



Guidelines for Managing Maps in Cisco CMX

We recommend that you use the following guidelines to effectively manage the maps on Cisco CMX. These guidelines are based on frequently asked questions about map import/update scenarios and will help avoid typical mistakes while importing/updating maps on Cisco CMX.

- Map uploads into Cisco CMX are best performed outside of business hours (or when Cisco CMX system activity is low), after 9PM is recommended. There are no hard and fast rules though. Maps import involves significant amount of processing to update the Database and processing floor images based on the size of floor image.
- Decide on an update window of 30 minutes for uploading maps to Cisco CMX. For a typical floor image, Cisco CMX can take up to 15 seconds per image to complete processing and show the floor image on Cisco CMX GUI. A typical map of a Campus with 100 floors may take up to 30 minutes to complete image processing background jobs. If the image processing in progress, The GUI will show an information message saying 'This floor image is currently being processed. Please refresh the page

after a few moments to view the image'.

The screenshot shows the Cisco CMX GUI interface. At the top, there is a blue header with the Cisco logo and version 'CMX 10.3.0-3'. Navigation tabs include 'DETECT & LOCATE', 'ANALYTICS', and 'MANAGE'. A left sidebar contains a menu with 'Mall of America' (expanded), 'Garage B2', 'Level 1' (selected), 'Level 2', 'Level 3', 'Level 4', and 'Street Level'. The main content area is titled 'Activity Map' and shows a breadcrumb path: '< Back to World Map Mall of America / Mall of America / Level 1'. A large blue message box states: 'This floor image is currently being processed. Please wait.' There are zoom controls (+ and -) on the left side of the map area.

- Create and update the zones using Cisco CMX GUI map editor. All other map edit operations are to be performed using Prime Infrastructure.
- An AP can only be associated with a single floor map in Prime. If you are planning to move APs from one floor to another, you want to disassociate them from existing floor-map in Prime so that they can be associated to new floor-map in Prime. (Please refer to 'Typical map import issues: Case 2' for troubleshooting steps.)
- To expand a map to cover a larger area, create a new map in Prime and move APs to the new map from older map. You also want to make sure that the older floor is deleted from Prime and Cisco CMX before the new floor map is imported on Cisco CMX.
- Avoid doing bulk map import/exports. Export individual maps changes from Prime Infrastructure and import into Cisco CMX. For large set of maps, Its not recommended to use 'Import from Cisco Prime' option (shown in the picture) as this will sync all maps from Prime to Cisco CMX that may put significant

amount of load on the system.

SETTINGS

Tracking

Filtering

Location Setup

Mail Server

▼ Controllers and Maps Setup

Import

Advanced

Upgrade

High Availability

Import from Cisco Prime

Please provide Cisco Prime credentials below:

Username

Enter Username

IP Address ▼

Enter IP Address

Save Cisco Prime Credentials

Delete & replace existing maps & analytics data

Delete & replace existing zones

*Please enter the correct SNMP community string after import.

▶ Controllers

Last Synced: *N/A*

▶ Maps

Last Synced: *N/A*

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Create a Map Using Cisco Prime Infrastructure

To create a map using Cisco Prime Infrastructure, see the "[Using Wireless Maps](#)" chapter in the Cisco Prime Infrastructure 3.1 User Guide.

Delete a Map Using Cisco Prime Infrastructure

Procedure

- Step 1** Log in to Cisco Prime Infrastructure.
- Step 2** Click the **Open/Close** navigation icon (above the Home icon on top left hand side).
- Step 3** Choose **Maps > Site Maps**.
- Step 4** From the **Select a command** drop-down list, choose **Delete**.
- Step 5** Select the checkbox of the individual map you wish to delete and click **Go** (next to the **Select a command** drop-down).

Prime Infrastructure

Home | **Maps / Wireless Maps / Site Maps** ★

Maps Tree View ▾

- ▾ Root Area
 - System Campus
 - Unassigned
 - Nortech Campus
 - pwalawal-campus

Site Maps [Edit View](#)

Show: Type Status Incomplete ?

<input type="checkbox"/> Name	Type ▲	Incomplete	Total APs
System Campus	Campus/Site		87
Unassigned	Campus/Site		0
<input type="checkbox"/> Nortech Campus	Campus/Site		13
<input type="checkbox"/> pwalawal-campus	Campus/Site		4
<input type="checkbox"/> Nortech Campus > Nortech Building	Building		13
<input type="checkbox"/> System Campus > Bldg 18	Building		7
<input type="checkbox"/> System Campus > Mall Of Emirates	Building		4
<input type="checkbox"/> System Campus > Nortech	Building		4
<input type="checkbox"/> System Campus > SJC-24	Building		6
<input type="checkbox"/> System Campus > bldg14-dharani	Building		3
<input type="checkbox"/> System Campus > dwg_test_building	Building		1
<input type="checkbox"/> System Campus > khushbo18	Building		47
<input type="checkbox"/> System Campus > khushboo	Building		0
<input type="checkbox"/> System Campus > pwalawal	Building		15
<input type="checkbox"/> System Campus > test2	Building		0
<input type="checkbox"/> pwalawal-campus > pwalawal-building-1	Building		4
<input type="checkbox"/> Nortech Campus > Nortech Building > Halo Mode	Floor Area		4
<input type="checkbox"/> Nortech Campus > Nortech Building > Mixed Mode	Floor Area		9
<input checked="" type="checkbox"/> System Campus > Bldg 18 > 2nd-Floor	Floor Area		7

