# Set Up Locations and Maps

# Locations and Maps

The Locations and Maps feature in Cisco Spaces helps to import, normalize and unify network hierarchies from various sources such as Cisco Meraki, Catalyst Center, and Cisco Prime Infrastructure into a single business orientated hierarchy. Use this feature as a platform to standardize the network hierarchy structure and provide a standardized location hierarchy view.

Apart from the traditional way of creating location hierarchy by importing/syncing from network sources, this new feature includes a new option to create a business centric hierarchy from a Microsoft Excel (.xlsx) file. The Microsoft Excel (.xlsx) file import allows to perform bulk add/update of the metadata information for multiple locations.

While Cisco Spaces creates a logical location hierarchy matching the network hierarchy, most Cisco Spaces users have one more source where the hierarchy/names differ because of the taxonomy, or because they are managed by different teams/people. With the Locations and Maps feature, you can create a business orientated hierarchy, merge/unify hierarchies from different network sources into the business hierarchy making it a clean unified hierarchy thereby helping in managing various outcomes.
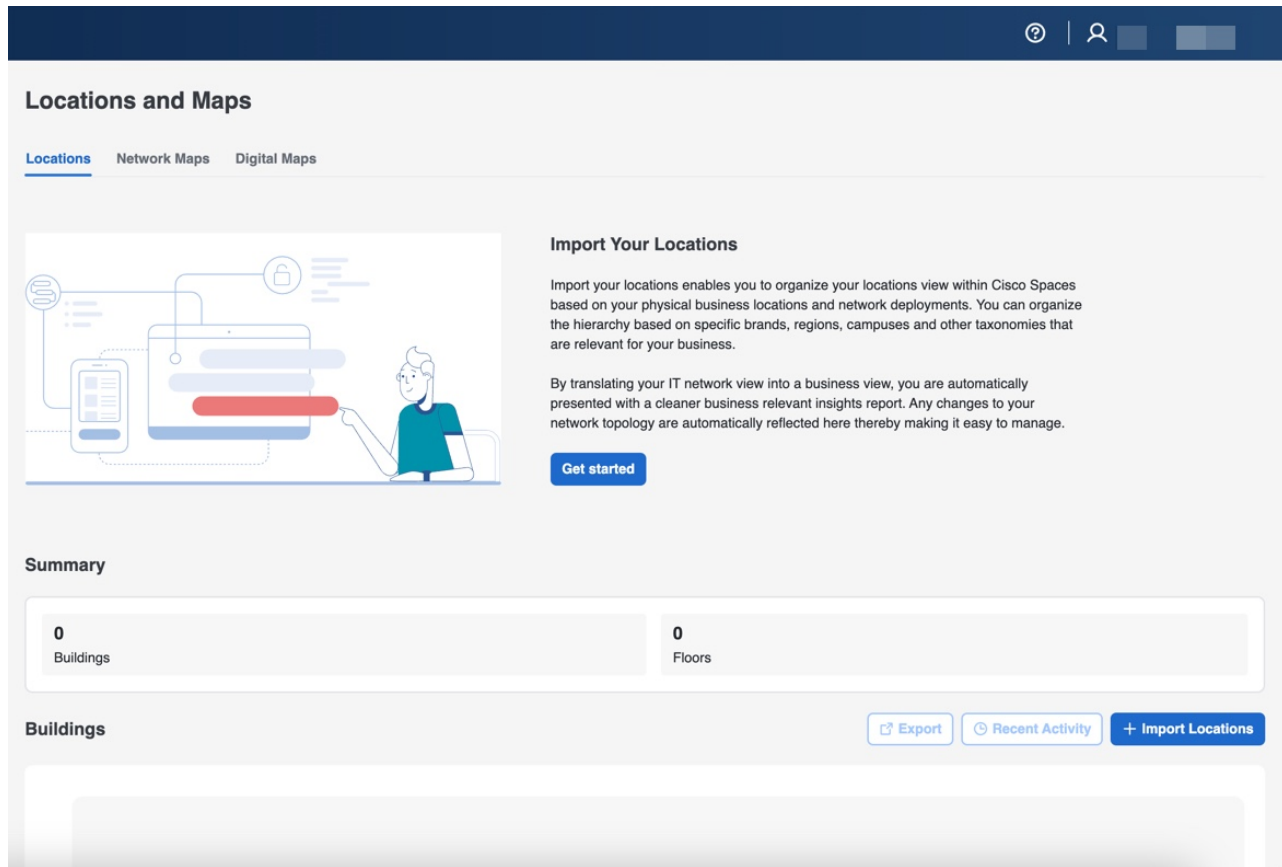
You can import your business locations and organize them within Cisco Spaces based on the physical business locations and network deployments. You can also organize the hierarchy based on specific brands, regions, campuses, and other taxonomies relevant for the business.

