



Defining the Location Hierarchy

This chapter describes the CMX Engage features and how to setup the location hierarchy in the CMX Engage.

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CMX Engage Features

The CMX Engage enables you to do the following:

- Automatically detect and engage all smart phone users with or without an app in the Wi-Fi or BLE Beacon network.
- Create captive portals that is to be display to the users who connects to your Wi-Fi.
- Display different captive portals for various set of customers connecting to the same SSID using captive portal rules that has location, time, and user filters.
- Use the engagement rules with location, time, and user filters to engage with the required set of customers and business users through notifications.
- Create tags of customers using the powerful profile rule.
- Provide customer level loyalty programs and offers.
- Introduce immediate offers and programs based on the customer statistics in the premises.
- Send notifications only to a certain category of customers.
- Generate reports to analyze the customer engagement and captive portal usage.
- Create captive portals, proximity rules, and users for specific location elements such as campus, floor, or zone.
- Connect to multiple wireless networks from the CMX Engage simultaneously.
- Manage existing experience zones.

Defining the Location Hierarchy

The CMX Engage enables you create the same location structure you have configured in the CMX. For using most of functions of the CMX Engage such as proximity rules, you must have the location hierarchy defined.

Each CMX Engage customer is provided with a default customer name and this customer name acts as the top element of the CMX Engage location hierarchy. You can add CMX nodes to the location hierarchy under this customer name. You can then import campuses. When you import a campus, its buildings and floors are also imported. You can create zones at building or floor level by grouping the access points. You can group the location elements at customer name, CMX node, or campus level. You can also rename the customer name.

You can create proximity rules such as captive portal rule, engagement rule, and profile rule, and view maps, and users at customer name, CMX node, group, campus, location, floor, or zone level. The number of proximity rules, maps, and users for each location in the location hierarchy are displayed against that particular location. For example, the number of proximity rules, maps, and users for a group are shown against that group in the location hierarchy.

**Note**

For a CMX Engage account with existing experience zones, you can view and edit the experience zones for each location from the location hierarchy.

To create the location hierarchy for CUWN-CMX, perform the following steps:

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Accessing the CMX Engage

Cisco provides the user credentials to each customer of the CMX Engage.

To access the CMX Engage, perform the following steps:

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- Step 1** Go to emsp.cisco.com.
- Step 2** In the Sign in window, enter the user credentials provided for your CMX Engage account, and click the arrow button to sign in.
- The CMX Engage dashboard appears.
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Adding a CMX Node

To create the location hierarchy in the CMX Engage, first you must add the wireless network of which you want to import the locations to the location hierarchy. The CMX Engage enables you to add various wireless networks to the location hierarchy. .

For Cisco Unified, you can maintain a Campus, Building, floor structure as in the CMX.

To add a CMX node to the location hierarchy, perform the following steps:

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- Step 1** In the CMX Engage dashboard, click **Manage Locations**.
 - Step 2** In the Locations page, click the **More Actions** icon at the far right of the customer name.
 - Step 3** Click **Add a Wireless Network**.
 - Step 4** From the Add a Wireless Network drop-down list that appears, choose **Cisco Unified**.
 - Step 5** In the Display Name text field, enter the name that must display for the CMX node in the location hierarchy.
 - Step 6** In the URL text field, enter the URL to connect to CMX.
 - Step 7** In the User Name field, enter the user name to connect to CMX.
 - Step 8** In the Password field, enter the password to connect to CMX.
 - Step 9** Click **Add**.

The CMX node appears in the location hierarchy under the customer name.

**Note**

The CMX Engage will not allow you to add two CMX nodes with the same access point.

You can add the CMX nodes under the customer name, or under a group with the customer name. That is, if you are creating a group with the entire locations including the customer name, you can add CMX nodes to that group.

Adding a Campus to the Location Hierarchy

The CMX Engage enables you to maintain the campus, building, and floor structure followed for the location hierarchy in the CMX. After adding a CMX node to the location hierarchy, you can import its campuses, and the associated buildings and floors.

