# THALES

# Sentinel RMS SDK v9.8
## RELEASE NOTES FOR LINUX ARM (32-BIT AND 64-BIT)

**Release Version: v9.8**

**Document Number: 007-000677-001, Revision C**

**Release Date: June, 2021**

# Contents

# 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 v9.8 Sentinel RMS. The last major release was Sentinel RMS v9.7.0.

# What's New in this Release

This section lists down the new features included in Sentinel RMS v9.8 release.

## Introduced Unified API for Persistence Data Management

You can now manage the persistence data using Unified APIs through two newly introduced libraries—persistence initialization and persistence cleaning. These persistence libraries are available in the ../<Version>/development/ directory. Prior to this release, persistence data could be setup using the system initialization API, which is now deprecated along with the related samples and tools.

To setup the persistence data, you should now use the Persistence API. For details about the new approach to setup the persistence data, refer to Persistence Libraries.

## Introduced New Samples

Following two new samples for C, Java interface are introduced:

> sntl_lspmgmtinit - Creates persistence data.

> sntl_lspmgmtclean - Repairs and resets the corrupted persistence files.

## .NET Core Support

> .NET Core version 5.0 is now supported that allows you to build applications for multiple operating systems.

> .NET Framework is updated from 4.0 to 4.7.2 ( Now, this is the minimum supported version)

For information about how to build the.NET Core applications, refer to samples available under ../<Version>/Samples/ directory.

## Partial Activation Support

To support partial activation of an entitlement in the case of lease mode, the following attributes are introduced in RMS SCP Integrated library for sntl_licensing_configure API :

> SNTL_ATTR_CONFIG_SCP_PRODUCT_VARIANT: Denotes the product variant of the license to retrieve.

> SNTL_ATTR_CONFIG_SCP_PRODUCT_QUANTITY: Denotes the product quantity of the license to retrieve.

For more details to set these attributes, refer to Sentinel RMS API Reference Guide.

## Revocation Tool

In this release, a new tool 'Revocation' is introduced, which is available at *../<Version>/Redistributable/Tools/* location. This tool is supported only for Windows and Linux operating systems. You can use this tool to revoke active licenses from the EMS portal. For more information, refer to the Sentinel RMS System Administration Guide.

## Software And Services Evaluation Tool

In this release, a new tool 'SoftwareAndServicesEvaluationTool' is introduced, which is part of SCL Add-on package. This tool is supported only for Windows and is used to evaluate Sentinel Cloud Licensing (SCL) standalone lease deployment and license consumption.

For more details on standalone lease deployment, refer to Sentinel Cloud Licensing (SCL) Add-on Installation and Configuration Guide.

# Miscellaneous Changes Included

## Installation Directory Structure

> A new directory, Legacy, is introduced in the installation directory containing the deprecated persistence initialization and cleaning libraries, vendor tools, and samples.

## lsrvdown

The lsrvdown utility and sample file are no longer supported.

# Issues Fixed in this Release

The following issues have been corrected in this release.

| Internal Tracking ID | Description |
|---|---|
| SM-87935 | Feature index should not be mandatory in the FeatureInfo and Feature CumulativeTrialInfo APIs. |
| SM-87944 | Feature index with license index should not be mandatory in the LicenseInfo API. |
| SM-90819 | Unwanted logs are shown in error mode in SCP. |

# System Requirements

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

## Build Environment Recommendations

| Hardware Requirements | Software Requirements |
|---|---|
| **Processors:**<br>> x86 processors (32-bit)<br>> x86-64 processors (64-bit) | **Operating Systems:**<br>> Red Hat Enterprise Linux (RHEL) 7.x<br>> Red Hat Enterprise Linux (RHEL) 8.x<br>> Debian Linux 9.x<br>> Debian Linux 10.x<br>> Ubuntu Linux 16.04<br>> Ubuntu Linux 18.04<br>> Ubuntu Linux 20.04 |
| **Hard Disk (Minimum)**<br>1.5 GB of free hard disk space | **GCC:**<br>> **32-bit:**<br>  • **Soft Float**: arm-linux-gnueabi-gcc-4.7<br>  • **Hard Float**: arm-linux-gnueabihf-gcc-4.7<br>> **64-bit**: aarch64-linux-gnu-gcc-4.8 |
| **RAM (Minimum)**<br>> 4 GB capacity for:<br>  • Red Hat Enterprise Linux (RHEL) 8.x<br>> 2 GB capacity for:<br>  • Red Hat Enterprise Linux (RHEL) 7.x<br>  • Ubuntu Linux 16.04<br>  • Ubuntu Linux 18.04<br>  • Ubuntu Linux 20.04<br>  • Debian Linux 10.x<br>> 512 MB capacity for:<br>  • Debian Linux 9.x | **Java Development Kit (JDK):**<br>Java SE 8 (minimum supported version)<br><br>**Web Browser (for viewing HTML5 Documents):**<br>> Mozilla Firefox<br>> Google Chrome<br>**PDF File Viewer (for viewing PDF documents):**<br>Adobe Acrobat 4.0 (or later) |

## Deployment Environment Recommendations

| Hardware Requirements | Software Requirements |
|---|---|
| **Processor:**<br>ARM | **Operating System:**<br>Linux |
| **Architecture:**<br>> ARMv7-A (32-bit Soft Float)<br>> ARMv7-A (32-bit Hard Float)<br>> ARMv8-A (64-bit) | **Java Runtime:**<br>Java Runtime Environment version 1.8 |

# Installation Information

This section contains important information related to the installation of Sentinel RMS v9.8.

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

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

```
tar -xvf RMSSDK9.8.xxxxLinuxArm.tar
```

2. Change the directory where the installation script *INSTALL.sh* exists (*slm_098_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 EMS and Sentinel RMS Solution 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 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.

## 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 access, use the following ways:

> 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, system initialization, and so on. Useful for developers integrating the API functions in the code. To access, use the following ways:

> 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.