



## APPENDIX **B**

# Licensing

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This appendix provides licensing information for Cisco Unified Operations Manager (Operations Manager). It contains the following sections:

- [Licensing Overview, page B-1](#)
- [Licensing Reminders, page B-5](#)

## Licensing Overview

Operations Manager features software-based product registration and license key technologies. Licensing ensures that you possess a licensed copy of Operations Manager.

- Licensing uses node-locking technology. The license file can only be used with the MAC address that you supply.
- To license, install, and run Operations Manager on VMware, you must configure a static address for the virtual machine.

This section contains:

- [Verifying License Status](#)
- [Licenses That Can Be Purchased](#)
- [Licensing Process](#)
- [Obtaining a PAK](#)
- [Obtaining a License File](#)
- [Registering a License File with Operations Manager](#)

To determine whether Operations Manager is licensed, see [Verifying License Status, page B-1](#). If you do not have a license or you want to upgrade your license, see [Licensing Scenarios, page B-3](#).

## Verifying License Status

You can use this procedure to verify both Operations Manager and Service Monitor license status. License status is also available using **Common Services > Server > Admin > Licensing**.

### On Operations Manager

To verify license status, select **Administration > System Settings > Miscellaneous > Licensing Information**.

The Licensing Information page appears, displaying the licensing information. For window descriptions, see the online help.

### On Common Services

**Step 1** Select **Administration > Server Administration > Administration > Licensing**.

The Licensing Information page appears, displaying the information in the following table.

Column	Description
Name	Abbreviated product name—For Operations Manager, this is OM.
Version	Product version— <i>A.b</i> , where <i>A</i> is the major version number, and <i>b</i> is the minor version number.
Size	Limit—Number of IP phones that Operations Manager supports. Registered, unregistered, and suspect phones are counted toward the license limit.
Status	One of the following: <ul style="list-style-type: none"> <li>• Purchased—You have a registered, licensed product.</li> <li>• Evaluation—This license will expire on the expiration date; Operations Manager and/or Service Monitor will stop running.</li> </ul>
Expiration Date	Date on which Operations Manager stops running—Applies to evaluation licenses. The evaluation period lasts for 90 days.

## Licenses That Can Be Purchased

You can purchase a base license for the full-feature Operations Manager that supports a specific number of phones (displayed online when you order the product). You can purchase incremental or *scaling* licenses to increase the number of phones that are supported.

## Licensing Scenarios

Table B-1 describes what to do in different scenarios if you do not have a licensed, registered copy of Operations Manager or if you want to increase device support.

**Table B-1**      *How to Obtain and Register a License*

Scenario	What to do
Installing with a purchased license.	<ol style="list-style-type: none"> <li>Before installing, obtain a license file. See <a href="#">Licensing Process, page B-3</a>.  You can install Operations Manager without the license file. You can upgrade your license after installation. See <a href="#">Registering a License File with Operations Manager, page B-5</a>.</li> <li>During installation, select License File Location, and provide the location of your license file.</li> </ol>
Installing with an evaluation license. The evaluation license is limited to monitoring 2,000 devices and 10,000 phones.	<p>During installation, select Evaluation Only. Evaluation versions are active for 90 days, before you are required to purchase a license.</p> <p>If you want to upgrade to a purchased license after installation, obtain a PAK and license file for the installed version of Operations Manager. For information on the licensing process, see <a href="#">Licensing Process, page B-3</a>.</p>
Getting a license for additional devices (either upgrading from an evaluation license, or increasing the number of supported devices).	<p>See <a href="#">Licensing Process, page B-3</a>.</p> <p>While upgrading your license either from an evaluation version or from lower device limits to higher limits, you must restart the daemon manager.</p> <p>If you do not restart the daemon manager, the new device limits will not take effect and the system status reports will not show the correct information.</p>
Moving Operations Manager to another server.	Call the Cisco TAC for assistance.

## Licensing Process

The Operations Manager license file includes support up to 500 phones. You can purchase incremental licenses for additional device support and register up to 45,000 phones with a single Operations Manager.

For each incremental license that you purchase, you will receive a PAK, and you must use that PAK to obtain a license file. Registered, unregistered, and suspect phones are counted toward the license limit.

For details on purchasing additional licenses, see [http://www.cisco.com/en/US/products/ps6535/prod\\_bulletins\\_list.html](http://www.cisco.com/en/US/products/ps6535/prod_bulletins_list.html).



### Note

This licensing process also applies to Service Monitor.

