Cisco Mobility Express with Cisco CMX Cloud

Cisco CMX Cloud

Cisco® Connected Mobile Experiences Cloud (Cisco CMX Cloud) is an simple and scalable offering which enables delivery of wireless guest access and in-venue analytics, integrating seamlessly with Cisco wireless infrastructure.

This cloud-delivered Software-as-a-Service (SaaS) offering is quick to deploy and intuitive to use. It is based on CMX 10.x code and is compatible with Cisco Mobility Express Release 8.3. It offers the following services:

- Connect for Guest Access–Providing an easy-to-use guest-access solution for visitors through a custom portal using various authentication methods including social, self-registration, and Short Message Service (SMS).
- Presence Analytics–Detecting all Wi-Fi devices (the “devices”) in the venue and providing analytics on their presence, including dwell times, new vs. repeat visitors, and peak time.

Cisco CMX Cloud Solution Compatibility Matrix

- Cisco Mobility Express running AireOS Release 8.3
- All Cisco Mobility Express supported Access Points

Minimum requirements for CMX Cloud deployment

Below are the minimum requirements for CMX Cloud deployment:

1. Verify Cisco CMX Cloud Solution Compatibility Matrix above.

2. Recommended browser is Chrome 45 or later
3. Signup to https://cmxcisco.com for 60 day trial or go to Cisco Commerce Workspace (CCW) and purchase license for your choice of CMX Cloud service. Refer to CMX Cloud Ordering information.

   After sign-up, start using Connect or Connect and Presence Analytics.

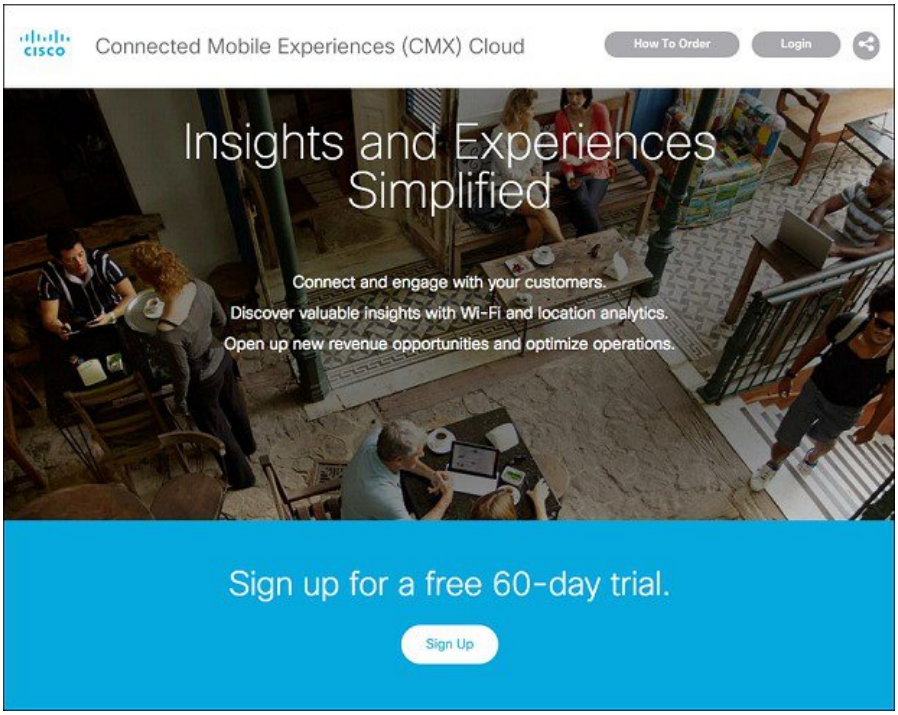
CMX Cloud Trial Sign-Up and Sign-In

Sign-Up

To sign-up for a trial account, perform the following steps:

Procedure

Step 1 Browse to https://cmxcisco.com and sign-up for a 60-Day trial.



