



Licensing and Software Activation

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This document provides an overview of the Cisco Software Licensing (CSL) processes and describes the role the Cisco Software Activation feature plays in those processes. The Cisco Video Management and Storage System, Video Surveillance Management System, and Video Surveillance Operations Manager applications enable CSL to manage feature entitlements for SRE-enabled platform stock keeping units (SKUs). Both applications can reside on either of two Cisco SM-SRE module SKUs: Cisco SM-SRE-700 and Cisco SM-SRE-900.

Two licenses are available for the Cisco SM-SRE:

- VMSS-VSMS-LIC—License to run the Cisco Video Management and Storage System and Video Surveillance Management System applications.
- VMSS-VSOM-LIC—License to run the Cisco Video Management and Storage System and Video Surveillance Operations Manager when managing video processes as a standalone site application.

This section contains the following topics:

- [About Software Activation, page 5](#)
- [Options for Obtaining and Maintaining Software Licenses, page 7](#)

About Software Activation

Cisco Video Management and Storage System application has a general purpose license (VMSS-VSMS-LIC) and an optional Video Surveillance Operations Manager (VMSS-VSOM-LIC), which are required for the applications to run. There is a 60-day evaluation license bundled with the software images that can be used to evaluate the hosting environment.

The CSL framework also supports custom Cisco or third party licenses using dynamic license policies. Cisco Software Licensing:

- Bundles the VMSS-VSOM-LIC evaluation license with the Video Surveillance Operations Manager
- Supports evaluation license activation after accepting an end-user license agreements (EULAs)
- Supports permanent license installation and removal

License Keys and Types

The Cisco software activation feature is an orchestrated collection of processes and components designed to activate Cisco software feature sets by obtaining and validating Cisco software licenses.

The following describes license keys, license types, and other licensing terms:

Product Authorization Key

A Product Authorization Key (PAK) may be required to interact with the Cisco licensing portals. A PAK is provided to customers when they order and purchase the right to use a feature set for a particular platform. It serves as a receipt and is an important component to obtain and upgrade a license.

Customers may also purchase a bulk PAK to fulfill multiple licenses on a device.

Universal Device Identifier

Cisco software performs license verification checks by comparing a stored Universal Device Identifier (UDI)—a unique and unchangeable identifier assigned to all Cisco hardware devices—with that of the device. The UDI has two main components: product ID (PID) and serial number (SN). The UDI is printed on a label located on the back of most Cisco hardware device and can be viewed using software.

Software License Validation

Cisco Software Licensing uses a system of validation keys to provide a simple mechanism for deploying new feature sets that offer Cisco customers increased functionality for upgrading and maintaining their software.

License keys for the Video Surveillance Management System or Video Surveillance Operations Manager features must be enabled on the Cisco Video Management and Storage System. You can obtain the license key using Cisco's licensing portal. A license key is issued for a specific feature set and is node-locked to the device UDI.

End User License Agreement

As part of the licensing process, you must accept the terms and conditions set forth in the EULA. This agreement is accepted implicitly when you first use a new device but must be explicitly accepted before a feature set can be activated for evaluation and upon applying temporary extension licenses.

Permanent License

Permanent licenses are perpetual; that is, they do not have any usage period associated with them. After permanent licenses are installed, they provide all the permissions necessary to access features in the software image. All permanent licenses are node locked and validated by the licensing infrastructure during software installation and, after a permanent license is installed, it is not necessary to upgrade for subsequent releases.

Temporary License

Temporary licenses are limited to a specific usage period (for example, 60-days), and the EULA must be accepted before temporary licenses are activated.

Temporary licenses may or may not be node-locked, depending on their type. For instance, evaluation licenses bundled with the software not, while an extension license issued by Cisco TAC would be under certain circumstances.

Options for Obtaining and Maintaining Software Licenses

Cisco software activation provides the following resources to enable and register licensed features:

- [Cisco Product Licensing Registration Portal, page 7](#)—Lets you manually obtain and register individual software licenses using the Cisco registration portal.
- [RMA License Transfer, page 9](#)—Lets you transfer a software license from a failed device to a new device.
- [License Software Activation, page 10](#)—Lets you install and manage licenses directly on the device using the command-line interface (CLI) commands in Cisco Video Management and Storage System privileged EXEC mode.

Cisco Product Licensing Registration Portal

These services are provided at the following portals and require a Cisco.com (CDC) account. If you do not have a CDC account, contact your Cisco Video Management and Storage System product marketing representative.

- [Product License Registration](#)
- [Return Merchandise Authorization \(RMA\) Replacement Licenses](#)
- License resend operations
- [License Revocation and Transfer Operations](#)
- License migration

Obtaining a Permanent License

When you are ready to deploy your application, you can acquire a permanent license if your Cisco SM-SRE module does not already have one. The output of the **show license permanent** command displays a blank line if your Cisco SM-SRE module does not have a permanent license.

**Note**

You must have a Cisco.com username and password to access some of the URLs in the following procedure. If you do not have a Cisco account on Cisco.com, contact your Cisco Video Management and Storage System product marketing representative.

Follow these steps to obtain licenses for Cisco Video Management and Storage System, Video Surveillance Management System, or Video Surveillance Operations Manager features:

Step 1 Go to the licensing portal at www.cisco.com/go/license, click the link at the top of the webpage, and enter the appropriate SKU to obtain a PAK for those Cisco Video Management and Storage System, Video Surveillance Management System, or Video Surveillance Operations Manager features that you want.

Step 2 To get your license file, return to the Cisco [Product License Registration](#) portal and enter the appropriate information.

You must enter the PAK and the UDI of the device on which the license is to be installed. The UDI is printed on a label located on the back of most Cisco hardware devices or on a label tray visible on the front panel of field-replaceable motherboards. The UDI can also be viewed using the **show license udi** command in privileged EXEC mode. The UDI has two main components: PID and SN.

■ Options for Obtaining and Maintaining Software Licenses

- Step 3** If prompted for Device Credential, download your device credential using **license save credential ftp://user:password@10.10.10.6/device-cred.txt** command in privileged EXEC mode.
- Step 4** Open your device credential file with a text editor and cut and paste the entire file contents into the corresponding Device Credentials field on the licensing portal.
- Step 5** Download the license file or receive the license file through your E-mail account.
- Step 6** Repeat [Step 1](#) through [Step 5](#) for each device for which you want to obtain a license.
- Step 7** Copy the license files to an FTP, SFTP, or TFTP server that can be accessed by the Cisco SM-SRE module.
- After you obtain a license file from Cisco's licensing portal and copy it to an FTP, SFTP, or TFTP server, use CLI commands to install ([Step 8](#)) and verify ([Step 9](#)) the license.



Note Only a TFTP example is shown the following examples.

- Step 8** Use the **license install** command to install your licenses.

As shown in the following example (which is truncated for easier reading), the **license install** command initiates several actions that result in either:

- The printing of an end-user license agreement with prompts to accept the agreement (for extension licenses only) or,
- Messages indicating that the license is installed.

When a license is successfully installed, a message confirms the installation and its state, whether or not the licensed feature is present in the current image, as shown in the following example:

```
cvmss# license install tftp://ip-address/FHH13070015_20091106190424734.lic
Installing...Feature:VMSS-VSMS-LIC...OK:No Error
1/1 licenses were successfully installed
0/1 licenses were existing licenses
0/1 licenses were failed to install
```

- Step 9** Use the **show license all** command to display a summary of all licenses installed on your Cisco SM-SRE module. As shown in the example, evaluation licenses for VSOM and VSMS features have not been accepted.

```
SRE-Module show license all
License Store: Evaluation License Storage
StoreIndex: 0 Feature: VMSS-VSMS-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA not accepted
    Evaluation total period: 8 weeks 4 days
    Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: None
License Store: Evaluation License Storage
StoreIndex: 1 Feature: VMSS-VSOM-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA not accepted
    Evaluation total period: 8 weeks 4 days
    Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: None
```

- Step 10** Use the **show license in-use** command to display licenses that are currently being used by the system, as shown in the following example:

```
SRE-VMSS-900# show license in-use
```

```

StoreIndex: 0 Feature: VMSS-VSMS-LIC Version: 1.0
  License Type: Permanent
  License State: Active, In Use
  License Count: Non-Counted
  License Priority: Medium
StoreIndex: 1 Feature: VMSS-VSOM-LIC Version: 1.0
  License Type: Permanent
  License State: Active, In Use
  License Count: Non-Counted
  License Priority: Medium

```

- Step 11** After verifying the licenses are enabled, continue with the configuration of Cisco Video Management and Storage System. To configure the application's CLI parameters, see the *Cisco Video Management and Storage System CLI Administrator Guide*.

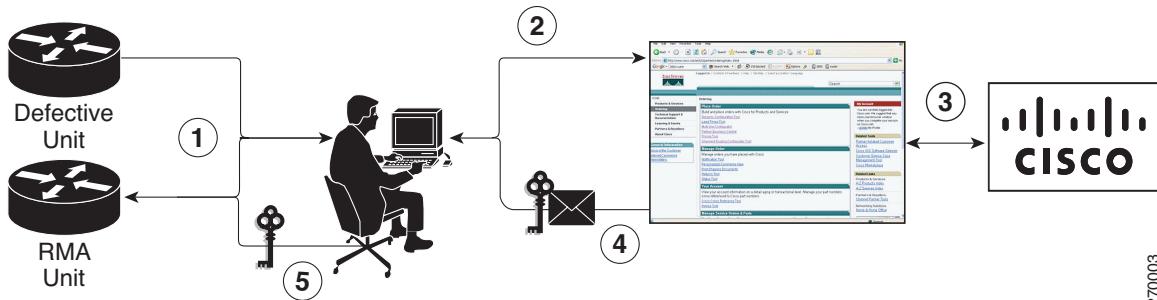
RMA License Transfer

When you need to transfer a software license from a failed device to a new device, the devices must interact with the Cisco Product License Registration portal to initiate an RMA replacement license (<https://tools.cisco.com/SWIFT/Licensing/LicenseAdminServlet/rmaLicenseTransfer>).

If you need assistance to obtain a license, contact Cisco technical support at: <http://www.cisco.com/techsupport>.

Figure 1 shows the RMA replacement license process.

Figure 1 RMA Replacement License Work Flow



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The RMA replacement license process involves these steps:

1. You obtain the UDI of the defective and RMA devices.
2. You enter the UDI into the RMA License portal tool on Cisco.com.
3. The license portal determines licenses associated with defective device.
4. The license portal issues replacement licenses.
5. You install the new license on the new device.

License Software Activation

You can use the Cisco Video Management and Storage System CLI to install and manage the software licenses on your Cisco SM-SME module. This section includes the following topics:

- [Software Activation Feature Using Privileged EXEC Commands, page 10](#)
- [License Transfer, page 10](#)
- [Activating an Evaluation License, page 12](#)
- [Installing and Activating Licenses, page 14](#)

Software Activation Feature Using Privileged EXEC Commands

Use the following privileged EXEC commands perform basic licensing tasks:

- Install a license.

```
cvmss# license install url
```

where the URL is in the format `ftp://user:password@ip/filename.lic`.

- Add a comment to a license.

```
cvmss# license comment {add | delete} feature-name comment string
```

- Save license credentials. Use this command if you need to resend your device's licenses.

```
cvmss# license save credentials url
```

where the URL is in the format `ftp://user:password@ip/filename.cred`.

- Back up a license.

```
cvmss# license save ftp://path/filename.lic.
```

in the format `ftp://user:password@ip/filename.lic`.

- Remove or clear unused licenses.

- To see which feature licenses your Cisco Video Management and Storage System application is using, perform the following command:

```
cvmss# show licenses all
```

- Shutdown each application that uses a feature license that you want to clear.



Note

A license cannot be cleared if the license is currently in use.

- Clear the license using the following command:

```
cvmss# license clear feature-name
```

License Transfer

Cisco supports two scenarios to transfer licenses between devices:

1. The first scenario has both the source and destination devices active and functional. In this scenario, the license is revoked on the source device, and a new permanent license is issued for the destination device.

2. The second is a failure scenario in which one of the devices is unavailable. In this scenario, the license from the failed device is transferred to the RMA or to the replaced device by using the RMA License Transfer portal.

License Transfer Between Two Working Devices

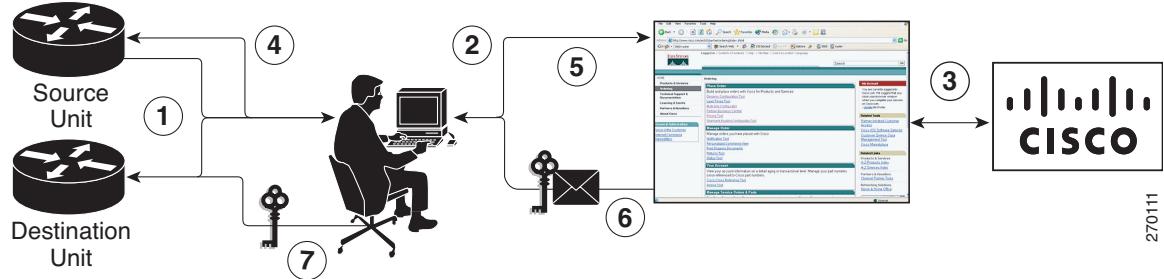
Cisco supports fully automated, customer-initiated, no-questions-asked transfer of licenses. Transferring a license is accomplished by using a process known as *rehosting*. The rehosting process transfers a license from one UDI to another by revoking the license from the source device and installing it on a new device.

You perform a license transfer (rehosting) by using one of these methods:

- Cisco Product License Registration portal
- Cisco IOS License Call Home commands
- Cisco License Manager application

[Figure 2](#) shows the processes involved for rehosting (transferring) a license.

Figure 2 License Transfer Work Flow



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This summary is for a license transfer process by using the Cisco Product License Registration portal:

1. You obtain the UDI and device credentials from the source and destination devices by using Cisco Cisco SM-SRE commands. For more information, see the “[Software Activation Feature Using Privileged EXEC Commands](#)” section on page 10.
2. You contact the Product License Registration page on Cisco.com, and you enter the source device credentials and the UDI into the license transfer portal tool.
3. The portal displays licenses that can be transferred from the source device. Select the licenses that need to be transferred. A permission ticket is issued. You can use this permission ticket to start the rehost process by using Cisco IOS commands.
4. You apply the permissions ticket to the source device by using the **license** commands as described in the “[Software Activation Feature Using Privileged EXEC Commands](#)” section on page 10.
5. The source device then provides a rehost ticket indicating proof of revocation. A sixty-day grace period license is also installed on the device to allow enough time to transfer the licenses to the destination device.
6. You enter the rehost ticket into the license transfer portal tool on Cisco.com along with destination device UDI.
7. You receive the license key through E-mail.
8. You install the license key on the destination device.

Activating an Evaluation License

The **show license** commands display the types of licenses available. If the license is an evaluation license, the **show license all** command also shows if the EULA has been accepted or not. To activate an evaluation license, complete the following steps:

-
- Step 1** Use the **show license all** command to display the status of both VSMS and VSOM licenses. As shown in the following example, the evaluation licenses for VSOM and VSMS features have not been accepted:

```
SRE-Module show license all
License Store: Evaluation License Storage
StoreIndex: 0 Feature: VMSS-VSMS-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA not accepted
        Evaluation total period: 8 weeks 4 days
        Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: None
License Store: Evaluation License Storage
StoreIndex: 1 Feature: VMSS-VSOM-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA not accepted
        Evaluation total period: 8 weeks 4 days
        Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: None
```

