MSE Delivery Modes

The Cisco MSE comes preinstalled on a physical appliance with various performance characters. The MSE is delivered in two modes, the physical appliance and the virtual appliance.

Physical Appliance

When the MSE is located on the physical appliance, you can use the standard license center UI to add new licenses. When the MSE is located on the physical appliance, the license installation process is based on Cisco Unique Device Identifier (UDI). Choose **Administration** > **License Center** on the Cisco Prime Infrastructure UI to add the license.

Note   Virtual appliance licenses are not allowed on physical appliances.

Virtual Appliance

The MSE is also offered as a virtual appliance, to support lower-level, high, and very high deployments. When the MSE is located on the virtual appliance, the license is validated against Virtual Unique Device Identifier (VUDI) instead of UDI.

Note   MSE is available as a virtual appliance for Release 7.2 and later. The virtual appliance must be activated first before installing any other service licenses.

The MSE virtual appliance software is distributed as an Open Virtualization Archive (OVA) file. You can install the MSE virtual appliance using any of the methods for deploying an OVF supported by the VMware

environment. Before starting, make sure that the MSE virtual appliance distribution archive is in a location that is accessible to the computer on which you are running vSphere Client.

For a virtual appliance, you must have an activation license. Without an activation license, the MSE starts in evaluation mode. Even if service licenses are present on the host, it rejects them if the activation license is not installed.

Note   See the VMware vSphere 4.0 documentation for more information about setting up your VMware environment.

You can add and delete a virtual appliance license either using the **Services** > **Mobility Services Engine** > **Add Mobility Services Engine** page when you are installing MSE for the first time, or you can use the **Administration** > **License Center** page to add or delete a license.

See the Adding and Deleting Mobility Services Engines and Licenses and the Deleting an MSE License File for more information on adding a license and deleting a license using the mobility services engine wizard.

For more details on deploying MSE virtual appliance, see the *Cisco MSE Virtual Appliance Configuration Guide*.

This section contains the following topics:

- Operating Systems Requirements
- Client Requirements
- Virtual Appliance Sizing
- Reinstalling MSE on a Physical Appliance
- Deploying the MSE Virtual Appliance
- Adding a License File to the MSE Using the License Center

Viewing the MSE License Information Using the License Center

The license center allows you to manage the Prime Infrastructure, Cisco WLCs, and MSE licenses. To view the license information, follow these steps:

Step 1   Choose **Administration** > **License Center** to access the License Center page.

Step 2   Choose **Summary** > **MSE** from the left sidebar menu, to view the MSE summary page.
The following table lists the MSE Summary page fields.

Table 1: MSE Summary Page

Field	Description
MSE Name	Provides a link to the MSE license file list page.
Service	The service type can be CAS, wIPS, Mobile Concierge service, Location Analytics service, Billboard service, and Proxy service.

Field	Description
Platform Limit	Platform limit.
Type	Specifies the type of MSE.
Installed Limit	Shows the total number of client access points licensed across MSEs.
License Type	The three different types of licenses: permanent, evaluation, and extension.
Count	The number of CAS or wIPS elements currently licensed across MSEs.

Removing a License File Using the License Center

To remove a license, follow these steps:

Step 1   Install the MSE virtual appliance.

Step 2   Add the MSE to Prime Infrastructure using the wizard.

Step 3   Choose **Administration** > **License Center** to access the License Center page.

Step 4   Choose **Files** > **MSE Files** from the left sidebar menu.

Step 5   Choose an MSE license file that you want to remove by selecting the **MSE License File** radio button, and click **Remove**.

Step 6   Click **OK** to confirm the deletion.