

# Cisco Connected Mobile Experiences (CMX) Cloud Data Sheet

This document details the specifications for Cisco® Connected Mobile Experiences (CMX) Cloud.

## Overview

Cisco Connected Mobile Experiences (CMX) Cloud is a cloud-delivered version of the on-premises CMX 10 software. CMX Cloud revolutionizes the delivery of wireless services, integrating seamlessly with the Cisco wireless infrastructure and creating out-of-the-box capabilities that are intuitive as well as quick and easy to deploy and use. The affordable subscription billing model helps reduce up-front investments in equipment (CapEx) and IT resources. Ultimately, CMX Cloud accelerates how wireless infrastructure can deliver business outcomes by:

- Detecting all Wi-Fi devices that are in the proximity of access points in the venue and providing analytics on their presence, including dwell times, new vs. repeat visitors, peak times, etc.
- Providing a simplified guest access solution to onboard visitors through a custom drag-and-drop portal using various authentication methods (social, self-registration, SMS, guest vouchers, sponsor email approval, etc.).
- Providing capabilities to engage the visitors directly on the guest portal page with external content based on location. Clickable menu items in the captive portal editor create interactive experiences. Alternatively, CMX APIs can be used to engage users via a mobile app.

## Product Summary

Built on an advanced cloud infrastructure, Cisco CMX Cloud delivers unprecedented benefits, as listed in Table 1.

**Table 1.** CMX Cloud Overview

Feature	Benefits
<b>Cloud delivered</b>	<ul style="list-style-type: none"> <li>• Easy to order, provision, and set up with minimal on-premises involvement</li> <li>• Faster delivery of ongoing innovation</li> <li>• Easier to integrate with other software and systems in the public domain through APIs</li> </ul>
<b>Software as a service (SaaS)</b>	<ul style="list-style-type: none"> <li>• Reduce the technical and operational overhead needed to set up, operate, and maintain servers and software</li> <li>• Seamlessly add capacity, scale, and features, securely and reliably</li> <li>• Focus on the business objectives and reduce technical infrastructure</li> </ul>
<b>Subscription pricing</b>	<ul style="list-style-type: none"> <li>• Flexibility of payments with a 1-, 3-, or 5-year initial term and annual renewals</li> <li>• Reduce up-front CapEx and overall total cost of ownership (TCO)</li> <li>• Add capacity or term as needed per business requirements</li> </ul>
<b>Simplified guest access (CMX Connect)</b>	<ul style="list-style-type: none"> <li>• Prebuilt templates to get a quick start with Wi-Fi guest portals</li> <li>• Easy drag-and-drop components to create a custom look and function for the portal pages – no web programming skills needed</li> <li>• Multiple access methodologies to choose from, including simple registration, SMS, guest vouchers, email authentication, sponsor email, and social login</li> <li>• Combined with CMX location, create unique pages per site, zone, SSID, etc.</li> <li>• Engage guest users with advertisements and external content</li> <li>• Separate option of a “success page” to engage repeat visitors while bypassing the login page</li> <li>• Guest user analytics: All data accessible as new vs. repeat visitors, network usage, portal and SMS success ratio, language used</li> </ul>

Feature	Benefits
<b>Presence Analytics</b>	<ul style="list-style-type: none"> <li>• Fastest path to analytics. No need for maps; just enlist access points into sites and perform analytics based on the proximity of clients around those sites, as measured by their signal strengths (thresholds can be customized)</li> <li>• Dashboard provides quick insights into both current and historical numbers of visitors, average dwell time, busiest hour or day, conversion rate, and top device manufacturer</li> <li>• Detailed charts over time or in aggregate for a given time range show client device classification (passersby vs. visitors vs. connected), dwell time, repeat visitors by their frequency of visit, etc.</li> </ul>
<b>Beacon Center</b>	<ul style="list-style-type: none"> <li>• Eliminates the need for battery-operated physical beacons for proximity engagement or wayfinding</li> <li>• Easily create, move, and replace virtual beacons from an intuitive dashboard with the click of a mouse</li> <li>• Use the power of advanced machine learning to dramatically simplify the beacon experience across all mobile device types</li> </ul>

## License Tiers

CMX Cloud will be offered in three license tiers – CMX Connect, CMX Connect with Presence Analytics, and CMX Cloud Beacon Center.

