Cisco CMX Engage with CUWN Quick Start Guide

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Preface

This preface describes the audience, organization, acronyms, and conventions used in the Cisco CMX Engage with CUWN Quick Start Guide, and provides information about the related documentation.

Audience

This guide is intended for site producers who create web portals using the CMX Engage with Cisco Unified Wireless Network (CUWN). For example, a technical administrator who creates the proximity rules and manages the users, or a portal administrator who manages the portal content.

This guide is also meant for business and store administrators who use the CMX Engage to create the proximity rules to send notifications to customers and business users.

Document Organization

Chapter Number	Chapter Title	Description
Chapter 1	Getting Started	Provides information on the process flow and system requirements for the Cisco CMX Engage.
Chapter 2	Defining the Location Hierarchy	Describes the CMX Engage features and how to define the location hierarchy.
Chapter 3	Captive Portals and Proximity Rules	Describes how to create the captive portals, various portal modules, and the proximity rules that you can create using the CMX Engage.
Chapter 4	CMX Engage Reports and Users	Provides information on the CMX Engage Reports and user types.

Document Conventions

Convention	Description
Boldface	Commands, command options, and keywords are in **boldface**.
Italics	Arguments for which you supply values are in *italics*.
Option > Option	Used to describe a series of menu options.

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in this guide.

List of Acronyms and Abbreviations

Table i-1   *List of Acronyms and Abbreviations*

Acronym	Expansion
BLE	Bluetooth Low Energy
CUWN	Cisco Unified Wireless Network
SSID	Service Set Identifier
WLC	Wireless LAN Controller

Related Documentation

Cisco CMX Engage with CUWN Configuration Guide- Refer to this document for detailed documentation of the Cisco CMX Engage with CUWN.

Getting Started

This chapter provides an overview of the CMX Engage, process flow, license packages, and the system requirements for the CMX Engage with CUWN.

- Overview, page 1-1
- Process Flow, page 1-3
- System Requirements, page 1-3

Overview

The Cisco CMX Engage is a location intelligence, digital customer acquisition and multi-channel engagement platform that enables companies to connect, know, and engage with visitors at their physical business locations.

This innovative cloud-based software platform delivers rich customer experiences and provides actionable location insights by unifying location engagement across all location technologies with unmatched reliability, while leveraging your existing infrastructure investments in the best possible way.

The major functionalities of the CMX Engage includes:

- Enable to Display Captive Portals Based on Rules, page 1-2
- Function as a WiFi Beacon to Send Notifications, page 1-2

Enable to Display Captive Portals Based on Rules

The captive portal refers to the portal that appears for a user who accesses your Wi-Fi from a particular location with a specific Wi-Fi network ID (SSID).

The end users of this captive portal are internet users who connect to the Internet through Wi-Fi or mobile devices from a public Wi-Fi network at airports, malls, hotels, and so on.

The CMX Engage enables you to create Captive Portal Rules that define the captive portals for various customers, locations, and period for an SSID. You can configure to display a captive portal based on the location, number of visits by the customer, type of customer, app status of the customer, and so on. The portal also serves as a gateway for visitors to gain internet access over Wi-Fi.

Function as a WiFi Beacon to Send Notifications

The CMX Engage also functions as a Wi-Fi based beacon that facilitates you send appropriate information to your customers, who has a Wi-Fi enabled device, when the customer is in and around your premises. The beacon functionality enables you to reach out to your customers individually with different promotions and offers. You can remind the customers about the offers available for them and their membership details. You can also set to provide offers only in certain outlets.

You can configure to send the notifications using the Engagement Rules. The CMX Engage enables you to send the notification when a customer connects to a Wi-Fi or when a customer is with in a beacon premises.

The CMX Engage enables you to send the notifications in the following ways:

- SMS
- E-mail
- Push notifications using apps
- BLE notifications
- API notifications using the external applications

This document describes how to use the CMX Engage with the CUWN.

Process Flow

The process flow for the CMX Engage is as shown in Figure 1-1.