To import a campus and its associated buildings and floors to the location hierarchy, perform the following steps:

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- Step 1** In the CMX Engage dashboard, click **Manage Locations**.
 - Step 2** In the Locations page, click the **More Actions** icon at the far right of the CMX node for which you want to add the campus.
 - Step 3** Click **Add Campus**.
 - Step 4** In the Add Campus window that appears, select the campuses that you want to add to the location hierarchy.

The Add Campus window appears with all the available campuses for that CMX node. If you select a campus, its buildings and floors appears to the right of the campus.

**Note**

If you do not want to add a particular building or floor of a campus to the location hierarchy, you can remove it by unselecting the corresponding check box. If required, you can add it to the location hierarchy any time later. For more information on adding a building to a campus or adding a floor to a building, see the Cisco CMX Engage with CUWN Configuration Guide.

Step 5 Click **Add**.

The campuses added gets listed in the location hierarchy along with its associated buildings and floors.



Note

In the CUWN, ensure that there is no duplicate for a building name under a campus.

Creating Zones and Adding Access Points

You can group the access points of a building or floor using zones. You can create the zones at building or floor level.



Note

You cannot modify the access points for a floor.

To create a zone for a building or floor, perform the following steps:

Step 1 In the CMX Engage dashboard, choose **Manage Locations**.

Step 2 In the Locations page, click the **More Actions** icon at the far right of the building or floor under which you want to create the zone.

Step 3 Click **Add Zone**.

Step 4 In the Add Zone window that appears, perform the following steps:

- a. In the Enter Zone Name Here text field, enter a name for the zone.
- b. In the Select Access Points area, select the check box for the access points that you want to add to the zone.
- c. Click **Add**.



Note

When you add an access point of a building or floor to a zone, that access point will not be available for that building or floor. The access points added to a zone will not be available for other zones.

Creating Groups

You can group the CMX nodes or campuses in the location hierarchy. You can create a group even at the customer name level. You can also create sub groups under these groups. For example, you can group the Campus1 and Campus 2 under one group and Campus 3 and Campus 4 under another group.

Grouping enables you to create proximity rules specific to that group.

To create a group for a location element, perform the following steps:

Step 1 In the CMX Engage dashboard, click **Manage Locations**.

Step 2 In the Locations page, click the **More Actions** icon at the far right of the customer name, CMX node, or campus under which you want to add the group.

Step 3 Click **Create Group**.

- Step 4** In the window that appears, perform the following steps:
- Enter a name for the group.
 - Select the locations that you want to add under this group.



Note The locations available for selection depends upon where you are adding the group in the location hierarchy.

- Click **Create**.



Note You can add more locations to a group at any time. You can add only those locations that are defined in the CMX.



Note To import the access points, the CMX must be publicly accessible. For a default CUWN installation, the ports 80 and 443 must be open.

Defining Metadata for a Location Element

The CMX Engage enables you to define metadata for a location using variables. You can define the metadata at customer name, CMX node, campus, location, or floor level. You can also define metadata for groups and zones. You can use this metadata for filtering the locations when creating the proximity rules. For example, if you want to categorize your locations as corporate branch, division branch, and local branch, then you can define a location metadata with key as Branch and values as CB, DB, and LB respectively. Then, you can use this metadata to filter the locations when creating the proximity rules.

To define a metadata for a location element, perform the following steps:

- Step 1** In the CMX Engage dashboard, click **Manage Locations**.
- Step 2** In the Locations page, click the **More Actions** icon at the far right of the location element (CMX node, campus, location, and so on) for which you want to add the location metadata.
- Step 3** Click **Add/Edit Metadata**.
- Step 4** In the Add Metadata window that appears, perform the following steps:
 - Click the + button.
 - In the Key text field, enter a name for the variable key.
 - In the Value text field, enter a value for the variable key.
 - Click **Save**.



Note You can delete a location metadata by clicking the Delete button for that metadata.

