

Configuring MSE System Settings and Services

- Viewing General Properties and Enabling Services, page 1
- Viewing Dashboard, page 3
- Viewing and Adding License, page 4
- Viewing Active Sessions on a System, page 4
- Adding Trap Destinations, page 5
- Deleting Trap Destinations, page 6
- Viewing Advanced Parameter Settings, page 6
- Configuring Advanced Parameters, page 7
- Rebooting or Shutting Down a System, page 7
- Clearing the System Database, page 8
- Configuring Logging Options, page 8
- Downloading Log Files, page 9

Viewing General Properties and Enabling Services

To view the general properties and enable the MSE services, follow these steps:

Step 1 Launch the MSE admin UI.

- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** Choose **System** > **General Properties** from the left sidebar menu.

The General Properties page appears. This table lists the General Properties page fields.

Table 1: General Tab

Field	Configuration Options
Model	Model details for the MSE.

Field	Configuration Options				
Build	The software version running on the MSE.				
UDI	The Device UDI (Unique Device Identifier) is the string between double quote characters (including spaces in the end if any).				
IP Address	Indicates the IP address for the Mobility Services Engine.				
Hostname	Hostname.				
Mobility Services	To enable a service on the Mobility Services Engine, select the check box next to the service. The services include Context Aware, wIPS, Mobile Concierge, CMX Analytics, CMX Browser Engage, and Proxy service.				
	You can choose CAS to track clients, rogues, interferers, wired clients, and tags.				
	Choose either of the following engines to track tags:				
	• Cisco Tag Engine				
	or				
	Partner Tag Engine				
	 Note The Partner Tag Engine is used only to track the tags. The clients are still tracked by Cisco Context-Aware Engine. Note Once selected, the service is displayed as Up (active). All inactive services are noted as Down (inactive) on the selected (current) system and on the network. Note From release 7.5 onward, wIPS service requires a dedicated MSE because it does not support CAS and wIPS on the same MSE. 				
	Click the here link to see the number of devices that can be assigned for the current system.				
	In the License Center page, choose MSE from the left sidebar menu option to see the license details for all Mobility Services Engines on the network.				
	Note For more information on purchasing and installing licenses, see the following URL:				
	http://www.cisco.com/en/US/prod/collateral/wireless/ps9733/ps9742/data_sheet_ c07-473865.html				
Current Server Time	Current time on the server.				
Server Time Zone	Current time zone the server is located in.				
Server Start Time	Indicates the start time when the server was started.				
Server Restarts	Number of times the server has restarted.				
Maximum Memory (MB)	Maximum memory installed on the MSE.				

Field	Configuration Options
Allocated Memory (MB)	Maximum memory available to the MSE.
Used Memory (MB)	Maximum memory being used by the MSE.
DB Disk Usage (GB)	Amount of data in the MSE database disk.
CAS Element Limit (licensed)	Number of elements (Clients, tags, interferes, etc) that the MSE is licensed to track.
Current Active Element Count	Number of elements (clients, tags, interferers, etc) that the MSE is currently tracking.
Elements not tracked due to limiting	Number of elements above the licensed limit on the MSE.

Step 4 Click **Save** to update the Prime Infrastructure and Mobility Services Engine databases.

Viewing Dashboard

To view the dashboard, follow these steps:

Step 1 Launch the MSE admin UI.

Step 2 Click the Configuration icon on the top right of the home page.

Step 3 Choose System > Dashboard.

You will be able to view the following details in the dashboard:

- No of active clients
- Percentage of memory utilization
- Percentage of CPU utilization
- Notification Destinations
- MAC Filtering Status Enabled or Disabled
- Client Location History Enabled or Disabled
- Location calculation latency
- Type of license used
- Number of controllers synched

Viewing and Adding License

To view and add license to the MSE, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** From the left sidebar menu, choose **System > Licensing**.
- **Step 4** The License page displays the following information.

Field	Description
Туре	Type of service.
Platform Limit	Platform Limit
Installed Limit	Displays the total number of client elements licensed across MSEs.
License Type	The three different types of licenses. They are permanent, evaluation, and extension.

- **Step 5** Click **Select File** to browse for the license file.
- **Step 6** Click Add to add the license to the MSE.

Viewing Active Sessions on a System

You can view active user sessions on the Mobility Services Engine.

To view active user sessions, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.

Step 3 Choose System > Active Sessions.

For every session, the Prime Infrastructure shows the following information:

- · Session identifier
- IP address from which the MSE is accessed
- · Username of the connected user
- · Date and time when the session started
- Date and time when the MSE was last accessed

· How long the session was idle since it was last accessed

Adding Trap Destinations

To add a trap destination, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** Choose **System > Trap Destinations**.
- Step 4Click Add Trap Destination.The following table lists the Add Trap Destination page fields.

Table 2: Add Trap Destination Page Fields

Field	Description		
IP Address	IP address for the trap destination.		
Port	The port number for the trap destination. The default port number is 162.		
Community	SNMP community string for the trap destination.		
Destination Type	This field is not editable and has a value of Other .		
SNMP Version	Choose either v2c or v3 from the SNMP Version drop-down list.		
The following set of fields appear only if you select v3 as	the SNMP version.		
User Name	The username for the SNMP Version 3.		
Security Name	The security name for the SNMP Version 3.		
Authentication Type	Choose one of the following from the drop-down list:		
	HMAC SHA		
Authentication Password	The authentication password for the SNMP Version 3.		