Move an Access Point Between Maps Using Cisco Prime Infrastructure

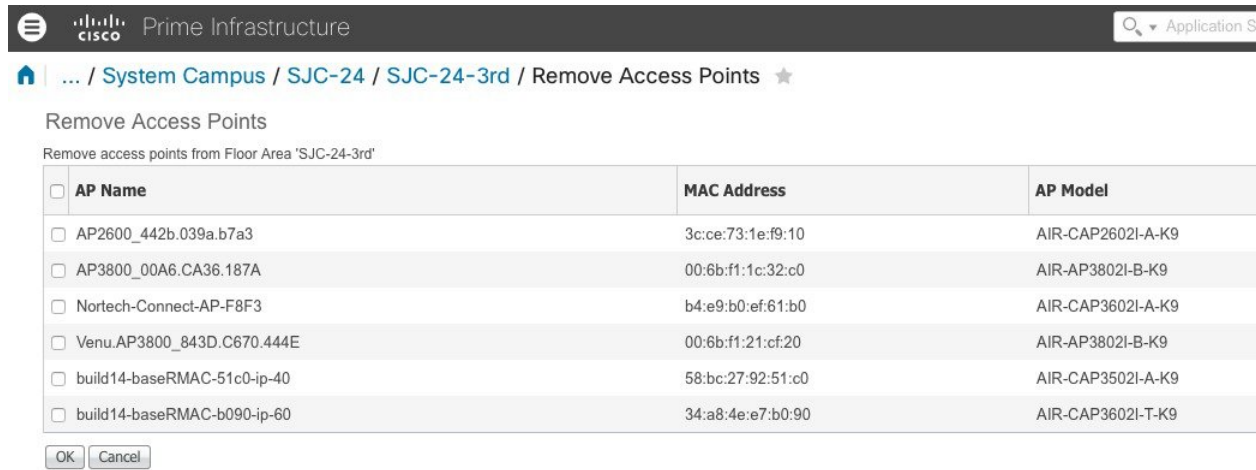
Procedure

- Step 1** Log in to Cisco Prime Infrastructure.
- Step 2** Click on Open/Close navigation icon (above the Home icon on top left hand side).
- Step 3** Choose **Maps > Site Maps**.
- Step 4** From the **Select a command** drop-down list, choose **Floor Area**.
- Step 5** Click **Go**.
- Step 6** Click on the floor Area from which you want to release the AP. The **Floor View** window is displayed.
- Step 7** From the **Select a command** drop-down list, choose **Remove Access**

The screenshot displays the Cisco Prime Infrastructure Floor View interface. At the top, there is a navigation bar with 'Application Search' and 'root - ROOT-DOMAIN'. Below this, the breadcrumb path is 'em Campus / SJC-24 / SJC-24-3rd'. The main area is titled 'Floor View' and shows a floor plan with a grid. A legend at the top indicates signal strength from -35 dBm (red) to -90 dBm (blue). The floor plan shows several rooms and access points (APs) represented by small icons. A 'Remove Access Points' button and a 'Go' button are visible. The bottom right corner of the floor plan shows the coordinates '301.49 ft, 4'.

- Step 8** Select the AP to be deleted and click **OK**.

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Remove Access Points

Remove access points from Floor Area 'SJC-24-3rd'

<input type="checkbox"/>	AP Name	MAC Address	AP Model
<input type="checkbox"/>	AP2600_442b.039a.b7a3	3c:ce:73:1e:f9:10	AIR-CAP2602I-A-K9
<input type="checkbox"/>	AP3800_00A6.CA36.187A	00:6b:f1:1c:32:c0	AIR-AP3802I-B-K9
<input type="checkbox"/>	Nortech-Connect-AP-F8F3	b4:e9:b0:ef:61:b0	AIR-CAP3602I-A-K9
<input type="checkbox"/>	Venu.AP3800_843D.C670.444E	00:6b:f1:21:cf:20	AIR-AP3802I-B-K9
<input type="checkbox"/>	build14-baseRMAC-51c0-ip-40	58:bc:27:92:51:c0	AIR-CAP3502I-A-K9
<input type="checkbox"/>	build14-baseRMAC-b090-ip-60	34:a8:4e:e7:b0:90	AIR-CAP3602I-T-K9

Step 9 Click **Position AP** icon (before the delete icon) to place APs on the map.

