Cisco MSE Admin User Interface

MSE Admin UI Home Page

The MSE admin UI home page displays at-a-glance views of the most important data in your network, status of various services, and allows you to configure MSE system settings. You can also view the Beta version of various applications such as the Health and Data Accuracy Tool by choosing **admin > enable beta features** in the top right side of the page.

Launching the MSE Admin User Interface

To launch the MSE admin user interface, follow these steps:

SUMMARY STEPS

1. Launch the MSE admin user interface (UI). To launch it, type https://*mseip*/*mseui* in the Web Browser or you can launch it from the Cisco Prime Infrastructure (PI) by clicking the MSE name link from **Services** > **Mobility Services Engines** page.
2. Enter the username and password.
3. Click **Sign In**.

DETAILED STEPS

	Command or Action	Purpose
Step 1	Launch the MSE admin user interface (UI). To launch it, type https://*mseip*/*mseui* in the Web Browser or you can launch it from the Cisco Prime Infrastructure (PI) by clicking the MSE name link from **Services** > **Mobility Services Engines** page.	**Note** The MSE admin UI is displayed only if you have selected the MSE Admin View check box in the Administration > User Preference Page from the Prime Infrastructure user interface.
Step 2	Enter the username and password.	
Step 3	Click **Sign In**.	The MSE admin UI home page appears.

MSE Services

This section briefly describes the different services that the Cisco MSE supports within the overall Cisco Unified Wireless Network (CUWN):

All the available services are listed in the MSE admin UI home page under the Services group box.

- **CMX Analytics —**The CMX Analytics service analyzes wireless device location information in a particular network. The CMX Analytics service uses the data provided by the Cisco Mobility Services Engine (MSE) to calculate the location of Wi-Fi devices in the Wireless Local Area Network (WLAN). When a wireless device is enabled in a network, it transmits probe request packets to identify the wireless network in its neighborhood. Even after connecting to the access point in the WLAN, the client devices continue to transmit probe request packets to identify other access points for better quality of service. The access points gather these request and the associated RSSI from the various wireless devices and forwards them to the Wireless LAN Controller (WLC). The controller then forwards this information to the MSE.

  The basic data that is collected from various APs, when analyzed, produces information and knowledge about the movement and behavior patterns of people who are using Wi-Fi devices in the building. For example, the building can be an airport, shopping mall, city center, and so on. The CMX Analytics service helps the airport authorities or the building owners to understand the movement of passengers or customer within their building. This helps them improve the signage, make changes to the under utilized areas, and so on.

- **Context Aware Service—**Also known as Location service. This is the core service of the Mobility Services Engine (MSE) that turns on Wi-Fi client tracking and location API functionality. Allows MSE to simultaneously track thousands of mobile assets and clients by retrieving contextual information such as presence, location, telemetry data, and historical information.

- **CMX Connect & Engage—**Connect and Engage Service**—**Formerly known as Browser Engage Service. The CMX Connect and Engage service provides connect, a guest Wi-Fi on-boarding solution, zone, and message configuration for the CMX Software Development Kit (SDK).

- **Mobile Concierge—**Mobile Concierge enables the Cisco Mobility Services Advertisement Protocol (MSAP). This protocol enables direct communication between the MSE and mobile devices, allowing content to be pushed directly to the mobile device pre-association. This functionality is dependent on the mobile device supporting 802.11u and MSAP.

- **Wireless Intrusion Prevention—**Provides wireless-specific network threat detection and mitigation against malicious attacks, security vulnerabilities, and sources of performance disruption within the CUWN infrastructure. wIPS visualizes, analyzes, and identifies wireless threats, and centrally manages mitigation and resolution of security and performance issues using Cisco monitor mode and Enhanced Local Mode (ELM) Access Points. Proactive threat prevention is also supported to create a hardened wireless network core that is impenetrable by most wireless attacks.

Enabling or Disabling the MSE Services

To enable or disable the MSE services, follow these steps:

SUMMARY STEPS

1. Launch the MSE Admin UI.
2. To enable any of the services, follow these steps:
3. To disable any of the services, follow these steps:

DETAILED STEPS

	Command or Action	Purpose
Step 1	Launch the MSE Admin UI.	The MSE Admin UI home page appears. The following are the various services displayed in the Services group box: • CMX Analytics • Context Aware Service • CMX Connect & Engage • Mobile concierge • Wireless Intrusion Prevention
Step 2	To enable any of the services, follow these steps:	**Note** Services that are enabled will be in green color and the disabled services will in red color. • Click the desired services tab that you wish to enable in the Services group box. • Click the **Up/Down** button. Do you really want to change the service status dialog box appears. • Click **Ok**. The color of the **Up** button changes to green once the service is enabled. Also the corresponding service name in the Services group box changes to green.
Step 3	To disable any of the services, follow these steps:	• Click the desired services tab that you wish to disable in the Services group box. • Click the **Up/Down** button. Do you really want to change the service status dialog box appears. • Click **Ok**.

	Command or Action	Purpose
		The color of the **Down** button changes to red once the service is disabled. Also the corresponding services name in the Services group box changes to red.

MSE Applications

The admin UI is composed of the following web applications which serve as the front end for the services:

- What's New
- CMX Connect and Engage
- Maps
- Data Accuracy Tool
- Health

Using Data Accuracy Tool

Prerequisites

Before you filter the devices using location tuning or device filters, you should do the following using Cisco Prime Infrastructure user interface:

- Synchronize the floor area of a building with the MSE.
- Draw Perimeter on the floor.