Figure 1-1   Process Flow for the CMX Engage
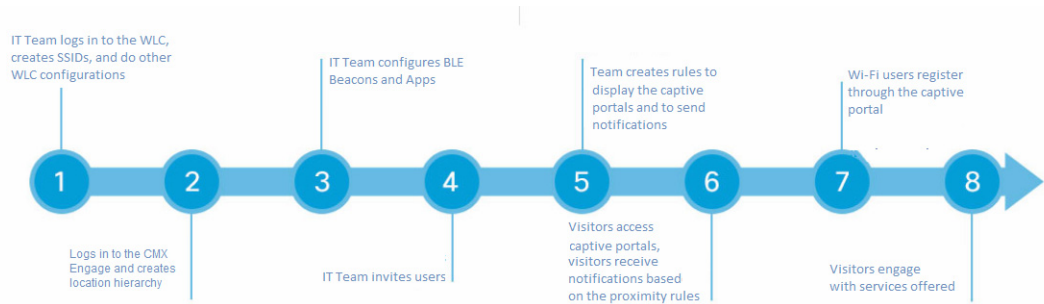
CMX Engage License Packages

The CMX Engage is available in three different license packages namely Base, Advance, and Enterprise. The features available for your account depends on the type of CMX Engage license package you own.

System Requirements

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Table 1-1   System Requirements

Item	Supported Requirements
Operating System	• Microsoft® Windows® XP or later • Mac OS X 10.6 or later
Browser	Windows OS • Internet Explorer version 9 or later • Firefox version 30 or later • Chrome version 34 or later • Safari version 5.1.7 or later Mac OS • Firefox version 30 or later • Chrome version 34 or later • Safari version 5.1.7 or later
WLC(CUWN)	8.0 or later
CMX	10.0 or later

CHAPTER **2**

Defining the Location Hierarchy

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

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:

1. Accessing the CMX Engage, page 2-2
2. Adding a CMX Node, page 2-2
3. Adding a Campus to the Location Hierarchy, page 2-3

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:

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.

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:

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:

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:

a.   Enter a name for the group.

b.   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.

c.   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:

a.   Click the **+** button.

b.   In the Key text field, enter a name for the variable key.

c.   In the Value text field, enter a value for the variable key.

d.   Click **Save**.

✎

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

Captive Portals and Proximity Rules

This chapter describes how to create a captive portal using the CMX Engage, the various portal modules, and the proximity rules.

Captive Portals

A captive portal is the user interface that appears when a Wi-Fi user is connected to an SSID. The CMX Engage enables you create captive portals. You can enhance the portals using the various portal modules provided by the CMX Engage.

Creating the Portals

To create a portal, perform the following steps:

Step 1   In the CMX Engage dashboard, choose **Portal**, and click **Create New**.

Step 2   In the Portal window that appears, enter a name for portal in the Name field.

Step 3   If you want the portal to be available for all the locations, select the "Enable this portal for all locations" check box. Else, select the locations for which the portal must be available.

Note   You can select the location only if you unselect the "Enable this portal for all locations" check box.

Step 4   Click **Next**.

Step 5   From the Authentication Type drop-down list, choose the authentication type that you want apply for the portal.

Based on the authentication type selected additional fields appear. For more information on various authentication types, refer to Cisco CMX Engage with CUWN Configuration Guide.

Step 6   After specifying the details for the authentication type, click **Next**.

Step 7   Adjust the **Expiry** slide bar and define the expiry date for the Terms and Conditions.

Step 8   In the Terms & Condition Message text field, enter the Terms and Conditions for the portal.

Step 9   Based on your authentication type, a button appears at the bottom of the screen.

- For authentication types other than "SMS with password verification" and "Email ", click **Save and Configure Portal**.

- If you have selected "SMS with password verification" or "Email" as the authentication type, click **Next**. The screen for configuring the Data Capture form appears. Configure the Data Capture form by specifying the following details:

a. If you want to enable the Data Capture option for this portal, swap the Data Capture button to enable it.

Note   By default, the Data Capture swap button appears as disabled. After enabling, the button turns green.

b. Add the fields required for the Data Capture form using the **Add Field Element** button. For more information on adding fields to the Data Capture form, refer to Cisco CMX Engage with CUWN Configuration Guide.

c. Click **Save and Configure Portal**.

A message "Portal saved successfully" appears and the portal page opens with the portal modules on the left and portal preview on the right.

Step 10   Add features to the portal using the Portal Modules.

Step 11   Click **Save** to save the changes made to each module.

