret Key, and Secret Key ID required for the execution of Cloud Run-time APIs.

## Installation

Extract the *Sentinel Cloud Services (Linux).tar* package to a location on your system, by using the following command:

```
tar -xvf Sentinel Cloud Services(Linux).tar
```

## Extracted Components

The directory structure of the extracted components is described below:

Directory	Contents
<b>Configurations</b>	Stores client configuration file, <i>SentinelCloudRuntime.properties</i> , that contains Run-time configuration settings for all supported interfaces.
<b>Documentation</b>	Contains Sentinel Cloud documents.
<b>Installer</b>	Contains the <b>install</b> utility and <i>installer.config</i> configuration file, which are required for preparing Run-time libraries. The install utility inserts the vendor details, as specified in configuration file, into Run-time libraries.
<b>Redistributables</b>	Contains redistributable components, such as customized License Manager Server, that the software provider can distribute to customers for on-premise deployments.
<b>RunTimes</b>	Contains jars or library files.
<i>/Java SDK</i>	<ul style="list-style-type: none"> <li>□ <i>\Jars</i>: Contains the jar files.</li> <li>□ <i>\Third party libraries</i>: Contains the third party jar files.</li> </ul>
<i>/C SDK</i>	<ul style="list-style-type: none"> <li>□ <i>\include</i>: Contains the header files.</li> <li>□ <i>\32-bit</i>: Contains C Run-time libraries and third-party libraries for Linux 32-bit platform.</li> <li>□ <i>\64-bit</i>: Contains C Run-time libraries and third-party libraries for Linux 64-bit platform.</li> </ul>

Directory	Contents
<b>Samples</b>	
<i>/Java SDK</i>	Stores source code of demo application including project file, class path files, jars, etc.  <i>Note:</i> For more information about Java sample contents, refer to <i>Java Demo Application ReadMe</i> available in this folder.
<i>/C SDK</i>	Contains the sample application and its make file.  <i>Note:</i> For more information about C sample code, refer to <i>C Reference Application ReadMe</i> available in this folder.
<b>Sentinel Cloud Connect Web Services</b>	Stores Python sample application and XML schema for Cloud Connect Web services.  <i>Note:</i> For more information about Python sample contents, refer to <i>Cloud Connect Web Services Python Sample ReadMe</i> available in this folder.

## Modifying *installer.config* File

You need to update settings in the *installer.config* configuration file by the vendor details you receive in SafeNet e-mails:

- **SecretKey:** Denoted by Shared Key in SafeNet e-mails. You receive this as a password-protected zip file.
- **SecretKeyID:** Denoted by Shared Key ID in SafeNet e-mails.
- **VendorID:** Unique identifier assigned to each software vendor by SafeNet.
- **VendorCodeFilePath:** It is the absolute path of the *.hvc* file. You need to extract the *.hvc* file from the password-protected zip file to a location on your system, specify this location in the VendorCodeFilePath property.

## Inserting Vendor Details

After installing Sentinel Cloud Services on Linux, run the **install** utility to insert vendor details in the Cloud Run-time libraries.

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*Note:* You must have full permissions before inserting vendor details in Run-time libraries. If the insertion process fails, execute the `install` command as a root user.

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To see the usage of the `install` utility, type the `install` command at the command prompt.

To insert vendor details in 32-bit and 64-bit Java or C libraries on Linux, perform the following steps:

1. Run the `install` command with the command-line options, as explained below:

### Java

- For 32-bit:

```
./install ../RunTimes/Java\ SDK/Jars/libSentinelCloudRuntime_P.so
installer.config installation.log
```

- For 64-bit:

```
./install ../RunTimes/Java\ SDK/Jars/
libSentinelCloudRuntime_P_x64.so installer.config installation.log
```

## C

- For 32-bit:

```
./install ../RunTimes/C\ SDK/32-bit/lib/libscrruntime.a
installer.config installation.log
```

- For 64-bit:

```
./install ../RunTimes/C\ SDK/64-bit/lib/libscrruntime_x64.a
installer.config installation.log
```

---

**Note:** Before executing the install utility on 64-bit machines, install the 32-bit libs package by using the command:

**Ubuntu:**

```
sudo apt-get install ia32-libs.
```

**CentOS and RHEL**

```
yum install glibc.i686
```

```
yum install libSM.i686
```

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2. The Sentinel Cloud Services Software License Agreement is displayed on console. Type **Y** or **y** to accept the agreement and complete the installation.

## Installing Sentinel Cloud Run-time at Customer's Site

The on-premise Run-time environment is required for your protected software to run at the customer's site. The components required to install on-premise Run-time environment are available in the *\Redistributables* folder.

To install the on-premise Run-time environment:

Open command prompt, navigate to the *Redistributables* directory, and run the following command:

```
rpm -Uvh aksusbd-2.1-1.i386.rpm
```

---

**Note:** To install and operate the Sentinel Cloud Run-time package under a 64-bit Linux operating system, you must also install the 32-bit base library package (x86 compatibility packages). To do so, use the following command:

```
rpm -ivh /mnt/cd/Packages/glibc-2.12-1.47.el6.i686.rpm /mnt/cd/
Packages/nss-softokn-freebl-3.12.9-11.el6.i686.rpm
```

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## Uninstalling Sentinel Cloud Services

To uninstall Sentinel Cloud Services on Windows, select **Start > All Programs > SafeNet Sentinel > Sentinel Cloud Services > Uninstall SentinelCloudRuntime**.

## Obtaining Support

You can contact us using any of the following options:

- **Business Contacts** - To find the nearest office or distributor, use the following URL:  
<http://www.safenet-inc.com/contact-us/>
- **Technical Support** - To obtain assistance in using SafeNet products, feel free to contact our Technical Support team:
  - **Phone:** 800-545-6608 (US toll free), +1-410-931-7520 (International)
  - **E-mail:** [support@safenet-inc.com](mailto:support@safenet-inc.com)
  - **URL:** <http://sentinelcustomer.safenet-inc.com/sentinelsupport/>
- **Downloads** - You may want to check out updated installers and other components here:  
<http://www.sentinelcustomer.safenet-inc.com/sentineldownloads/>