### CMX Connect

This business-to-consumer (B2C) guest access solution is designed for flexible, easy onboarding to the guest Wi-Fi network. It provides a location-aware captive portal optimized for mobile devices. CMX Connect helps venue owners monetize their guest Wi-Fi networks.

The following capabilities are offered within CMX Connect, which also includes base CMX capabilities:

- Easy-to-use portals
  - Prebuilt templates allow you to get started quickly with Wi-Fi guest portals
  - With easy drag-and-drop components, you can create a custom look and function for the portal pages that works across all mobile devices and computers; no web programming skills required
  - Multiple language option allows easy creation of portals specific to user language preference
- Multiple onboarding options
  - Simple registration options to capture customer-specified name, email, phone number, or any other custom field or option to do quick polls
  - SMS option for customer phone number verification, which is a common and useful customer identifier
  - Social login (Facebook, Instagram, Foursquare) option not only allows for better verification but also gathers additional social media data on that user
  - Guest voucher can provide front-desk or kiosk-based voucher generation and onboarding for the guest Wi-Fi
  - Sponsor option allows guest users to be authenticated by a host without overhead, including lobby admin, voucher management, or other
  - Policy controls include upload and download bandwidth; access duration can be specified on a per-portal basis
- Engagement
  - Information collected through these onboarding methods is available via API and CSV format and provides visitor demographic insights for follow-up marketing and engagement
  - Create a better engagement experience with clickable menu items that allow a variety of relevant information accessible on the guest portal and deliver a web app experience

- Create unique pages on a site or venue basis and engage guest users with relevant advertisements and external content
- Automatically allow repeat visitors to access your site, and engage with them on a dedicated success page
- Analytics
  - Visitor search and exportable table containing historical data on all visitors
  - Visitor reports:
    - Pages served vs. pages submitted
    - SMS sent vs. authenticated
    - Languages used
    - New and repeat users
    - Network usage

## **CMX Connect with Presence Analytics**

### **Connect**

Location-based experience: The CMX Connect dashboard provides an option for the IT admin, location manager, or zone manager to import infrastructure details (Wi-Fi access points and their location) and create sites. Portals can be assigned on a per-site basis (grouped using the access point radios' MAC addresses).

### **Presence Analytics**

Presence Analytics provides analytics based on the proximity of the devices to a Wi-Fi access point. A collection of Wi-Fi access points can be added together to form a site, and analytics can be defined on a per-site basis.

Presence Analytics provides the following benefits:

- Location statistics to improve customer engagement and loyalty across sites
- Insight into mobile behavior across locations enables you to enhance customers' on-site experience, make better decisions about how to engage visitors, and optimize business strategies
- Statistics on the number of first-time vs. repeat visitors and number of devices passing by vs. devices spending time at the site

Presence Analytics reports the following:

- Passerby, visitors, and connected devices over time for a given time range
- Distribution by connected state: Passersby vs. visitors, probing vs. connected visitors
- Dwell time distribution for a given time range
- Device mix with different dwell times at any given time within a specified time period
- Repeat visitors (at any given time or aggregate) by frequency of the visit within a specified time period

Presence Analytics supports API programmability and flexibility as follows:

- Ability to ignore MAC addresses, wireless networks (SSIDs), or devices with certain dwell times or repeat behavior
- Ability to export analytics in current shape or for custom analytics using external pull APIs

## Cisco CMX Cloud Beacon Center

CMX Cloud Beacon Center works with Cisco Beacon Points to create virtual beacons. Unlike physical Bluetooth low energy (BLE) beacons, virtual BLE beacons do not need a battery to operate. Virtual beacons can be created on demand simply by dropping a pin on the map. As smartphones and devices approach the virtual beacon, the virtual beacon SDK notifies the application and triggers a proximity message and/or action.

