

Managing the Location Hierarchy

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Renaming a Customer

To rename a customer, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, click **Location Hierarchy**.
- Step 2 In the Location Hierarchy window, click More Actions at the far right of the customer name.
- Step 3 Click Rename <root name>.
- **Step 4** In the **Rename root** window that appears, enter the customer name you want.
- Step 5 Click Rename.

Adding a Wireless Network

There are multiple methods to connect your wireless network with Cisco Spaces based on your wireless network deployment.

Cisco Spaces supports Cisco AireOS Wireless Controller (Cisco Wireless Controller), Cisco Catalyst 9800 Series Wireless Controller and Cisco Meraki. You can add multiple wireless networks to the loaction hierarchy using the **Connect Wireless Networks** option.

In the **Connect your wireless network** window, click Go to Setup to go to **Setup** > **Wireless Networks** to add your wireless network.

The following wireless network options are available:

- AireOS Controller/Catalyst 9800 Wireless Controller: Choose this for Cisco Aironet Access Points with Cisco Wireless Controllers or Cisco CMX On-Prem Tethering. This includes:
 - Via Spaces Connector: Need to install Cisco Spaces: Connector on a VM in order to connect your controller to Cisco Spaces.

- Connect Cisco Wireless Controllers directly: Wireless controllers require direct internet connectivity. Cisco AireOS Wireless Controller release 8.3 or later and Cisco Catalyst 9800 Series Wireless Controller release 16.10 or later is required.
- Connect via CMX Tethering: Cisco CMX Release 10.6 or later versions are supported while connecting via CMX Tethering.
- Cisco Meraki: Choose this for Cisco Meraki networks with Cisco Meraki Access Points. This includes Connect via API key method.



Note

For more information on adding a Cisco CMX node, Cisco Meraki Organization, or Cisco Wireless Controller access points using the Add a Wireless Network option, see Defining the Location Hierarchy.

Adding Metadata for a Location

You can group the locations using metadata. You can use this metadata when defining the proximity rules. You can also use this metadata also for defining the brands for the **Behavior Metrics** app.

To add a metadata for a location, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, choose **Location Hierarchy**.
- **Step 2** In the **Location Hierarchy** window, click the **More Actions** icon for the location for which you want to add metadata.
- Step 3 Click Add/Edit Metadata.
- **Step 4** In the Add Metadata for <location>window that appears, perform the following steps:
 - a) In the Key field, enter a metadata key.
 - b) In the value field, enter a value for the key.
 - c) Click Save.

What to do next



Similarly, add the metadata for other locations that must have this metadata.

Updating Metadata for a Location

To update the metadata for a location, perform the following steps:

- **Step 1** In the **Location Hierarchy** window, click **More Actions** at the far right of the location for which you want to update the location metadata.
- Step 2 Click Add/Edit Metadata.
- **Step 3** In the Add Metadat for <location> window that appears, click the metadata that you want to update.

Step 4 Make necessary changes, and click **Update**.

What to do next

Note

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

Defining or Changing the Time Zone for Locations

You can define the time zone for various locations in the location hierarchy. To define the time zone for a location, perform the following steps:

Step 1 In the Cisco Spaces dashboard, choose Location Hierarchy.
Step 2 In the Location Hierarchy window, click the location for which you want to define the time zone.
Step 3 On the Location Info tab, click Edit for Location Data. The Location Information pop-up window appears.
Step 4 From the Select Timezone drop-down list, choose the time zone that you want to configure for this location.
Step 5 Click Update. The time zero is defined for the location

The time zone is defined for the location.

What to do next



The notifications are sent for the locations based on the configured time zones.

Adding the Information of a Location

You can specify the information such as address of each separately location in the location hierarchy.

To add the location information for a location, perform the following steps:

- **Step 1** Click the three-line menu icon at the top-left of the Cisco Spaces dashboard.
- Step 2 Choose Location Hierarchy.
- **Step 3** In the Location Hierarchy window, click the location for which you want to add the information.
- **Step 4** On the Location Info tab, click Edit for Location Data.
- **Step 5** In the Location Information window that appears, enter the information for the particular location.

You can add the following information about the location:

- Brand
- Country
- State
- City
- Zip /Postal Code
- Address
- Time Zone
- Area in Square Feet or Square Meter
- Occupancy Limit (Max Capacity)

Step 6 Click Update.

The location information added will now gets listed in the Location Data area on the Location Info tab.