Field	Description		
Privacy Type	Choose one of the following from the drop-down list:		
	CBC-DES		
	CFB-AES-128		
	CFB-AES-192		
	CFB-AES-256		
Privacy Password	The privacy password for the SNMP Version 3.		

Note All trap destinations are identified as *other* except the automatically created *default* trap destination.

Step 5 Click Save.

You are returned to the Trap Destination Summary page and the newly defined trap is listed.

Deleting Trap Destinations

To delete a trap destination, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** Choose **System > Trap Destinations**.
- **Step 4** Click the Delete icon corresponding to the trap destination entry that you want to delete.
- **Step 5** In the dialog box that appears, click **OK** to confirm deletion.

Viewing Advanced Parameter Settings

To view the advanced parameter settings of the Mobility Services Engine, follow these steps:

Step 1	Launch the MSE admin UI.
Step 2	Click the Configuration icon on the top right of the home page.
Step 3	Choose System > Advanced Parameters. The Advanced Parameters page appears.

Configuring Advanced Parameters

To configure advanced parameters, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** From the left sidebar menu, choose **System > Advanced Parameters**.
- **Step 4** View or modify the advanced parameters as necessary.
 - Number of Days to keep Events—Enter the number of days to keep logs. Change this value as required for monitoring and troubleshooting.

 Session Timeout—Enter the number of minutes before a session times out. Change this value as required for monitoring and troubleshooting. Currently this option appears dimmed.

Advanced Commands

 Reboot Hardware—Click to reboot the mobility services hardware. See the Rebooting or Shutting Down a System for more information.

 Shutdown Hardware—Click to turn off the mobility services hardware. See the Rebooting or Shutting Down a System for more information.

• Clear Database—Click to clear the mobility services database. See the Clearing the System Database for more information. Unselect the Retain current service assignments in Prime Infrastructure check box to remove all existing service assignments from the Prime Infrastructure and MSE. The resources must be reassigned in the Services > Synchronize Services page. By default, this option is selected.

Step 5 Click **Save** to update the Prime Infrastructure and Mobility Services Engine databases.

Rebooting or Shutting Down a System

To reboot or shut down a Mobility Services Engine, follow these steps:

Step 1	Launch	the	MSE	admin	UI.

- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** Choose **System > Advanced Parameters**.
- **Step 4** In the Advanced Commands group box, click the appropriate button (**Reboot Hardware** or **Shutdown Hardware**). Click **OK** in the confirmation dialog box to initiate either the reboot or shutdown process. Click **Cancel** to stop the process.

Clearing the System Database

To clear a Mobility Services Engine configuration and restore its factory defaults, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- Step 3 Choose System > Advanced Parameters.
- **Step 4** In the Advanced Commands group box, click **Clear Database**.
- **Step 5** Click **OK** to clear the Mobility Services Engine database.

Configuring Logging Options

You can use Prime Infrastructure to specify the logging level and types of messages to log.

To configure logging options, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- **Step 3** Choose System > Logging. The logging options for the selected Mobility Services Engine appear.
- **Step 4** Choose the appropriate options from the Logging Level drop-down list. There are four logging options: **Off**, **Error**, **Information**, and **Trace**.

All log records with a log level of **Error** or above are logged to a new error log file locserver-error-%u-%g.log. This is an additional log file maintained along with the location server locserver-%u-%g.log log file. The error log file consists of logs of **Error** level along with their context information. The contextual information consists of 25 log records prior to the error. You can maintain up to 10 error log files. The maximum size allowed for each log file is 10 MB.

Caution Use **Error** and **Trace** only when directed to do so by Cisco Technical Assistance Center (TAC) personnel.

- **Step 5** Select the **Enable** check box next to each element listed in that section to begin logging of its events.
- **Step 6** Select the **Enable** check box under Advanced Parameters to enable advanced debugging. By default, this option is disabled.
 - **Caution** Enable advanced debugging only under the guidance of Cisco TAC personnel because advanced debugging slows the mobility service down.
- **Step 7** To download log files from the server, click **Download Logs**. For more information, see the Downloading Log Files, page 10-9.
- **Step 8** In the Log File group box, enter the following:
 - The number of log files to be maintained in the Mobility Services Engine. You can maintain a minimum of 5 log files and a maximum of 20 log files in the Mobility Services Engine.
 - The maximum log file size in MB. The minimum log file size is 10 MB and the maximum is 50 MB.

Step 9 In the MAC Address Based Logging page, do the following:

- Select the Enable check box to enable MAC address logging. By default, this option is disabled.
- Add one or more MAC addresses for which you want to enable logging. You can also remove MAC addresses that you have already added by selecting the MAC address from the list and clicking **Remove**.

For more information on MAC-address-based logging, see the MAC Address-based Logging, page 10-9.

Step 10 Click **Save** to apply your changes.

Downloading Log Files

If you need to analyze Mobility Services Engine log files, you can use Prime Infrastructure to download them to your system. The Prime Infrastructure downloads a .zip file containing the log files.

To download a .zip file containing the log files, follow these steps:

- **Step 1** Launch the MSE admin UI.
- **Step 2** Click the Configuration icon on the top right of the home page.
- Step 3 Choose System > Logging.
- Step 4 Click Download Logs.
- **Step 5** Follow the instructions in the File Download dialog box to view the file or save the .zip file to your system.