- Step 2** To accept the EULAs for VMSS-VSMS-LIC and/or VMSS-VSOM-LIC, use the **license evaluation enable** command in global configuration mode for each license to activate it. Enter **y(es)** when asked to accept the EULAs, as shown in the following two examples:

```
cvmss(config)# license evaluation enable VMSS-VSMS-LIC
Evaluation licenses are being activated in the device for the following feature(s):
    Feature Name: VMSS-VSMS-LIC

PLEASE READ THE FOLLOWING TERMS CAREFULLY. INSTALLING THE LICENSE OR
LICENSE KEY PROVIDED FOR ANY CISCO PRODUCT FEATURE OR USING SUCH
PRODUCT FEATURE CONSTITUTES YOUR FULL ACCEPTANCE OF THE FOLLOWING
TERMS. YOU MUST NOT PROCEED FURTHER IF YOU ARE NOT WILLING TO BE BOUND
BOUND BY ALL THE TERMS SET FORTH HEREIN.

You hereby acknowledge and agree that the product feature license
is terminable and that the product feature enabled by such license
may be shut down or terminated by Cisco after expiration of the
applicable term of the license (e.g., 30-day trial period). Cisco
reserves the right to terminate or shut down any such product feature
electronically or by any other means available. While alerts or such
messages may be provided, it is your sole responsibility to monitor
your terminable usage of any product feature enabled by the license
and to ensure that your systems and networks are prepared for the shut
down of the product feature. You acknowledge and agree that Cisco will
not have any liability whatsoever for any damages, including, but not
limited to, direct, indirect, special, or consequential damages related
to any product feature being shutdown or terminated. By clicking the
"accept" button or typing "yes" you are indicating you have read and
agree to be bound by all the terms provided herein.
Do you accept the EULA [y/n]? : y
Feature Activated; Execute "video-surveillance task restart" CLI for license activation to
take effect.
```

```
cvmss# license evaluation enable VMSS-VSOM-LIC
```

Evaluation licenses are being activated in the device for the following feature(s):

Feature Name: VMSS-VSOM-LIC

PLEASE READ THE FOLLOWING TERMS CAREFULLY. INSTALLING THE LICENSE OR LICENSE KEY PROVIDED FOR ANY CISCO PRODUCT FEATURE OR USING SUCH PRODUCT FEATURE CONSTITUTES YOUR FULL ACCEPTANCE OF THE FOLLOWING TERMS. YOU MUST NOT PROCEED FURTHER IF YOU ARE NOT WILLING TO BE BOUND BY ALL THE TERMS SET FORTH HEREIN.

You hereby acknowledge and agree that the product feature license is terminable and that the product feature enabled by such license may be shut down or terminated by Cisco after expiration of the applicable term of the license (e.g., 30-day trial period). Cisco reserves the right to terminate or shut down any such product feature electronically or by any other means available. While alerts or such messages may be provided, it is your sole responsibility to monitor your terminable usage of any product feature enabled by the license and to ensure that your systems and networks are prepared for the shut down of the product feature. You acknowledge and agree that Cisco will not have any liability whatsoever for any damages, including, but not limited to, direct, indirect, special, or consequential damages related to any product feature being shutdown or terminated. By clicking the "accept" button or typing "yes" you are indicating you have read and agree to be bound by all the terms provided herein.

Do you accept the EULA [y/n] : yes

Feature Activated; Execute "video-surveillance task restart" CLI for license activation to take effect.