Note   When creating the portal, you can save the portal after specifying the name for the portal. The new portal gets listed in the Portals page. You can configure authentication type, Terms and Conditions, Data Capture form, and so on at any time later using the Edit button for that portal.

Note   To capture the customer details such as name, phone number, and so on, ensure that you add a Data Capture module in the captive portals. Before provisioning the internet, the data capture form is displayed to the customer. The captured customer details are stored in the CMX Engage database. The Data Capture module is available for the SMS with password verification and E-mail authentication types.

Note   A portal becomes live when you associate it with a Captive Portal Rule, and publish that rule.

Portal Modules

A portal is the user interface that appears when a Wi-Fi user is connected to an SSID. You can enhance the portals using the various portal modules provided by the CMX Engage.

The following are the portal modules available in the CMX Engage:

- Authentication—Set the authentication mode for your portal using this module. You can provide access to a portal without authentication or with authentication through SMS, e-mail, and Social Sign In.

- Data Capture—Add an option to register to the CMX Engage through the portal using this module. This module is available only if you choose the authentication type as "SMS with password verification" or "Email".

- Brand Name—Define the brand name for your portal using this module. You can add the brand name as text or a logo image.

- Notice—Add a notice in the portal using this module. This helps you display notices to the portal users whenever required. You can set to provide the notice in the thicker text, text, or text with an image format.

- Welcome Message—Add a welcome message in the portal using this module..

- Venue Map— Add a label and icon for the Venue Map using this module. The venue map is uploaded in the portal from the CUWN based on the location.

- Videos—Add videos in the portal using this module. You can also add an appropriate caption and icon for the video section in the portal. You can also view the preview of the video when uploading.

- Feedback—Add the feedback questions in the portal using this module. You can add multiple-choice and rating questions. This module also lets you customize the labels for the Submit button, Thank You message, and Post Submission button. It has an option to set whether the customers are provided a text box to add the comments. It also lets you specify the e-mail addresses and subject for feedback.

- Help—Add a help line number that the customer can contact for assistance using this module. You can customize the caption and icon for Help.

- Get Apps—Add apps to the portal using this module. You can add appropriate caption and icon for each app using this module.

- Get Internet—Add the external URL to which the customer can navigate from the Get Internet section in the portal. To navigate to this URL, the customer has to complete the authentication process configured.

- Add Menu Item—Add customized menu items to the portal using this module. All the modules mentioned earlier are the default modules provided by the CMX Engage. You can add additional items to a portal based on your requirements using the Add Menu Item module.

- Promos & Offers—Add the promotions and offers to display through the portal using this module. You can modify the title of the promotion. For each module you can add appropriate captions and images, and specify the URL to the promotion details. Promos are displayed as carousels.

Proximity Rules

The CMX Engage enables you to create the following three types of proximity rules:

- Captive Portal Rule - To configure the captive portal that is to display to the customers who are connecting to a particular SSID from a particular location during a particular time. You can also configure to provide direct internet access or deny internet access to the customers on your business premises based on a Captive Portal Rule.This rule can also be used to create tags and sending customer details to an external API.

- Engagement Rule-To send notifications to the customers or business users when the customer is in your business premises.

- Profile Rule - To create tags that are used to group the customers. You can also use this rule to add additional customers to an existing tag or remove certain customers from an existing tag.

Figure 1   Proximity Rules in the CMX Engage
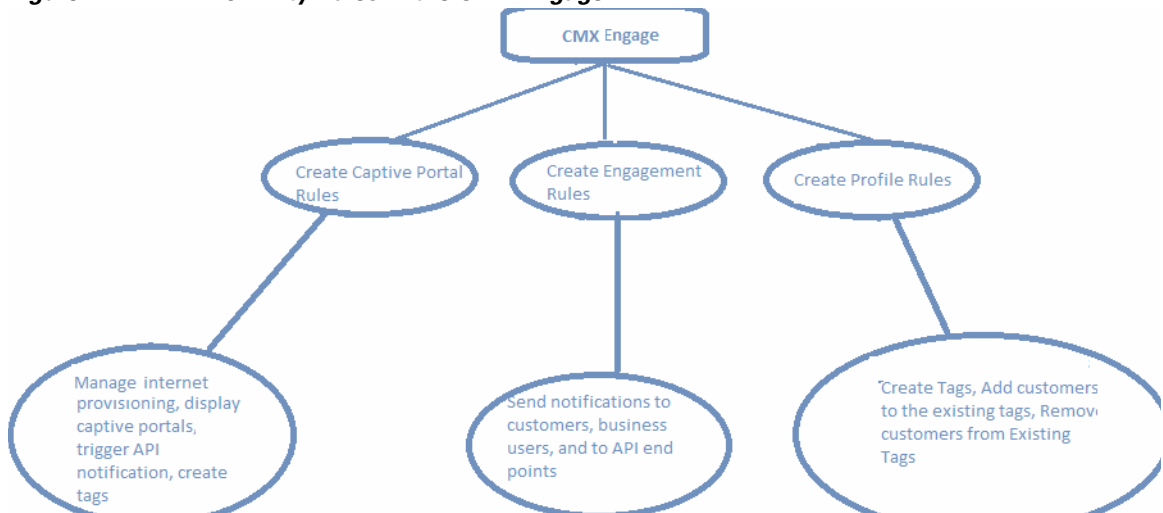
Note The Proximity Rules can be created only if the location hierarchy configuration is complete. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2.

