

Sentinel RMS SDK v10.0

RELEASE NOTES FOR LINUX ARM (32-BIT AND 64-BIT)

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Product Description

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.

Sentinel Cloud Licensing (SCL) add-on for RMS combined with the license enforcement features of Sentinel RMS and the entitlement management features of Sentinel EMS; makes a complete solution that provides the benefits of cloud-connected licensing to applications deployed on-premises or hosted online. Usage collection and reporting is the most-significant advantage obtained with cloud-connected licensing.

About This Document

This document contains details about the new features, enhancements, and installation of v10.0 Sentinel RMS. The last major release was Sentinel RMS v9.8.1.

What's New in this Release

This section lists down the new features included in Sentinel RMS v10.0 release.

Introducing Sentinel RMS Cloud License Manager (LM) for SCL Add-on Users

A cloud-based RMS License Manager, managed as a service by Thales, has been introduced in this release for the SCL Add-on users. This new deployment is called the Connected (Cloud LM) mode. The major highlights of the new feature are:

- > In Sentinel EMS, Flexible License Model now provides a new deployment type called Cloud Served - Cloud LM. In addition, usage reports is also supported by Connected (Cloud LM) mode.
- > Sentinel RMS license version is upgraded to version 22.
- > **RMS Cloud LM** is accessible either through SCP-integrated library or RMS Cloud LM REST APIs.
- > SCP-integrated library includes a new value 'sntl-cloudlm' for SNTL_ATTR_APPCONTEXT_CONTACT_SERVER attribute (available in sntl_licensing_app_context_new API).
- > SCP-integrated library includes the following two new attributes in sntl_licensing_configure API:
 - SNTL_ATTR_CONFIG_SCP_REGISTRATION_TOKEN
 - SNTL_ATTR_CONFIG_SCP_TENANT_HOST_ADDRESS
- > SCP configuration file includes the following new properties:
 - TenantHostAddress
 - RegistrationToken
- > Added sample programs to demonstrate Cloud LM licensing for C, Java, and .NET.

NOTE Refer to the Common Use Cases sections of [C](#), [Java](#), and [.NET](#) for a quick snapshot of the APIs workflow.

End of Development ("EoD") for the Legacy (VLS) Licensing API

From the Sentinel RMS v10.0 onward, new developments would no longer be made to the legacy licensing (VLS) API in the upcoming General Availability ("GA") releases.

Unified APIs, introduced since v9.0.0 of Sentinel RMS, must be used for implementing licensing under all scenarios as these:

- > Provide a compact API set with minimal, intuitive, and easy to remember semantics.
- > Offer uniform licensing and features in C, Java, and .NET implementations.
- > Follow consistent approach across all the deployment modes—on-premises, lease, and connected (cloud LM)—allowing you to rebalance across deployments.
- > Can be evaluated and integrated easily using the API Explorer tool and sample programs.

NOTE The documentation is still to be fully updated for the removal of references of VLS APIs.

Issues Fixed in this Release

The following issues have been corrected in this release.

Internal Tracking ID	Description
SM-110391	Fixed the issue with the response of VLSupdateExt API on floating license.
SM-110136	Resolved the memory leak problem occurring on calling sntl_persistence_create, sntl_persistence_reset, sntl_persistence_repair APIs.
SM-107042	Update documentation to include 16001 and 16010 error code and descriptions.
SM-106411	Updated the description of 510007 and 510033 error codes.
SM-105682	Fixed the issue with the response of sntl_licensing_app_context_delete API.
SM-81624	Fixed the issue with VLSgetCommuterInfo showing wrong concurrency for checked-out feature.

System Requirements

The following table provides the minimum hardware and software requirements for using Sentinel RMS.