- Step 3** Use the **show license all** command to verify that both VSMS and VSOM licenses have been accepted and activated, as shown in the following example:

```
cvmss# show license all
License Store: Evaluation License Storage
StoreIndex: 0 Feature: VMSS-VSMS-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA accepted
        Evaluation total period: 8 weeks 4 days
        Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: Low
License Store: Evaluation License Storage
StoreIndex: 1 Feature: VMSS-VSOM-LIC Version: 1.0
    License Type: Evaluation
    License State: Active, Not in Use, EULA accepted
        Evaluation total period: 8 weeks 4 days
        Evaluation period left: 8 weeks 4 days
    License Count: Non-Counted
    License Priority: Low
```

- Step 4** Before the license activations can successfully take effect, the **video-surveillance task restart** command must be entered, as shown in the following example:

```
cvmss# video-surveillance task restart
Restarting all Cisco Video Surveillance services, please wait ...
Apache already running..
snmpd:/usr/BWhttpd/sbin/snmpd:status...Running
snmptrapd:/usr/BWhttpd/sbin/snmptrapd:status...Running
Checking for vsrecorder
    Checking for xvcrmanMonitor... Running.
    Checking for xvcrman... Running.
    Checking for xvcrconfig... Running.
```

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```
Checking for vsms daemons... running.
Checking for mediaout... Running.
Checking for httpd... running.
Checking for service MRTG mrtg:/usr/BWhttpd/bin/mrtg:status...Running
Checking for backup server... Running.
Checking for sys config agent... Running.
se-172-25-210-163#
```

You can now continue with the configuration of the Cisco Video Management and Storage System, Video Surveillance Management System, and Video Surveillance Operations Manager applications. See the *Cisco Video Management and Storage System CLI Administrator Guide* to configure the Cisco Video Management and Storage System application.

After the evaluation license expires, the Cisco Video Management and Storage System applications continue to run. The applications will not start if the **video-surveillance task restart** command is used or the Cisco SM-SRE is reloaded.

When the evaluation license is about to expire, warning messages appear the device's console. These messages continue to appear until you have either installed a permanent license for the particular feature or you shut down the installed application that was utilizing the now expired temporary license.

Installing and Activating Licenses

Evaluation licenses only require activation and do not need to be installed because they are included with the Cisco Video Management and Storage System, Video Surveillance Management System, or Video Surveillance Operations Manager images on the Cisco SM-SRE module.

Permanent licenses must be installed but do not require any activation.

Use the **show license** commands to determine if you need to install a permanent license or to activate an evaluation license, as shown in the following example:

```
cvmss# show license feature
Feature name      Enforcement   Evaluation  Clear Allowed  Enabled
VMSS-VSMS-LIC    yes          yes        yes          yes
VMSS-VSOM-LIC    yes          yes        yes          yes
linux_shell       yes          no         yes          no
```

- Use the **show license permanent** command to display the permanent license. In the following example, the CLI returns a blank line because a permanent license is not installed:

```
cvmss# show license permanent
[[A blank line indicates that no permanent license is installed]]
```

- Use the **show license file** command to display the actual license files, as shown in the following example:

```
cvmss# show license file
License Store: Primary License Storage
Store Index: 0
License: 11 VMSS-VSMS-LIC 1.0 LONG NORMAL STANDALONE EXCL INFINITE_KEYS IN
FINITE_KEYS NEVER NEVER Nil SLM_CODE CL_ND_LCK Nil *1HZJJJFX6BMQP
AE400 Nil Nil Nil 5_MINs <UDI><PID>SM-SRE-900-K9</PID><SN>FHH1325
001N</SN></UDI> LaSnaW2x604WWV0d0OY6Vqxx1OCfpX8nviQiXU,:0EV386QzN
,rxY5SekTYtYNoj3T:553PCAmruUHIXyMXJoeVd6BfyoyvQztoJ9D5ycikYf6Ystf
```

TfHM3ufqt6S8LShWLf\$<WLC>AQEBIQAB//8y4fSyakSpLno5M19wLRjvzLnrpK9W3

Ebpfx2G331FbKQK04kZKc6MxNqkZXJxL7yRqwInXo3s+nsLU7rOtdOxoIxYZAo3LY

mUJ+MFzsqlihKoJV1PyEvQ8H21MNUjVbhoN0gyIWsyiJaM8AQIkVBQFzhr10GYolVz

dzfJfEPQIx6tZ++/Vtc/q3SF/5Ko8XY=</WLC>

Comment:

Hash: qQuaB3pvi9qUPZdmgsMbDzZjYN0=

Store Index: 1

License: 11 VMSS-VSOM-LIC 1.0 LONG NORMAL STANDALONE EXCL INFINITE_KEYS IN

FINITE_KEYS NEVER NEVER Nil SLM_CODE CL_ND_LCK Nil *1HZJJJFX6BMQP

AE400 Nil Nil Nil 5_MINS <UDI><PID>SM-SRE-900-K9</PID><SN>FHH1325

001N</SN></UDI> kyKoWoyxE7xBSPwUJ4zV6mm, PSOhrDZqJN8pYJorrVzpCypZ

BcaU9CxWGozLgVTVe1Q1MNnk3X4Z3m381p2oBLcOR:hFLnP1vbDy8Qws8K9VBncYZ

1PsJL, 1Ad9pqfzufVp\$<WLC>AQEBIQAB//+aPMYWE4kIlQws8rR1LK6Ax/cmGw2Sd

JDA6spL3GcbD7KSV5wLYN+PHw03H/jdFxYRqwInXo3s+nsLU7rOtdOxoIxYZAo3LY

mUJ+MFzsqlihKoJV1PyEvQ8H21MNUjVbhoN0gyIWsyiJaM8AQIkVBQFzhr10GYolVz

dzfJfEPQIx6tZ++/Vtc/q3SF/5Ko8XY=</WLC>

Comment:

Hash: o6Jwm+8w/f97X7ZvGLExF9o7sE8=

License Store: Evaluation License Storage

Store Index: 0

License: 11 VMSS-VSMS-LIC 1.0 LONG TRIAL DISABLED 1 DISABLED STANDALONE AD

D INFINITE_KEYS INFINITE_KEYS NEVER NEVER Nil SLM_CODE DEMO Nil N

iL Ni Nil Nil 5_MINS Nil PjwvCW8A21QLSw5XUSMHLsXdbIiyi3jqa4uMlwhr

oLffG6ojt5C5E46hKWP:Xtgz38\$<WLC>AQEBIQAB//+4YnbK/7Y0TG0PJQAuBI1zH

RsQ5wNQues27aLfEmNk9HBhkPXhMKTy0SqIfcIojkSRqwInXo3s+nsLU7rOtdOxoI

xYZAo3LYmUJ+MFzsqlihKoJV1PyEvQ8H21MNUjVbhoN0gyIWsyiJaM8AQIkVBQFzhr

10GYolVzdzfJfEPQIx6tZ++/Vtc/q3SF/5Ko8XY=</WLC>

Comment:

Hash: qEmD4LiXIh3vCutGhUxZT5h/RuA=

Store Index: 1

License: 11 VMSS-VSOM-LIC 1.0 LONG TRIAL DISABLED 1 DISABLED STANDALONE AD

D INFINITE_KEYS INFINITE_KEYS NEVER NEVER Nil SLM_CODE DEMO Nil N

iL Ni Nil Nil 5_MINS Nil YnhKGaZ7zaRj0CaEkvifVcm1:1F3yV2D,t2KLtf

Ro3m0uGqmZk440Vk:oWMFy4Ifq\$<WLC>AQEBIQAB///g4sRu8LPj3rfKBbk1ofLze

bQg3qHUICyU6hCVC6nz5ADiRXieijk2zdKvqx5AJ+eRqwInXo3s+nsLU7rOtdOxoI

xYZAo3LYmUJ+MFzsqlihKoJV1PyEvQ8H21MNUjVbhoN0gyIWsyiJaM8AQIkVBQFzhr

10GYolVzdzfJfEPQIx6tZ++/Vtc/q3SF/5Ko8XY=</WLC>

Comment:

Hash: v7PhckVI/D7gV5adtn3fsZ+xD/s=

■ Options for Obtaining and Maintaining Software Licenses