Note If you are not specifying the location information for a location, that location will inherit the information of its parent location. Location information inherited from the parent location will appear in Orange. However, we recommend you to update the location information for each location.

Searching for a Location

You can search for a location in the location hierarchy using its name. To search for a location in the location hierarchy, perform the following steps:

 Step 1 In the Cisco Spaces dashboard, choose Location Hierarchy. The Location Hierarchy window appears.
 Step 2 In the Search field, enter the name of the location that you want to search.

The location gets highlighted in the location hierarchy.

Searching for an Access Point

You can search for an access point using its name or MAC address.

To search for an access point in the location hierarchy, perform the following steps:

Step 1 In the Cisco Spaces dashboard, choose **Location Hierarchy**.

The Location Hierarchy window appears.

Step 2 In the Search field, enter the name or MAC address of the access point that you want to search.

The access point gets highlighted.

Managing the Maps for a Location

The maps are displayed by default based on the map configuration in the wireless network.

To view the map for a location, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2 Step 3	In the location hierarchy, click the location for which you want to view the map. Click the Maps tab.
	The map appears in the Maps tab.

Managing the Access Points

You can add or remove access points to a zone.

Adding an Access Point to a Zone

To add access points to a zone, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click the zone to which you want to add the access point.
Step 3	Click Modify Access Points
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- **Step 4** Select the check box for the access point that you want to add.
- Step 5 Click Add.

The access point gets added to the zone.

What to do next



If there are no access points under that zone, the button name will beAdd Access Points.



Note For Cisco Unified Wireless Network, to import the access points, the Cisco CMX must be publicly accessible. For a default Cisco Unified Wireless Network installation, the ports 80 and 443 must be open. For more information, see Bandwidth Requirements to Deploy Cisco Spaces.

Removing an Access Point from a Zone

To remove an access point from a zone, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click the zone from which you want to delete the access point.
Step 3	Click Modify Access Points .
Step 4	Uncheck the check box for the access point that you want to delete.
Step 5	Click Add .
	The access point gets deleted from the zone.

Viewing the Access Points for a Location

You can view the access points under each location. Ideally, the access points belong to a floor or zone.

To view the access points for a location, perform the following steps:

Step 1 In the Cisco Spaces dashboard, choose **Location Hierarchy**.

The Location Hierarchy window appears with the location hierarchy.

- **Step 2** In the location hierarchy, click the location for which you want to view the access points.
- **Step 3** Click the **Access Points** tab.

The access points associated with that location are displayed.

What to do next



The Access Points link for a location is enabled only if at least one access point exists for that location.

Managing the Groups

Cisco Spaces enables you to rename a group name, edit a group, and delete an independent group.

Creating Groups

Grouping enables you to create proximity rules specific to a set of locations. You can create groups at the higher levels in the location hierarchy.

For Cisco Unified Wireless Network, you can group the CMX nodes or campuses in the location hierarchy. For example, you can group the Campus1 and Campus 2 under one group and Campus 3 and Campus 4 under another group. You can also create sub groups under these groups. For Meraki, you can group the Cisco Meraki Organizations or networks in the location hierarchy. For example, you can group the Network 1 and Network 2 under one group and Network 3 and Network 4 under another group. You can also create sub groups under these groups.

You can also create a group including the wireless network nodes of both Cisco Unified Wireless Network and Meraki. However, you cannot group the lower level locations of Cisco Unified Wireless Network and Meraki. For example, you cannot group a campus and a Meraki network.

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

- **Step 1** In the Cisco Spaces dashboard, click **Location Hierarchy**.
- **Step 2** In the **Location Hierarchy** window, click **More Actions** at the far right of the location under which you want to add the group.
- Step 3 ClickCreate 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. When you add a group under the customer name (root level), the first level locations (For example, CMX node, Cisco Meraki Organization) are available for selection. When you add a group under a CMX node, only the campuses under that CMX node are available for selection.
 - c) Click Add.

What to do next



Tip If you want to have a parent group without any location, and sub groups with location, then you first create the parent group with all the required locations that must become the part of its sub groups. Then you create a sub group under the parent group. The locations added to the parent group are available for selection. Select the locations that you want to add under the sub group. Similarly, you can create more sub groups under the parent group.



Note You can add more locations to a group at any time.

Renaming a Group

To rename a group, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the group that you want to rename.
Step 3	Click Rename ''group name'' .
Step 4	In the Rename group window that appears, enter the new name for the group.
Step 5	Click Rename .