Step 2 Enter the following details:

a. Full Name

b. E-mail address

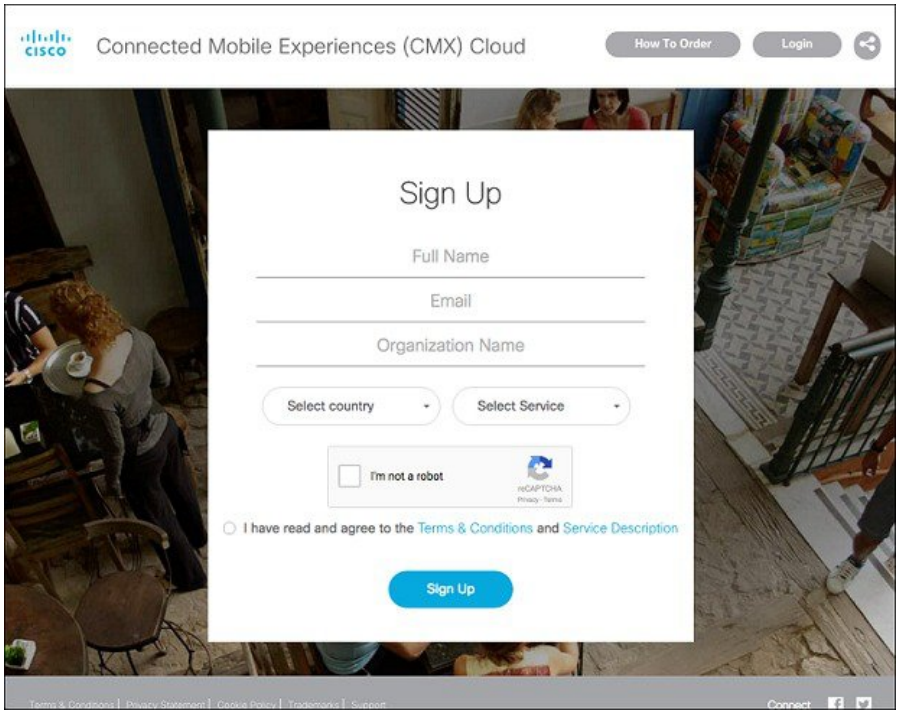
c. Organization name

d. Select Country

e. Select Service (Connect or Connect with Presence Analytics) from drop down list

f. Check “I have read and agree to the Terms and Conditions”

g. Click Sign Up



After your account is created and Site is provisioned, an email will be sent to you with the following:

a. Account Login Password

b. Site URL

c. Token

Sign In

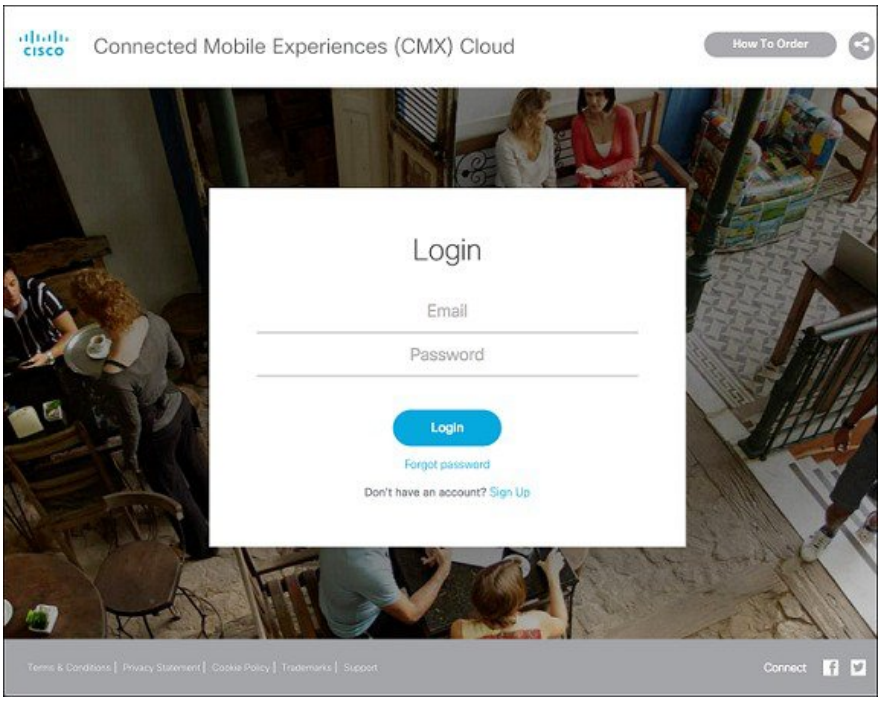
To sign-in, perform the following steps:

Procedure

Step 1 Browse to https://cmxcisco.com

Step 2 Click Login on the top right and enter the email address which was used to create the account and password.

Step 3 Click Login to get redirected to you CMX Cloud site.



Configuring Cisco Mobility Express to send data to CMX Cloud for Presence Analytics

Enabling CMX Cloud Service on Primary Access Point

After CMX Cloud Account is created and CMX Site provisioned, next step is to configure and enable the CMX Cloud Service on Primary Access Point so that it can send data to the CMX Cloud.