Build Environment

Hardware Requirements	Software Requirements
Processors: <ul style="list-style-type: none">> x86 processors (32-bit)> x86-64 processors (64-bit)	Operating Systems: <ul style="list-style-type: none">> Red Hat Enterprise Linux (RHEL) 7.x> Red Hat Enterprise Linux (RHEL) 8.x> Debian Linux 9.x> Debian Linux 10.x> Ubuntu Linux 16.04> Ubuntu Linux 18.04> Ubuntu Linux 20.04
Hard Disk (Minimum) As per the operating systems' specification.	GCC: <ul style="list-style-type: none">> 32-bit:<ul style="list-style-type: none">• Soft Float: arm-linux-gnueabi-gcc-4.7• Hard Float: arm-linux-gnueabi-gcc-4.7> 64-bit: aarch64-linux-gnu-gcc-4.8
RAM Requirement As per the operating systems' specification.	Java Development Kit (JDK): Java SE 8 (minimum supported version)
	Web Browser (for viewing HTML5 Documents): <ul style="list-style-type: none">> Mozilla Firefox> Google Chrome PDF File Viewer (for viewing PDF documents): Adobe Acrobat 4.0 (or later)

Deployment Environment Recommendations

Hardware Requirements	Software Requirements
Processor: ARM	Operating System: Linux

Hardware Requirements	Software Requirements
Architecture: <ul style="list-style-type: none"> > ARMv7-A (32-bit Soft Float) > ARMv7-A (32-bit Hard Float) > ARMv8-A (64-bit) 	Java Runtime: Java Runtime Environment version 1.8

Installation Information

This section contains important information related to the installation of Sentinel RMS v10.0.

Before installing the Sentinel RMS SDK, you must have the following:

- > **Administrator Privileges:** Administrator privileges are required to successfully install all the components.
- > **Sentinel RMS SDK Serial Number:** A valid serial number. The installer prompts you to enter the serial number provided to you.

Installation Instructions

Ensure that your build environment is set as per the specification described in the [System Requirements](#) section.

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

```
tar -xvf RMSSDKx.x.xxxxLinuxArm.tar
```

2. Change the directory where the installation script *INSTALL.sh* exists (*slm_xxxx_linux_arm_cdrom* directory).
3. Type *sh INSTALL.sh* to start the installation.
4. Accept the license agreement to proceed with the installation.
5. Enter the path of the installation directory.

NOTE It is recommended NOT to install two non-Windows SDKs in the same directory.

6. You will be required to specify the Sentinel RMS SDK serial number. This serial number is contained in the Sentinel Order Credentials email and is unique for each vendor.

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

Installed Directories

The following directories and files are installed.

Directory or File	Description
development	Contains all the RMS libraries, header files, and source code for licensing and customization purpose.
manuals	Documentation for the Sentinel RMS SDK.
redistributable	The utilities and files for your customers, including the Sentinel RMS License Manager.
samples	Contains the sample programs for demonstrating the use of various RMS features and API functions.
vendorTools	Contains the utilities and files for your use.
install.rbo	Contains information about Sentinel RMS SDK version and serial number.
ReleaseNotes.pdf	This file.
Legacy	Contains deprecated RMS libraries and samples.

Sentinel RMS Documentation Resources

The following are the major documentation resources for the product. The latest documentation resources are also listed [here](#):

Sentinel Software and Services Solutions Guide

This guide provides the complete overview of the Software Monetization solution. You can use this guide to prepare a comprehensive monetization strategy prior to integrating licensing technology with your software and business processes.

- > To view the online version of the latest document, [click here](#).

Sentinel RMS Developer Guide

This guide contains the complete product overview, the necessary information for licensing and distributing the applications. Useful for developers planning and implementing licensing.

- > To view the online version of the latest document, [click here](#).

Sentinel RMS API Reference Guide

This guide contains details about all the API functions, including the licensing library, persistence management, and so on. Useful for developers integrating the API functions in the code.

- > To view the online version of the latest document, [click here](#).

Sentinel RMS System Administrator Guide

This 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.
- > To view the online version of the latest document, [click here](#).

Sentinel Cloud Licensing (SCL) Add-on Installation and Configuration Guide

This guide describes the procedure for installing and configuring SCP for Cloud-Served Lease and On-premises deployment modes, respectively. This is applicable to Windows, Linux, Mac, Android, and Linux ARM operating systems. Additionally, it describes the components included in the SCP package for serving Cloud-Connected deployments.

- > To view the online version of the latest document, [click here](#).