Editing a Group

You can add or remove the locations from a group. To edit a group, perform the following steps:

Step 1In the Cisco Spaces dashboard, choose Location Hierarchy.
The Location Hierarchy window appears with the location hierarchy.Step 2In the location hierarchy, click More Actions for the group that you want to edit.Step 3Click Edit group.Step 4In the Edit Group window that appears, check the check box for the locations that you want to be part of the group.Step 5Click Update.

Deleting a Group

To delete a group, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions at the far-right of the group that you want to delete.
Step 3	Click Delete group .

What to do next



Note To delete a group, first you have to delete the locations and sub groups under that group, if any.



You cannot delete a group that is associated with the proximity rules.

Managing the Zones

You can rename and delete the zones created for Cisco Unified Wireless Network or Meraki.

Renaming a Zone

To rename a zone, perform the following steps

In the Cisco Spaces dashboard, choose Location Hierarchy.
The Location Hierarchy window appears.
In the location hierarchy, click More Actions for the zone that you want to rename.
Click Rename "zone name".
In the Rename-zone window that appears, enter the new name for the zone.
Click Rename.

Deleting a Zone

To delete a zone, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears.
Step 2	In the location hierarchy, click More Actions for the zone that you want to delete.
Step 3	Click Delete zone .

- When you delete a zone location from the **Map Service** UI, the same is deleted from **Location Hierarchy** as well.
 - You cannot delete any zone that is associated with the proximity rules.

Managing the Location Hierarchy for Meraki

You can rename, and delete the locations under Meraki.

Adding Floors to a Network

To add a floor to a network, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
Step 2	In the Location Hierarchy window, click More Actions at the far right of the network under which you want to create the floor.
Step 3	In the Add Floor window that appears, select the floor that you want to add under the network.
Step 4	Click Add.
	The floor gets added to the network.

Renaming a Cisco Meraki Organization

To rename a Cisco Meraki Organization, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the organization that you want to rename.
Step 3	Click Rename "Organization Name".
Step 4	In the Rename-Meraki window that appears, enter the new name for the Cisco Meraki Organization.
Step 5	Click Rename .

Deleting a Cisco Meraki Organization

To delete a Cisco Meraki Organization, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the Cisco Meraki Organization that you want to delete.

Step 3 Click Delete Organization.

What to do next



Note To delete an organization, first you have to delete the locations and groups under that organization, if any.

• You cannot delete any organization that is associated with the proximity rules.

Renaming a Network

To rename a network, perform the following steps:

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Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the network that you want to rename.
Step 3	Click Rename ''network name'' .
Step 4	In the Rename-location window that appears, enter the new name for the location.
Step 5	Click Rename .

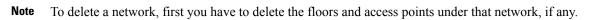
Deleting a Network

To delete a network, perform the following steps:

Step 1In the Cisco Spaces dashboard, choose Location Hierarchy.The Location Hierarchy window appears with the location hierarchy.

- **Step 2** In the location hierarchy, click **More Actions** for the network that you want to delete.
- Step 3 Click Delete network.

What to do next



• You cannot delete any network that is associated with a proximity rule.

Renaming a Floor

To rename a floor, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the floor that you want to rename.
Step 3	Click Rename "floor name".
Step 4	In the Rename-floor window that appears, enter the new name for the floor.
Step 5	Click Rename.

Deleting a Floor

To delete a floor, perform the following steps:

- Step 1In the Cisco Spaces dashboard, choose Location Hierarchy.
The Location Hierarchy window appears with the location hierarchy.Step 2In the location hierarchy, click More Actions for the floor that you want to delete.
- Step 3 Click Delete floor.

What to do next



If the floor that you delete has any zone under it, that zone is moved under the network after the deletion of the floor.



You cannot delete any floor that is associated with a proximity rule.

Managing the Location Hierarchy for Cisco Wireless Controller with Cisco CMX

For Cisco Wireless Controller with Cisco CMX, you cannot add campuses, building, and other child locations using **More Actions** in the location hierarchy. You must update the locations in **Setup** > **Map Service**. However, you can rename, group, or delete the locations from the location hierarchy.

When you delete a location from the location hierarchy, that location gets removed from **Map Service** also. When you delete a location from **Map Service**, only the APs will be removed from the location hierarchy leaving the hierarchy structure as it is.