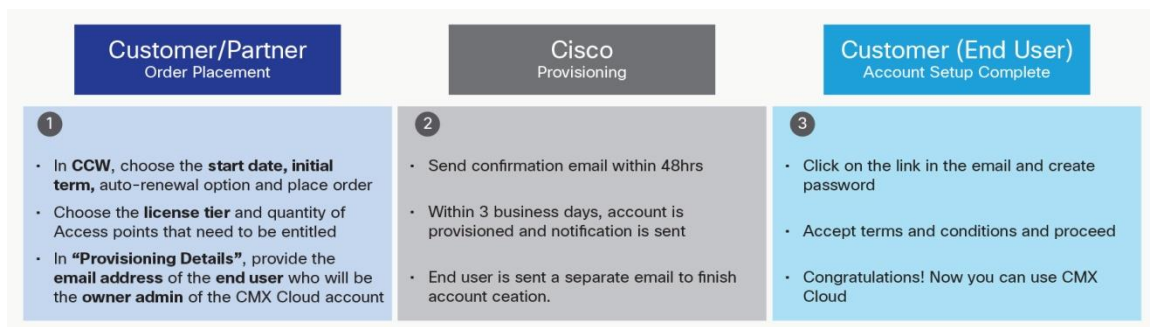
- Typical experience for a mobile client, accurate within 10 feet (3 m), with latency less than 5 seconds
- Wayfinding or navigation
- Proximity messaging
- Zone-based metrics with peak hourly visits and minimum and maximum visits
- Machine learning across iOS and Android device types
- Enterprise-grade management of beacon points

## Licensing Structure and Orderability

CMX Cloud license tiers in the price list are metered per access point per month and are available as a 12-, 36-, or 60-month prepaid initial term, with the option of automatic annual renewals. An inherent multiyear discount is built in based on the initial term length. The SKUs needed to place the order are listed in Table 2. CMX Cloud Beacon Center licenses are metered per beacon point per month. A one-time purchase of Cisco Beacon Point hardware, AIR-VBLE1-K9, is required to match the quantity of CMX Cloud Beacon Center licenses.

**Table 2.** Ordering Information

SKU	Description
AIR-CMX-CLOUD	Top-level SKU for CMX Cloud
AIR-CMX-SVC-CX	CMX Cloud Connect only
AIR-CMX-SVC-CPAX	CMX Cloud Connect with Presence Analytics
AIR-CMX-SVC-VBLE	CMX Cloud Beacon Center



Recommended flow for CMX Cloud service ordering is as follows:

1. Establish the email of the end user who will be the default owner of the CMX Cloud account. This user will own and operate the account. If you have an existing free trial account email, use this email and it will convert that account from trial to paid without loss of any data or disruption to the deployment.
2. Determine the license tier, the start date and initial term of the license, and the quantity of licenses in terms of the number of access points that need to be entitled.

3. Search for AIR-CMX-CLOUD in the ordering tool and follow the instructions to complete the order. Note that the existing subscription can be changed to add quantity or to change the service level or term at any time. This allows you to avoid multiple orders and complexity.
4. Please fill out the “Provisioning Details” section carefully. The email provided here is the email account the activation link is sent to. This user will be the owner and administrator for the CMX Cloud account. Note that one email address can be associated with only one subscription. To avoid duplicate orders, change the existing subscription.
5. Please file a support case if provisioning information needs to be corrected at any time.

CMX Cloud uses the SaaS billing process. We recommend that partners and distributors review the [training](#).

Following are the next steps to complete the provisioning workflow:

1. Cisco will provision the service within three business days and send a “provision complete” confirmation email to the end customer.
2. To complete the account creation, a separate email will be sent to the end user provided in the “Provisioning Details” section of the order.
3. The end customer will open the email, accept the terms and conditions, and create a password for the CMX Cloud account. This completes the CMX Cloud account setup. As mentioned above, if the email is an existing trial account, it will be seamlessly converted to the paid account.

To access CMX Cloud, go to <http://cmxcloud.cisco.com> and use the above email and password to start using CMX.

## For More Information

- To learn more about the service description for CMX Cloud, visit [http://www.cisco.com/web/about/doing\\_business/legal/service\\_descriptions/docs/connected-mobile-experiences-cloud.pdf](http://www.cisco.com/web/about/doing_business/legal/service_descriptions/docs/connected-mobile-experiences-cloud.pdf).
- To learn how to use and deploy CMX Cloud, visit <https://support.cmxcloud.com/hc/en-us/articles/217123567-Cisco-CMX-Cloud-Deployment-Guide>.
- To learn more about the Cisco Virtual BLE Beacon Solution, visit <http://www.cisco.com/c/en/us/solutions/enterprise-networks/virtual-ble-beacon.html>.
- For more information about Cisco Connected Mobile Experiences, visit <http://www.cisco.com/go/cmx>.



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