The Locations and Maps feature in Cisco Spaces helps to translate your IT network view into a business view and present a cleaner business relevant insights report. Any changes to your network topology are automatically reflected in Cisco Spaces making it easy to manage.

The **Locations and Maps** window has the following tabs:

- **Locations**: Use this tab to add or manage locations.

- **Network Maps**: Use this tab to add Network Maps.

- **Digital Maps**: Use this tab to add or manage Digital Maps.

**Figure 1: Locations and Maps**



## Locations Tab

The **Summary** section in the **Locations** tab displays the number of buildings and floors. The **Buildings** section in the **Locations** tab displays the following information related to the imported location:

- Name

- Path

- #of Floors

- Source

- Essential Location Info

Click **Add Locations** to import locations. For detailed information, see .

## Network Maps Tab

The **Network Maps** tab also displays the imported location information. The **Buildings** section in the **Network Maps** tab displays the following information related to the imported location:

- Name

- Path

- #of Floors

- #of APs

- Source

- Network Map Status

Use the **Add Network Map** to add network maps. For detailed information, see, Add Network Map, on page 16.

### Digital Maps Tab

**Digital Maps** is an upgraded version of Rich Maps. Two variations of Digital Maps available are:

- **STANDARD** Maps: Shows 2D flat maps without support for meeting rooms or integration with **Cisco Smart Workspaces**.

- **PRO** Maps: Shows 3D visualizations and include all the available features of **Cisco Smart Workspaces**, similar to Rich Maps.

The **Digital Maps** tab also displays the imported location information.

The **Buildings** section in the **Digital Maps** tab displays the following information related to the imported location:

- Name

- Path

- #of Floors

- #of APs

- Status

- Actions

Click **Add Digital Map** to add digital maps. For detailed information, see, Add Digital Map, on page 17.

You can also click **Upload CAD File** under **Actions** column to add digital maps to the selected location.

**Note** Locations with ACT/UNLIMITED licenses have exclusive access to the PRO variant, while the STANDARD variant remains accessible to other license types, including SEE, EXTEND, and SMART_OPERATIONS.

### Digital Maps: User Experience Enhancements

The following enhancements are made in the Cisco Spaces dashboard:

- The **Select Floor** window is redesigned to minimize user effort. The new design reduces the number of entries required from users, enabling a quicker and more efficient process by automatically generating the floor level number and short name for each floor.

- The file upload process is enhanced to improve efficiency. You can now upload files for multiple floors simultaneously, with each being processed in parallel. The full-page loader that previously displayed

during single floor uploads is replaced by individual loader indicators for each floor, allowing clear visibility into the status of each upload.

If any floor file requires additional time, you have the option to cancel that specific upload without affecting the progress of others. This enables better management of successful uploads and more effective time allocation.

- **Map Processing Status Reporting with Estimated Time and Email Notifications**: Map Processing feature is enhanced to address the issues reported with time-intensive map generation. With this enhancement, after you successfully submit the map, the window is displayed with an estimated processing time. You can also view the processing status, including a tentative ETA or error details, by hovering over the status message for each building in the Digital Maps list view. Additionally, the submitter receives email notifications regarding any changes in the map status.

- **Re-Processing Maps/Re-submission of CAD Files**: The map re-processing experience is enhanced to include a feature that allows you to specify the exact changes needed. This helps to reduce the turnaround time. You can select from a list of common reasons and provide additional comments, along with any supporting documents or images as evidence for the re-processing request.

### STANDARD Maps (BETA)

**STANDARD Maps** (BETA): The beta version of STANDARD Digital Maps (with a beta watermark) has been introduced in Cisco Spaces. The STANDARD maps gets generated more quickly compared to the PRO version but with fewer features, thus supporting a limited range of use cases.

You might notice that the orientation and positioning of STANDARD maps may not always align perfectly with the actual building position on the earth map. We recommend that you adjust the position and orientation of STANDARD maps using the tools available in the **Standard Map** preview.

**Note**
- The PRO maps are exclusively available to locations with ACT or UNLIMITED licenses, while STANDARD maps are accessible for locations with SEE or Extend licenses.

- You can use the STANDARD version of the map for device placement. For locations with ACT or UNLIMITED licenses, use the STANDARD map until the PRO version is fully generated.

# Import Locations

Use the **Locations** tab to import the business hierarchy.

**Procedure**

**Step 1**    Log in to Cisco Spaces.

**Step 2**    In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected. The other tabs available are **Network Maps** and **Digital Maps**.