Captive Portal Rule

The Captive Portal Rule refers to the conditions based on which a captive portal is displayed to the customers who are connecting to a particular SSID.

Before defining the captive portal rule, you must first create the location hierarchy, import the SSIDs, create the tags, and create the portal that is to display for the captive portal rule. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2. For more information, see the Cisco CMX Engage with CUWN Configuration Guide.

Note You must do certain configurations in the WLC such as creating ACLs, creating SSIDs, configuring the mode for access points, and so on. For more information, see the Cisco CMX Engage with CUWN Configuration Guide.

Creating a Captive Portal Rule

To create a captive portal rule to show a portal, perform the following steps:

Step 1   In the CMX Engage dashboard, choose **Proximity Rules > Captive Portal Rule**.

Step 2   Click **Create a new rule**.

Step 3   In the Rule Name text field, enter a name for the captive portal rule.

Step 4   In the Sense area, perform the following steps:

   a.   From the drop-down list after "When a user is on", choose **WiFi**.

   b.   From the drop-down list after "and connected to", choose the SSID for which you want to apply the rule.

✎
Note   The SSIDs are available for selection only if you have manually imported the SSIDs from the CMX.

Step 5   In the Locations area, specify the locations for which you want to apply the rule.

You can configure to show the portal for the entire location hierarchy, or a single or multiple locations such as CMX node, campus, group, building, floor, or zone. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2.

You can also filter the locations using the location metadata.

Step 6   In the IDENTIFY area, specify the type of customers for whom you want to apply the rule.

You can filter the customers based on whether the customer is an opted in or not opted in user, the tags the customers belong to, the number of visits made by the customer, and the status of the app in the customer's device. You can apply all these filters or any of them based on your requirement.

Step 7   In the Schedule area, specify the period for which you want to apply the rule.

   a.   Select the Set a time range for the rule check box and in the fields that appear, specify the time range for which you want to apply the captive portal rule.

   b.   Select the Set a date range for the rule check box, and in the fields that appear, specify the start date and end date for the period for which you want to apply the captive portal rule.

   c.   If you want to apply the rule only on particular days, select the Filter by days of the week check box, and from the list of days that appears, click the days on which you want to apply the rule.

Step 8   In the Actions area, choose the action to be performed when the conditions defined in the rule are met.

You can configure to show a captive portal, provide direct access to internet, or deny access to the internet when the conditions defined in the rule are met. You can also create tags based on the rule, and send the customer details captured to an external API using the rule.

Step 9   Click **Save and Publish**.

The captive portal rule is published. The rule gets listed in Captive Portal Rules page.

✎
Note   For detailed information on creating a captive portal rule see the Cisco CMX Engage with CUWN Configuration Guide.

Engagement Rule

The Engagement Rule refers to the conditions based on which the notifications are sent to the target customers. You can create the engagement rule for your customers and business users such as employees.

You can set the frequency at which the notification is to send. You can also define the criteria that must match to send the notification. You can configure to send the notification to a single customer or a group of customers in multiple locations.

For customers, you can send the notifications through SMS, e-mail, BLE, or app. For business users, you can send the notifications through SMS, e-mail, or an external API. For both customers and business users, you can configure to send the notifications based on the proximity of the customer to a BLE beacon or connectivity of the customer to an SSID. You can configure more than one notification type for a proximity rule, so that the customer gets notification in more than one format. This increases the probability of notifications to be noticed by the customer.

Before creating the engagement rule, you must define the location hierarchy and create the required tags that group the customers. You must also configure the BLE beacon and app, if required

- Creating an Engagement Rule for a Consumer, page 3-6
- Creating an Engagement Rule for a Business User, page 3-8

Creating an Engagement Rule for a Consumer

You can send the notifications to the customer as SMS, e-mail, app, or BLE notifications.

To define an engagement rule to send notifications to the customers, perform the following steps:

Step 1   In the CMX Engage dashboard, choose **Proximity Rules > Engagement Rule**.

Step 2   Click **Create a New Rule**.

Step 3   In the Rule Name text field, enter a name for the engagement rule.

Step 4   In the Sense area, from the "When a user is on drop-down list, choose whether you want to send notifications based on the customer's connectivity to the Wi-Fi or proximity to the BLE Beacon.

    a. If you choose "WiFi", you can configure to send the notification during any of the following scenarios: when a customer connected to the Wi-Fi enters the location, when a customer connected to the Wi-Fi leaves the location, or when the customer connected to the Wi-Fi is present at the location for a specified duration or at a particular time.

    b. If you choose "Beacon", you can configure to send the notification during any of the following scenarios: when a customer enters the beacon premises, when the customer leaves the beacon premises, when the customer is with in the beacon premises for a specified duration or at a particular time.

Note   If you choose "Beacon", the notification is sent only if the customer's bluetooth is ON.

Step 5   In the Locations area, specify the locations for which you want to send the notifications.

You can configure to send notifications for the entire location hierarchy or a single or multiple locations such as CMX node, campus, group, building, floor, or zone. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2.

You can also filter the locations for the rule using the location metadata.

Step 6   In the IDENTIFY area, specify the type of customers for whom you want to send the notifications.

You can filter the customers based on whether the customer is an opted in or not opted in user, the tags the customers belong to, the number of visits made by the customer, and the status of the app in the customer's device. You can apply all these filters or any of them based on your requirement.

Step 7   In the Schedule area, specify the period for which you want to apply the rule.

   a. Select the Set a time range for the rule check box, and in the fields that appear, specify the time range for which you want to apply the engagement rule.

   b. Select the Set a date range for the rule check box, and in the fields that appear, specify the start date and end date for the period for which you want to apply the engagement rule.

   c. If you want to apply the engagement rule only on particular days, select the Filter by days of the week check box, and from the list of days that appears, click the days on which you want to send the notifications.

Step 8   In the Actions area, perform the following steps:

   a. From the **Notify** drop-down list, choose **Notify Consumer**, and from the adjacent drop-down list choose any of the following:

   – Only Once- The notification is sent only once to a customer.

   – Once In- The notification is sent more than once to a customer based on the notification frequency specified. In the additional fields that appear when you choose this option, specify the notification frequency.

   b. Select the Via App Push Notification check box, if you want to send the notification to the customers through the app as push notifications. From the drop-down list following the check box, choose the app through which the notification is to send. Also, include smart links in the following text using the variables provided.

   Note   To use the BLE beacons in the CMX Engage or to send the push notifications, you must integrate the BLE Beacon or the app from which you want to send the notifications with the CMX Engage SDK. For more information on how to integrate BLE Beacon or app with the CMX Engage SDK, see the CMX Engage SDK documentation.

   c. Select the BLE Notification check box, if you want to send the notifications as BLE notification. Also, include smart links in the following text using the variables provided.

   d. Select the Via SMS check box, if you want to send the notification through SMS. From the SMS Gateway drop-down list, choose the SMS gateway through you want to send the notification. In the Link field, enter the engagement URL that must appear in the notification. You can enhance your URL using the smart link option. Enter"$" to view the parameters that you can add. You can also edit the content in the following text box to match your business requirements.

   e. Select the Via Email check box, if you want to send the notification through e-mail. In the From Name field, specify the name that must appear in the e-mail, in the From E-mail ID field, specify the From e-mail ID that must appear in the e-mail, and in the Subject field, enter the subject for the notification e-mail. In the Link field, enter the engagement URL that must appear in the notification. You can enhance your URL using the smart link option. Enter"$" to view the parameters that you can add. You can also edit the content in the following text box.

Note The notifications by default contain the welcome back message with the First Name, and Last Name of the customer. You can edit the text in the message to match your business requirements. To view the parameters that you can add, enter "$" in the message box or click the Add Variable button. For more information on the parameters that you can add see the Cisco CMX Engage with CUWN Configuration Guide.

Note If you opt for app notification, the SMS and e-mail notifications are not sent even if they are configured. In any case if the app notification fails, the SMS or e-mail notifications are sent, if configured.

Step 9 Click **Save and Publish**.

The engagement rule is published. The rule gets listed in the Engagement Rules page.

Note For detailed information on creating an engagement rule for a consumer see the Cisco CMX Engage with CUWN Configuration Guide

Creating an Engagement Rule for a Business User

You can send the notifications to the business users such as employees through SMS, and e-mail. You can also send notifications to an external API.

To define an engagement rule to send notifications to the business users, perform the following steps:

Step 1 In the CMX Engage dashboard, click the drop-down arrow for **Proximity Rules > Engagement Rule**.

Step 2 Click **Create a New Rule**.

Step 3 In the Rule Name text field, enter a name for the engagement rule.

Step 4 In the Sense area, from the "When a user is on drop-down list, choose whether you want to send notifications to the business user based on the customer's connectivity to the Wi-Fi or access to the BLE Beacon.

    a. If you choose "WiFi", you can configure to send the notification during any of the following scenarios: when a customer connected to the Wi-Fi enters the location, when a customer connected to the Wi-Fi leaves the location, or when the customer connected to the Wi-Fi is present at the location for a specified duration or at a particular time.

    b. If you choose "Beacon", you can configure to send the notification during any of the following scenarios: when a customer enters the beacon premises, when the customer leaves the beacon premises, when the customer is with in the beacon premises for a specified duration or at a particular time.

Note If you choose Beacon, the notification is sent to the business user only if the customer's blue tooth is ON.

Step 5 In the Locations area, specify the locations for which you want to send the notifications.

You can configure to send notifications for the entire customer name or a single or multiple locations such as CMX node, campus, group, building, floor, or zone. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2.

You can also filter the locations for the rule using the location metadata.

Step 6   In the IDENTIFY area, specify the type of customers for whom you want to send the notifications to the business users.

You can filter the customers based on whether the customer is an opted in or not opted in user, the tags the customers belong to, the number of visits made by the customer, and the status of the app in the customer's device. You can apply all these filters or any of them based on your requirement

Step 7   In the Schedule area, specify the period for which you want to apply the engagement rule.

    a.   Select the Set a time range for the rule check box, and in the fields that appear specify the time range for which you want to apply the engagement rule.

    b.   Select the Set a date range for the rule check box, and in the fields that appear specify the start date and end date for the period for which you want to apply the engagement rule.

    c.   If you want to apply the rule only on particular days, select the Filter by days of the week check box, and from the list of days that appears, click the days on which you want to apply the engagement rule.

Step 8   In the Actions area, perform the following steps:

    a.   From the **Notify** drop-down list, choose **Notify Business User**, and from the adjacent drop-down list choose any of the following:

        –   Only Once- The notification is sent only once to a business user.

        –   Once In- The notification is sent more than once to a business user based on the notification frequency specified. In the additional fields that appear when you choose this option, specify the notification frequency.

Note   To use the BLE beacon, you must integrate the BLE Beacon with the CMX Engage SDK. For more information on how to integrate the BLE Beacon with the CMX Engage SDK, see the CMX Engage SDK documentation.

    b.   If you want to send the notification through SMS, select the Via SMS check box. From the SMS Gateway drop-down list, choose the SMS gateways through which you want to send the notifications. In the To field that appears, enter the mobile number of the business user to whom you want to send the notifications. In the Link field, enter the engagement URL that must appear in the notification. You can enhance your URL using the smart link option. Enter"$" to view the parameters that you can add. You can also edit the content in the following text box to match your business requirements.

    c.   If you want to send the notification through e-mail, select the Via Email check box. In the From field, specify the From e-mail ID that must appear in the e-mail, in the "To" text field, enter the e-mail ID of the business user to whom you want to send the notification, and in the Subject field, enter a subject for the notification e-mail. You can also edit the content in the following text box to match your business requirements.

    d.   If you want to send the notification to an external API, select the Trigger API check box. From the Method drop-down list, choose the method for triggering API, and mention the required parameters.You can enhance the parameter values by adding variables using the corresponding Add Variable button.