This process applies to new installations and license upgrades:

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- Step 1** Obtain a Product Authorization Key (PAK)  
The PAK is used to register Operations Manager, and any additional device support that you might purchase for Operations Manager, on Cisco.com, and it contains resource limitations. See [Obtaining a PAK, page B-4](#).
- Step 2** Obtain a license file.  
A license file is sent to you after you register the PAK on Cisco.com. See [Obtaining a License File, page B-4](#).
- Step 3** Copy the license file.  
You need to copy the file to a directory with read permission for the username casuser or the user group casuser, onto the server where Operations Manager is to be installed.  
If Operations Manager is already installed and you are upgrading your license file, you must register the license file with Operations Manager. See [Registering a License File with Operations Manager, page B-5](#).
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## Obtaining a PAK

The PAK is located on the software claim certificate that is shipped with the Operations Manager product CD.

## Obtaining a License File

To install Operations Manager on a VMware server, you must supply a static MAC address to obtain a license file. Operations Manager does not work with a purchased license when a dynamic MAC address is configured for the virtual machine. For more information, see [VMware Guidelines, page 1-5](#).

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- Step 1** Register the PAK and the MAC address of the system where Operations Manager is installed with Cisco.com at <http://www.cisco.com/go/license>.  
You will be prompted to log in. You must be a registered user of Cisco.com to log in.  
The MAC address is required because licensing uses node-locking technology. The license file can only be used with the MAC address that you supply.  
The license file will be e-mailed to you.
- Step 2** After you obtain a license file, register the license with the Operations Manager server.
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## Registering a License File with Operations Manager

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- Step 1** Copy the license file to the Operations Manager server, into a directory with read permission for the username casuser or the user group casuser.
- Step 2** Install the license:
- Select **Administration > Server Administration > Administration > Licensing**. (For more information, see Common Services online help.)  
The Licensing Information page appears.
  - Click **Update**.  
A file browser dialog box appears.
  - Enter the path to the new license file in the License File field, or click **Browse** to locate the license file you copied to the server.
  - Click **OK**.  
The system verifies whether the license file is valid, and updates the license. The updated licensing information appears on the Licensing Information page. If you purchased more than one license, repeat [Step 2](#) to install each additional license.  
If you encounter errors, repeat the steps to license your product.
- Step 3** Stop and start the daemon manager from a command prompt by running the following commands:
- ```
net stop crmdmgtd
net start crmdmgtd
```
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## Licensing Reminders

Operations Manager provides reminders in the following circumstances:

- [Evaluation Version: Before Expiry, page B-5](#)
- [Purchased Version: No License File, page B-6](#)
- [Purchased Version: Device Limit Exceeded, page B-6](#)

### Evaluation Version: Before Expiry

If you have installed the evaluation version of Operations Manager, you must obtain the license file from Cisco.com if you want to continue to use the product after the 90-day evaluation period. For details, see [Licensing Process, page B-3](#).

Before expiry of the evaluation license, you will see the following prompt:

```
This software is provided for evaluation purposes only and will expire in XX days. If this is not an evaluation copy, please click this link for information about obtaining a valid purchase license. Click here for current licensing information. Otherwise, please contact your Cisco representative for purchasing information.
```

This message is displayed as an alert after you log in and try to access Operations Manager. If you fail to upgrade your evaluation license, all Operations Manager processes will run, but access to Operations Manager functionality will be prohibited.

## Purchased Version: No License File

If you have installed a purchased version of Operations Manager, you must register Operations Manager using the PAK number. For details, see [Licensing Process, page B-3](#). If you do not register Operations Manager, you will see the following prompt:

```
The license file is invalid. Please click this link for information about obtaining a valid purchase license. Click here for current licensing information. Otherwise, please contact your Cisco representative for purchasing information.
```

Operations Manager is fully functional. However, you will continue to receive the alert until you register your license.

## Purchased Version: Device Limit Exceeded

If you have a restricted license, Operations Manager notifies you when your device inventory approaches the device limit. Operations Manager counts registered, unregistered, and suspect phones toward the license limit.

After the device limit has been reached, Operations Manager displays the following messages:

- Exceeded device limit:

```
You have exceeded the device limit for Cisco Unified Operations Manager. Devices will not be managed.
```

- Exceeded phone limit:

```
You have exceeded the phone limit for Cisco Unified Operations Manager. Please click here for current licensing information. Please contact your Cisco representative to determine if additional licenses can be purchased for this server.
```

Operations Manager remains functional, but will shortly stop adding devices and phones to managed inventory.