Prime Infrastructure

... / Site Maps / System Campus / SJC-24 / SJC-24-3rd

Maps Tree View >

Floor Settings >

- Access Points >
- AP Heatmaps >
- Clients >
- 802.11 Tags >
- Rogue APs >
- Adhoc Rogues >
- Rogue Clients >
- Coverage Areas >
- Location Regions >
- Obstacles >
- Rails >
- Markers >
- Chokepoints >
- Wifi TDOA Receivers >
- GPS Markers >
- Services >
- Interferers >
- wIPS Attackers >

Show MSE data: Currently Detected

Save Settings

Load Status

Load

Loading APs
Loading Clients
Loading Tags
Periodic Refresh Done.
Done loading Clients
Done loading Tags

MSE Assignment >

Floor View

Showing: AP Status Protocol: 802.11a/n/ac

Data may be delayed up to 15 minutes or more depending on b

-35 dBm -90 dBm 5

0 ft 50 ft

50 ft

100 ft

150 ft

200 ft

Step 10 From the **AP Name** drop-down list, choose the AP and place it to the correct location on the map.

Home / ... / System Campus / SJC-24 / SJC-24-3rd / Position APs

Click on an AP icon to change its position, height and/or antenna information. Position of AP can be changed by dragging the icon with mouse.

Position APs

--AP Name--	--MAC Address--
AP2600_442b.039a.b7a3	3c:ce:73:1e:f9:10
AP3800_00A6.CA36.187A	00:6b:f1:1c:32:c0
build14-baseRMAC-51c0-ip-40	58:bc:27:92:51:c0
build14-baseRMAC-b090-ip-60	34:a8:4e:e7:b0:90
Nortech-Connect-AP-F8F3	b4:e9:b0:ef:61:b0
Venu.AP3800_843D.C670.444E	00:6b:f1:21:cf:20

Use Ctrl + Mouse Click or Mouse Drag on APs for multiple. Ctrl-A for all currently visible APs

Export a Map Using Cisco Prime Infrastructure

Procedure

- Step 1** Log in to Cisco Prime Infrastructure.
- Step 2** Click on Open/Close navigation icon (above the Home icon on top left hand side).
- Step 3** Choose **Maps > Site Maps**.
- Step 4** From the **Select a command** drop-down list, choose **Export Maps**.
- Step 5** Check the checkbox of the individual map you wish to export .

Prime Infrastructure

Application Search

Maps / Wireless Maps / Site Maps

Maps Tree View

- Root Area
 - System Campus
 - Unassigned
 - Nortech Campus
 - pwalawal-campus

Site Maps [Edit View](#)

Show: Type Status Incomplete [?](#)

<input type="checkbox"/>	Name	Type ^	Incomplete	Total APs	a/n/ac Radios	b/g/n Radios
<input type="checkbox"/>	System Campus	Campus/Site		92	93	91
<input type="checkbox"/>	Unassigned	Campus/Site		0	0	0
<input type="checkbox"/>	Nortech Campus	Campus/Site		13	13	13
<input type="checkbox"/>	pwalawal-campus	Campus/Site		4	4	4
<input type="checkbox"/>	Nortech Campus > Nortech Building	Building		13	13	13
<input type="checkbox"/>	System Campus > Bldg 18	Building		7	7	7
<input type="checkbox"/>	System Campus > Mall Of Emirates	Building		10	11	9
<input type="checkbox"/>	System Campus > Nortech	Building		4	4	4
<input type="checkbox"/>	System Campus > SJC-24	Building		6	6	6
<input type="checkbox"/>	System Campus > bldg14-dharani	Building		3	3	3
<input type="checkbox"/>	System Campus > dwg_test_building	Building		0	0	0
<input type="checkbox"/>	System Campus > khushbo18	Building		47	47	47
<input type="checkbox"/>	System Campus > khushboo	Building		0	0	0
<input type="checkbox"/>	System Campus > pwalawal	Building		15	15	15
<input type="checkbox"/>	System Campus > test2	Building		0	0	0
<input type="checkbox"/>	pwalawal-campus > pwalawal-building-1	Building		4	4	4
<input checked="" type="checkbox"/>	Nortech Campus > Nortech Building > Halo Mode	Floor Area		4	4	4

Step 6 Click **Go**.

Import New and Modified Maps to Cisco CMX

Navigate to Cisco CMX UI Advanced import option below (select System - Settings - Controllers and Maps Setup - Advanced), leave both checkboxes unchecked shown below. Browse to the maps file to be imported, select **Upload**.

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Maps

Please select maps to add or modify:

Delete & replace existing maps & analytics data

Delete & replace existing zones

Controllers

Please add controllers by providing the information below:

Controller Type

IP Address

Controller Version [Optional]

Controller SNMP Version

Controller SNMP Write Community