Note Primary Access Point should be able to talk to the CMX Cloud.

To configure, perform the following steps:

Procedure

Step 1 On Cisco Mobility Express WebUI, navigate to **Advanced > CMX**.

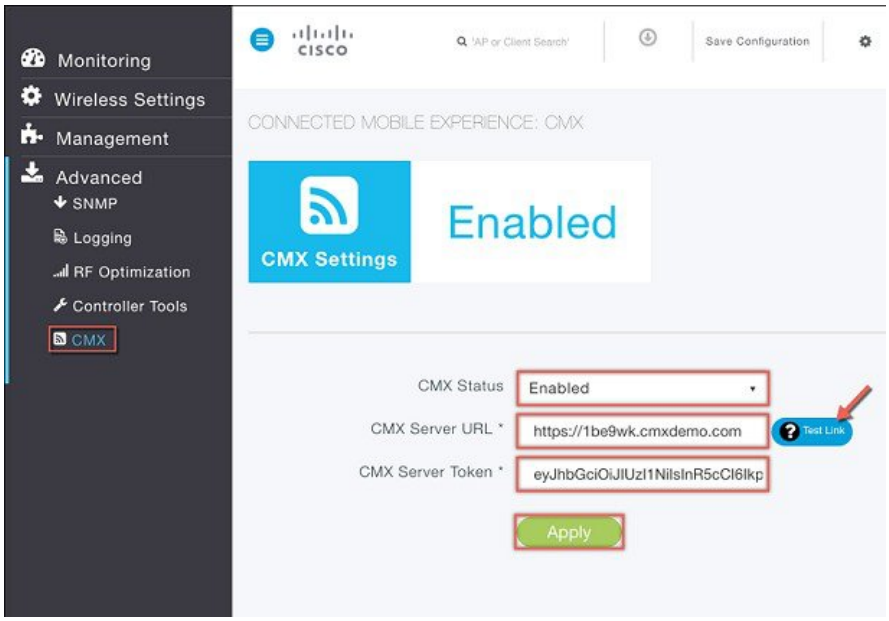
Step 2 On Cisco Mobility Express WebUI, navigate to **Advanced > CMX**.

Step 3 Enter the **CMX Server URL** (Site URL).

Step 4 Enter the **CMX Server Token**.

Step 5 Click **Apply**.

Tip Click the **Test Link** button to verify connectivity from Primary AP to CMX Cloud Site using the configured information.



Collecting Base MAC Address of Access Points to add them to the Site in CMX Cloud

In AireOS release 8.3, Access Points, which are part of the Cisco Mobility Express deployment, are not discovered automatically in the CMX Cloud when the CMX Could Service is started on the Primary Access Point. Access Points have to be manually added to the site in CMX Cloud. To obtain the Base MAC address, execute the following command in the Controller CLI.

```
(Cisco Controller) >show ap join stats summary all

Number of APs.......................................... 3

Base Mac            AP EthernetMac      AP Name               IP Address        Status
38:ed:18:ca:8b:00   38:ed:18:ca:09:28   AP38ED.18CA.0928      172.20.229.60     Joined

38:ed:18:cb:60:60   38:ed:18:ca:3d:10   AP38ED.18CA.3D10      172.20.229.21     Joined

38:ed:18:cd:31:80   38:ed:18:cc:32:c0   AP38ED.18CC.32C0      172.20.229.61     Joined
```

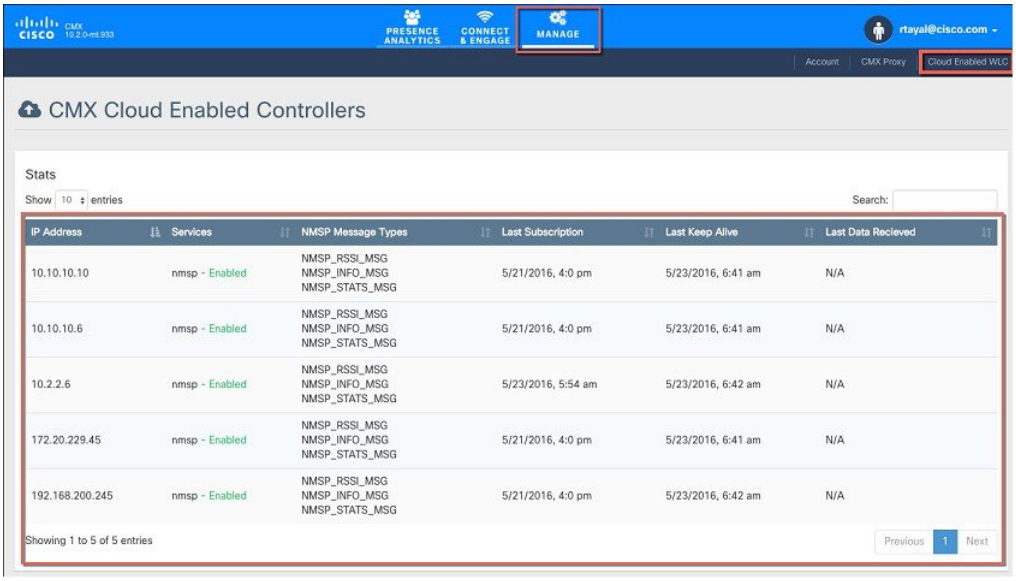
Creating a Site and Adding Access Points to Site in CMX Cloud for Presence Analytics