**Step 3**   In the **Locations** tab, click **Add Locations**. If locations are already imported and available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with the various methods to upload the locations.

*Figure 2: Upload Building Details*



**Step 4**   Import the locations using the following methods:

- Import buildings from Excel sheet (preferred)

- Import locations from Cisco Prime Infrastructure

- Import locations from Catalyst Center

- Import locations from Cisco Meraki

- Import locations from Cisco Webex

- Add locations manually

The imported location details are displayed in the **Locations** tab.

- The **Summary** section displays the details of the buildings, floors, missing location metadata information and locations that need review.

- The **Building** section in the **Locations** tab displays the location details such as name, path, number of floors, source and so on.

- In the **Building** section, the **Essential Location Info** field displays an alert if the required location metadata is not updated.

**Step 5** In the **Essential Location Info** field, click **Alert** icon (⚠️) to add the missing metadata if required.

A pop-up window is displayed with the information related to missing location metadata. Click **Click Here** to update the location info.

**Step 6** Click **Review** to view and proceed with location reviews. For more information, see Review Locations.

The **Review** option is displayed when you import locations using methods other than **Import buildings from Excel sheet** method.

**Step 7** (Optional) In the **Locations** tab, use the following options as required:

- **Export**: Click to export the imported business location details into a Microsoft Excel file (.xls). You can click **Download** to download the same.

- **Recent Activity**: Click to view the recent activity details. The **Recent Activity** slide in window displays the history of activities happened in the recent past.

    - File Name

    - User

    - Type

    - Time

    - Status

- **Filter**: Click to view the filter options. In the **Filter** slide-in window that is displayed, choose the location from the **Locations** drop-down list and the required filter options and click **Apply**. The filter options are: **Source**, **# of Floors** and **Location Metadata**.

# Import Buildings from Microsoft Excel Sheet

Use the **Import buildings from Excel sheet** option to add locations by importing a Microsoft Excel (.xlsx) file. We recommend that you choose this method to import the locations with buildings, location metadata, time zone, address, and so on that are important for Cisco Spaces application.

**Procedure**

**Step 1** Log in to Cisco Spaces.

**Step 2** In the Cisco Spaces dashboard, click the **Menu** icon (≡) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3** In the **Locations** tab, click **Add Locations**. If locations are already imported and available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with various methods to upload the locations.

**Step 4** Click **Import buildings from Excel sheet** and click **Next**.

**Step 5**    In the **Import Location Details** window, drag and drop the Microsoft Excel (.xlsx) file or click **Click here to upload** to upload the Microsoft Excel (.xlsx) file with details of the business locations to be imported.

**Note**
If you do not have the template, you can download the template from the link available in the **Import Location Details** window and upload the same with the building details in the correct format.

**Step 6**    Click **Next**.

The **Import Location Details** window is displayed with location information from the Microsoft Excel (.xlsx) file in the left column and existing location level and group level information in the right column.

**Step 7**    In the **Import Location Details** window, map the imported location metadata in the **Column from CSV** column with the corresponding hierarchy and group levels under the **Link to** drop-down and assign respective location metadata values accordingly.

The options available in the **Link to** drop-down are:

- **Location Info**: Use this for location metadata information such as Country, City, Occupancy, Band, Address, Time Zone and so on. You must assign a corresponding metadata value also.

- **Hierarchy Level**: Use this to map the **Level** column value from the Microsoft Excel (.xlsx) file. The Microsoft Excel (.xlsx) file can have multiple **Level** values. Level values from the Microsoft Excel (.xlsx) file are mapped as **Hierarchy Level** in the Location Hierarchy.

    For each **Hierarchy Level**, you can assign a grouping level value. The options are: **Grouping Level1**, **Grouping Level2** and **Grouping Level3**.

    In the Microsoft Excel (.xlsx) file, you can have `NYC1 Campus` as **Level1** and `NYC2 Campus` as **Level2**. In the **Import Location Details** window, you can map **Level1** and **Level2** with **Hierarchy Level** in the **Link to** drop-down list. For **Level1**, you can assign the grouping value as **Grouping Level1** and **Grouping Level2** for **Level2**.

- **Location Name**: Use this to map with the **Location** column value from the Microsoft Excel (.xlsx) file.

    **Note**
    You need not assign any value for **Location Name**. The location name is directly fetched from the Excel file and cannot be modified or mapped with any header columns.

- **Location ID**: The Location ID is auto-generated after the location import is successfully complete.

**Step 8**    Click **Next**.

The **Merge Locations** window is displayed.

- A message indicating that the Location Hierarchy in Cisco Spaces is updated to include new locations discovered by importing the Microsoft Excel (.xlsx) file.

