

Sentinel RMS SDK v9.0.0

Linux (32 and 64-bit) Release Notes

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Sentinel RMS SDK v9.0.0 for Linux (32 and 64-bit) - Release Notes

About This Document

This document contains details about the new features and installation of the Sentinel RMS v9.0.0 for Linux. This release includes feature changes and problem fixes since the last major release v8.6.1.

Product Overview

Sentinel RMS is a software licensing SDK for your applications. It increases revenue by authorizing the use of your applications and offers a variety of licensing schemes to boost your product sales. It also provides tools that system administrators can use to track and manage licenses in a network.

What's New in This Release?

This section provides details about the new features introduced in this release.

Introduced Sentinel Cloud Licensing - Add-on for Sentinel RMS

Sentinel RMS is enhanced to support the Sentinel Cloud Licensing (SCL) Add-on.

SCL enables you to reap benefits of cloud-connected licensing—where software licensing is managed from cloud to serve both on-premise or cloud-based deployments.

SCL combines the security and license enforcement features of Sentinel RMS, the licensing operations management features of Sentinel EMS, and the cloud platform, to deliver a simple and smooth customer experience.



The Sentinel Cloud Licensing – Add-on for Sentinel RMS is not a part of the Sentinel RMS SDK release. To request for a trial Sentinel Cloud Licensing platform, contact [Technical Support](#).

For more information about SCL, refer to the SCL Add-on for RMS - Overview Guide.

Introduced Unified API Set

In this release, a new set of license enforcement API is introduced. These API provide a programmatically superior and scalable alternative to the existing license enforcement API. These API are useful for developers—either designing a new RMS-based licensing implementation or planning to upgrade an existing.



In the future releases, the Unified API set will eventually replace the existing set of RMS license enforcement API.

For more information, see the following documentation sections:

- The section "Which Licensing API to Use?" of the chapter "Planning Application Licensing" in the *Sentinel RMS SDK Developer's Guide*.
- The chapter "Unified API" of the *Sentinel RMS SDK API Reference Guide*.

Introduced Java Interface for Unified API

In addition to the native C library, a new Java interface for the Unified API is also included in this release. You can find the interface at the following path:

- `<installdir>/development/java` - Contains the Java interface source.
- `<installdir>/samples/java` - Contains the Java interface sample.

Support for License Start Time and End Time

Starting v9.0, you can generate licenses that include the start time and end time values (in hours and minutes). Prior to this release, only date values were specified as time attributes.

To support this enhancement, the following changes are made:

- The time value is based on the "Coordinated Universal Time (UTC)" time standard.
- The 'start time' and 'end time' fields are introduced in the license generator utility (lsc-gen).
- The following new API functions are introduced in the license generator library. You can find API details in the Sentinel RMS SDK API Reference Guide:
 - VLScgAllowLicBirthTime
 - VLScgSetLicBirthMinutes
 - VLScgSetLicBirthHours
 - VLScgAllowLicExpirationTime
 - VLScgSetLicExpirationMinutes
 - VLScgSetLicExpirationHours

The following new members are also added in the CodeT, LicenseInfo, and FeatureInfo structures:

- int birth_minutes
- int birth_hours
- int death_minutes
- int death_hours

License Version Upgraded to v16

Due to the following changes in the License Generation module, the license version has been upgraded to v16:

- Many new members are introduced in the license structure to support SCL - Add on for Sentinel RMS SDK.
- Addition of start time and end time values (see "[Support for License Start Time and End Time](#)" on page 9).

Modified Directory Structure of the Sentinel RMS SDK

In this release, directory structure of the Sentinel RMS SDK SDK has been modified for intuitive naming and consistent look-n-feel across all the supported platforms. You can find the new directory names and their contents in the section: [Installed Directories](#).

Deprecated LRT-based Method of License Revocation

The LRT (License Revocation Ticket) based method introduced in v8.0.0 is deprecated in this release. The following related changes are done in the SDK:

- The API functions `VLSrevokeLicense` and `VLScgDecodeLicenseRevocationTicket` are removed from the various header files (*lserv.h*, *lscgen.h*, *lscgen_sdk.h*, and *lsdecode.h*).
- Removed the `-lrt` and `secret` options from the `lsdecode` utility.
- Updated documentation for the above-mentioned changes

Components Removed From the SDK

In this release, the following components are removed from the SDK. To obtain any of the component listed below, please contact [Technical Support](#):

- **Native Java Client**
The native Java client module has been removed from the SDK.
- **Demo Directory**
The Demo directory (previous location was `<installdir>/examples/demo`) has been removed from the SDK.

Support for 64-bit License Generation Library

The `x86_64` license generation libraries are now available on the supported Linux based platforms.

Support for 64-bit Redundancy Configuration File Library

The `x86_64` redundancy configuration file libraries are now available on the supported Linux based platforms. Both static (*liblsr1f64.a*) and shared libraries (*liblsr1f64.so*) are now available in the RMS SDK.

Query for Remaining Period and Expiry Date of Grace License

Starting v9.0, you can query the remaining grace time in seconds and expiration date of grace license. The following new members are also added in the `FeatureInfo` structure:

- `grace_period_remaining`
- `grace_period_expiry_date`

Installation Information

This section contains following information about installation of the product:

- "Before You Install..." on page 12
- "System Requirements" on page 13
- "Installation Instructions" on page 15
- "Installed Directories" on page 17

Before You Install...

Before you begin installing the RMS SDK, note the following:

Administrator Privileges

You must have Administrator privileges to successfully install all the components.

RMS SDK Serial Number

You require a valid serial number provided by SafeNet. The installer prompts you to enter the serial number specific to you.

System Requirements

To use the Sentinel RMS SDK, the minimum hardware and software requirements are:

Hardware Requirements	Software Requirements
<p>Processors:</p> <ul style="list-style-type: none"> ■ x86 processors for 32-bit ■ x86-64 processors for 64-bit 	<p>Operating Systems and Compilers:</p> <p>Red Hat Enterprise Linux 6.x (Kernel v2.6.32)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.4.7 ■ glibc v2.12 <p>Red Hat Enterprise Linux 7.x (Kernel v3.10.0-121)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.8.2 20140120 ■ glibc v2.17 <p>SUSE Linux Enterprise Server 11 SP4 (Kernel v2.6.18)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.1.2 ■ glibc v2.4 <p>SUSE Linux Enterprise Server 12 (Kernel v3.0.13)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.3.4 ■ glibc v2.11.3 <p>Open SUSE 13.1 (Kernel v3.11.6)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.8.1 ■ glibc v2.18 <p>Open SUSE 13.2 (Kernel v3.7.10)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.7.2 ■ glibc v2.17 <p>Ubuntu 14.x (Kernel v3.13.0)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.8.2 ■ glibc v2.13 <p>Ubuntu 15.x (Kernel v3.1.0)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.8.2 ■ glibc v2.13 <p>Debian Linux 7.x (Kernel v2.6.32)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.4.5 ■ glibc v2.11.2 <p>Debian Linux 8.x (Kernel v3.2.0.4)</p> <ul style="list-style-type: none"> ■ gcc (32 and 64-bit) v4.7.2 ■ glibc v2.13
<p>Monitor and Settings: VGA monitor with 800 x 600 resolution (1024 x 768 recommended)</p>	<p>Java Runtime Environment: Java Runtime Environment v1.6, 1.7 and 1.8 for the Java interface.</p>
<p>Hard Disk Space:</p>	<p>Web Browser (for viewing HTML Helps):</p>

Hardware Requirements	Software Requirements
200 MB free hard disk space	Firefox 3.5 or later
RAM: 128 MB RAM	PDF File Viewer (for viewing PDF documents): Adobe Acrobat 4.0 (or later)
Peripherals: <ul style="list-style-type: none">■ A USB port or a parallel port to attach the license meter key. This is required on the system where licenses are to be generated.	

Installation Instructions

1. The Software is packed in a .tar archive. Extract files from the archive as follows:

```
tar -xvf RMSSDK9.0.0.0094Linux.tar
```

4. Change the directory where the installation script *install.sh* exists (*slm_0900_linux_combo_cdrom* directory). Afterward, type *sh install.sh* to start the installation.
5. Accept the license agreement to proceed with the installation.
6. Enter the path of the installation directory.
7. You will be required to specify the RMS SDK serial number—included with the product packaging—to complete the installation.



Sentinel RMS is self-contained in the installation directory. To uninstall, remove the directory. Do stop the Sentinel RMS License Manager before uninstalling.