To create a site and add Access Points to the site in CMX Cloud for Presence Analytics, perform the following steps:

Procedure

Step 1 Login to CMX Cloud account at https://cmscisco.com/

Step 2 Navigate to **Manage > Cloud Enabled WLC** and verify that the IP address of the WLC shows up on the list.



Step 3 Navigate to **PRESENCE ANALYTICS > Manage.** Click **Add Site** to create a Site and add Access points to the Site.

Step 4 In the New Site window, enter the following dertails:

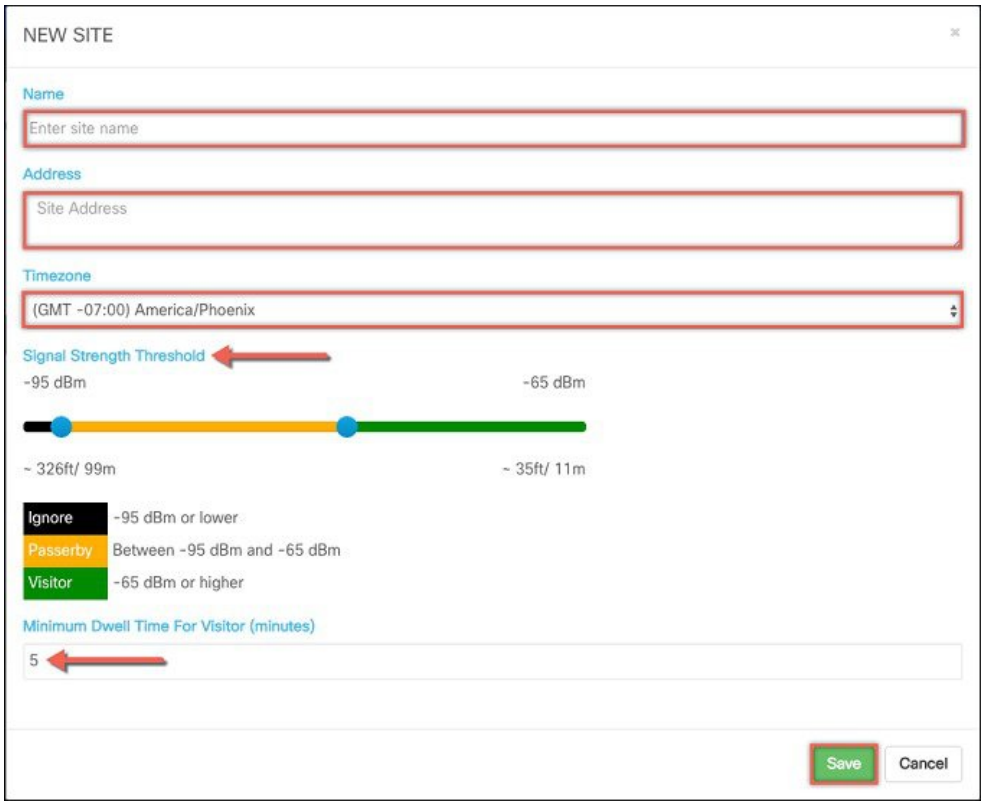
a. Site Name

b. Site Address

c. Timezone from the drop down list

d. Signal Strength Threshold for Ignore, Passerby, and Visitors

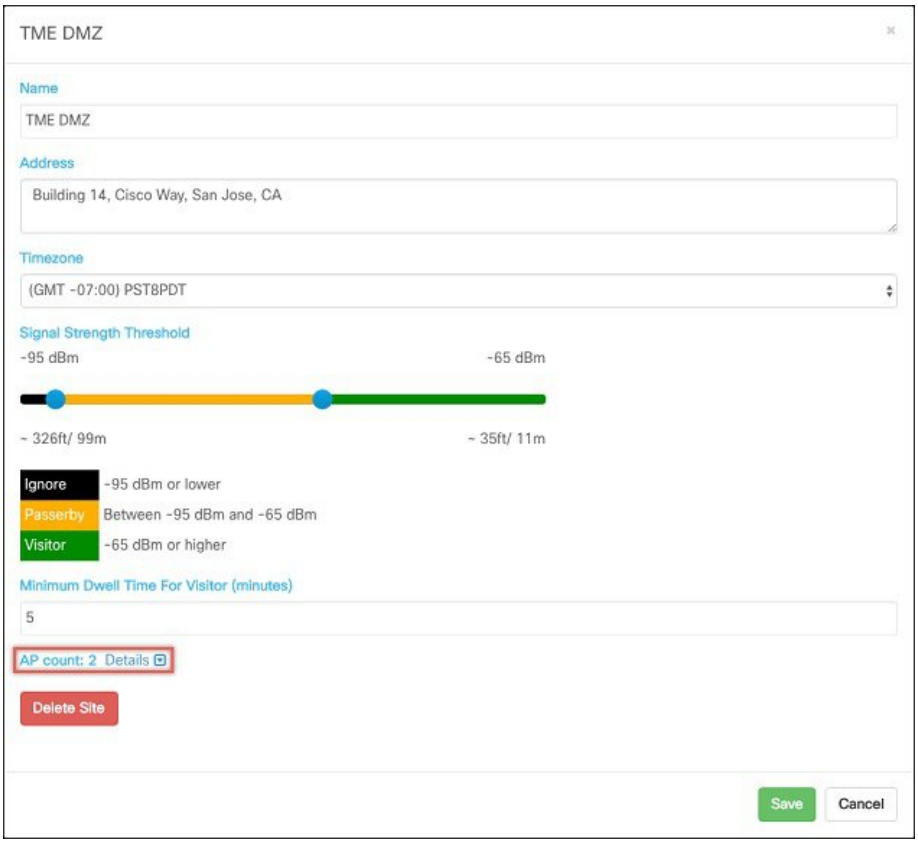
e. Minimum Dwell Time for Visitor