- Get- If you choose this method, a Request Parameters text box appears where you can mention the request parameters.

- Post Form- If you choose this method, a Form Parameters text box appears where you can mention the form parameters.

- Post Json- If you choose this method, a Json Data text box appears where you can mention the json data.

- Post Body Data-If you choose this method, a Post Body Data text field appears where you can mention the post body data.

In the URI text field, enter the URI for the API. You can enhance your URI using the smart link option. Enter"$" or click the Add Variable button to view the parameters that you can add.

Note   The notifications by default contain the welcome back message with the First Name, and Last Name of the customer. You can edit the text in the message to match your business requirements. To view the parameters that you can add, enter "$" in the message box or click the corresponding Add Variable button. For more information on the parameters that you can add see the Cisco CMX Engage with CUWN Configuration Guide.

Step 9   Click **Save and Publish**.

The engagement rule is published. The rule gets listed in the Engagement Rules page.

Note   For detailed information on creating an engagement rule for a business user see the Cisco CMX Engage with CUWN Configuration Guide

Profile Rule

You can use the profile rule to create tags, add more customers to the existing tags, or to remove certain customers from an existing tag.

Before you create the Profile Rule, you must first define the location hierarchy, and configure the BLE beacon, if required.

Creating a Profile Rule

To create a profile rule, perform the following steps:

Step 1   In the CMX Engage dashboard, choose **Proximity Rule> Profile Rule**.

Step 2   Click **Create a new rule**.

Step 3   In the Rule Name text field, enter a name for the profile rule.

Step 4   In the Sense area, from the "When a user is on drop-down list, choose whether you want to add the customers to the tag based on the customer's connectivity to the Wi-Fi or access to the BLE Beacon.

    a.   If you choose "WiFi", you can configure to filter the customers for the tag based on any of the following scenarios: when a customer connected to the Wi-Fi enters the location, when a customer connected to the Wi-Fi leaves the location, or when the customer connected to the Wi-Fi is present at the location for a specified duration or at a particular time.

    b.   If you choose "Beacon", you can configure to filter the customers for the tag based on any of the following scenarios: when a customer enters the beacon premises, when the customer leaves the beacon premises, when the customer is with in the beacon premises for a specified duration or at a particular time.

Step 5   In the Locations area, specify the locations at which you want to apply the rule.

You can configure to apply the rule for the entire customer name or a single or multiple locations such as CMX node, campus, group, building, floor, or zone. For more information on creating the location hierarchy, see the "Defining the Location Hierarchy" section on page 2-2.

You can also filter the locations for the rule using the location metadata.

Step 6   In the IDENTIFY area, specify the type of customers that you want to add to the tag.

> ✎
> **Note**   You can filter the customers to be included in the tag based on whether the customer is an opted in or not opted in user, the tags the customers belong to, the number of visits made by the customer, and the status of the app in the customer's device. You can apply all these filters or any of them based on your requirement.

Step 7   In the Schedule area, specify the period for which you want to apply the rule.

    a.   Select the Set a time range for the rule check box and in the fields that appear, specify the time range for which you want to apply the profile rule.

    b.   Select the Set a date range for the rule check box, and in the fields that appear, specify the start date and end date for the period for which you want to apply the profile rule.

    c.   If you want to the rule to be executed only on particular days, select the Filter by days of the week check box, and from the list of days that appears, click the days on which you want to apply the rule.

Step 8   In the Actions area, specify whether you want to create a new tag or include customers to an existing tag, or exclude customers from an existing tag.

    a.   Click the **Add Tags** button.

    •   If you want to add or remove the filtered customers from the existing tags, mention the tags to which you want to include the filtered customers and the tags from which you want exclude the filtered customers.

        –   To add the customers that are filtered based on this profile rule to an existing tag, choose the **Add** radio button for the tags to which you want to add the customers.

        –   To remove the customers that are filtered based on this profile rule from an existing tag, choose the **Remove** radio button for the tags from which you want to remove the customers.