- The **Merge Locations** window displays the number of new locations and their levels imported using **Import buildings from Excel sheet** method.

- The **Merge Locations** window displays three columns: **Locations found in CSV**, **Actions** and **Existing Locations**.

- You must review the hierarchy and take necessary action using the **Action** drop-down list.

- You can use the **Search Location** field to enter search criteria and search for location name.

**Step 9**    In the **Locations found in CSV**, click the plus symbol to expand the location.

**Step 10**    From the **Actions** drop-down list, select the required action to merge the imported location with the existing Location Hierarchy displayed on the right side.

The options are:

- **Create New**: Select this option if you want to create the imported location as a new location into the existing Location Hierarchy.

- **Merge With**: Select this option if the imported locations from the Microsoft Excel (.xlsx) file are repeating and the location already exists in the Location Hierarchy. We recommend that you perform this action with attention as you cannot revert once you merge the locations.

- **Skip**: Select this option if you want to skip importing the locations into the Location Hierarchy. We recommend that you perform this action with attention as you cannot revert once you skip the locations.

**Note**

In the existing Location Hierarchy:

- If there are no existing campuses or buildings, the new imported locations are added as new entries.

- If there are locations with similar name, you can merge the new locations with the existing ones.

**Step 11**    Click **Next**.

You need to review the merge location updates displayed in the **Merge Locations** section. You can view the number of locations that are processed.

**Step 12**    Click **Submit**.

A success message is displayed indicating that the location details are uploaded.

You can click **Add Digital Maps** if you want to add digital maps or **View Locations** to view the locations.

**Step 13**    Click **Close this window** to return back to **Locations** tab.
The **Building** section in the **Locations** tab displays the location details such as name, path, number of floors, source and so on. The **Summary** section displays the details of the buildings, floors, missing location metadata information and locations that need review.

# Import Locations from Cisco Prime Infrastructure

Use the **Import locations from Prime Infrastructure** option to add locations using an export file from Cisco Prime Infrastructure into Cisco Spaces. You can import the network hierarchy from Cisco Prime Infrastructure and connect them to the business locations.

**Procedure**

**Step 1**    Log in to Cisco Spaces.

**Step 2**    In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3**     In the **Locations** tab, click **Add Locations**. If imported locations are already available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with the various methods to upload the locations.

**Step 4**     Click **Import locations from Prime Infrastructure** and click **Next**.

The **Import Location Details** window is displayed.

**Step 5**     In the **Import Location Details** window, drag and drop the Cisco Prime Infrastructure map file as a .GZ file (compressed archive file) or click **Click here to upload** to upload the .GZ file with the Cisco Prime Infrastructure map information.

**Step 6**     Click **Next**.

The **Import Location Details** displays a message indicating that the map data is processing. The Map Service takes some time to process the same. You can verify the map data processing status in the **Recent Activity** section.

After the map data is processed successfully, you must merge the map data with the locations.

**Step 7**     Click **Close this window** to close the window.

The **Building** section in the **Locations** tab displays the newly imported location details. The same location information is also displayed in the Cisco Spaces Location Hierarchy.

An alert message indicating that the import of maps from Cisco Prime Infrastructure added new locations to the Location Hierarchy is displayed in the **Location** tab.

**Step 8**     Click **Review** to review and take appropriate action.

The **Merge Locations** window is displayed.

- A message indicating that the Location Hierarchy in Cisco Spaces is updated to include new locations discovered by importing Cisco Prime Infrastructure maps.

- The **Merge Locations** window displays the number of new sites and building imported using **Import locations from Prime Infrastructure** method.

- The **Merge Locations** window displays three columns: **Locations from Prime Map**, **Actions** and **Existing Locations**.

- You must review the hierarchy and take necessary action using the **Action** drop-down list.

- You can use the **Search Location** field to enter search criteria and search for location name.

**Step 9**     In the **Locations from Prime Map**, click the plus symbol to expand the location.

The location hierarchy includes campus, buildings, and floors.

**Step 10**     From the **Actions** drop-down list, select the required action to merge the imported location with the existing Location Hierarchy displayed on the right side.

The options are:

- **Merge With**: Select this option if the imported locations from Cisco Prime Infrastructure are repeating and the location already exists in the Location Hierarchy. We recommend that you perform this action with attention as you cannot revert once you merge the locations.

- **Delete**: Select this option if you want to remove the imported locations from the existing Location Hierarchy. We recommend that you perform this action with attention as you cannot revert once you delete the locations.

- **Create New**: Select this option if you want to create or add a new location into the existing Location Hierarchy.

- **Accept**: Select this option if the locations imported from Cisco Prime Infrastructure are accepted as it is with the existing Location Hierarchy.