Renaming a CMX Node

To rename a CMX node, perform the following steps:

 Step 1 In the Cisco Spaces dashboard, choose Location Hierarchy. The Location Hierarchy window appears with the location hierarchy.
 Step 2 In the location hierarchy, click More Actions for the CMX node that you want to rename.
 Step 3 Click Rename <Cisco CMX Node>.

- **Step 4** In the window that appears, enter the new name for the CMX node.
- Step 5 Click Rename.

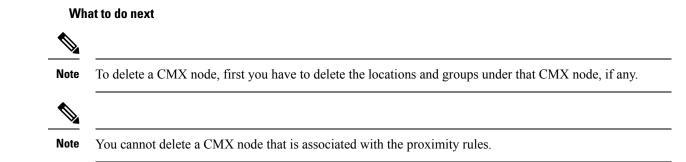
What to do next

Note The renaming is not reflected in the Cisco CMX.

Deleting a CMX Node

To delete a CMX node from the location hierarchy, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the CMX node that you want to delete from the location hierarchy.
Step 3	Click the option to delete the CMX node.



Renaming a Campus

To rename a campus, perform the following steps

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the campus that you want to rename.
Step 3	Click Rename <campus name="">.</campus>
Step 4	In the Rename-campus window that appears, enter the new name for the campus.
Step 5	Click Rename.

Deleting a Campus

To delete a campus, perform the following steps:

Step 1 In the Cisco Spaces dashboard, choose **Location Hierarchy**.

- The Location Hierarchy window appears with the location hierarchy.
- Step 2 In the location hierarchy, click More Actions for the campus that you want to delete.
- Step 3 Click Delecte campus.

What to do next

Note To delete a campus, first you have to delete the locations under that campus, if any.

Note You cannot delete a campus that is associated with proximity rules.

Renaming a Building

To rename a building, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy . The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click Location Hierarchy for the building that you want to rename.
Step 3	Click Rename <building name=""></building> .
Step 4	In the Rename -network window that appears, enter the new name for the building.
Step 5	Click Rename .

Deleting a Building

To delete a building, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the building that you want to delete.
Step 3	Click Delete building .

What to do next



To delete a building, first you have to delete the floor or zones under that building, if any.



You cannot delete a building that is associated with a proximity rule.

Renaming a Floor

To rename a floor, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the floor that you want to rename.
Step 3	Click Rename "floor name".
Step 4	In the Rename-floor window that appears, enter the new name for the floor.
Step 5	Click Rename .

Deleting a Floor

To delete a floor, perform the following steps:

Step 1	In the Cisco Spaces dashboard, choose Location Hierarchy.
	The Location Hierarchy window appears with the location hierarchy.
Step 2	In the location hierarchy, click More Actions for the floor that you want to delete.
Step 3	Click Delete floor.

What to do next



Note If the floor that you delete has any zone under it, that zone is moved under the building after the deletion of the floor.

Managing the Location Hierarchy for Cisco Wireless Controller or Cisco Catalyst 9800 Series Controller(with WLC Direct Connect or Cisco Spaces: Connector)

Adding Networks Automatically for a Primary Controller

If you have skipped to select the networks when importing the Cisco Wireless Controller, you can add the networks automatically at any time later.

To add network automatically for a Cisco Wireless Controller or Cisco Catalyst 9800 Series Wireless Controller, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, choose **Location Hierarchy**.
- **Step 2** In the **Location Hierarchy** window, click the **More Actions** icon for the wireless controller for which you want to add networks.
- Step 3 Click Edit.
- **Step 4** In the **Edit Controller** window that appears, select the **Auto Network Creation** check box.
- Step 5 Click Done.

The APs with similar prefix are grouped, and networks are formed automatically. The APs that are not added to the auto-created networks are listed under the network name "unconfigured".

What to do next



Note Only the APs added to the wireless controller after configuring the auto network are grouped. Existing APs under the "unconfigured" network name will not be grouped automatically based on this configuration. However, if any new AP gets added to the wireless controller with the same prefix of an existing AP in the "unconfigured" network, then the existing AP gets grouped with the new AP added.

Manually Adding Networks for a Primary Controller

To manually add network for a Cisco Wireless Controller or Cisco Catalyst 9800 Series Wireless Controller, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, choose **Location Hierarchy**.
- **Step 2** In the **Location Hierarchy** window, click the **More Actions** icon for the cisco wireless controller for which you want to define the network.
- Step 3 Click Add Network.