    •   You can create a new tag either by adding the filtered customers or by removing the filtered customers. In the New Tag field that appears, enter a name for the tag. Choose the **Add** radio button if you want to create a tag by adding the customers filtered based on the profile rule or choose the **Remove** radio button to create a tag excluding the customers filtered based on the profile rule. Click **Save**.

    b.   After mentioning all the required tags, click **Done**.

Step 9   In the Create Profile Rule page, click **Save and Publish**.

The profile rule is published, and the rule gets listed in the Profile Rules page.

Note   For detailed information on creating a profile rule see the Cisco CMX Engage with CUWN Configuration Guide

CMX Engage Reports and Users

This chapter describes the CMX Engage reports and various types of CMX Engage users.

- Reports in the CMX Engage, page 4-1

- CMX Engage Users, page 4-2

Reports in the CMX Engage

The Report shows the details of the customer activities in the CMX Engage enabled locations. It also shows the customer data you could acquire so far using the CMX Engage. You can analyze the customer activities at various locations through the report to make the right business decisions.

The Reports window has the following sections:

- **Customer Acquisition**-The Customer Acquisition report details the devices and customers that are acquired and the devices that opted in for subscriptions. It also displays the customer profile details such as the male-female ratio and the top tags to which the customers belong to. In addition, the total number of e-mail IDs, phone number, names, and gender collected using the data capture form is also displayed.

- **User Activity**-The User Activity report displays the customer visit details such as daily average number of customers, daily average number of visits, dwell time range for various customers, average number of visits by unique customers, and so on.

- **Engagement**- The Engagement report shows the details of new devices and returning devices connected to the Wi-Fi on each day for the specified period. It also shows the most highly used menu items in the captive portal and the percentage of use for each menu item. In addition, this report also shows the total number of notifications sent to the customers and business users using various mediums such as SMS, e-mail, and so on.In addition, the total number of customers tagged or the total number of customers removed from the tags using various profile rules during the specified period and locations are also shown in this section.

- **Right Now**- The Right Now section shows the count of customers currently present at your locations.

To view the report, perform the following steps:

Step 1 In the CMX Engage dashboard, choose **Reports > Overview**.

The Reports window appears. The report that appears represent the data from the time you have installed the CMX Engage.

Step 2 In the Filter by area, choose the locations for which you want to view the report.

Step 3 In the Date area, click the Edit icon, and specify the period for which you want to view the report.

Step 4 Click **Apply**.

The report for the specified locations and duration appears.

Step 5 To view a particular type of report, click the tab for that report.

For example, to view the customer acquisition report, click the Customer Acquisition tab.

Note You can access the Right Now section directly from the dashboard. To access the right now section directly from the dashboard, choose **Reports > Right Now**.

CMX Engage Users

The Account Admin user can add other users for the CMX Engage, and grant the users the required admin rights. The users can be created for a particular location. The CMX Engage enables you to define the following types of users:

- Account Admin—This user has complete administrative rights on the CMX Engage dashboard.
- Admin—This user has all the privileges except user management on the specified location. For example, an admin user cannot invite a user to join the CMX Engage.
- Portal Designer—This user has the access only to the Portal features of the CMX Engage on the portals.
- AccessCode Manager—This user has the access only to create and manage access codes.
- Read Only Access—This user has the access only to view the CMX Engage dashboard for the specified location. That is, this user cannot edit the CMX Engage configurations.

To add a CMX Engage user, perform the following steps:

Step 1 In the CMX Engage dashboard, choose **Team**.

Step 2 Click **Invite User**.

Step 3 In the Invite Users window, enter the following details:

   a. In the Email Address field, enter the e-mail address of the user to add.

   b. From the Privileges drop-down list, choose the access type to provide to this user.

   Based on your selection, an additional field appears. The field is not displayed for Account Admin, and Portal designer.

   c. Make necessary selection in the additional field as follows:

   – If you choose Admin or Read Only Access, the Choose Location button appears. Select the locations for which you want to provide access.

- If you choose AccessCodeManager, the Choose Location button appears. elect the locations for which you want to provide access.

- If you choose Location Manager, the Location area appears where you have to specify the locations for which the location manager must have access rights.

   d. Click **Send Invite**.

✎
Note   The Invite User button is available only for the Account Admin users.

✎
Note   The AcessCode Manager option appears only if any experience zone exists for your CMX Engage account.