> **Note**
>
> In the existing Location Hierarchy:
>
> - If there are no existing campuses or buildings, the new imported locations are added as new entries.
>
> - If there are locations with similar name, you can merge the new locations with the existing ones.

**Step 11** Click **Next**.

You need to review the merge location updates displayed in the **Locations** section. You can view the number of locations that are processed.

**Step 12** Click **Submit**.

A success message is displayed indicating that the location details are uploaded.

You can click **Add Digital Maps** if you want to add digital maps or **View Locations** to view the locations.

**Step 13** Click **Close this window**.

The **Building** section in the **Locations** tab displays the location details such as name, path, number of floors, source and so on.

The **Summary** section displays the details of the buildings, floors, missing location metadata information and locations that need review.

# Import locations from Cisco Catalyst Center

Use the **Import locations from DNA Center** option to add locations from Catalyst Center. You can connect Cisco Spaces to Catalyst Center and all the sites or buildings defined in Catalyst Centeris synchronized with Cisco Spaces.

**Procedure**

**Step 1** Log in to Cisco Spaces.

**Step 2** In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3** In the **Locations** tab, click **Add Locations**. If locations are already imported and available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with various methods to upload the locations.

**Step 4** Click **Import locations from DNA Center** and click **Next**.

To import locations from Catalyst Center, you must integrate Catalyst Center maps with Cisco Spaces.

**Step 5** (Optional) Click **View How to Integrate DNA Center Maps**.

The **Cisco DNA Center Integration** window is displayed.

Cisco Spaces integrates with Catalyst Center for map synchronization and to provide device location updates to Catalyst Center. To integrate Cisco Spaces with Catalyst Center, click **Create Token** to create a token and configure the token in Catalyst Center.

**Note**

Cisco Spaces integration feature in Catalyst Center is available for limited users. For additional support, contact Cisco Spaces support team.

**Step 6**       Click **Next**.

The **Import Location Details** window is displayed.

**Step 7**       Follow the instructions to connect the Catalyst Center.

**Step 8**       Click **Finish**.

The **Building** section in the **Locations** tab displays the location details. The **Summary** section displays the details of the buildings, floors, missing location metadata information, and locations that need review.

# Import locations from Cisco Meraki

Use the **Import locations from Meraki** option to add locations from Cisco Meraki. If you have a Cisco Meraki deployment, use this method to connect to your Cisco Meraki Cloud account to synchronize the network hierarchy, maps, Access Points, and Meraki video devices.

**Procedure**

**Step 1**       Log in to Cisco Spaces.

**Step 2**       In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3**       In the **Locations** tab, click **Add Locations**. If locations are already imported and available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with various methods to upload the locations.

**Step 4**       Click **Import locations from Meraki** and click **Next**.

The **Import Location Details** window is displayed.

To import locations from Cisco Meraki, you must connect your Cisco Meraki with Cisco Spaces.

**Step 5**       (Optional) Click **View How to Integrate Meraki** to view the instructions.

**Step 6**       In the **Import Location Details** window, click **Next**.

**Step 7**       Read the instructions to connect Cisco Meraki and click **Next**.

The **Connect your wireless network** window is displayed. You can connect use this option to connect to Cisco Meraki.

**Step 8**   If you are already connected, proceed with adding locations using the Location Hierarchy.

# Import Locations from Cisco Webex

Use the **Import locations from Webex** option to synchronize the Cisco Webex hierarchy and devices with Cisco Spaces.

**Procedure**

**Step 1**   Log in to Cisco Spaces.

**Step 2**   In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3**   In the **Locations** tab, click **Add Locations**. If imported locations are already available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with various methods to upload the locations.

**Step 4**   Click **Import locations from Webex** and click **Next**.

The **Import Location Details** window is displayed.

To import locations from Cisco Webex, you must onboard Cisco Webex. After a successful onboard, your locations are automatically displayed in **Setup** > **Locations and Maps**.

**Step 5**   Follow the instructions to activate **Cisco Smart Workspaces**.

**Step 6**   In the **Activation token** field, enter the token generated from **Cisco Smart Workspaces**.

**Step 7**   Click **Activate**.

# Add Locations Manually

Use the **Add locations manually** option to add a standalone building directly under the root location without importing a Microsoft Excel (.xlsx) file or a network map.

**Procedure**

**Step 1**   Log in to Cisco Spaces.

**Step 2**   In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3**   In the **Locations** tab, click **Add Locations**. If locations are already imported and available, then **Import Locations** option is displayed.

The **Upload Building Details** window is displayed with the various methods to upload the locations.