Installing Sentinel UNIX Driver (SUD)

Sentinel UNIX Driver (SUD) needs to be installed for making use of the hardware keys (for CID based locking and license generation). To install SUD on your system:



The RMS License Manager included with this release supports version 7.5.0 of the Sentinel UNIX Driver. On Linux 32-bit, both USB and parallel drivers are provided. On Linux 64-bit, only USB driver is provided.

1. Extract the SUD installer from its compressed tar image placed at *<installdir>/re-distributable/licenseManager/SUDInstaller tar.gz* location on the DVD by giving the following command:


```
tar -xvzf SUDInstaller.tar.gz
```

2. Change directory to SUDInstaller.
3. To install SUD parallel driver on kernel version 2.4.x:
 - Change directory to *parallel/2.4.x*.
 - Run command *rpm -i --force sntl-sud-parallel-7.1.0-0.i386.rpm* to install the driver.
4. To install SUD parallel driver on kernel version 2.6.x:
 - Change directory to *parallel/2.6.x*.
 - Run command *rpm -i --force sntl-sud-paralleldrv-7.1.3-0.i386.rpm* to install the driver.
5. To install SUD USB driver (applicable to both 32-bit and 64-bit):

- Change directory to USB.
- Run command `rpm -i --force sntl-sud-7.5.0-0.i386.rpm` to install the driver.

Installed Directories

The following directories are installed:

Directory or File	Description
<i>development</i>	Contains all the RMS libraries, header files, and source code for licensing and customization purpose.
<i>manuals</i>	Documentation for the Sentinel RMS SDK.
<i>samples</i>	Examples that illustrate the various features of Sentinel RMS. The include files, which provide the prototypes for various Sentinel RMS library functions.
<i>vendorTools</i>	Contains the utilities and files for your use. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> The license generator is no longer included with the SDK. A download link is provided to you using e-mail. If not, contact Technical Support for obtaining it.</div>
<i>redistributable</i>	The utilities and files for your customers, including the Sentinel RMS License Manager installer.
<i>ReleaseNotes.pdf</i>	This file.

Documentation Resources

This section provides details about the additional documentation resources for the product.

Developer's Guide

Contains the complete product overview, the necessary information for licensing and distributing the applications. Useful for developers planning and implementing licensing. To access, use the following ways:

- PDF and HTML versions installed on the system can be accessed using the Doc Access Page (.htm) in the *Manuals* directory.
- The latest online copy can be accessed here:
<http://sentinelrms.safenet-inc.com/RMSDocumentation/Vendor/Default.htm>

API Reference Guide

Contains details about all the API functions, including the licensing library, license code generator, system initialization, and so on. Useful for developers integrating the API functions in the code. To access, use the following ways:

- PDF and HTML versions installed on the system can be accessed using the Doc Access Page (.htm) in the *Manuals* directory.
- The latest online copy can be accessed here:
<http://sentinelrms.safenet-inc.com/RMSDocumentation/Vendor/Default.htm>



The Developer's Guide and API Reference Guide are bundled together as the Vendor's documentation. You can find it as the last item in its ToC (in the left-side pane).

System Administrator's Guide

Contains details about using the system administration and License Manager configuration options. Useful for the System Administrator of the end user (on the customer site). To access, use the following ways:

- The HTML version installed on the system can be accessed using the Doc Access Page (.htm) in the *Manuals* directory.
- The latest online copy can be accessed here:
<http://sentinelrms.safenet-inc.com/RMSDocumentation/SysAdmin/Default.htm>

Technical Support

You can contact us using any of the following options:

Contact method	Contact	
Address	Gemalto NV 4690 Millennium Drive Belcamp, Maryland 21017 USA	
Phone	Global	+1 410-931-7520
	Australia	1800.020.183
	China	(86) 10 8851 9191
	France	0825 341000
	Germany	01803 7246269
	India	000.800.100.4290
	Netherlands	0800.022.2996
	New Zealand	0800.440.359
	Portugal	800.1302.029
	Singapore	800.863.499
	Spain	900.938.717
	Sweden	020.791.028
	Switzerland	0800.564.849
	United Kingdom	0800.056.3158
United States	(800) 545-6608	
Web	www.safenet-inc.com	
Support and Downloads	www.safenet-inc.com/support Provides access to the Gemalto Knowledge Base and quick downloads for various products.	
Technical Support Customer Portal	https://serviceportal.safenet-inc.com Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the Gemalto Knowledge Base.	