The Add Networkwindow that appears.

- **Step 4** In the **Network Name** field that appears, enter a name for the network.
- Step 5 In the Access Point Prefix field that appears, enter the prefix the APs must have to group under the network, and click Fetch.

The network get listed in the location hierarchy.

Note Multiple prefixes are supported for a wireless network. However, when you are adding a network, you can add the APs of only one prefix. If you want to add access points with another prefix to this network, you must edit the network after adding it. For more information on adding APs of multiple prefixes, see Adding APs of Multiple Prefixes to a Network, on page 17.

Step 6 Click Done.

The network will be created with the APs having the prefix mentioned.

Adding APs of Multiple Prefixes to a Network

You can add APs of multiple prefixes to a network. For example, if you have APs with prefixes, AB, BC, and CA, and if you want to group the APs with AB and BC under one wireless network, you can do so.

To add APs of multiple prefixes to a network of a Cisco Wireless Controller or Cisco Catalyst 9800 Series Wireless Controller, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, click the three-line menu icon at the top-left of the window.
- Step 2 Choose Location Hierarchy.
- Step 3 In the Location Hierarchy window, click the network to which you want to add APs of multiple prefixes.
- Step 4 In the Location Info tab, click Edit for Access Points Prefix Used.
- **Step 5** In the **Edit Prefix** window that appears, in the **Prefix** field, enter the prefix.

The APs with the prefix entered get listed.

Step 6 Click Add Prefix.

Now the newly added prefix gets listed under **Added Prefixes** in the right pane of the window. **Add Prefix** will be enabled only if there are APs with the Prefix entered.

Step 7 Click Save.

After adding the prefix, the APs under the **unconfigured** network with this prefix will be moved to this network.

To delete a prefix, hover over that prefix under Added Prefixes, and click the Delete icon that appears.

Note The Access Points Prefix Used option will be available in the Location Info tab only for the network locations. However, the Access Points Prefix Used option will not be available for the Unconfigured network.

Adding Additional Secondary Controller

If you have skipped to add a secondary controller when importing the Cisco Wireless Controller, you can add it any time later. Even if you have configured a secondary controller, you can add more than one secondary controllers.

To add a secondary controller for a Cisco Wireless Controller, perform the following steps:

Step 1 In the Cisco Spaces dashboard, choose **Location Hierarchy**.

- **Step 2** In the **Location Hierarchy** window, click the **More Actions** icon for the Cisco Wireless Controller for which you want to add secondary controller.
- Step 3 Click Edit.
- **Step 4** In the **Edit Controller** window that appears, click **Add More** for Additional Controllers.
- **Step 5** In the **Add additional controller** window that appears, select the Cisco Wireless Controller that you want to configure as secondary controller.

Note The Cisco Wireless Controllers similar to the primary controller (having same APs) will be top in the list.

Step 6 Click Add.

Now the newly configured Cisco Wireless Controller has become the secondary controller.

Note You can add more than one Cisco Wireless Controller as secondary controller. However, you can add only one at a time.

Deleting a Secondary Controller

To delete a secondary controller, perform the following steps:

- **Step 1** Click the three-line menu icon displayed at the top-left of the Cisco Spaces dashboard.
- **Step 2** Choose Location Hierarchy.
- **Step 3** In the location hierarchy, click the **More Actions** icon for the Primary Controller of which you want to delete the secondary Cisco Wireless Controller.
- Step 4 Click Edit.

In the **Edit Controller** window that appears, the secondary controllers added for that PrimaryController will be listed under **Additional Controllers**.

- **Step 5** Click the **Delete** icon for the secondary controller that you want to delete.
- **Step 6** In the window that appears, confirm the deletion.

Now, the secondary controller is deleted.

What to do next



Note When you delete a secondary controller, the APs that are unique for this secondary controller (APs not in the primary controller or its other secondary controllers) also will be deleted.

Renaming the Primary Controller

To rename the primary controller, perform the following steps:

- **Step 1** In the Cisco Spaces dashboard, choose **Location Hierarchy**.
- Step 2 In the location hierarchy, click the More Actions icon for the Cisco Wireless Controller that you want to rename.
- Step 3 Click Rename <cisco wireless controller>.
- **Step 4** In the **Rename WLC** window that appears, enter the name required, and click **Rename**.

Now the name of the Cisco Wireless Controller is changed to the new name specified.

Note The name change is not reflected in the Cisco Wireless Controller.