



Installing the Cisco PVM License

Cisco PVM requires a license file to be installed to operate in the non-evaluation mode. The license file is not included in the Cisco PVM distribution; instead, Cisco PVM must first be installed on a host computer and then a license file must be acquired and installed for that particular host. This chapter describes how to install and test the Cisco PVM license file.

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License Install Process

You must install a license file to run Cisco PVM in Production mode. Without a valid license, Cisco PVM will run for 90 days in Evaluation mode and then cease to operate.

The basic sequence of steps for installing a Cisco PVM license is as follows:

1. Cisco PVM is installed on a host computer.
2. Cisco PVM users request a license file from Cisco. The following information is required during registration:
 - **Hostname:** obtained by executing the command `hostname` on the host computer where Cisco PVM is installed.
 - **Host ID:** obtained by executing the command `lmhostid` on the host computer where Cisco PVM is installed.
 - **Product:** Cisco Performance Visibility Manager.
3. Cisco provides the license file and customers install it on the host where Cisco PVM is installed. This involves:
 - copying the license file to the host computer where Cisco PVM is installed and
 - saving the file as `/opt/CSCOpvm/server/etc/sp_license.dat` and restarting the license server by issuing the command `lmreread`.

Evaluation and Production Modes of Operation

Without a valid license file installed, Cisco PVM will operate in Evaluation mode and will cease operating after 90 days. When a valid license file is installed, Cisco PVM will operate in Production mode. The Production license has no expiration date.



Note

Changes to the license file (such as adding NAMs over the number of current supported licenses) do not require reinstallation of Cisco PVM. In this case, replace the current license file on the Cisco PVM host computer with the new license file and issue the command **lmreread**.

License Administration

Cisco PVM includes the following command-line programs, located in `/opt/CSCOpvm/flexlm/bin`, for handling the licenses.

- **lmstat** – indicates the status of the license server and whether it is up or down.
- **lmreread** – re-reads the license file. This is necessary when the license file is replaced as in the case of obtaining new licensed features.
- **lmhostid** – provides the host ID information that is necessary for generating the license file. All license files are node locked to the host computer for which Cisco PVM is installed.

Cisco PVM provides a log file, `/opt/CSCOpvm/flexlm/log/flexlm.log`, which provides detailed information with respect to when licensed features were checked in and checked out.

Installing the License File

After the installation is complete, the product license must be installed before the application can be run in Production mode.

To install the license file, complete the following steps:

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- Step 1** Log in as the Cisco PVM Administrator by entering **su - pvmadm**.
 - Step 2** Obtain the host name by entering **hostname** at the command prompt
 - Step 3** Obtain the host ID by entering the following at the command prompt:


```
cd /opt/CSCOpvm/flexlm/bin
./lmhostid
```
 - Step 4** Contact Cisco Systems to request a new license file for the specific host where Cisco PVM is installed.
 - Step 5** Copy the license file to the host computer installation directory where Cisco PVM is installed and save it as `/opt/CSCOpvm/server/etc/sp_license.dat`.
 - Step 6** Restart the license server by entering the following at the command prompt:


```
cd /opt/CSCOpvm/flexlm/bin; lmreread
```
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Testing the License Manager

After installing the license file, verify the license manager status. Ensure that the following Cisco PVM components are up and running:

- License Manager license server daemon (*lmgrd*) is UP.
- Vendor daemon (SP_LM) is UP.
- License server is the current host.

Verifying the License Manager Status

Perform the following steps to check the status of the License Manager.

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- Step 1** Log in as the Cisco PVM Administrator.
- Step 2** Invoke the status daemon (*lmstat*):
- ```
/opt/CSCOpvm/flexlm/bin/lmstat -c /opt/CSCOpvm/server/etc/sp_license.dat
```
- Step 3** Ensure that the *lmgrd* process is running by entering `ps -ef | grep lmgrd` at the command prompt.
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