**Step 4**     Click **Add locations manually** and click **Next**.

*Figure 3: Add Location*

Add Location                                                                    ×
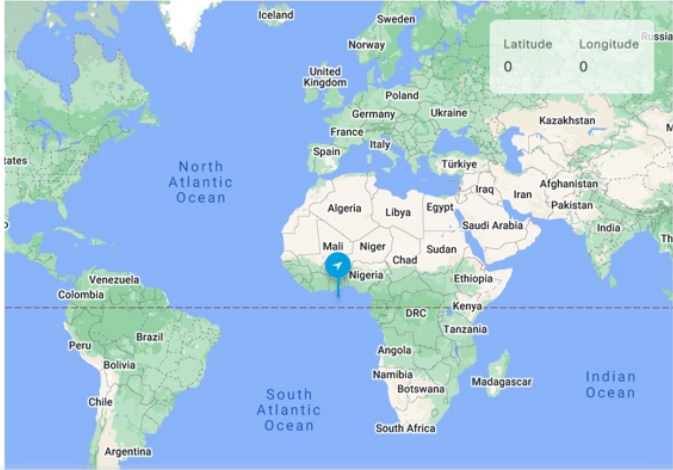
Please enter the location details

Location Name
Enter Location Name

Brand
Enter Brand

Total Area
Enter Area

Max Capacity
Enter Maximum Capacity

Address

Latitude  Longitude
0         0

[ Previous ]  [ **Add** ]

**Step 5**     In the **Add Location** window, enter the following location details to add a new location:

- **Location Name**: Name for the new location.

- **Brand**: Brand for the new location.

- **Total Area**: Total area details for the new location.

- **Max Capacity**: Maximum capacity information for the new location.

- **Address**: The address of the new location. You can manually enter the address or drag the marker to choose the address from map displayed on the right side.

- **Time Zone**: Select the time zone from the drop-down list.

- **Latitude**: Latitude of the new location.

- **Longitude**: Longitude of the new location.

**Step 6**     Click **Add**.

A success message is displayed indicating that a new location is added. You can click **Add Another Location** if you want to add more locations manually.

**Step 7**     Click **Done**.

The **Building** section in the **Locations** tab displays the location details. The Summary section displays the details of the buildings, floors, missing location metadata information and locations that need review.

# Update Location Information

The **Locations** tab displays an alert message if location metadata is missing for the imported location.

**Procedure**

**Step 1**    Log in to Cisco Spaces.

**Step 2**    In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed with the **Locations** tab selected.

**Step 3**    In the **Buildings** section, next to Essential Location Info field, click the Alert icon to update the missing location metadata.

The **Update Location Info** window is displayed.

**Step 4**    In the **Update Location Info** window, update the following location details as required:

- **Location Name**: Name for the new location.

- **Brand**: Brand for the new location.

- **Total Area**: Total area details for the new location.

- **Max Capacity**: Maximum capacity information for the new location.

- **Address**: The address of the new location. You can manually enter the address or drag the marker to choose the address from map displayed on the right side.

- **Time Zone**: Select the time zone from the drop-down list.

- **Latitude**: Latitude of the new location.

- **Longitude**: Longitude of the new location.

**Step 5**    Click **Save**.

# Review Locations

In the **Locations and Maps** window, an alert message is displayed if the imported location hierarchies need review. You need to review the locations and need necessary actions.

**Procedure**

**Step 1**    In the **Locations and Maps** window, click **Preview** to view and proceed with location reviews.

The **Review Locations** window displays all sources from which locations are imported, for example, Cisco Meraki or Catalyst Center. You can also view the number of sites, buildings and campuses imported for each location.

**Step 2**     Select the source location to review and click **Next**.

The **Review Locations** window displays the imported location hierarchy levels for the selected source in the left column and existing destination location hierarchy levels in the right column. Use the **Search Locations** field to search for specific locations.

**Step 3**     Use the options available in the **Action** drop-down list and select a recommended action to merge each level in the source location hierarchy with a relevant destination business hierarchy level in the right column.

By default, Cisco Spaces recommends some actions for reviewing the imported location hierarchy. The available actions are: Merge with, Accept, Create New and Delete.

- The action that you opt for the highest node in the source location hierarchy is automatically cascaded over to the subsequent nodes.

- You cannot delete a campus node from the source location hierarchy if the levels under the campus node are already merged with any relevant destination business hierarchy level.

- You cannot merge a building from the source location hierarchy to a campus in the destination business hierarchy.

- You can merge a site from the source location hierarchy to a campus in the destination business hierarchy.

- If the name of the source location hierarchy matches with any business hierarchy available in Cisco Spaces Location Hierarchy, then Cisco Spaces automatically displays the matching destination levels, and you proceed with the merge action.

- If the source location hierarchy is new, then select **Create** action to automatically create a new business hierarchy in Cisco Spaces Location Hierarchy.

**Step 4**     From the **Existing Locations** drop-down list, select the relevant destination level to merge and unify the imported location hierarchies from the any source location with the business hierarchy available in Cisco Spaces Location Hierarchy.

The **Existing Locations** drop-down list displays all the destination nodes available in the Cisco Spaces Location Hierarchy. You can view the source from where the business hierarchy is imported in the drop-down list.

**Step 5**     Click **Next**.

The **Merge Locations** window displays the summary of the actions and its implications with respect to the associated analytics data. We recommend that you review this alert information before proceeding.

**Note**
If a location that you selected to be deleted includes rules associated with it, you cannot proceed with the delete action. You need to review the action and update your merge preferences accordingly.

If a location that you selected to be deleted includes reports associated with it, you can proceed with the delete action. The reports are generated again after the locations are merged.

**Step 6**     Click **Agree and Continue**.

The selected review actions are processed, and the location is marked as reviewed. If you select to merge the source location level with a relevant destination node, all the properties of the source location levels are applied to the destination node in the business hierarchy.

# Add Network Map

Use the **Network Maps** tab to add a network map and view the locations with the network maps associated with it. You can import locations only if the source has network maps associated with it. Currently, Cisco Prime Infrastructure, Catalyst Center, Cisco Meraki and Cisco Connected Mobile Experiences includes network maps.

**Procedure**

**Step 1**    Log in to Cisco Spaces.

**Step 2**    In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**.

The **Locations and Maps** window is displayed.

**Step 3**    Click **Network Maps** tab.

**Step 4**    Click **Add Network Map**.

The **Upload Building Details** window is displayed.

**Step 5**    Import the locations using the following methods that include network maps:

- Import locations from Cisco Prime Infrastructure

- Import locations from Catalyst Center

- Import locations from Cisco Meraki

- Import locations from Cisco CMX

- Add locations manually

The imported location details are displayed in the **Locations and Maps** window under the **Network Maps** tab.

**Step 6**    Click **Preview** to view and proceed with location reviews. For more information, see Review Locations.

**Step 7**    (Optional) In the **Network Maps** tab, use the following options as required:

- **Export**: Click to export the imported business location details into a Microsoft Excel file (.xls). You can click **Download** to download the same.

- **Recent Activity**: Click to view the recent activity details. The **Recent Activity** slide-in window displays the following information:

  - File Name

  - User

  - Type

  - Time

  - Status

- **Filter**: Click to view the filter options. In the **Filter** slide-in window that is displayed, choose the location from the **Locations** drop-down list and the required filter options and click **Select** to apply.

# Import locations from Cisco CMX

Use the **Import locations from CMX** option to import locations from Cisco CMX. You must tether Cisco CMX with Cisco Spaces to import locations.

**Procedure**

| | |
|---|---|
| **Step 1** | Log in to Cisco Spaces. |
| **Step 2** | In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**. |
| | The **Locations and Maps** window is displayed. |
| **Step 3** | Click **Network Maps** tab. |
| **Step 4** | Click **Add Network Map**. |
| | The **Upload Building Details** window is displayed with various methods to upload the locations. |
| **Step 5** | Click **Import locations from CMX** and click **Next**. |
| | The **Import Location Details** window is displayed. |
| **Step 6** | (Optional) Click **Learn how to tether CMX** to view the instructions to tether Cisco CMX with Cisco Spaces. For more information, see Cisco CMX Tethering. |
| **Step 7** | In the **Import Location Details** window, click **Next**. |
| **Step 8** | Read the instructions to connect Cisco CMX and click **Next**. |
| | The **Connect your wireless network** window is displayed. Use this option to connect to Cisco CMX. |
| **Step 9** | If you are already connected, proceed with adding locations using the Location Hierarchy. |

# Add Digital Map

Use the **Digital Maps** tab to add digital maps for buildings in your location hierarchy. You need to upload the Computer-aided design (CAD) file(s) for the floor to convert them into a three-dimensional floor plan.

The **Summary** area displays the number of buildings for which digital maps are imported, number of buildings for which map review is pending and number of buildings with errors.

The **Buildings** area displays the locations available.

**Procedure**

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| **Step 1** | Log in to Cisco Spaces. |
| **Step 2** | In the Cisco Spaces dashboard, click the **Menu** icon ( ≡ ) and choose **Setup** > **Locations and Maps**. |

The **Locations and Maps** window is displayed.

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| **Step 3** | Click **Digital Maps** tab. |
| **Step 4** | Click **Add Digital Map**. |

The **Add Digital Map** window is displayed.

**Step 5**     Select a building location to add a digital map and click **Next**. Optionally, use the **Search Locations** field to search for locations.

**Step 6**     In the **Postal Address** field, enter the address.

You must select the right location from the map and confirm the postal address.

**Note**
If you want to choose the location from the map displayed on the right panel, you need to provide permission to Cisco Spaces to use the current location to populate the geo-coordinates.

**Step 7**     Click **Confirm Address**.

**Step 8**     Upload the CAD file(s) for the selected location. You can drag and drop the file(s) or click **Click here to upload** to browse locally and upload them.

We recommend that CAD file must contains all layers, such as architecture, furniture, names, and IDs for all the elements to convert. Only the elements with names or IDs can support sensor assignments.

**Note**
- Upload only one CAD file per floor. Cross references (XREFs) are not supported.

- The supported file types are ZIP, AutoCAD Drawing file (DWG), AutoCAD Drawing Interchange File (DXF), Portable Document Format (PDF).

**Step 9**     (Optional) In the **Remarks** field, enter additional notes, if any.

The CAD file(s) and the location metadata are processed, and the map is digitized. An alert message is displayed in the **Digital Maps** tab.

**Step 10**     Click **Review**.

**Step 11**     In the **Review Digital Maps** window, select the building you want to review and click **Next**.

The digitized map is displayed.

**Step 12**     (Optional) Select a floor or space and click to update them if required.

A pop-up window is displayed, and you can edit the name or update the type category.

**Step 13**     Click **Publish this Building**.

The digitized map is published and available of other applications to use them, for example, Cisco Smart Workspaces, Environmental Metrics app and so on.

In Cisco Spaces Location Hierarchy, for a selected location, digital maps are displayed by default if the location has digital maps.

Click **Skip this building** if you want to discard the changes.

# Setting up Map Service

Use **Map Service** in Cisco Spaces to import or synchronize multiple campuses with the same name under different sites into Cisco Spaces **Location Hierarchy** from Catalyst Center. You can move campuses between sites within Catalyst Center and allows to seamlessly import and synchronize these changes into the Cisco Spaces **Location Hierarchy**.

**Map Service** in Cisco Spaces includes the following features to keep **Location Hierarchy** in sync with the imported map data:

- Maps exported from Cisco Prime Infrastructure or Catalyst Center and imported into Cisco Spaces using **Map Service** appears automatically under **Location Hierarchy**.

- When you import or synchronize maps from various sources: Catalyst Center, Cisco Prime Infrastructure or Cisco Meraki, support is extended to normalize and unify network hierarchies into a single business-orientated hierarchy.

- If you delete a location from **Location Hierarchy**, it will also be removed from **Map Service**.

- When you delete a zone location from the **Map Service** UI, the zone location is also is deleted from **Location Hierarchy**.

- AP import restrictions have been implemented based on the AP license limits for the Cisco Spaces account.

The GPS markers warning message that is displayed in the **Recent Activity** section shows the entire hierarchy in the **Recent Activity** section for the floor with invalid GPS markers.

**Note**

- We recommend that you use Google Chrome Browser while working with maps. Map operations are best supported in Google Chrome. Map actions on other browsers are limited.

- If your locations have maps, create a map-based location hierarchy. However, if you have already created a location hierarchy through **WLCDirect > AP prefix**, **CMXOn-Prem Auto-Sync**, or **CMXManual Upload** and have imported the maps containing the overlapping APs, then the APs will be moved to a map-based hierarchy.

- If a location is deleted from **Map Service**, then only the corresponding access points are removed from **Location Hierarchy**.

- Map Service API performance is enhanced to get the recent activity and status.

**Support for Map Hierarchy Migration from Cisco Prime Infrastructure to Catalyst Center**: Cisco Spaces Location Hierarchy supports import of migration data with nested sites from Cisco Prime Infrastructure to Catalyst Center.

**Support for Cisco DNA Center Nested Site Hierarchy**: You can import or synchronize new sites from Catalyst Center to Cisco Spaces on top of the existing site hierarchy.

**Support for Planned Access Point (AP) Import**: You can import planned APs into Map Service.

### Maps Upload

Click **Maps Upload** to upload maps from Cisco Prime Infrastructure or Catalyst Center. In the **Maps Upload** pop-up window, select the required option and click **Select File** and to upload the maps downloaded from the sources.

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| **Note** | Click **Upload History** to view the map upload history details. |

### Cisco Catalyst Wireless 9164I Wi-Fi 6E Series Access Points (AP) Support

The Cisco Catalyst Wireless 9164I Wi-Fi 6E Series AP support is added in the **Map Service**.

You can import the Cisco Catalyst Wireless 9164I Wi-Fi 6E Series APs into Cisco Spaces using the **Map Service**.