For more information on synchronization and map editors, see chapter Monitoring Maps in *Cisco Prime Infrastructure Classic View Configuration Guide*.

Working with Location Tuning

To filter the devices outside the venue, follow these steps:

Step 1 Launch the MSE admin UI.

Step 2 Choose **admin > Enable Beta Features** to view the beta features.

Step 3 Click the **Data Accuracy Tool** tile.
The location tuning page appears.

Step 4 Choose a campus name from the drop-down list.

Step 5 Choose a building name from the drop-down list.

Step 6 Choose a building floor from the drop-down list.

Step 7 Click **Show Map**.
The floor map appears.

Step 8 Click **Inside Training**.

Step 9 Enter the comma separated MAC addresses of the devices roaming inside the perimeter area drawn on the floor.

Step 10 Click **Start Data Collection** to start collecting data for the devices within the perimeter area.
Minimum 100% data collection is required to create a model. 100 % represents at least 20 RSSI reading per operational AP present on the floor.

Step 11 Click **Outside Training**.

Step 12 Enter the comma separated MAC addresses of the devices roaming outside the area drawn on the floor.

Step 13 Click **Start Data Collection** to start collecting data for the devices outside the perimeter area.
Minimum 100% data collection is required to create a model. This 100% is considering the inside training data also.

Step 14 Click **Create Model** to create a model based on the collected data.
To enable **Create Model** button, you should stop the data collection when 100% data collection is complete. To delete all the collected data, click **Delete Data**.

Filtering Devices Based on Maximum RSSI Threshold

To filter the devices, follow these steps:

Step 1 Launch the MSE admin UI.

Step 2 Choose **admin > Enable Beta Features** to view the beta features.

Step 3 Click the **Data Accuracy Tool** tile.

Step 4 Click the **Device Filters** tab.

Step 5 Choose a building name from the drop-down list.

Step 6 Choose a building floor from the drop-down list.

Step 7 Choose a zone in the floor.

Step 8 Select Max RSSI Threshold from the report drop-down list.

Step 9 Enter the comma separated MAC addresses of the devices available in the selected zone.

Step 10 Select a RSSI threshold value.

Step 11 Click **View**.
It takes up to 10 minutes to show the data.

You will be able to view the RSSI report for the devices.

Filtering Devices Based on Stationary Devices and MAC Addresses

To filter the devices, follow these steps:

Step 1 Launch the MSE admin UI.
Step 2 Choose **admin > Enable Beta Features**.
Step 3 Click the **Data Accuracy Tool** tile.
Step 4 Click the **Device Filters** tab.
Step 5 Choose a building name from the drop-down list.
Step 6 Choose a floor of the building.
Step 7 Choose a zone in the floor.
Step 8 Choose Stationary Devices and MAC Addresses from the report drop-down list.
Step 9 Enter the comma separated MAC addresses of the devices available in the selected zone.
Step 10 Select the duration.
Step 11 Click **View**.
You will be able to view the MAC addresses of the located devices.
This allows you to download the report of stationary devices.

Monitoring System and Network Health

Viewing Health Dashboard

To view health dashboard for a specific mobility services engine, follow these steps:

Step 1 Choose **Services > Mobility Services**.
Step 2 Click the name of the mobility services engine you want to configure.
Step 3 Click **Health** tile from the MSE admin UI home page.
Step 4 Choose **Application Statistics > Health Dashboard**.
You can view the utilization percentage of CPU, system memory, disk space, analytics CPU, analytics memory, CAS CPU and CAS memory.

Viewing CAS Latency Statistics

To view CAS latency statistics information for a specific mobility services engine, follow these steps:

Step 1 Choose **Services > Mobility Services**.

Step 2 Click the name of the mobility services engine you want to configure.

Step 3 Click **Health** tile from the MSE admin UI home page.

Step 4 Choose **Application Statistics > CAS Latency Statistics**.
You will be able to view the CAS latency statistics, CAS queue delay and CAS calculation time.

Viewing Notification Statistics

To view notification statistics information for a specific mobility services engine, follow these steps:

Step 1 Choose **Services > Mobility Services**.

Step 2 Click the name of the mobility services engine you want to configure.

Step 3 Click **Health** tile from the MSE admin UI home page.

Step 4 Choose **Application Statistics > Notification Statistics**.
The following table lists fields in the Notification Statistics page.

Field	Description
Destination Summary	
Total Destinations	Destinations total count.
Unreachable Destinations	Unreachable destinations count.
Statistics Summary	
Host Address	The destination IP address to which the notifications are sent.
Port	The destination port to which the notifications are sent.
Destination Type	The type of the destination. Example: SOAP_XML.
Status	Status of the destination device. The status is either Up or Down.

Field	Description
Last Sent	The date and time at which the last notification was sent to the destination device.
Last Failed	The date and time at which the notification had failed.
Track Definition (Status)	Track definition can be either Nothbound or CAS event notification.
Total Count	The total count of notifications sent to the destination. Click the count link to view the notification statistics details of the destination device.

Viewing Vital Statistics

To view vital statistics information for a specific mobility services engine, follow these steps:

Step 1 Choose **Services > Mobility Services**.

Step 2 Click the name of the mobility services engine you want to configure.

Step 3 Click **Health** tile from the MSE admin UI home page.

Step 4 Choose **Application Statistics > Vital Statistics**.
You can view the graphical representation of vital statistics over a period of time.