

# Sentinel RMS SDK v10.1

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

**Release Version: v10.1**

**Document Number: 007-001471-001, Revision B**

**Release Date: January, 2023**

### Contents

---

Product Description .....	2
About This Document .....	2
What's New in this Release .....	2
Sentinel RMS Lease-Related Improvements .....	2
Sentinel RMS Cloud Licensing for SaaS Applications .....	2
Swagger Support for RMS Cloud License Manager REST API .....	2
Issues Fixed in this Release .....	3
System Requirements .....	4
Build Environment .....	4
Deployment Environment Recommendations .....	4
Installation Information .....	6
Installation Instructions .....	6
Installed Directories .....	7
Sentinel RMS Documentation Resources .....	8

# 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.

## About This Document

---

This document contains details about the new features, enhancements, and installation of v10.1 Sentinel RMS. The last major release was Sentinel RMS v10.0.

## What's New in this Release

---

This section lists the changes included in the Sentinel RMS v10.1 release.

### Sentinel RMS Lease-Related Improvements

- > Lease renewal frequency and entitlement update detection controls are now decoupled allowing need-based and autonomous functioning of each mechanism.
- > A new set of options is available in [Sentinel EMS Administration Console](#) to detect various types of entitlement updates automatically. These options give you more control over when updates are triggered and detected by the Sentinel EMS back end and Sentinel Cloud Plug-in (SCP) clients.
- > The default lease renewal settings now enable you to control the number of activations more effectively. For more details, refer to the [SCL Add-on Installation and Configuration Guide](#).

### Sentinel RMS Cloud Licensing for SaaS Applications

Sentinel RMS cloud licensing can now be integrated more effectively with your SaaS applications in trusted environments. You can now use OAuth 2.0 Client Credentials to authorize RMS Cloud License Manager REST API.

### Swagger Support for RMS Cloud License Manager REST API

The RMS Cloud License Manager REST API is now integrated in the Sentinel EMS API Reference. This allows you to better experience, test, and implement licensing calls for the Connected (Cloud LM) deployment mode.

These APIs are included for SaaS applications only.

## Issues Fixed in this Release

---

The following issues have been corrected in this release:

Tracking ID (Service Request / Internal ID)	Issue Description
SM-120822 / SM-124075	GetInfo API showed unexpected behavior after manual sync and lservrc growing with duplicate entries.
SM-132956 / SM-134720	VLSgetClientInfo end time did not change when commuter extended.
SM-132465 / SM-132539	VLScleanExpiredCommuterCode caused heap corruption in 32-bit processes.
SM-130747 / SM-132508	Leased licenses file added the same license with different death time every time on sync lease.
SM-126099	Redundant license was not synced to the follower License Managers when added to the leader using the VLSaddFeature API.
SM-124690 / SM-125083	Error for network lease isolated License Manager.
SM-123982 / SM-124075 and SM-132638	SCP-integrated libraries did not remove previous lease activations in lservrc.
SM-119937	Client information duplicated for a commuted token.
SM-118640 / SM-119166	Client information disappeared from the license node.
SM-118285 / SM-109228	Aggregated license usable beyond the end date at server.
SM-117330 / SM-117638	Address CVEs found in third-party libraries used by Sentinel RMS.
SM-114813 / SM-124059	The license server crashed in a redundant license server-configured environment.

# System Requirements

---

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

## Build Environment

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

## Deployment Environment Recommendations

Hardware Requirements	Software Requirements
<b>Processor:</b> ARM	<b>Operating System:</b> Linux

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

# Installation Information

---

This section contains important information related to the installation of Sentinel RMS v10.1.

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