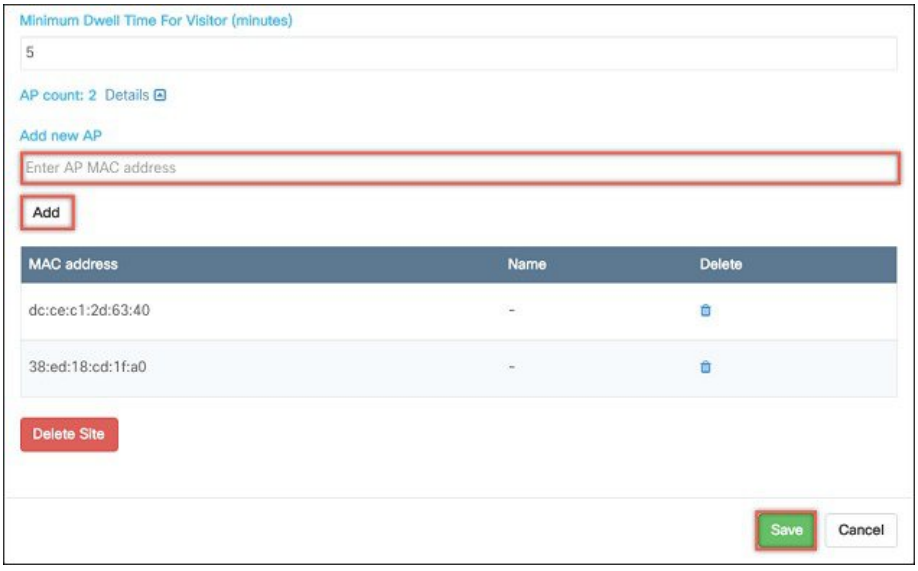
Step 5 Click **Save** to create the Site.

The site gets created.

Step 6 Click Site Name and then click the Details link next to the AP Count as shown in the Site window.



Step 7 The window will expand and **Add new AP** field will be displayed. Enter the Base MAC Address of the Access point and click **Add**. When finished with adding Base MAC of AP to the sites, click on the **Save**.



Understanding Data on the CMX Cloud for Presence Analytics Dashboard

After the Sites have been created and Access Points have been added to the sites, data will begin to appear on the Presence Analytics dashboard. To understand the Data represented on this dashboard, please visit the following site: