User Guide

Omada Design Hub

CONTENTS

About This Guide

This User Guide provides information for configuring Omada Design Hub. Read this guide carefully before operation.

Intended Readers

This Guide is intended for network managers familiar with IT concepts and network terminologies.

Conventions

When using this guide, notice that all images, steps, and descriptions in this guide are only examples and may not reflect your actual experience.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information and recommendations in this document do not constitute the warranty of any kind, express or implied. Users must take full responsibility for their application of any products.

In this Guide, the following conventions are used:

Note contains suggestions or references that help you make better use of the platform.

Bold font indicates a button, toolbar icon, menu or menu item.

Menu Name > Tab page indicates the menu structure. **Account Settings > My Profile** means the My Profile page under the Account Settings menu.

More Resources

Main Site	https://www.omadanetworks.com/business-networking/software-tools/omada-design-hub/
Product Support	https://www.omadanetworks.com/business-networking/software-tools/omada-design-hub/#products-resources
Documents	https://support.omadanetworks.com/document/
Technical Support	https://support.omadanetworks.com/contact-support/

Warranty

For details on the warranty period, policy, and procedures, visit

https://support.omadanetworks.com/warranty-services/.

Support

For technical support, user guides and other information, please visit

https://support.omadanetworks.com/.

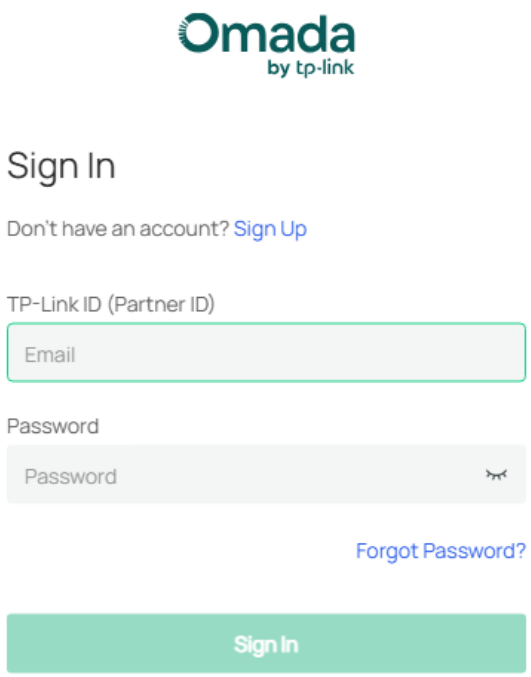
Getting Started with Omada Design Hub

Overview

Omada Design Hub offers a convenient platform for users to easily plan their network and select the most suitable products.

Create Your Account

Launch a web browser and enter https://design.tplinkcloud.com/ in the address bar. Enter your TP-Link ID and password to log in. If you do not have a TP-Link ID, create a TP-Link ID first.

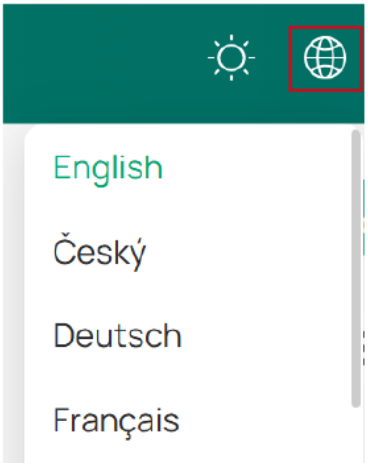


General Settings

After logging in to the Omada Design Hub, you can set up the platform based on your preferences.

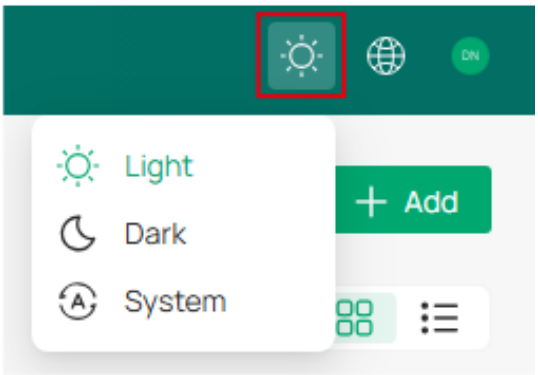
Select Your Language

Click the Language icon in the upper right of the page and select your language preference.



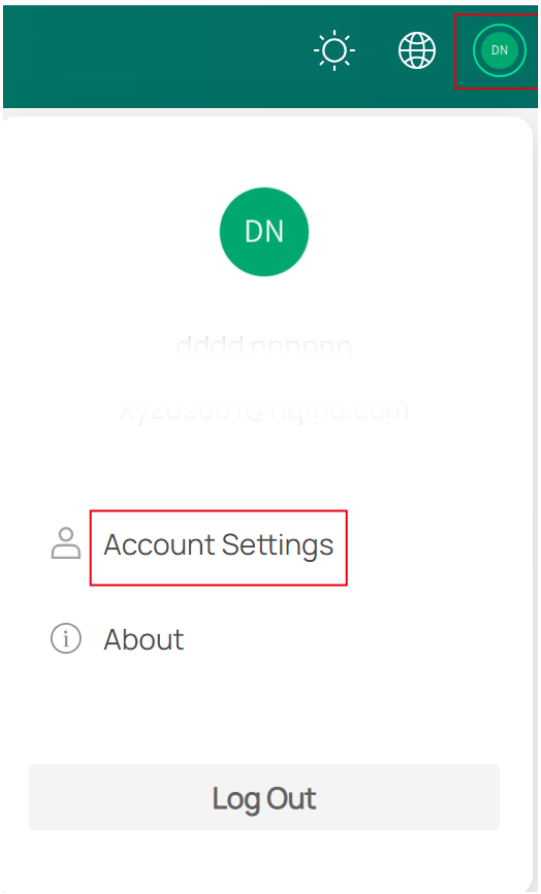
Select Your Display Mode

Click the Display icon in the upper right of the page and select Light or Dark mode. You can also choose System and the display mode will be automatically adjusted based on the system settings.



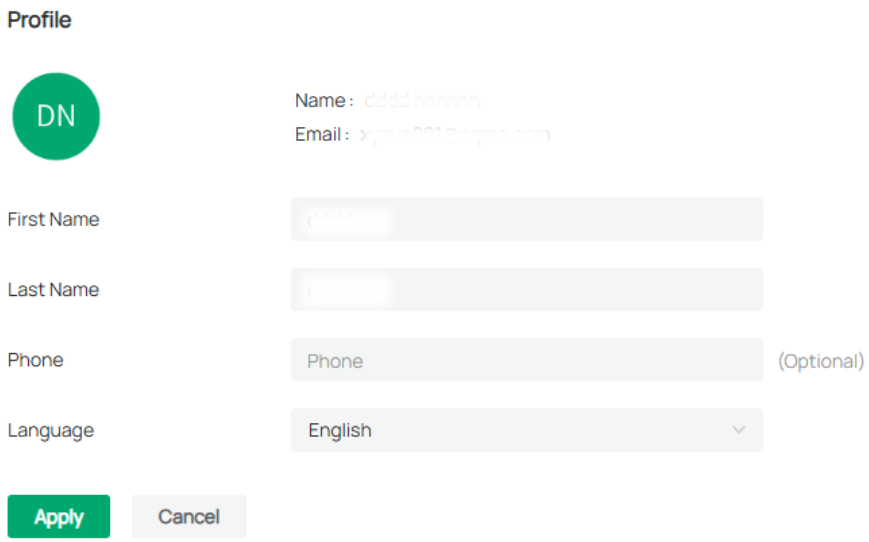
Account Settings

Click the Account icon in the upper right of the page and click Account Settings to configure your account.



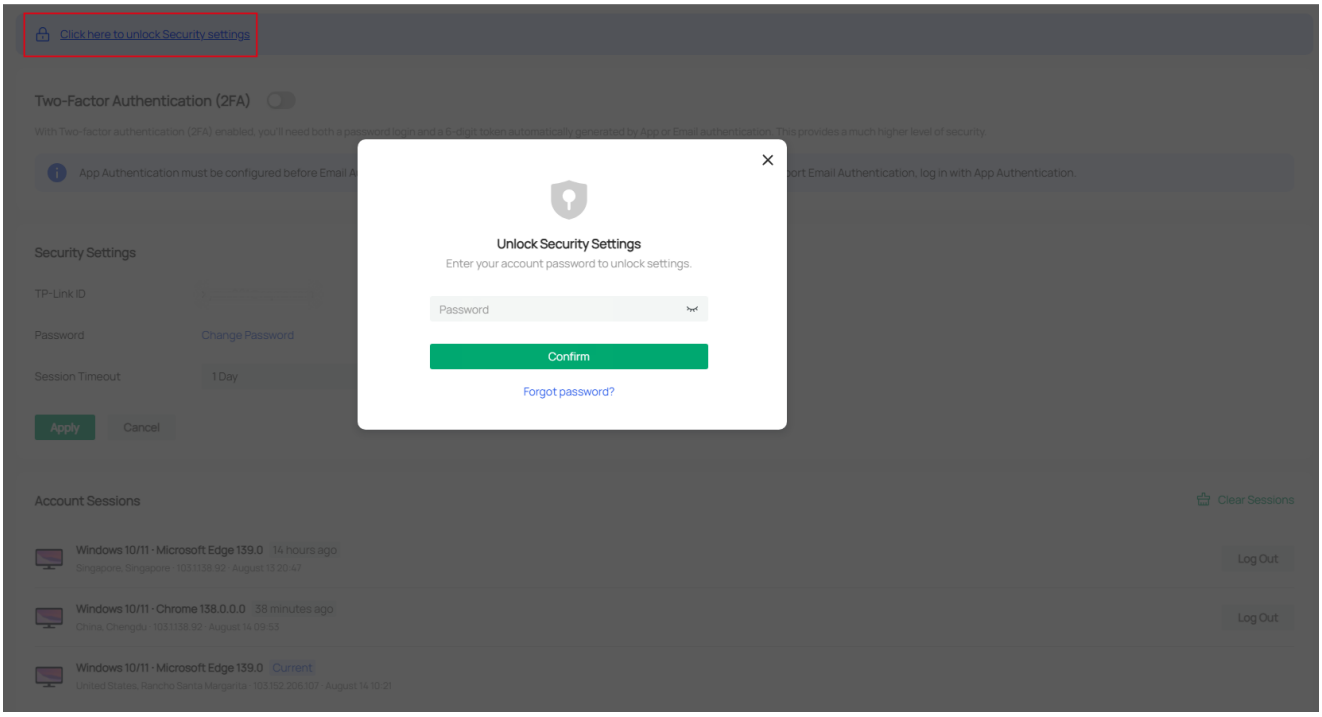
Set Up Your Profile

Go to **Account Settings > My Profile**, and you can set or change your name, phone number, and language preference.

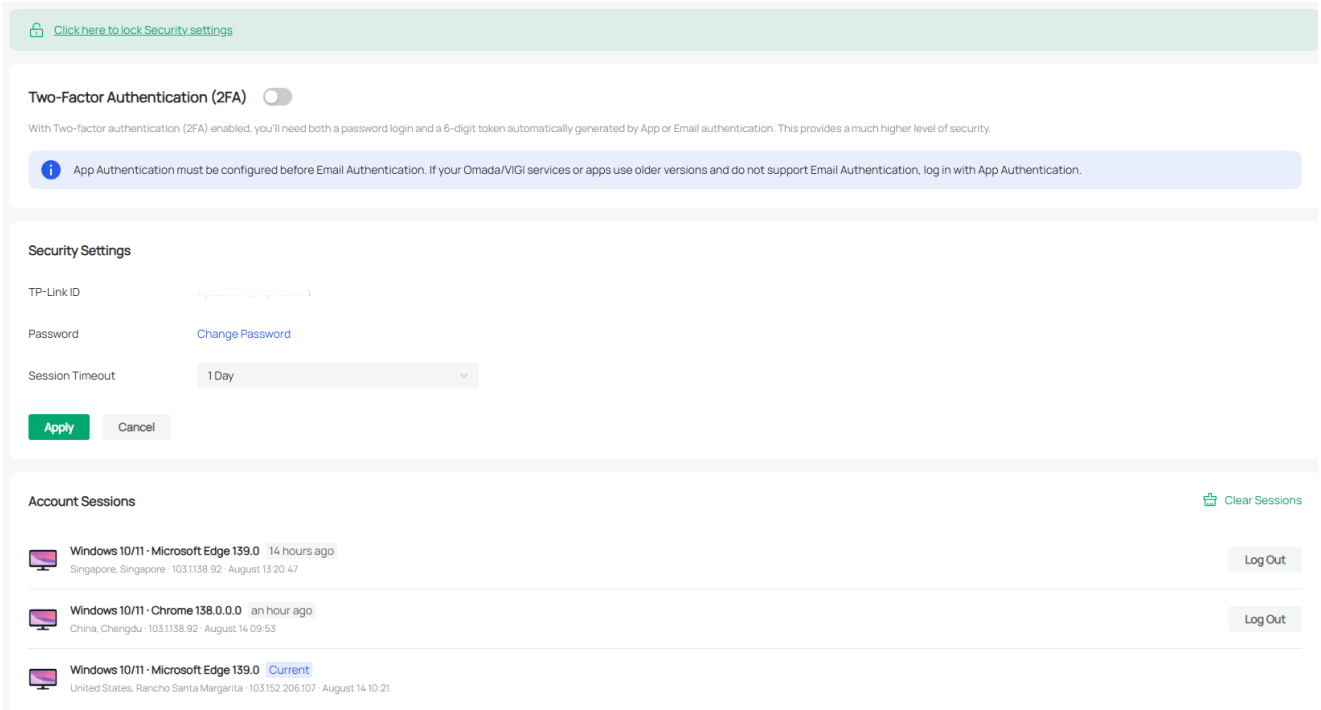


Configure Security Settings

Go to **Account Settings > Security**, and unlock the Security settings first by clicking the note on the top and entering your password.

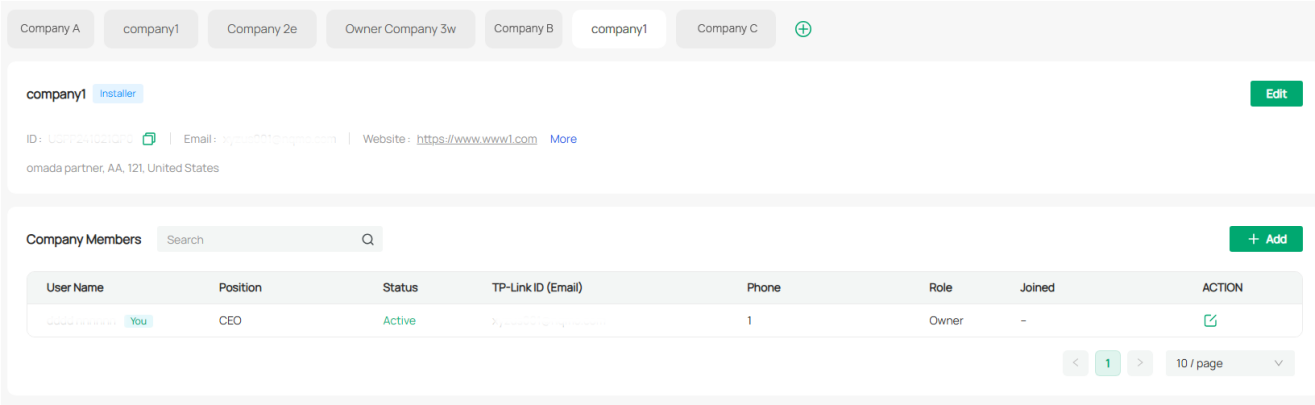


After unlocking the Security settings, you can enable two-factor authentication (2FA) for higher security, change your password, set the session timeout, and manage the account sessions. After the security configuration, click the note on the top again to lock the Security settings.



Configure Company Settings

Go to **Account Settings > Company**, and you can add a new company, join a company, edit your company's information, add and edit the company's members.

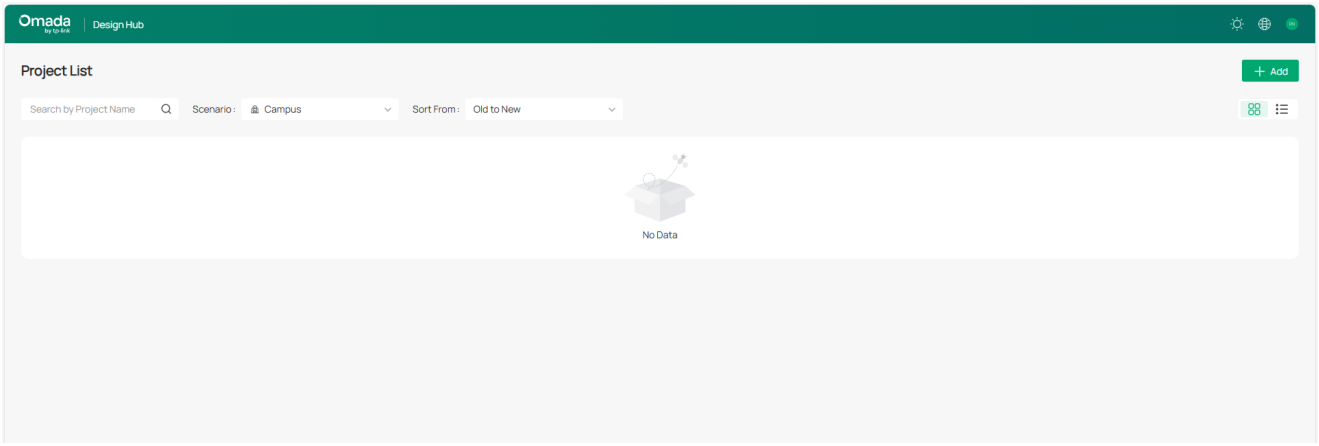


Network Planning and Design on Omada Design Hub

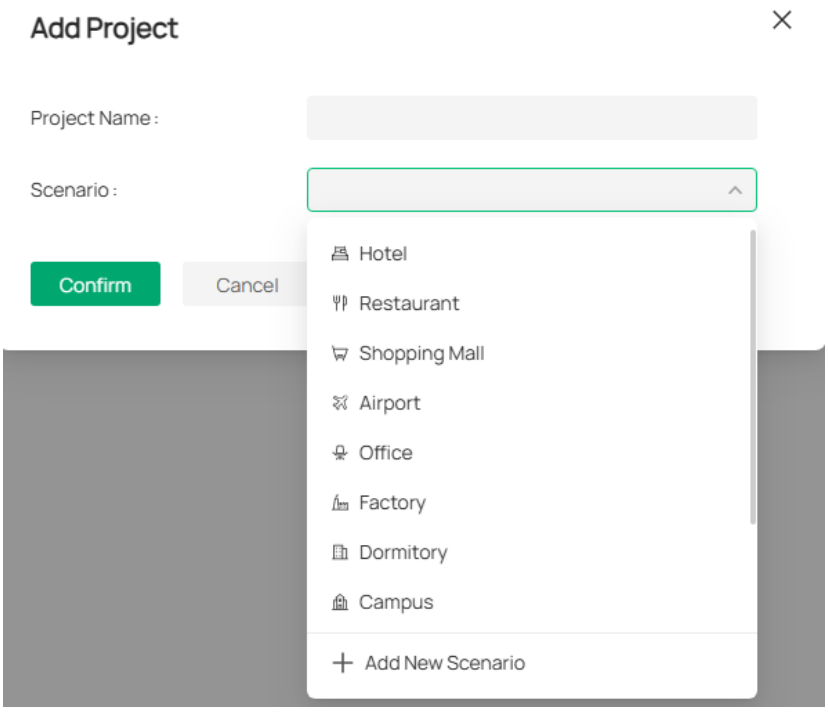
Create Projects

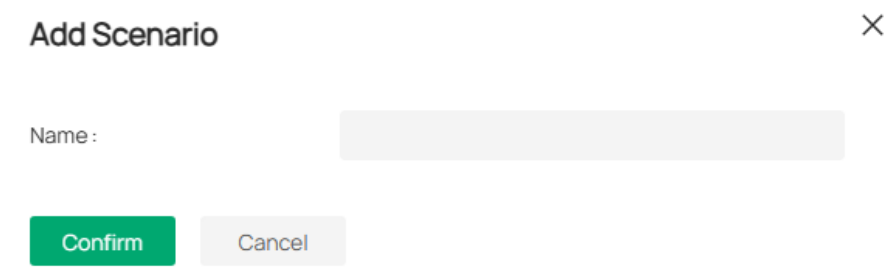
To create a new project, follow these steps:

1) Log in to the Omada Design Hub and click **+ Add** in the **Project List** page.



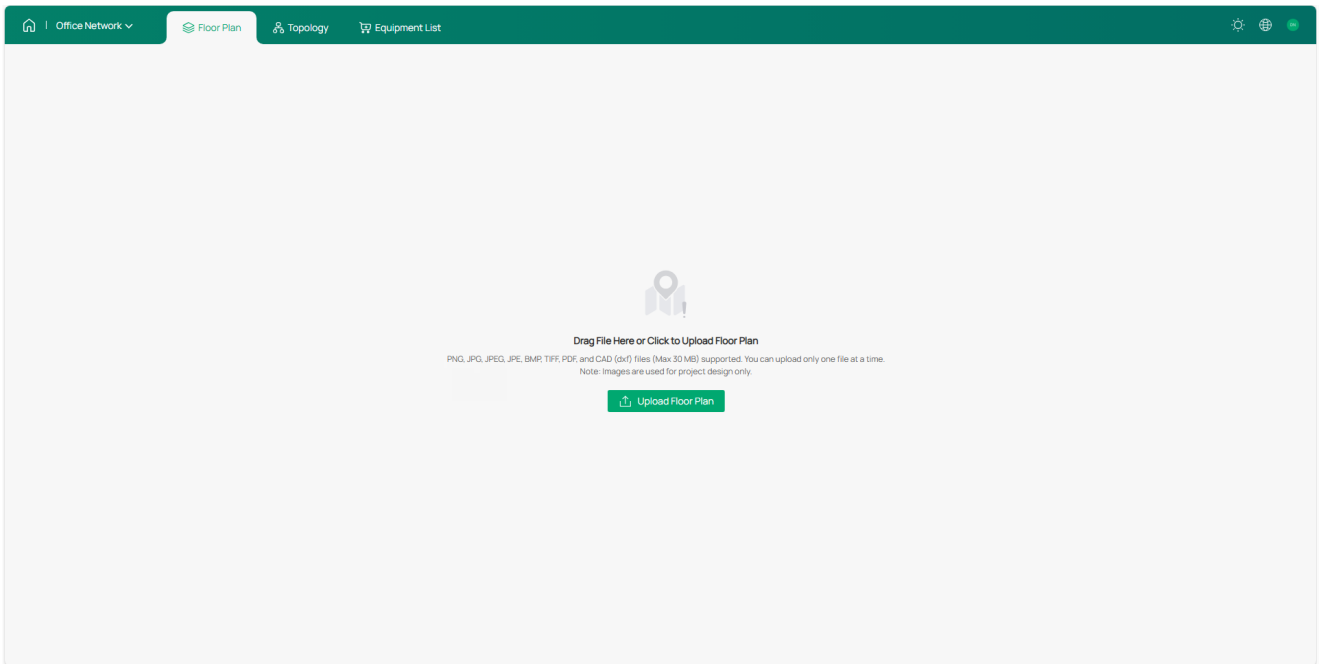
2) Specify the project name and scenario. If the predefined scenarios do not fit your need, click **+ Add New Scenario** to customize your own scenario. Click **Confirm**.





Create Floors

After creating your project, you will be automatically redirected to the following Floor Plan page.



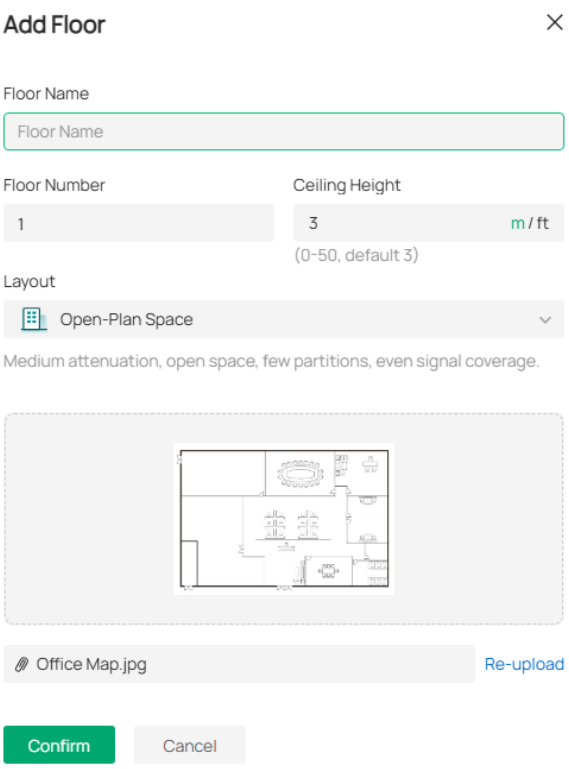
To create a floor, follow these steps:

1) Click **Upload Floor Plan** and choose a file from your computer. You can also drag the file directly to the page to upload.

Note:

Multiple formats, including PNG, JPG, JPEG, JPE, BMP, TIFF, PDF, and CAD (dxf) files (Max 30 MB), are supported, but only one file can be uploaded at a time.

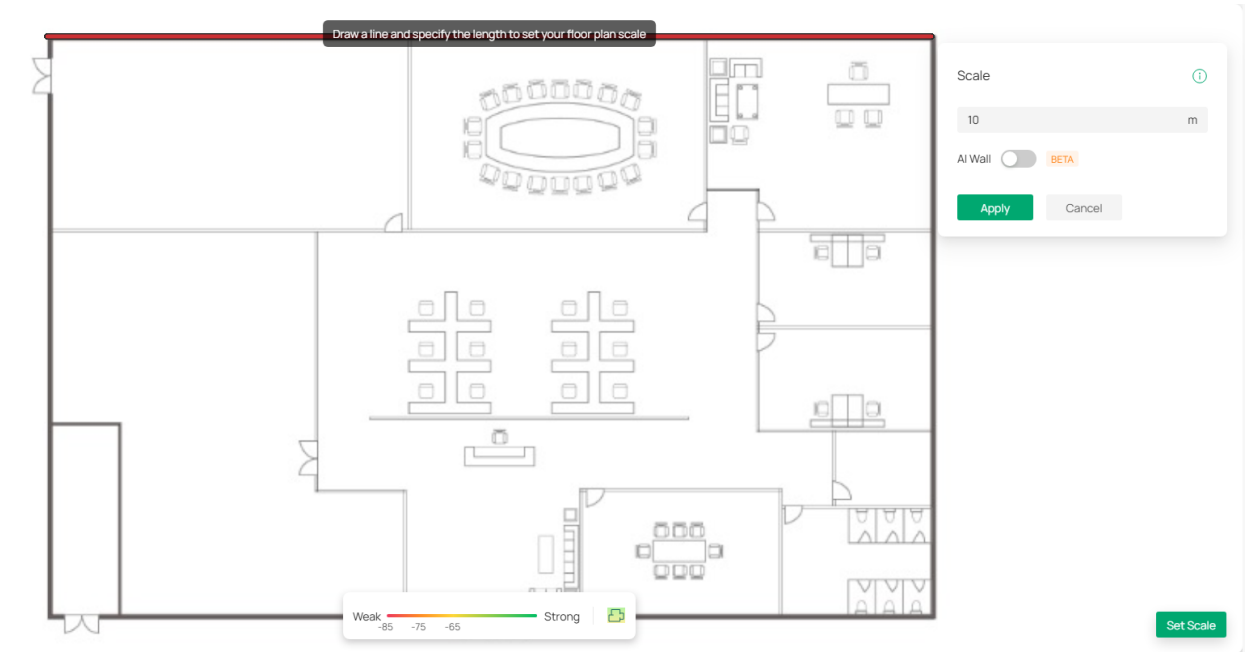
2) Specify the floor name, floor number, and ceiling height, and select a layout most suitable for your map, which will make the simulation more accurate. You can click the image to preview it and re-upload another file if you want to change it. Click **Confirm**.



Note:

You can switch the unit for the ceiling height between meter and feet.

3) After creating the floor, left-click at the starting point and left-click again at the ending point to draw a line on the map and specify its length to set your floor plan scale. Click **Apply**.



Note:

- The floor plan scale should reflect the actual environment, as it impacts wall

simulation, cable length, and wireless coverage.

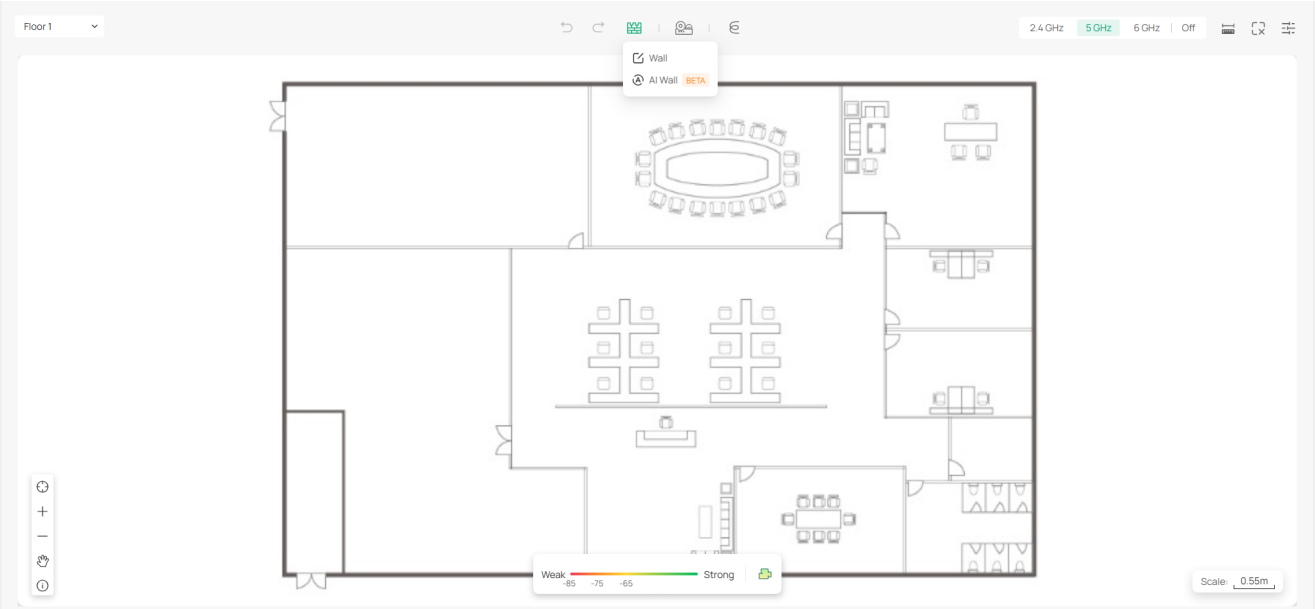
- To reset the scale, click the scale icon in the bottom right.

Draw Walls

Before deploying devices, draw walls for the floor to indicate the obstructions. You can draw the walls manually or take advantage of the AI tool to facilitate the process.

Note:

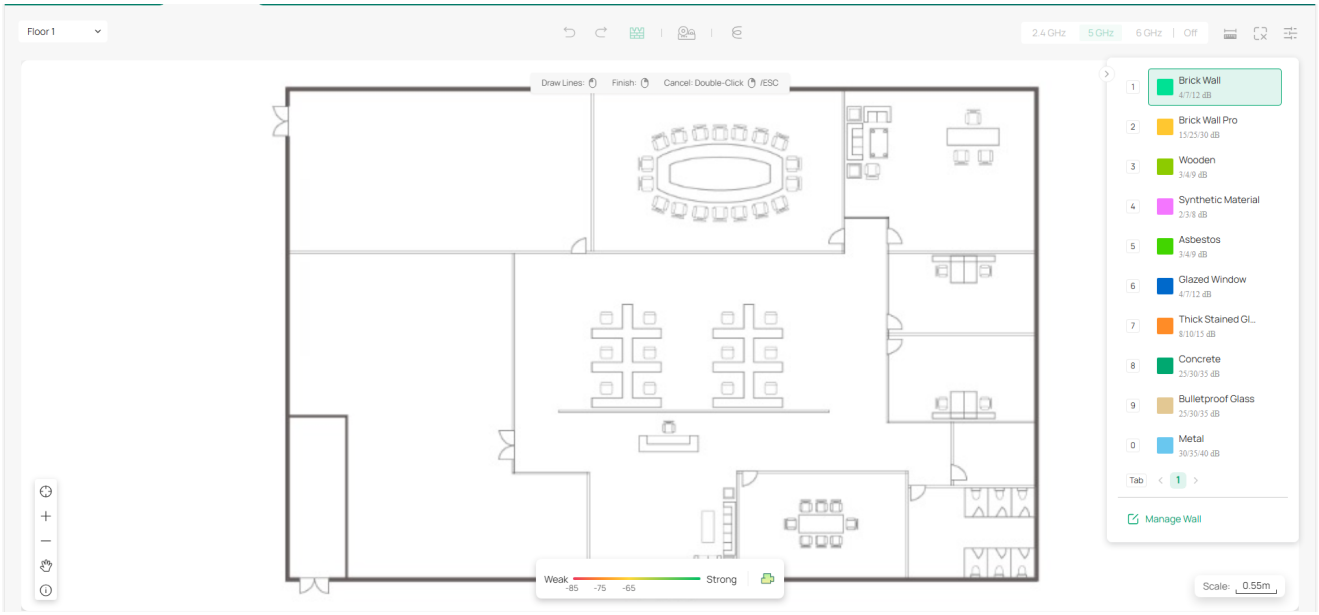
For more information on walls, refer to *Walls*.



■ Draw Wall Manually

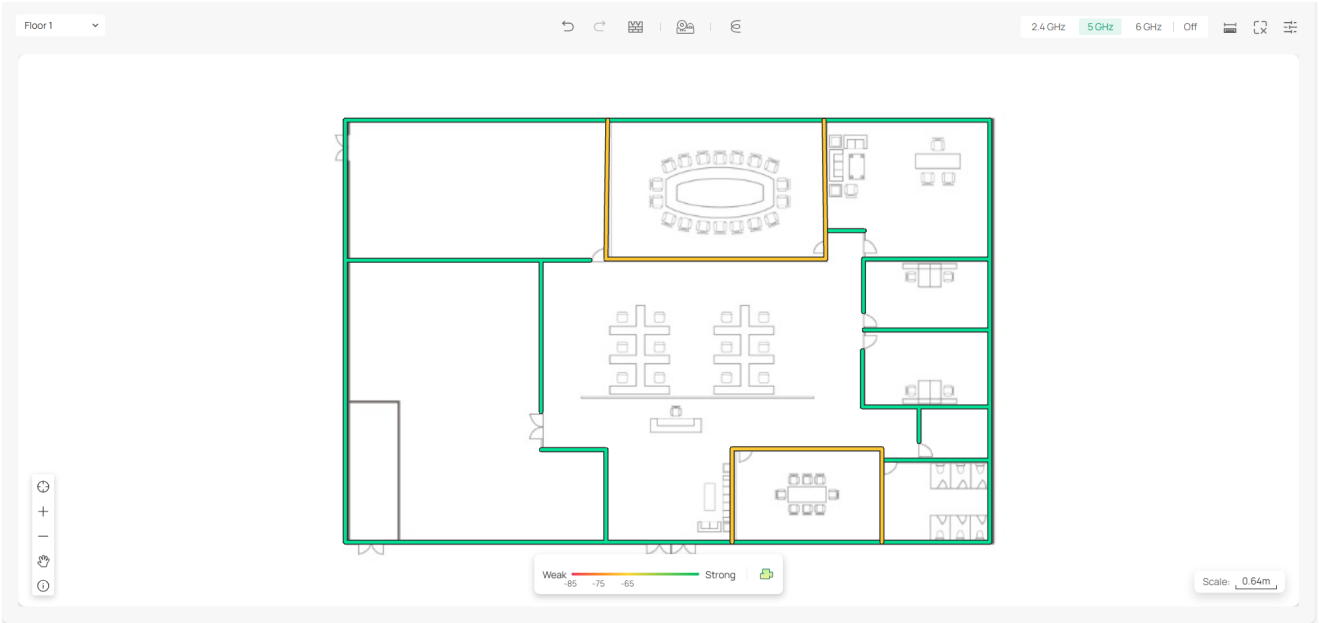
To draw walls manually, follow these steps:

1) Click **Wall** and choose the wall type on the right.



2) Left-click at the starting point to start drawing and left-click again at the ending point to place the wall. Walls can be drawn continuously. Right-click or press the Esc key to stop drawing.

3) When you finish drawing, right-click or press the Esc key to exit.



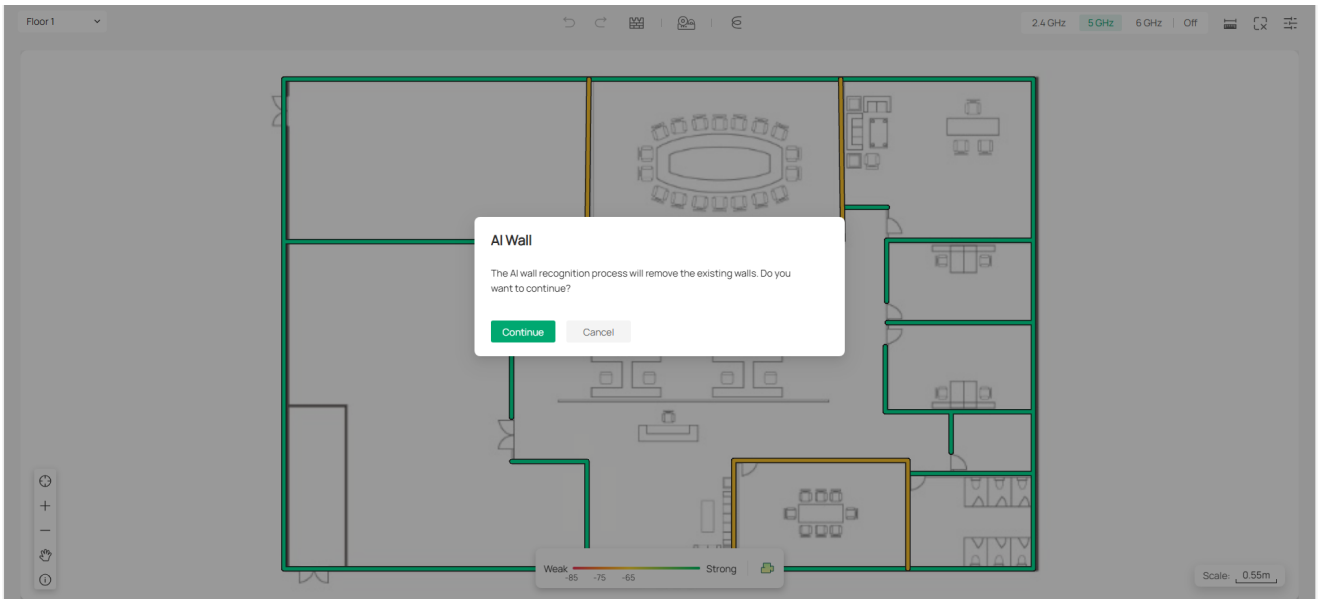
- Use AI Wall

To use AI Wall, follow these steps:

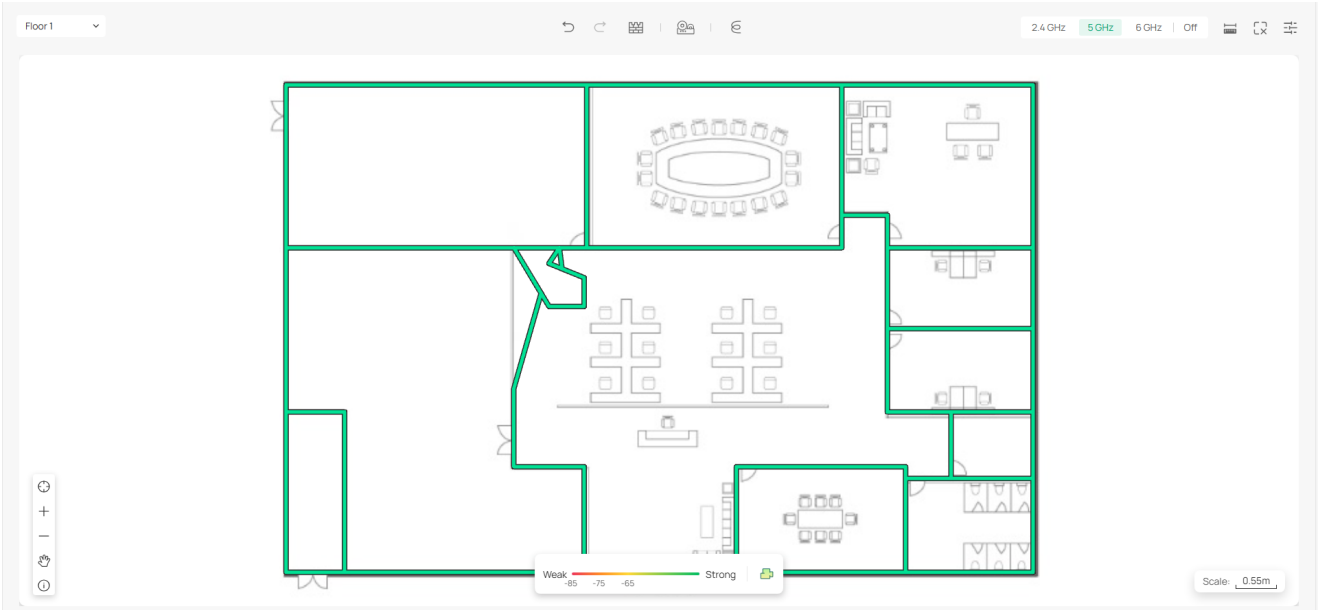
1) Click **AI Wall**. Walls will be automatically drawn on the map.

Note:

The existing walls will be removed if you already draw walls on the floor plan.



2) Modify manually the walls generated by the AI tool.

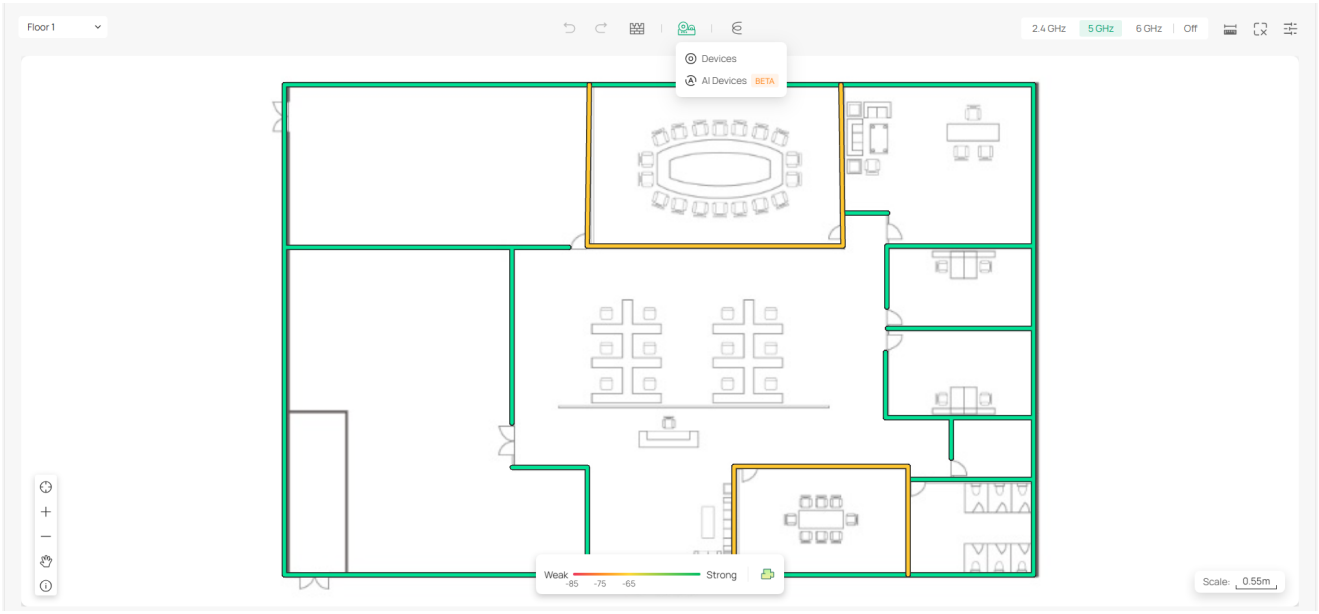


Deploy Devices

To deploy devices, you can select the devices manually or take advantage of the AI tool to facilitate the process.

Note:

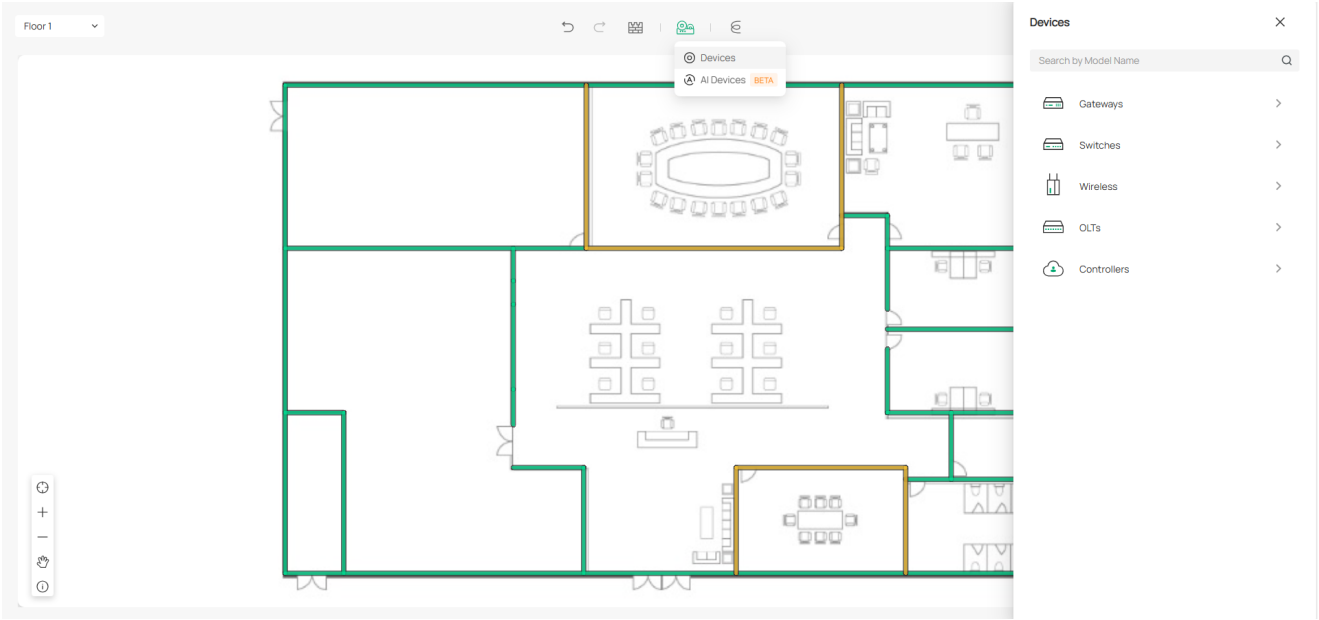
For more information on deploying devices, refer to *Devices*.



■ Deploy Devices Manually

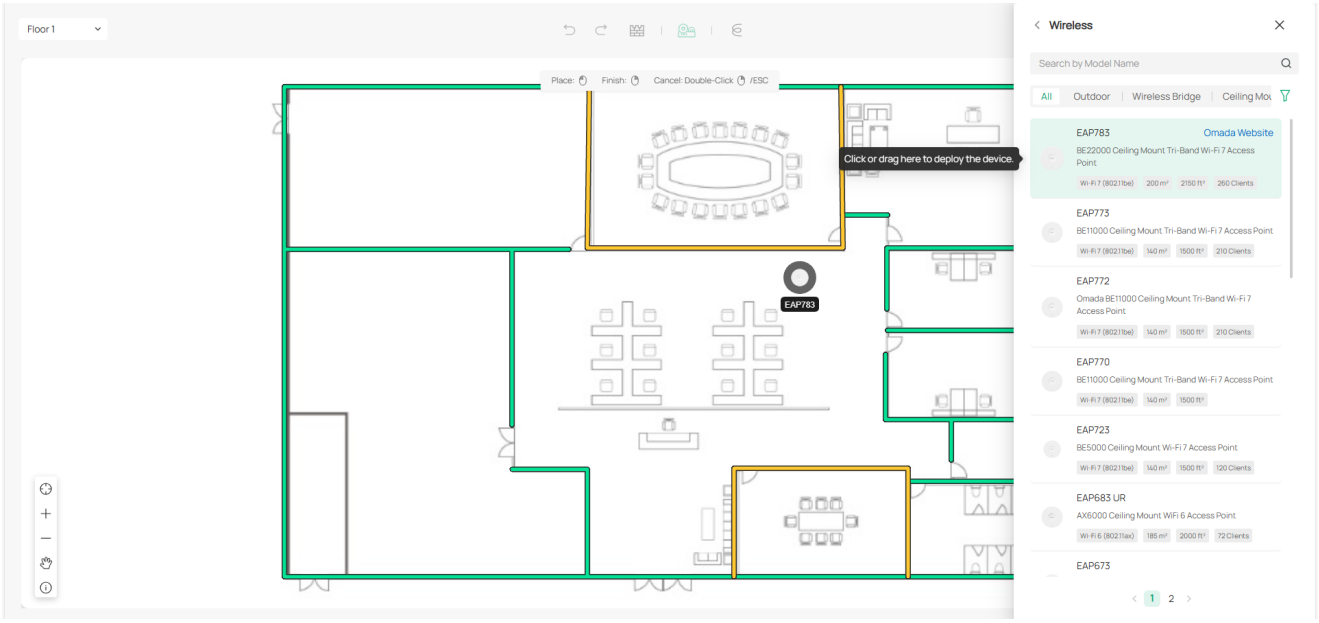
To deploy devices manually, follow these steps:

1) Click **Devices** and choose the device type on the right based on your needs.



2) Left-click or drag the selected device on the floor plan. The device can be placed on the map continuously. Right-click or press the Esc key to stop placing the selected device.

3) When you finish deploying devices, right-click or press the Esc key to exit.



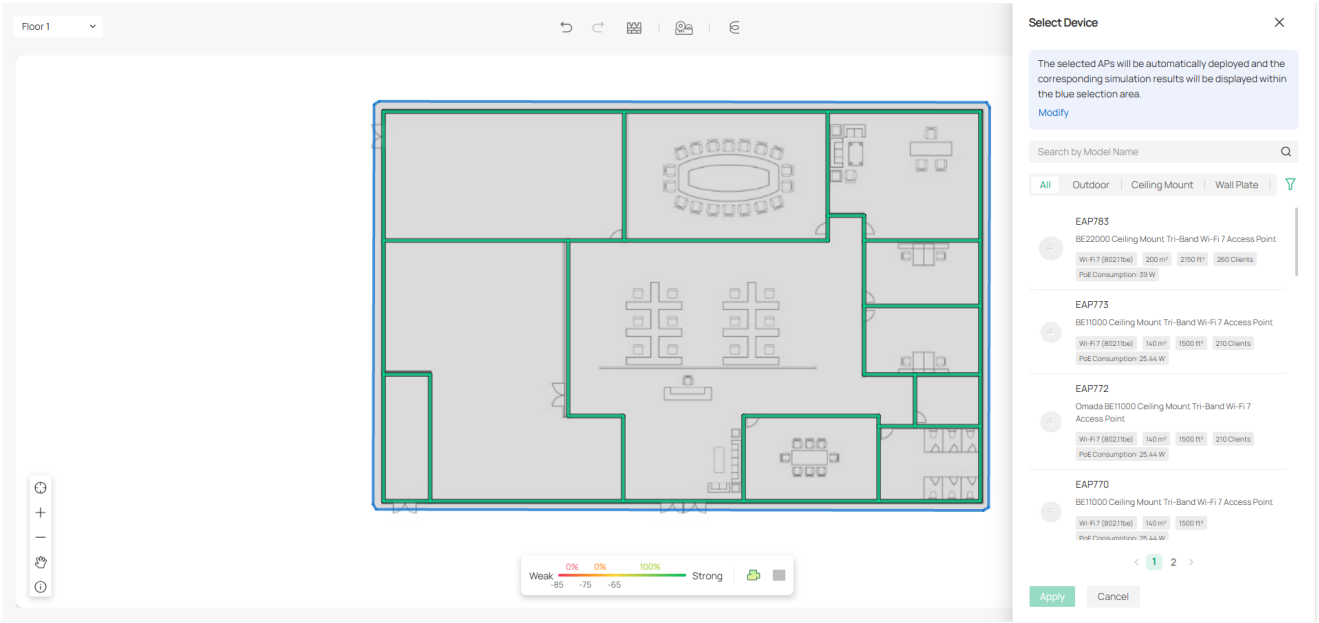
Note:

You can click **Omada Website** to go to the corresponding product page for more information on the device.

- Use AI Devices

To use AI Devices, follow these steps:

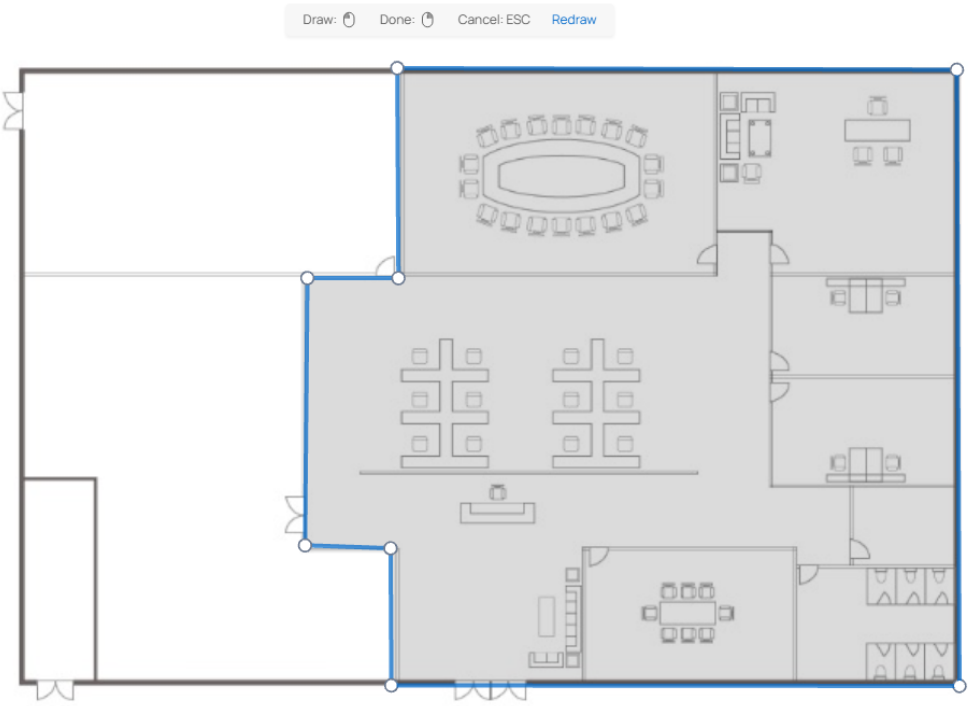
1) Click **AI Devices**, select a device model, and click **Apply**.



Note:

- Only EAPs are currently available for AI Devices.
- A blue selection area will be automatically generated. The selected AP will be automatically deployed (max 300) within the area, and the corresponding simulation results

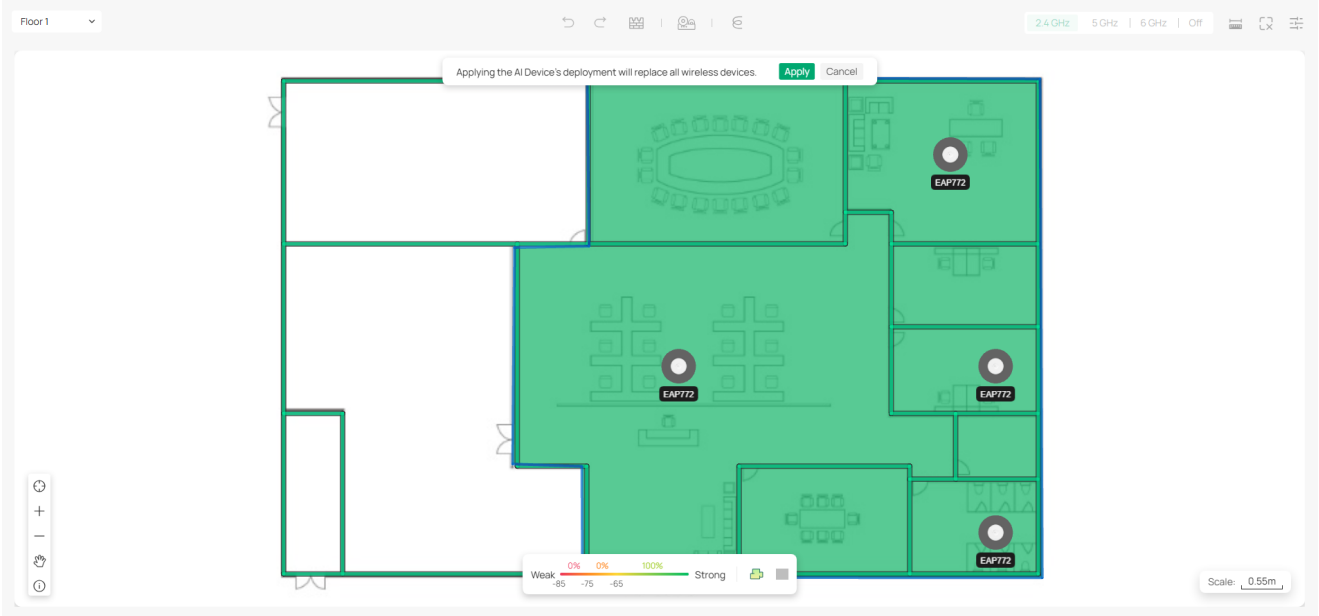
will appear in the blue selection area. If you want to modify the area, click **Modify**.



2) Click **Apply** to apply the AI deployment.

Note:

Applying the AI Device's deployment will replace all the existing EAPs on the current floor.

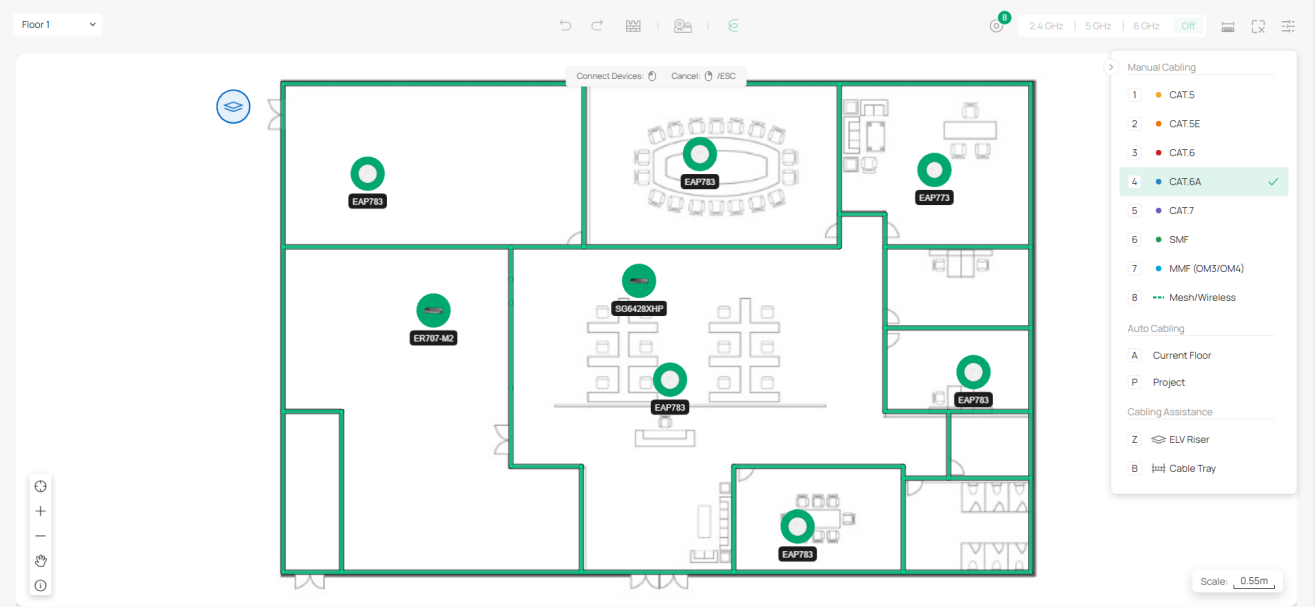


Deploy Cables

To deploy cables, you can select the cable type and deploy the cables manually or take advantage of the Auto Cabling tool to facilitate the process.

Note:

For more information on cabling, refer to *Cabling*.

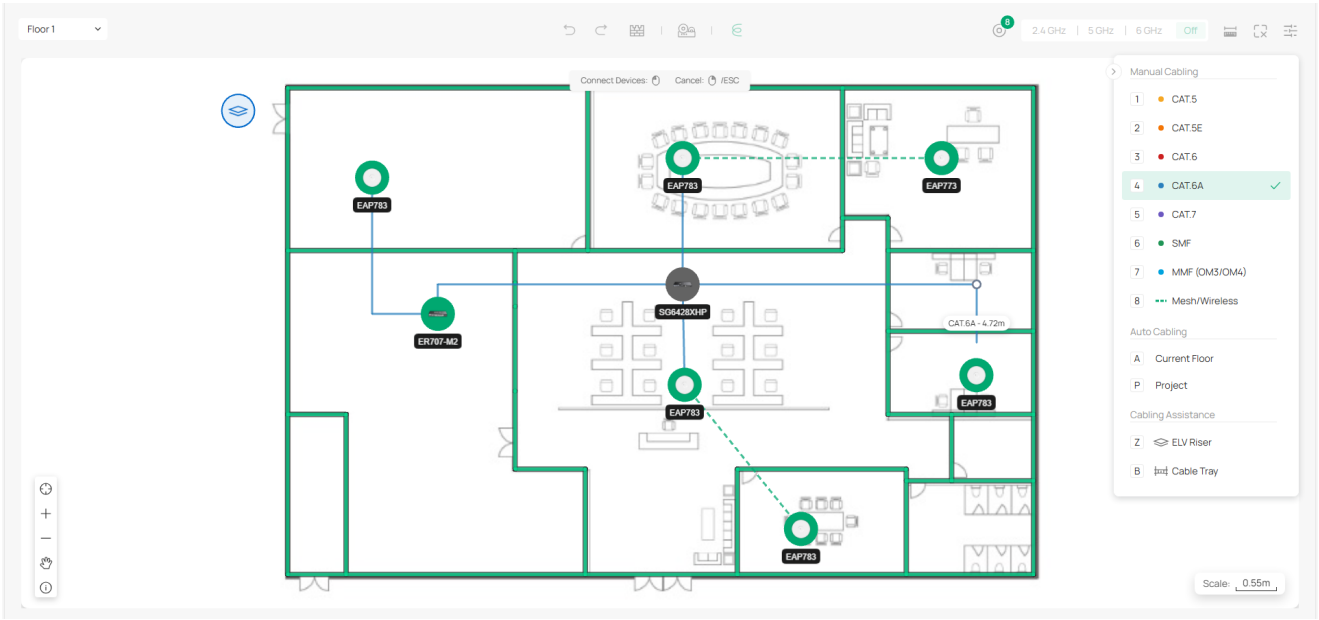


- Deploy Cables Manually

To deploy cables manually, follow these steps:

1) Click **Cable** and choose the cable type on the right.

2) Click a device and then another to connect the two devices with the selected cable. You can click on the floor plan to add a bend point to ensure the cable is routed horizontally or vertically.



- Use Auto Cabling

To use Auto Cabling, follow these steps:

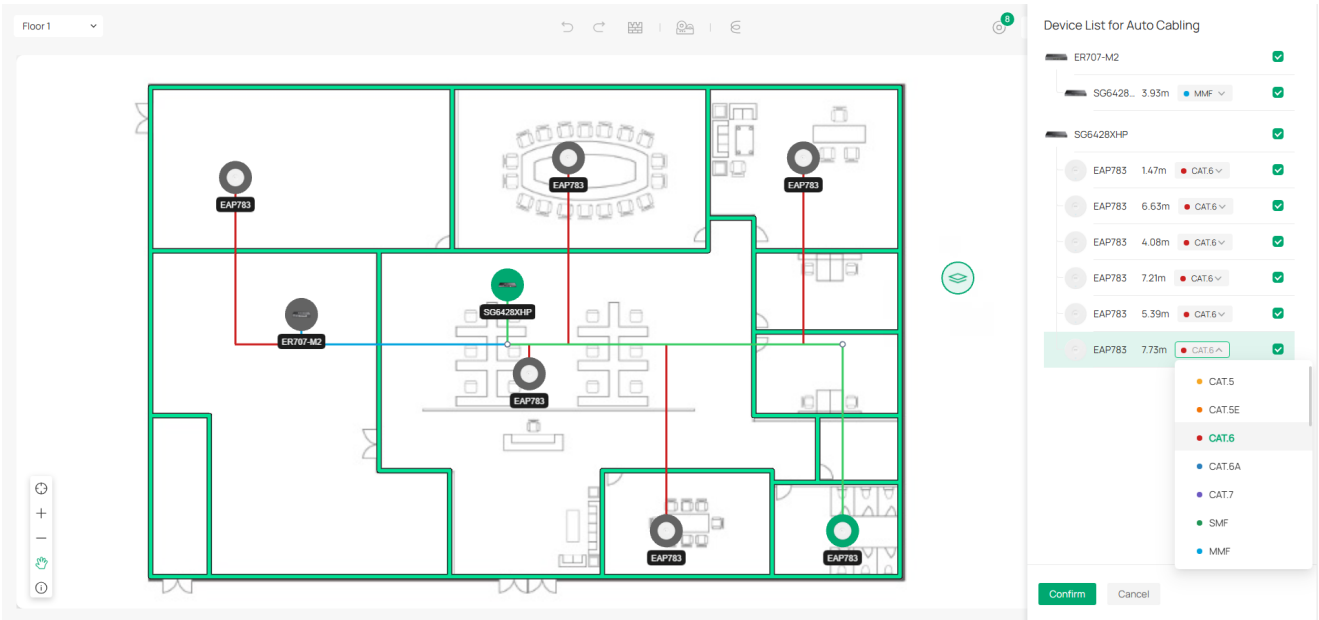
1) Click **Cable**.

2) Click **Current Floor** or **Project** to automatically deploy cables on the current floor or for the whole project.

3) Select the cabling results you want to keep or modify the cable type as needed. Click **Confirm**.

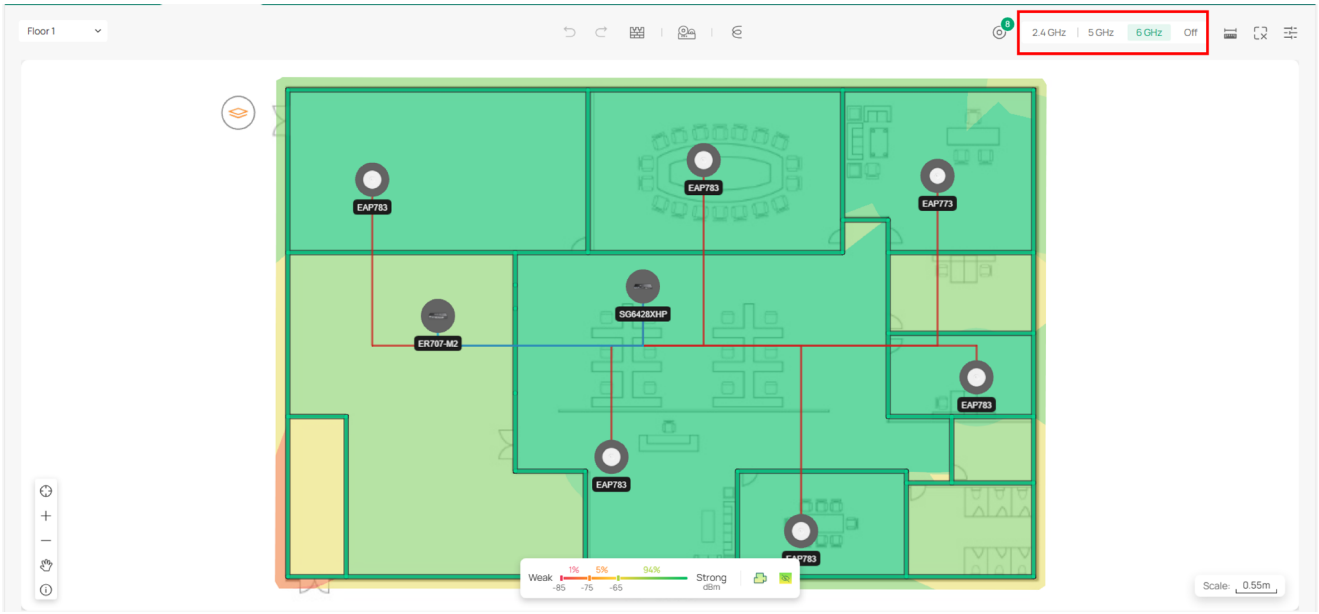
Note:

Applying auto cabling will remove all the existing cables.



Check Simulation

After network deployment, you can click **2.4 GHz/5 GHz/6 GHz** to view the simulation result in different frequency bands.

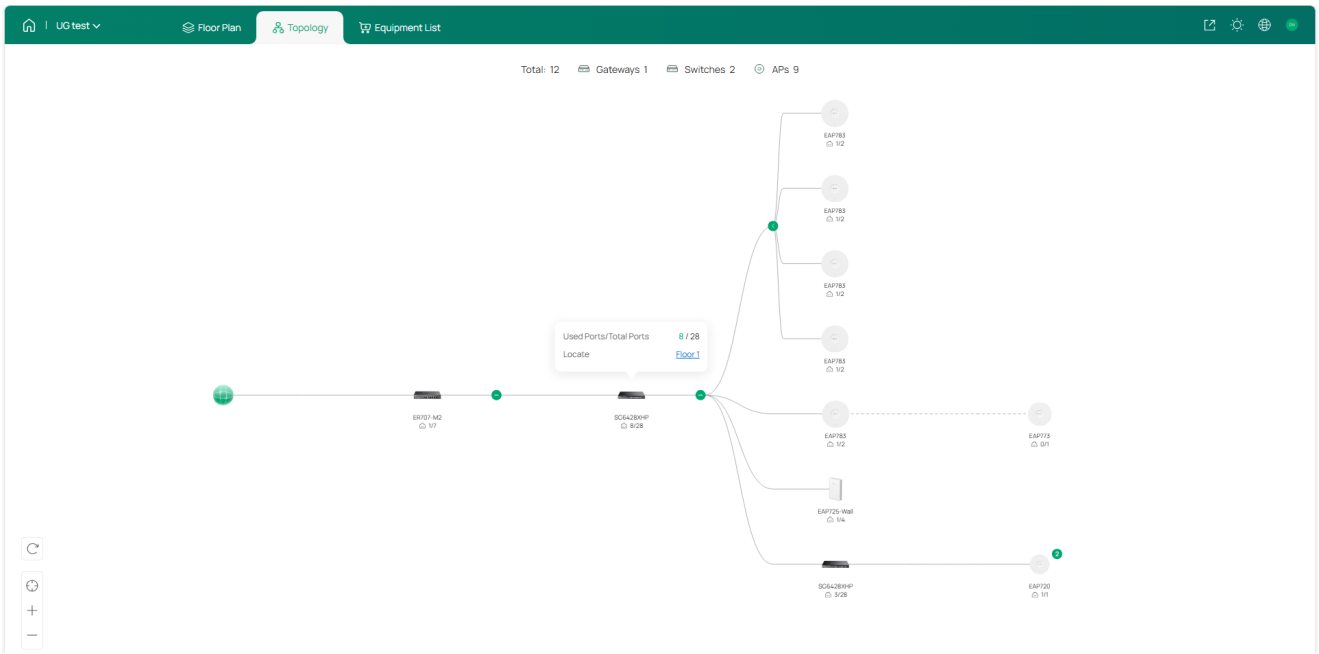


Note:

By default, the simulation results will be shown within the simulation boundary. Click the icon to modify the simulation boundary. You can also click the icon to check the results outside the boundary. For more information on simulation, refer to *Simulation*.

View Topology

To view the network topology of the whole project, click **Topology** on the top. You can view how the devices are connected (wired or wireless), hover your mouse over a specific device to check its port usage and locate the device.

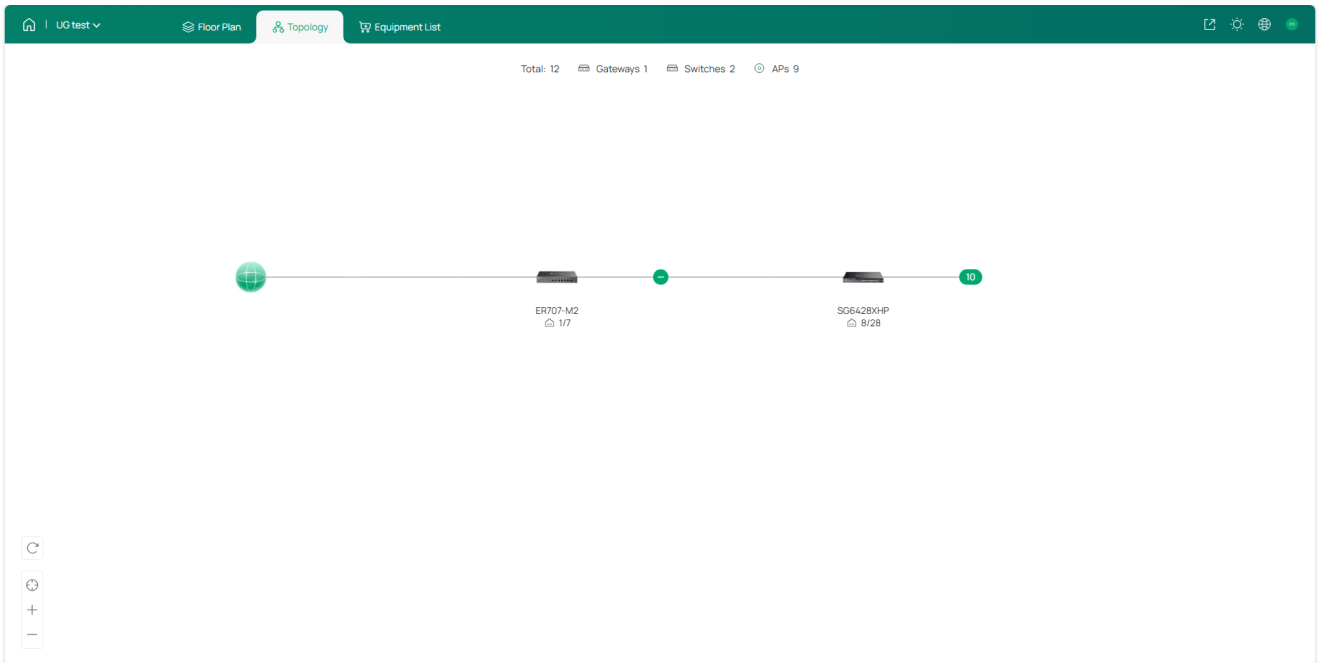


You can click the icon − or < to fold the topology, and the number icon 10 or the device icon with a number to unfold.

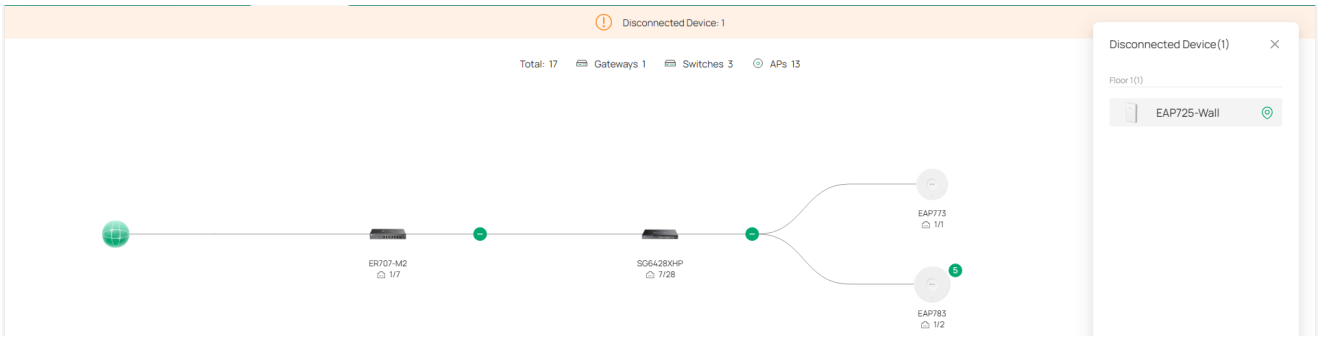
Note:

The numbers indicate how many devices are connected to the uplink device.

Click the icon ↻ at the bottom left to restore the topology to the default view.

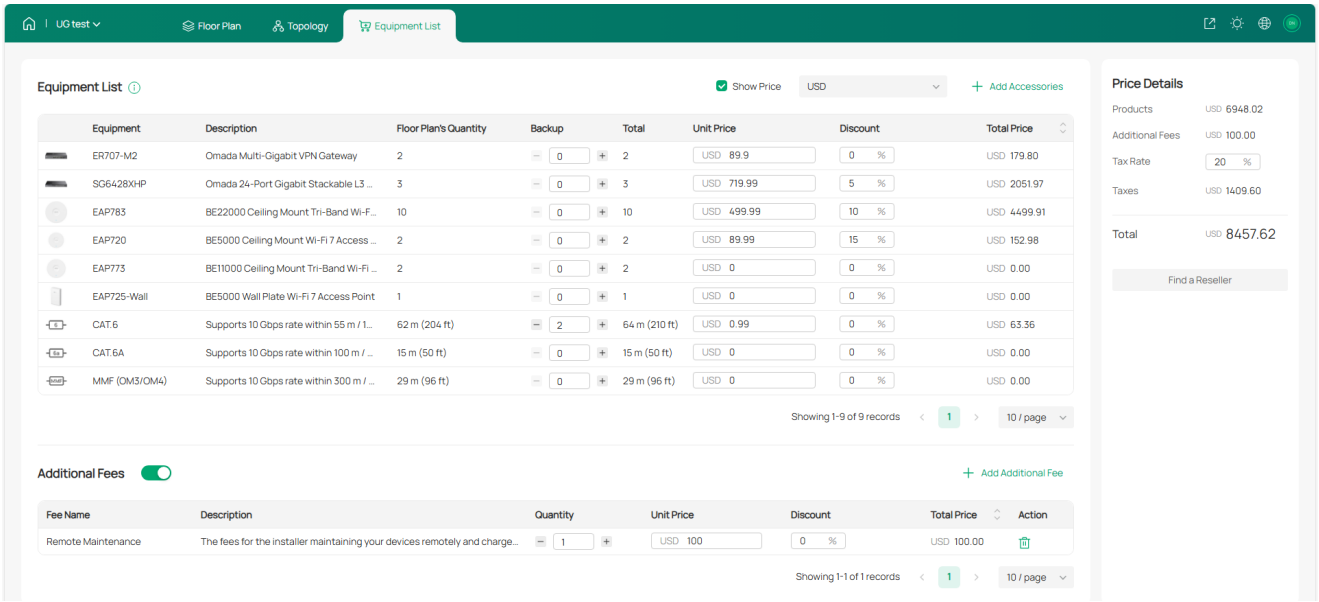


If there exist disconnected devices, you will be noted on the top of the page. Click the warning note and you can find a list of disconnected devices. Click the icon ◎ to locate the device on the floor plan.



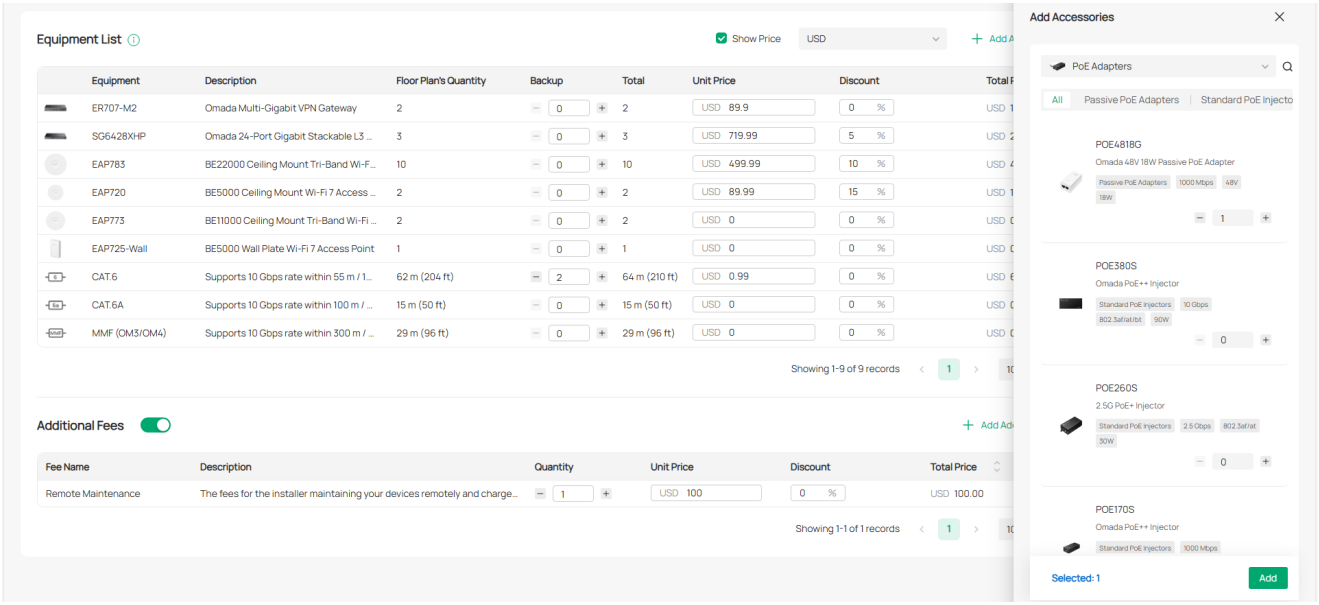
Check Equipment List

To check the equipment used for the project and caculate the fees, click **Equipment List** on the top.



- Modify Equipment List

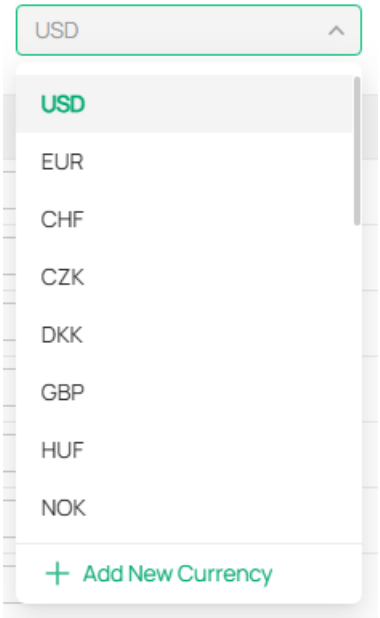
On the **Equipment List** page, you can add backup devices and new accessories according to your needs and modify the number of the equipment on the list.



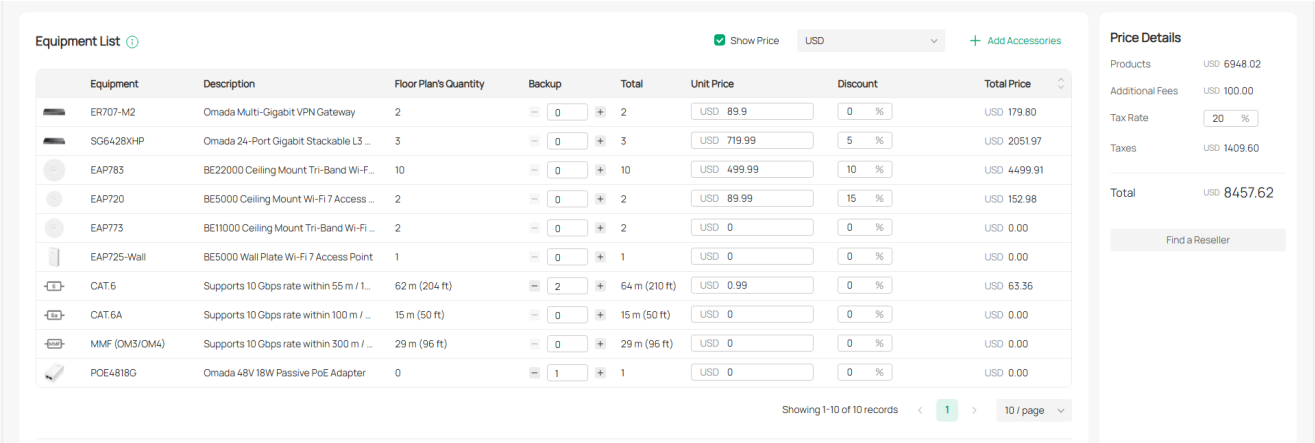
■ Calculate Total Fees

To calcualte the total fees, follow these steps:

1) Click **Show Price** and select your currency. If your currency is not available, click **Add New Currency**.



2) Enter the unit price and discount of the equipment.



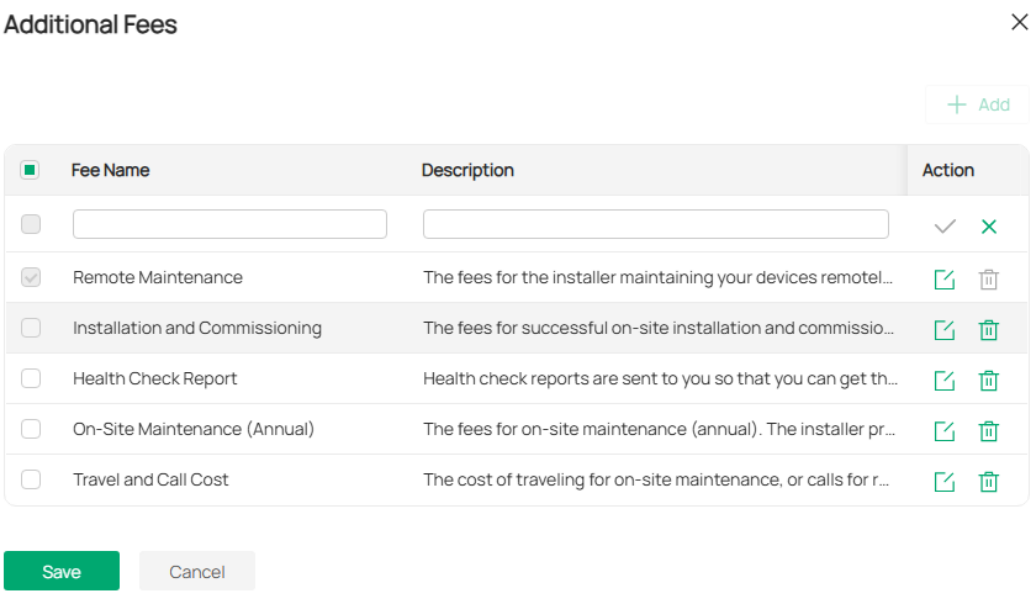
Note:

The unit price and discount vary in different regions and countries. Refer to your local store or website for the latest prices.

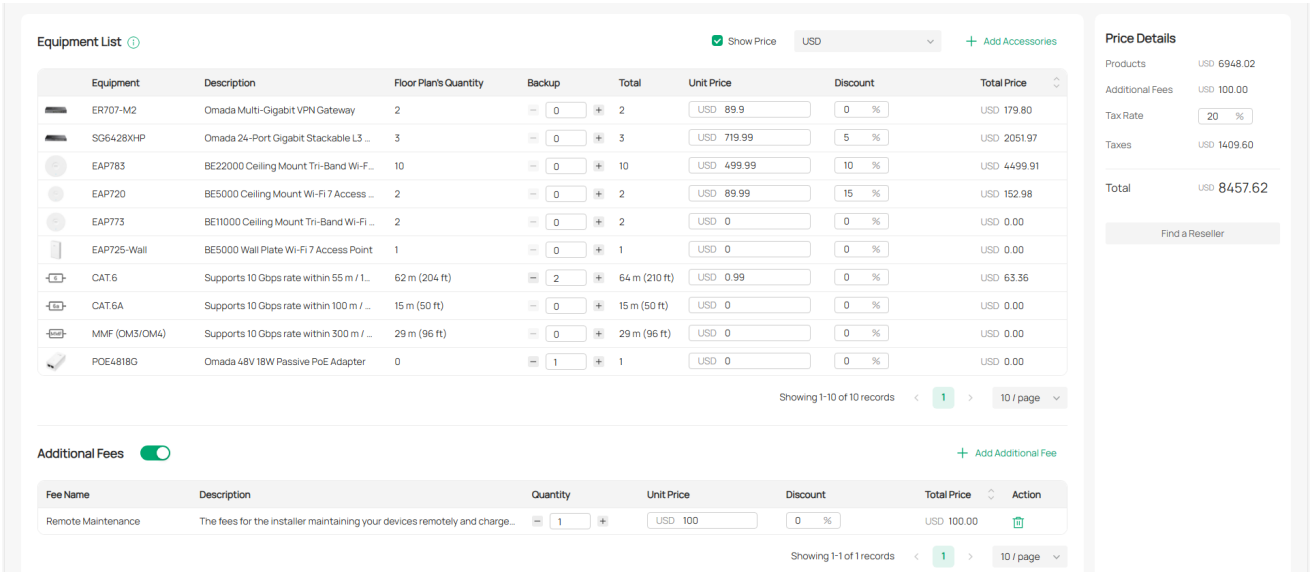
3) If there exists other related fees, enable **Additional Fees** and add the fees according to your needs.

Note:

Five customizable templates of additional fees are available and you can also create your own. Make sure to describe the fees clearly to avoid confusion.



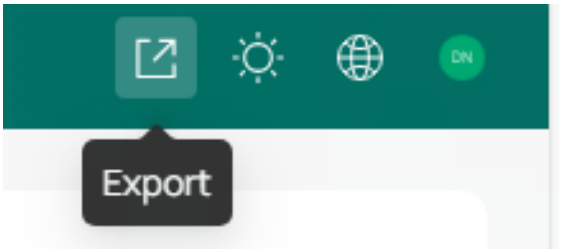
After setting the prices and fees, you can check the price details on the right. Click **Find a Reseller** to check where to buy the Omada products on the list.



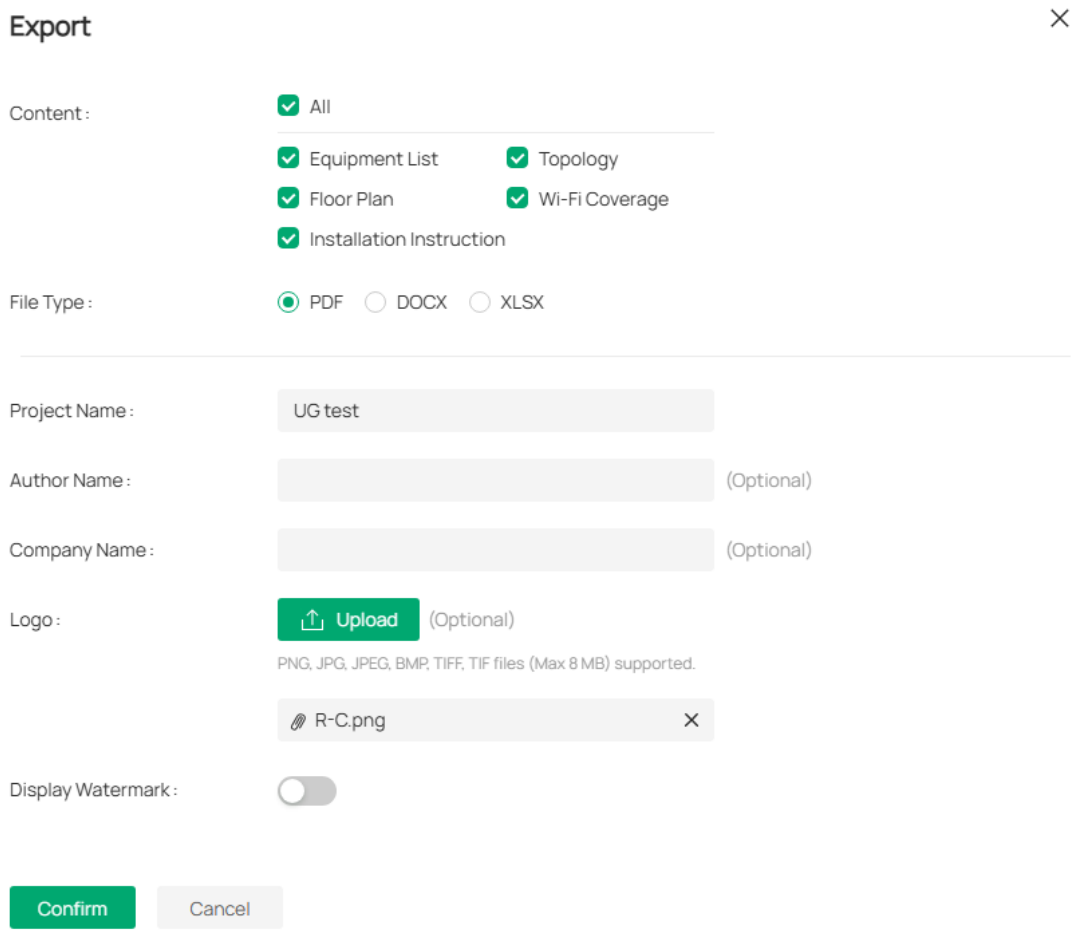
Export Report

To export the design report of the project, follow these steps:

1) Click the Export icon in the upper right of the page.



2) Select the content you want to export and the file type. Modify the project name, specify the author name and the company name, upload a logo, or display watermark as needed. Click **Confirm**.



Note:

Do not leave this page or the export will be interrupted.

Omada Design Hub Function Description

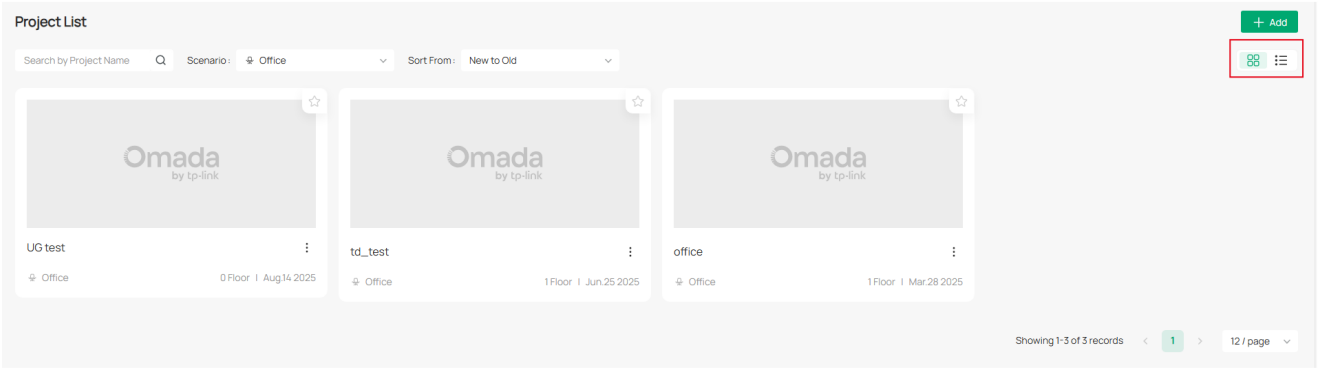
This chapter describes the major functions provided by Omada Design Hub.

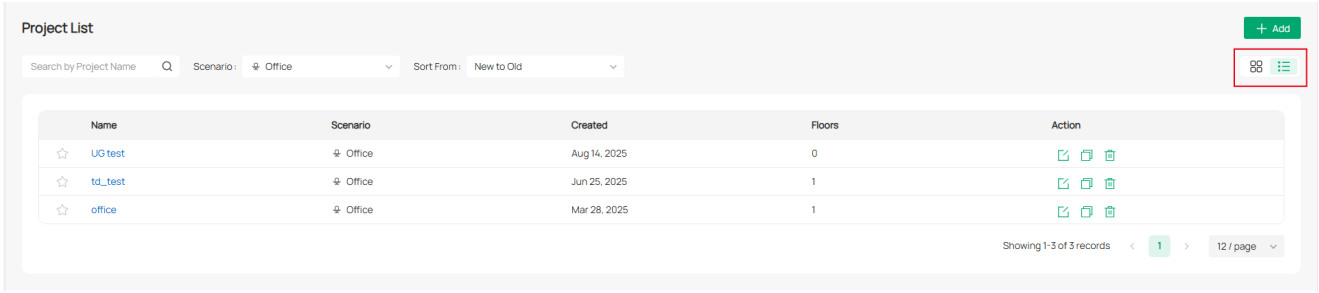
Manage Projects

After creating projects, you can view them on the **Project List** page. You can change the view type (Card view by default) of the project list by clicking the Switch View icons on the right.

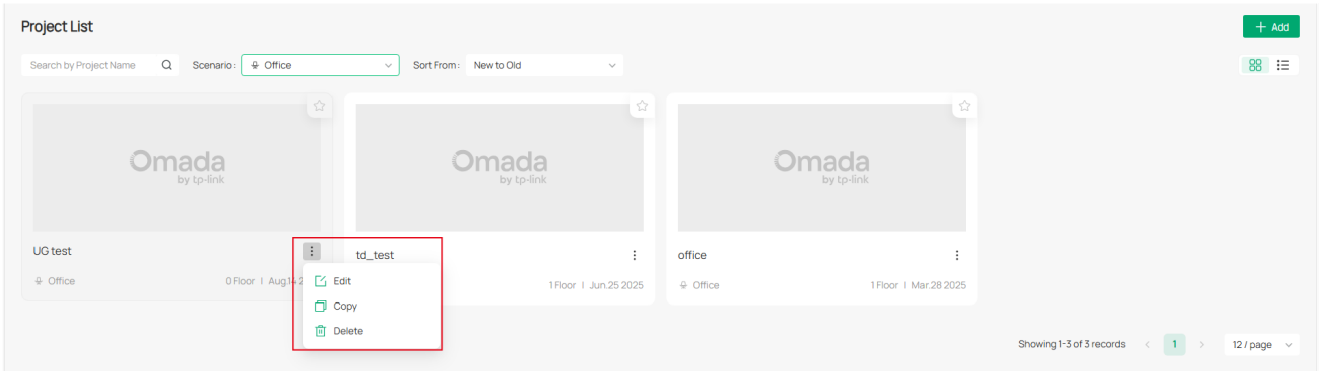
To search a specific project, use the search box above the table. To filter the projects by their scenario, select the specific scenario in the drop-down list. You can also sort the projects from New to Old or from Old to New.

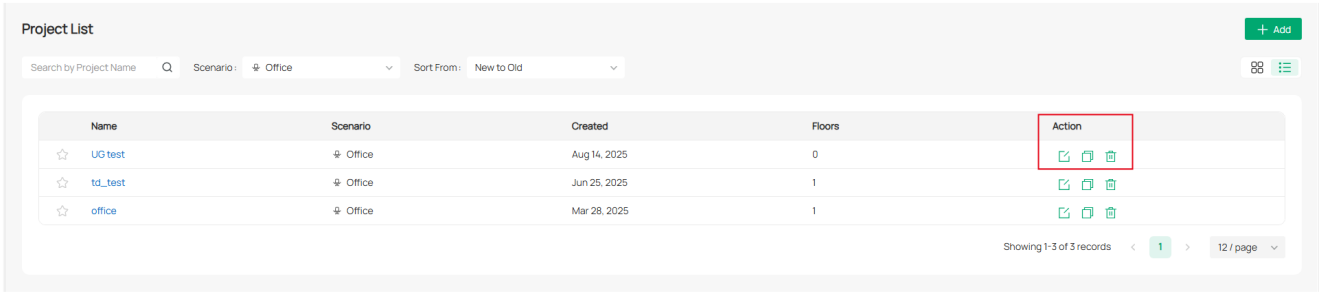
Click the star icon to bookmark a specific project, which will then be displayed at the top of the list.





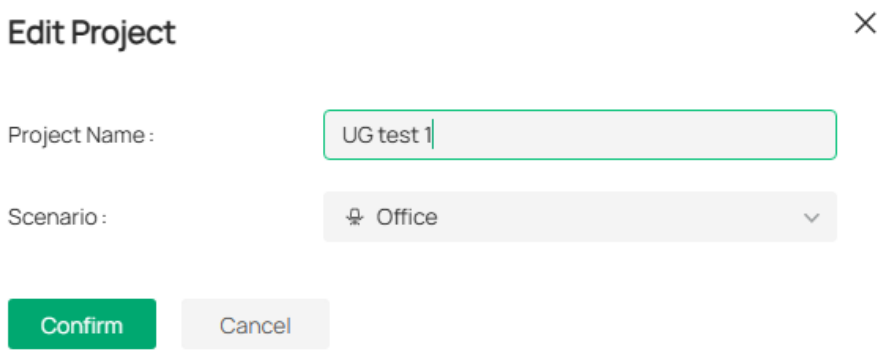
To edit, copy, or delete the projects, hover your mouse over the icon ⋮ in the Card view or click the corresponding icon in the **Action** column in the List view.





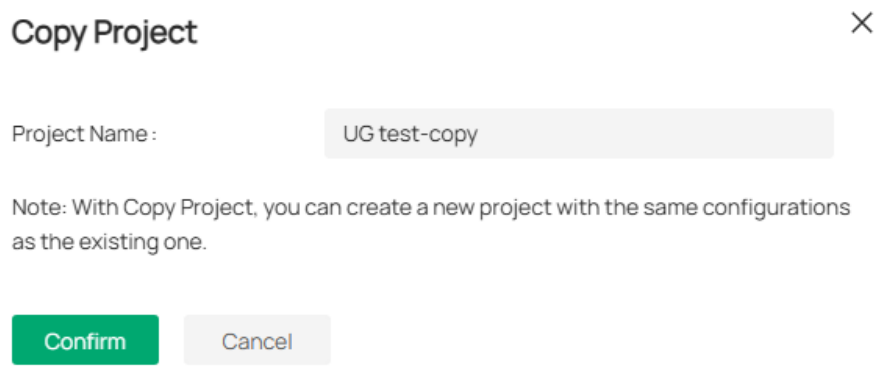
- Edit Projects

Click the **Edit** icon, and you can modify the project name or change the project scenario. Click **Confirm** to apply the changes.



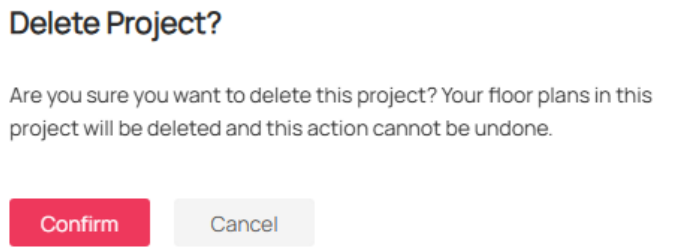
- Copy Projects

Click the **Copy** icon, and you can create a new project with the same configurations as the existing one. Specify the new project name and click **Confirm**.



- Delete Projects

Click the **Delete** icon, and click **Confirm** to delete the project.

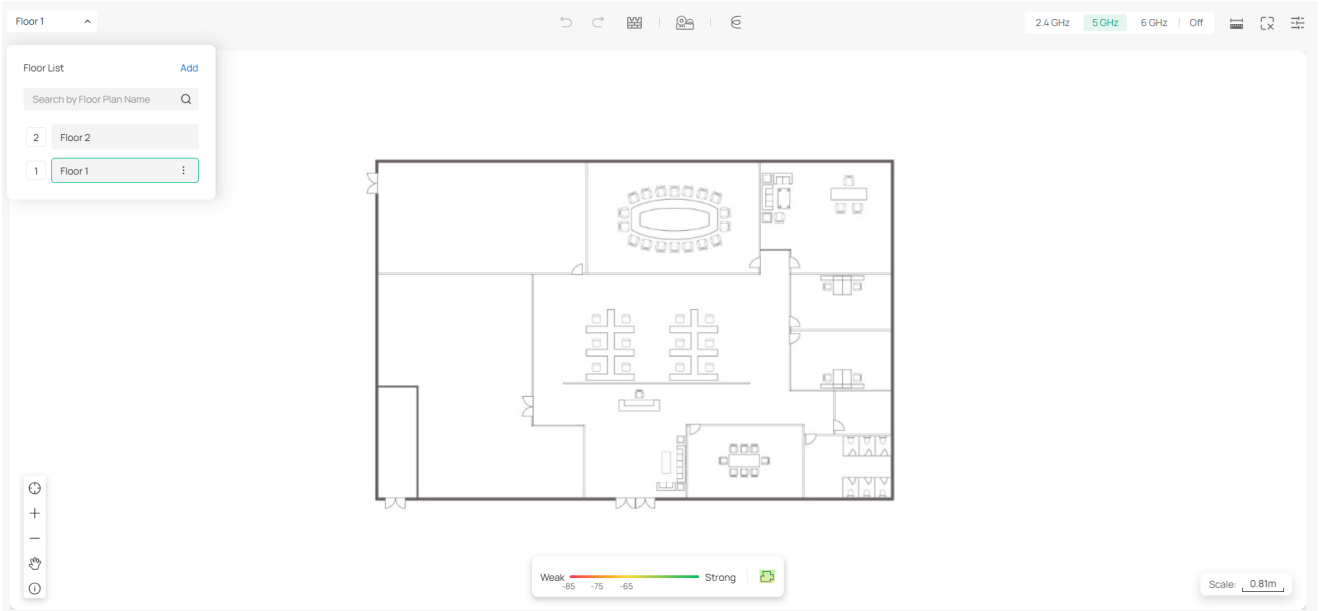


Note:

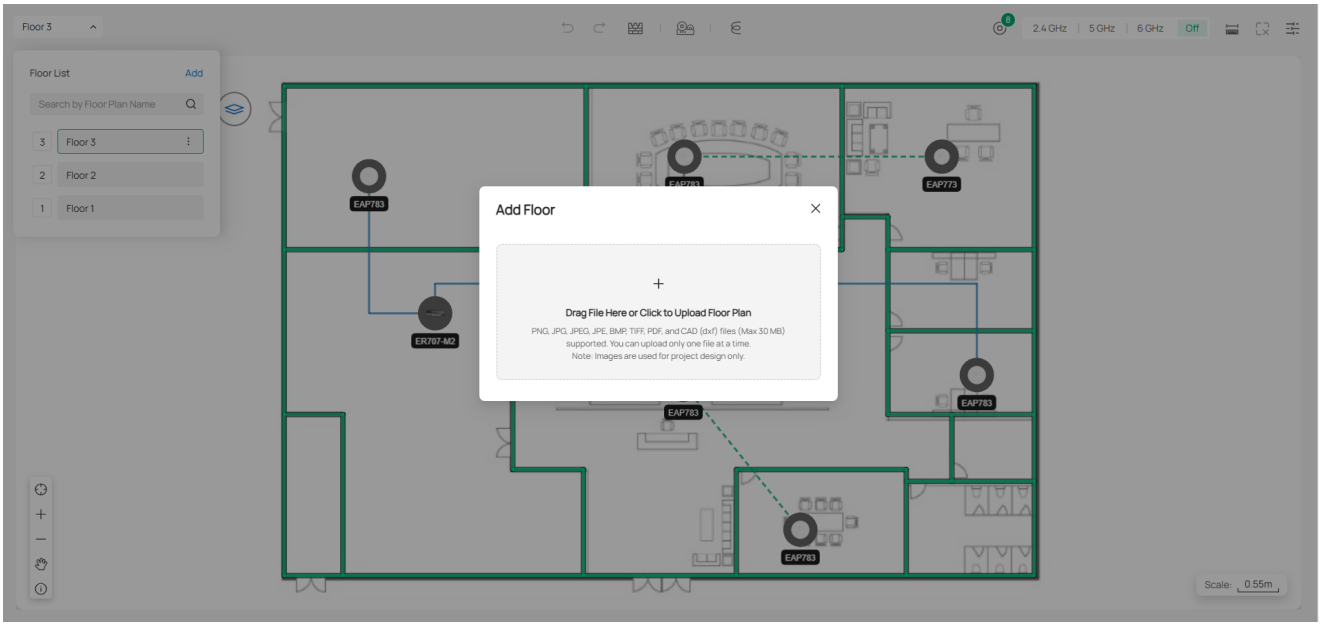
The floor plans in this project will be deleted and this action cannot be undone.

Manage Floors

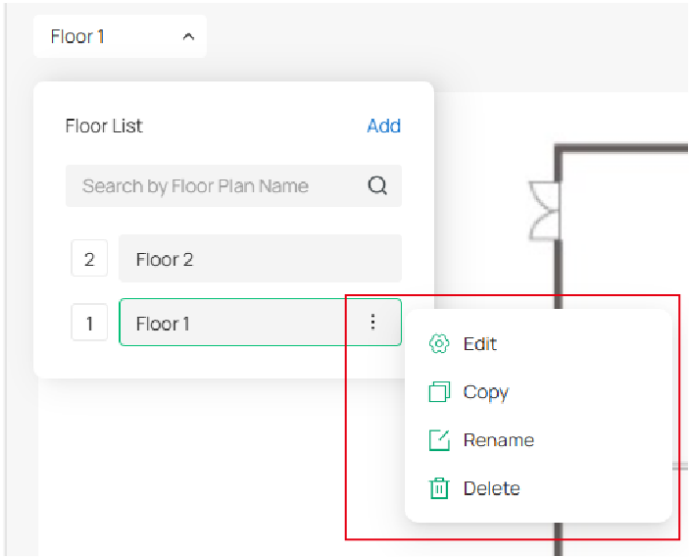
After creating floors, you can view them on the **Floor List**.



To create a new floor for the project, click **Add** on the **Floor List** and upload a floor plan.

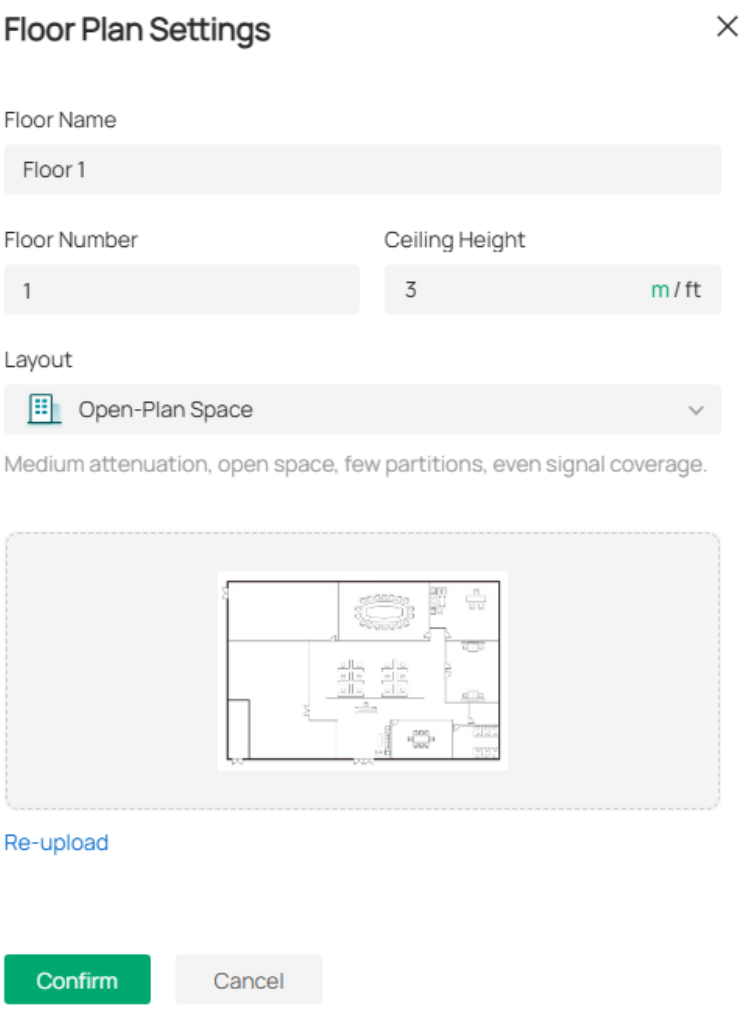


To edit, copy, rename, or delete the floor, click the icon ⋮.



- Edit Floor

Click **Edit**, and you can modify the floor name, floor number, ceiling height, and layout, or re-upload the floor plan. Click **Confirm** to apply the changes.

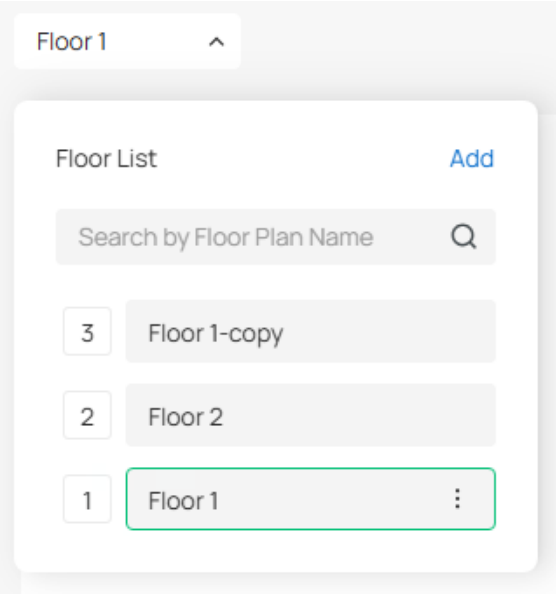


Note:

You can switch the unit for the ceiling height between meter and feet.

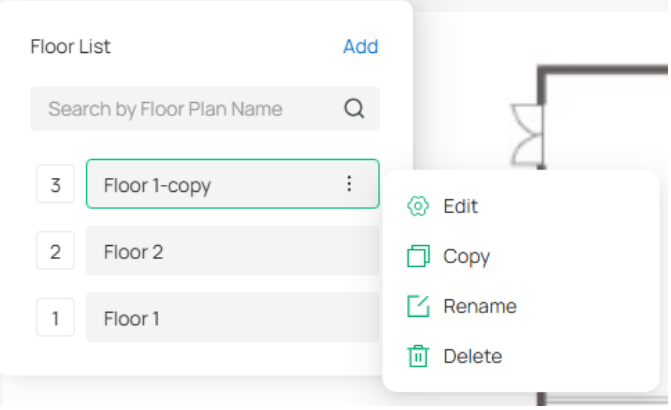
- Copy Floor

Click **Copy**, and you can create a new floor with the same configurations as the existing one.



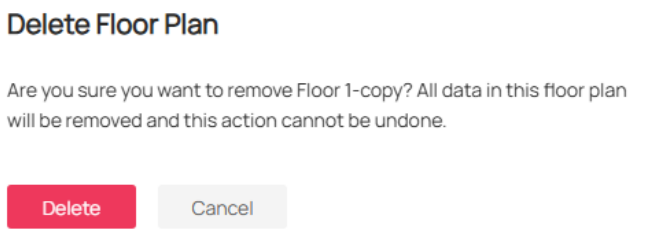
- Rename Floor

Click **Rename**, and you can change the name of the floor.



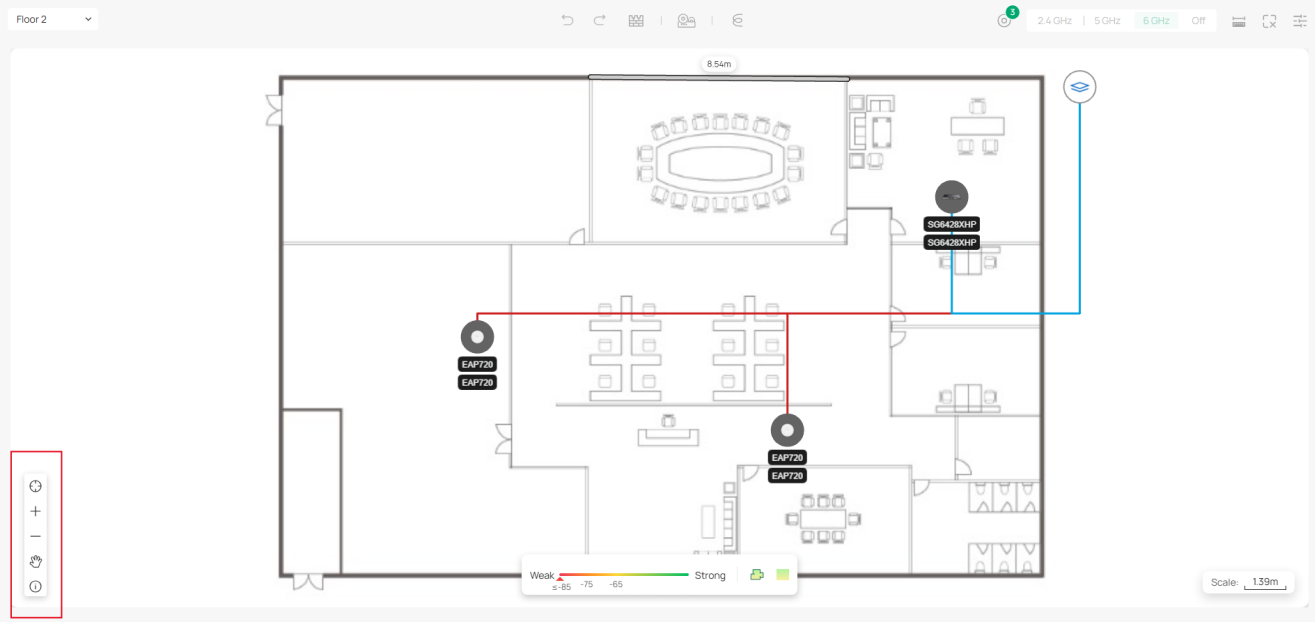
- Delete Floor

Click **Delete**, and click **Confirm** to remove the floor.



- Change Floor View

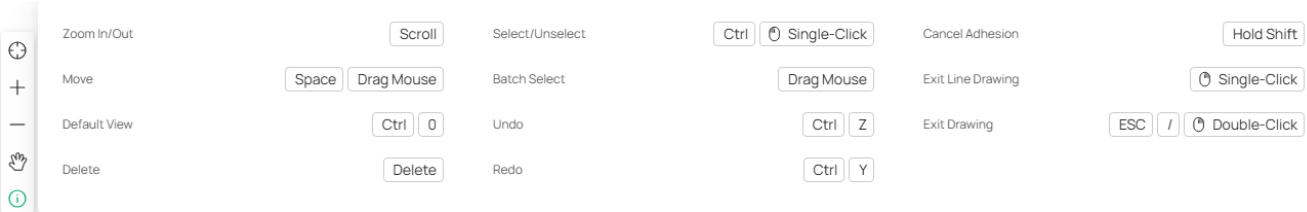
The panel in the bottom left allows you to change the floor view.



	Click to change to the default view.
	Click to zoom in the floor map.
	Click to zoom out the floor map.
	Click to change to the panning gesture that allows your to move the floor map.

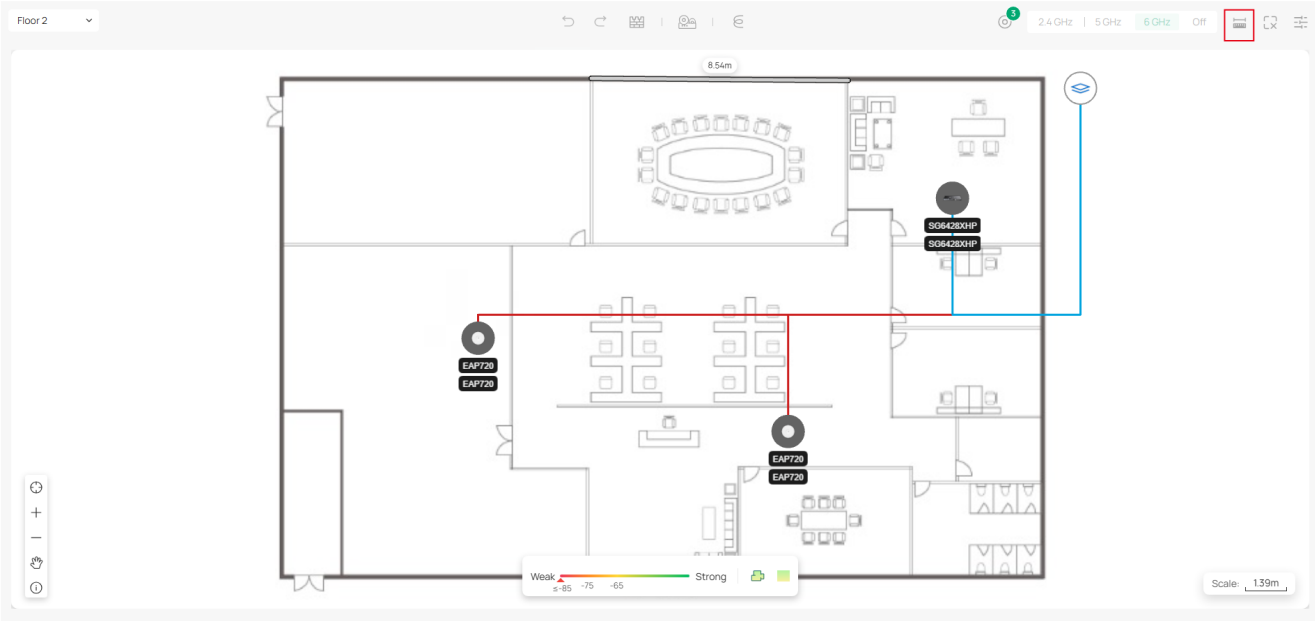
Note:

Hover your mouse over the Information icon and you will see the shortcuts that simplify your operations.



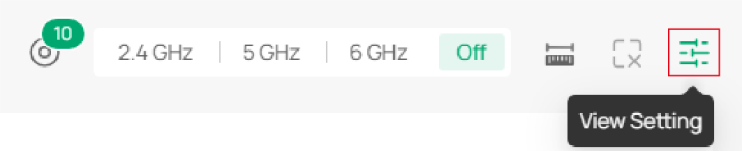
- Take a Measurement

Click the Measure icon to enter the measurement page. Left-click to draw a line on the map, and the length of the line will be measured and displayed based on the scale you have set.

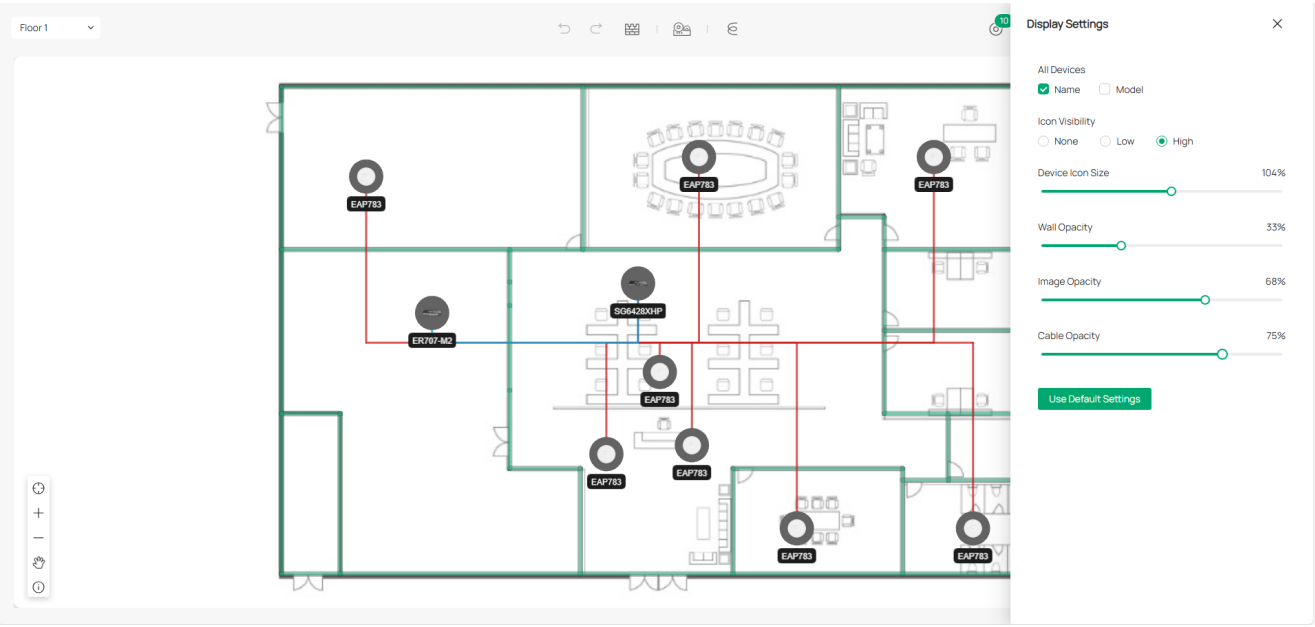


■ View Display Settings

Click the Setting icon to view and modify dispaly settings of the current floor.



You can select whether to display the name and model of the devices, set the device icon visibility and size, and adjust the opacity of the image, walls, and cables.



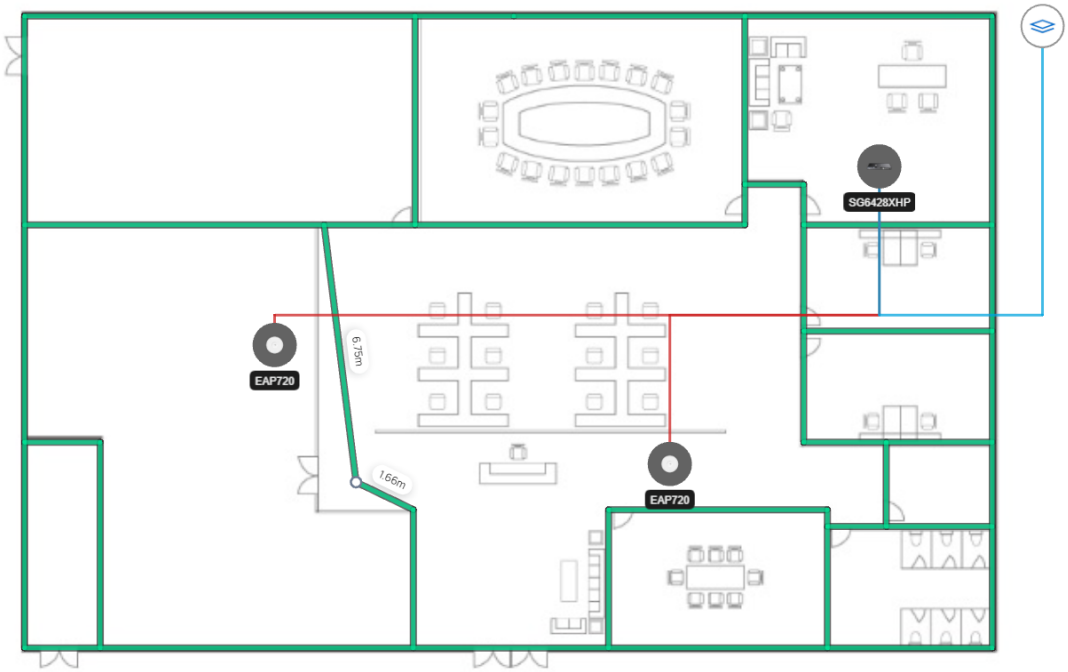
Walls

Walls are important to indicate the actual obstructions and help Omada Design Hub accurately predict signal propagation. You can draw the walls manually or take advantage of the AI tool to facilitate the process.

After drawing walls manually or automatically, you can edit the walls by moving, splitting, or deleting them or modifying their wall types.

- Move Walls

To move a wall, click and hold the node on the wall and drag it to the desired location.

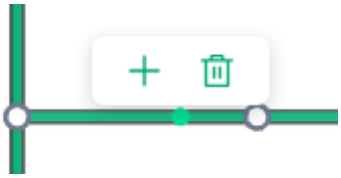


- Split Walls

Click the wall you want to split and click + . A node will be added to where you click and the wall will be split into two at that node.

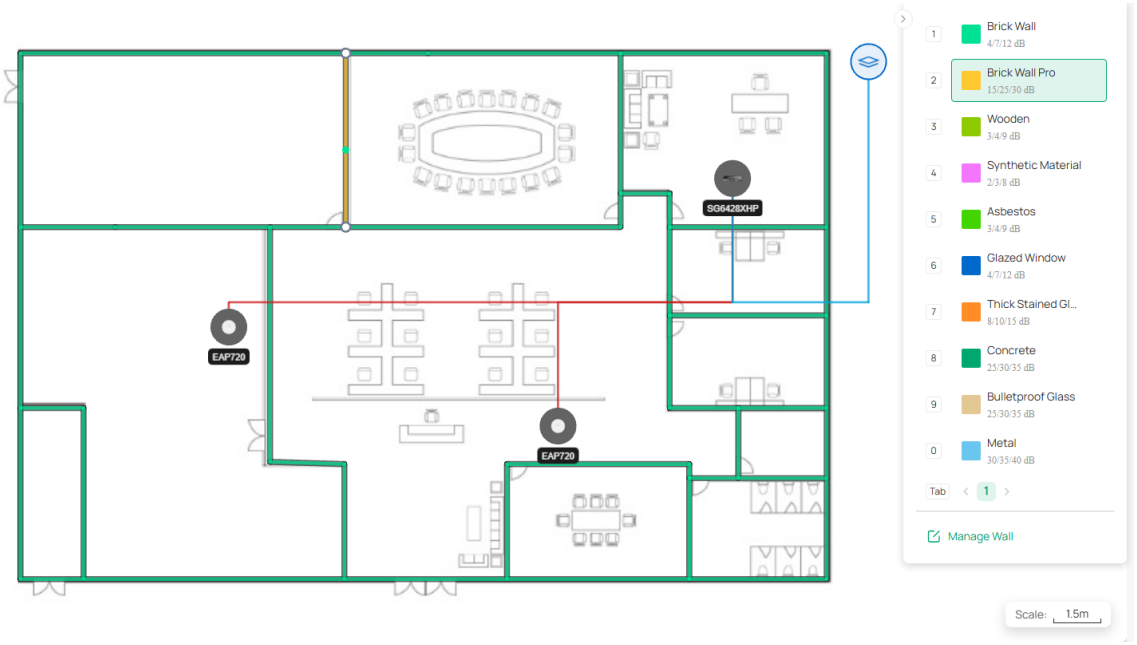
- Delete Walls

Click the wall you want to delete and click . The wall between the two nodes will be deleted.



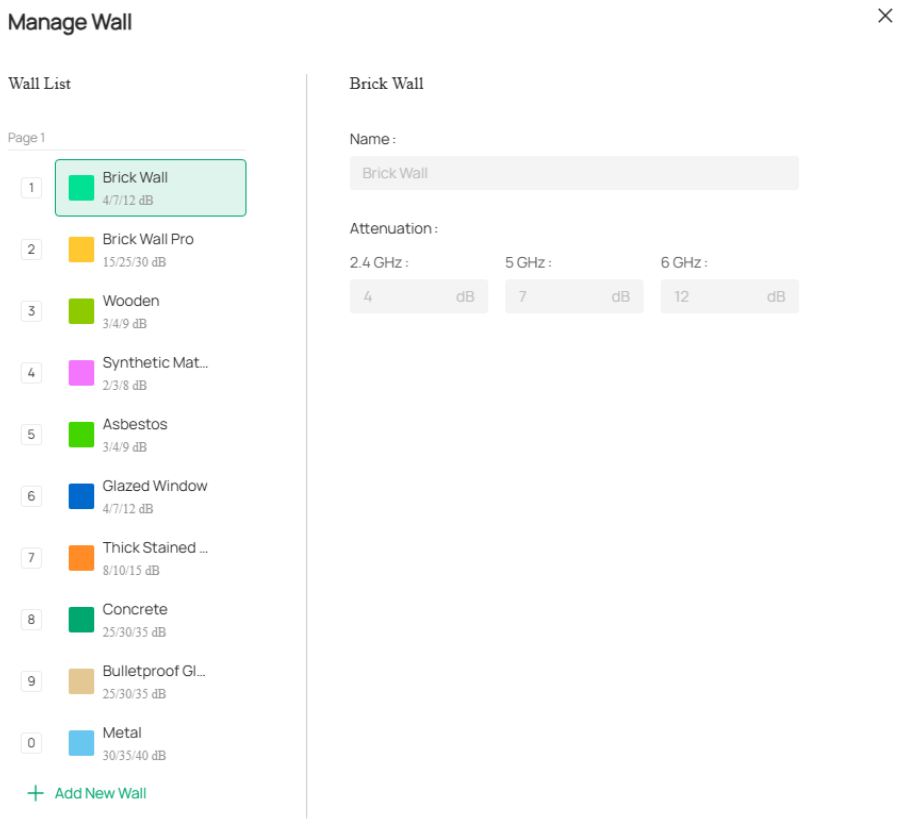
- Change Wall Type

To change the wall type, click the wall and select the wall type on the right or press the corresponding number key.

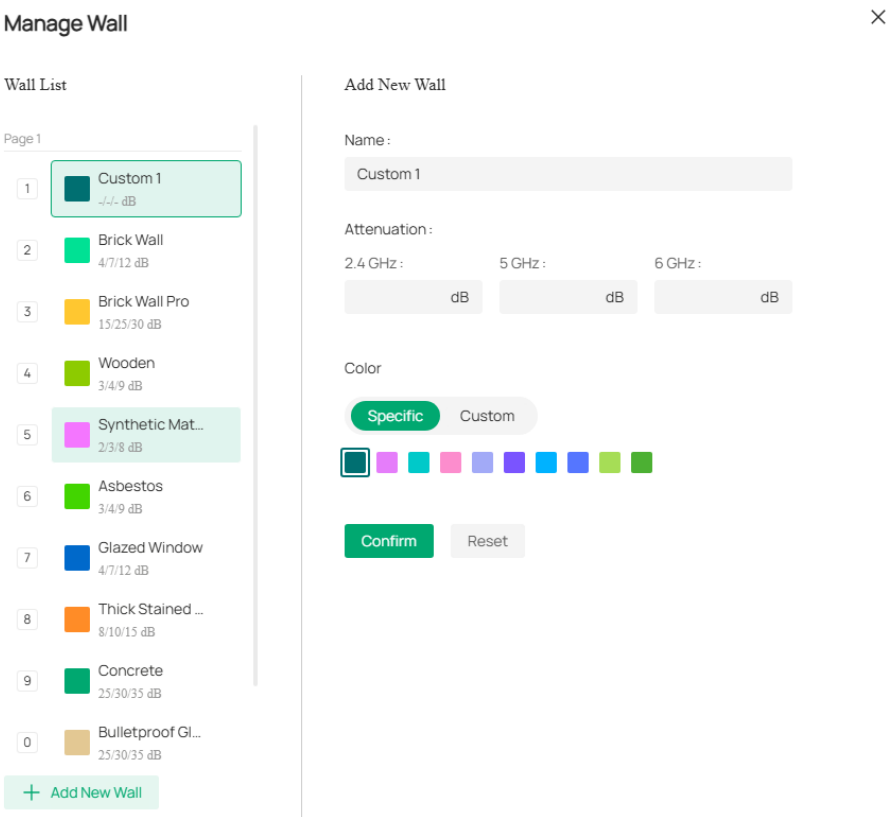


- Manage Walls Types

Click **Manage Wall**, and you can check the name of the existing wall types and the attenuation value for each band.



If the existing walls do not meet you actual need, click **Add New Wall** to customize your wall name, attenuation values, and color.



Note:

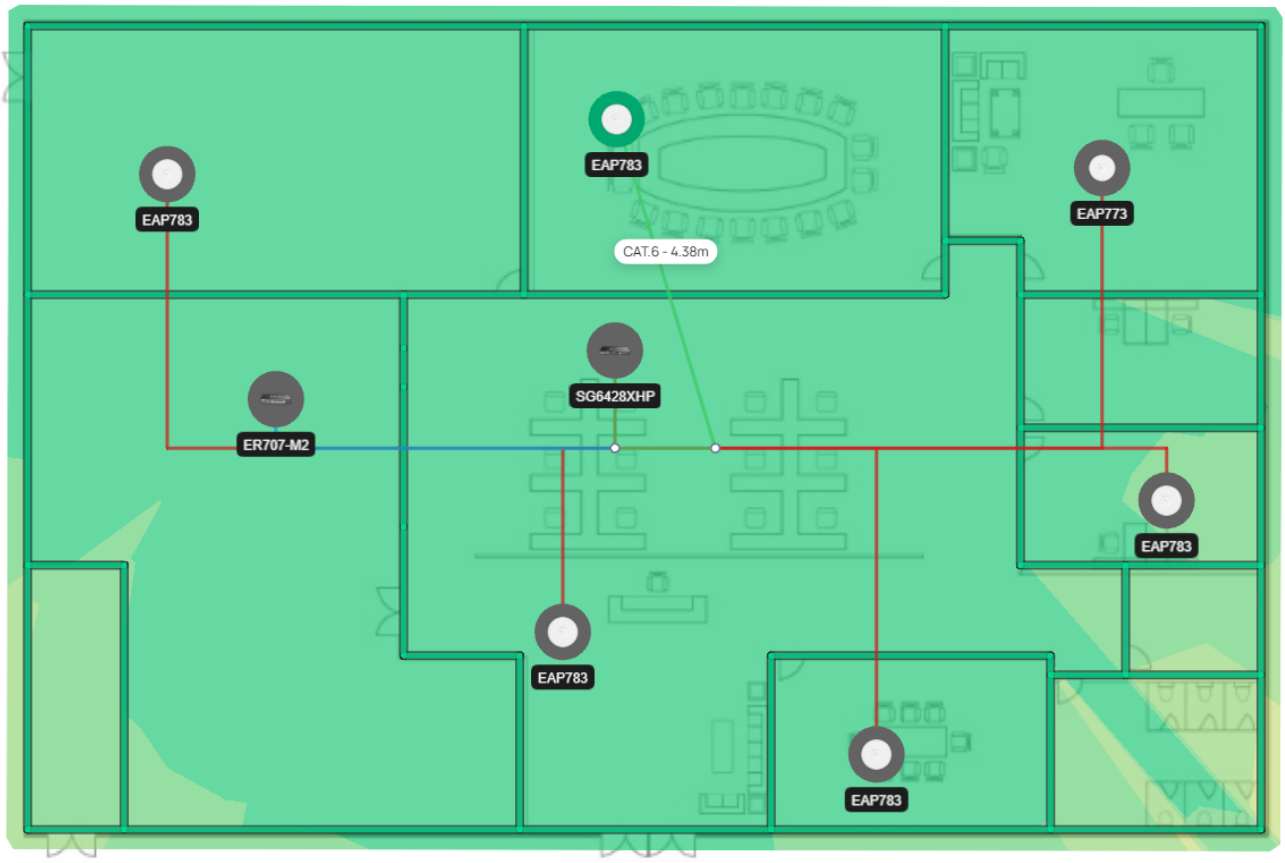
The wall type modifications are project-specific.

Devices

After deploying devices manually or automatically, you can move the device, check and edit the device settings, copy and delete the device, and view the device list of the current floor.

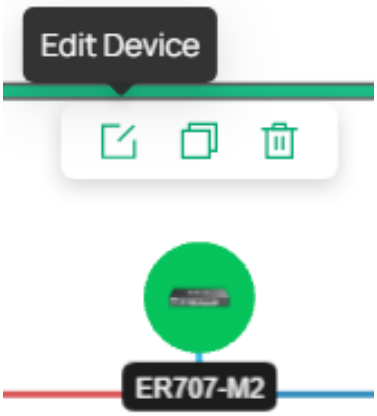
- Move Device

To move a device, click and hold it on the map and drag it to the desired location.

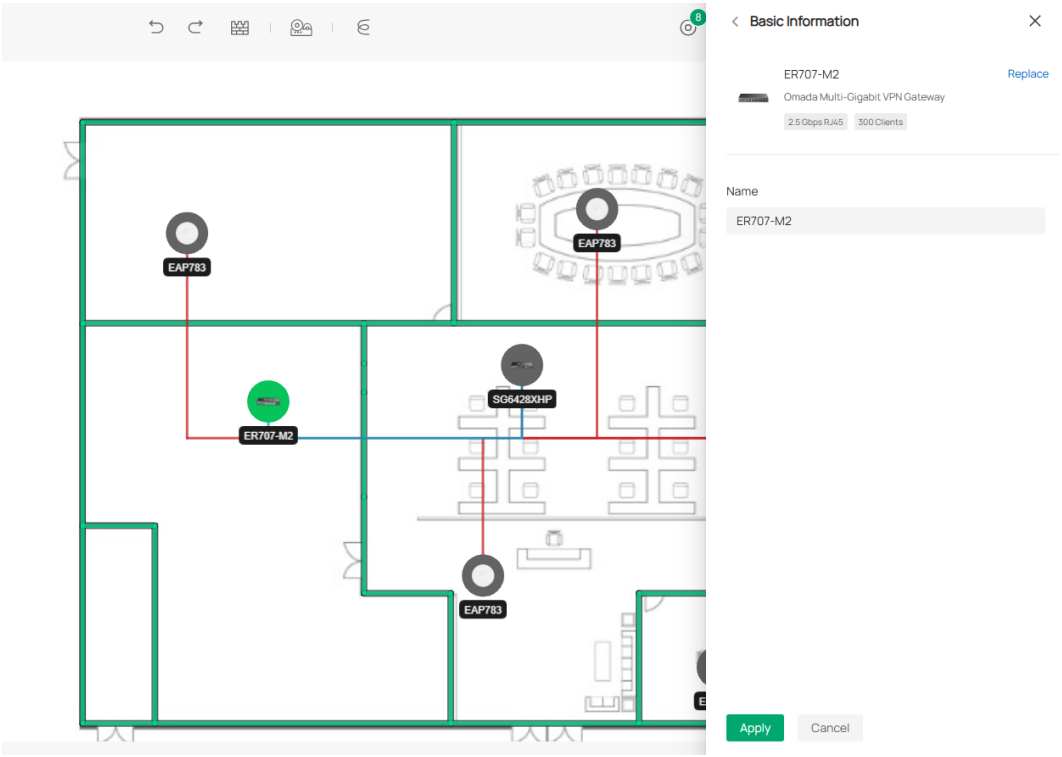


- Edit Device

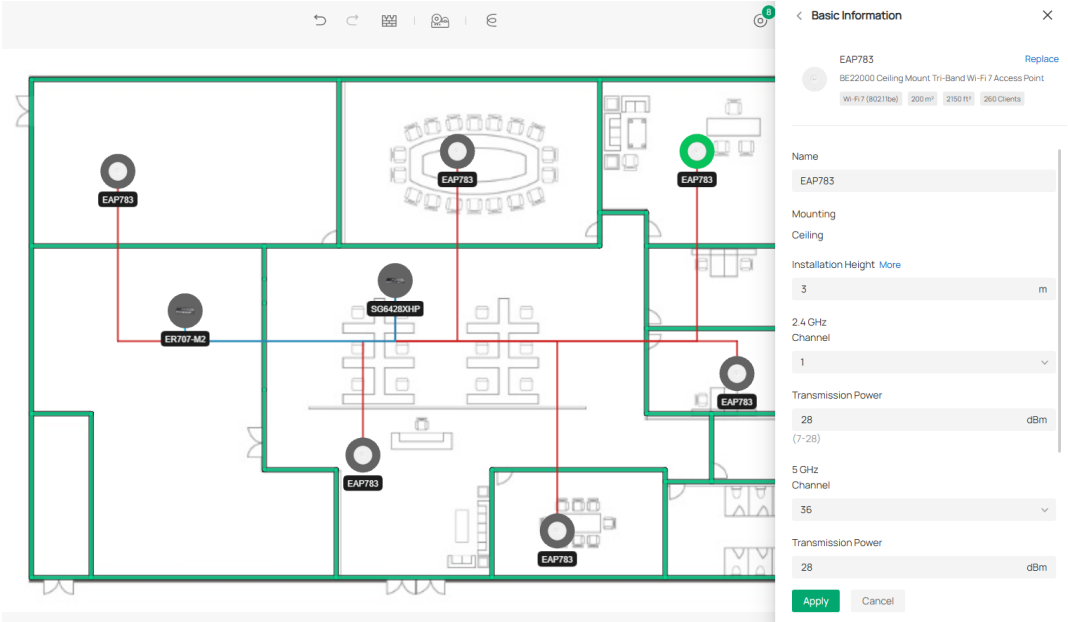
Click the device icon on the map and click the **Edit Device** icon to open the device's Basic Information page.



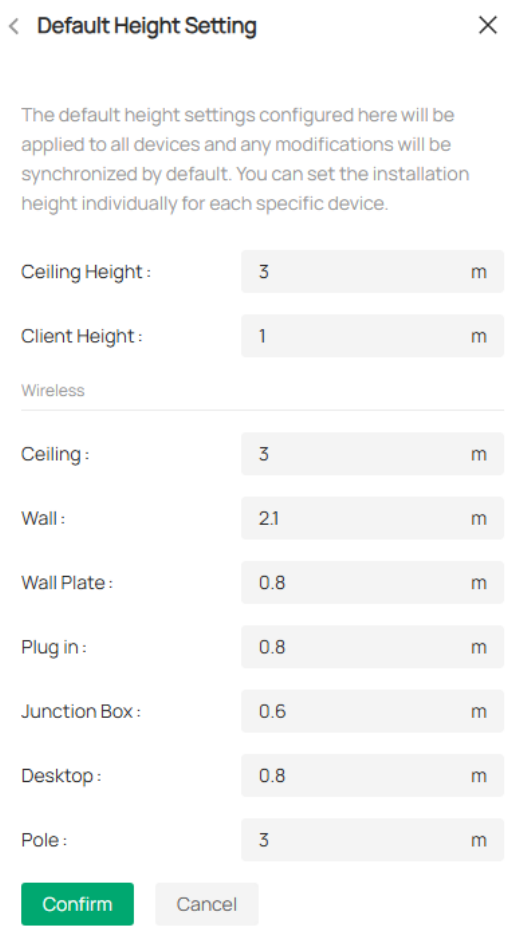
For gateways and switches, you can modify the device name.



For EAPs, you can modify the device name, the angle (for some models), the installation height, and the channel and transmission power for each band.



Click **More** to open the Default Height Setting page and you can set the default installation height for different EAPs.

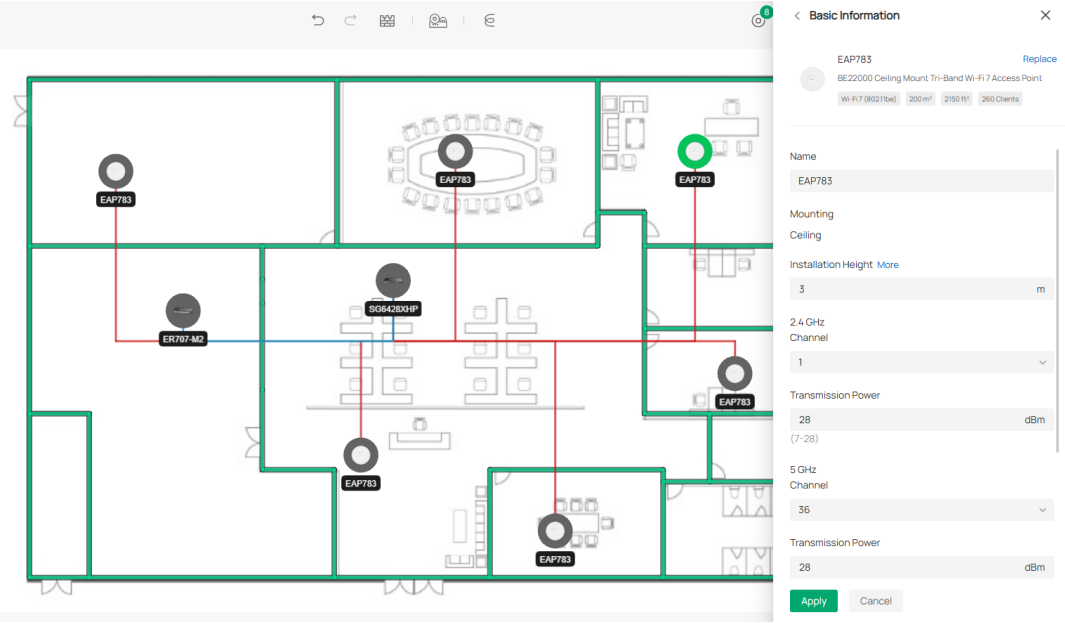


Note:

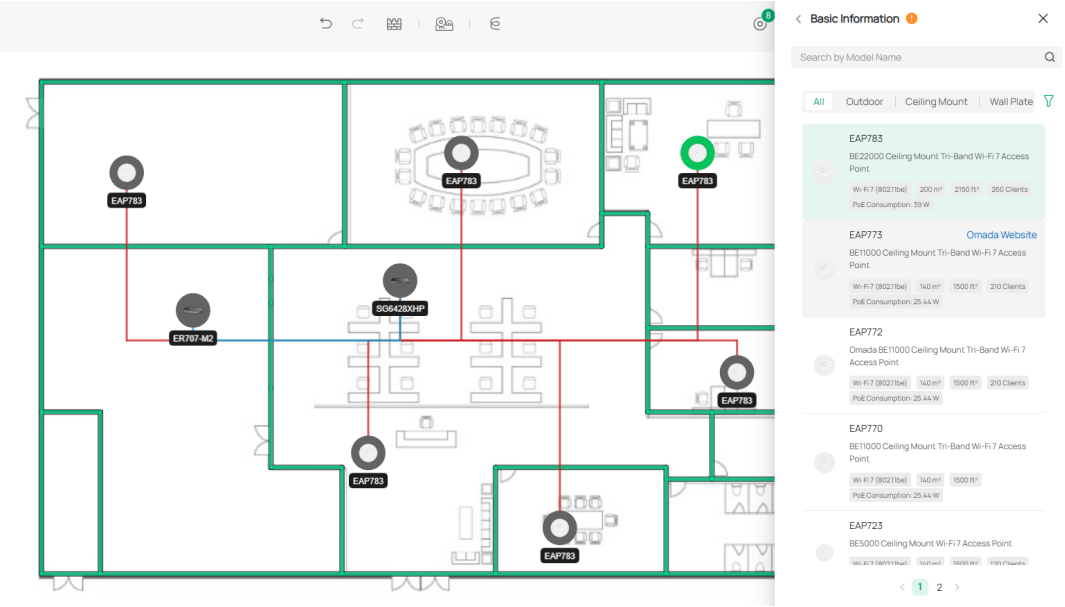
The default height settings configured here will be applied to all devices with the same installation method and any modifications will be synchronized by default. You can set the installation height individually for each specific device.

- Replace Device

Click **Replace** on the device's Basic Information page.



Select a different device model to replace the existing one.

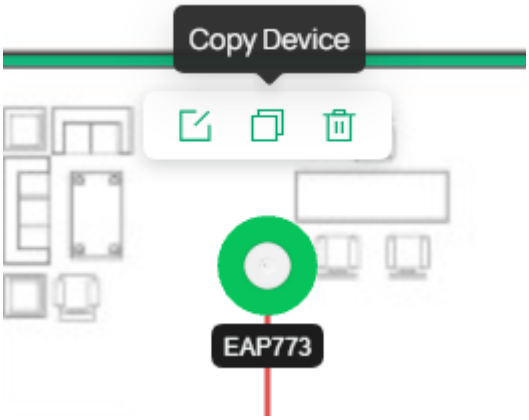


Note:

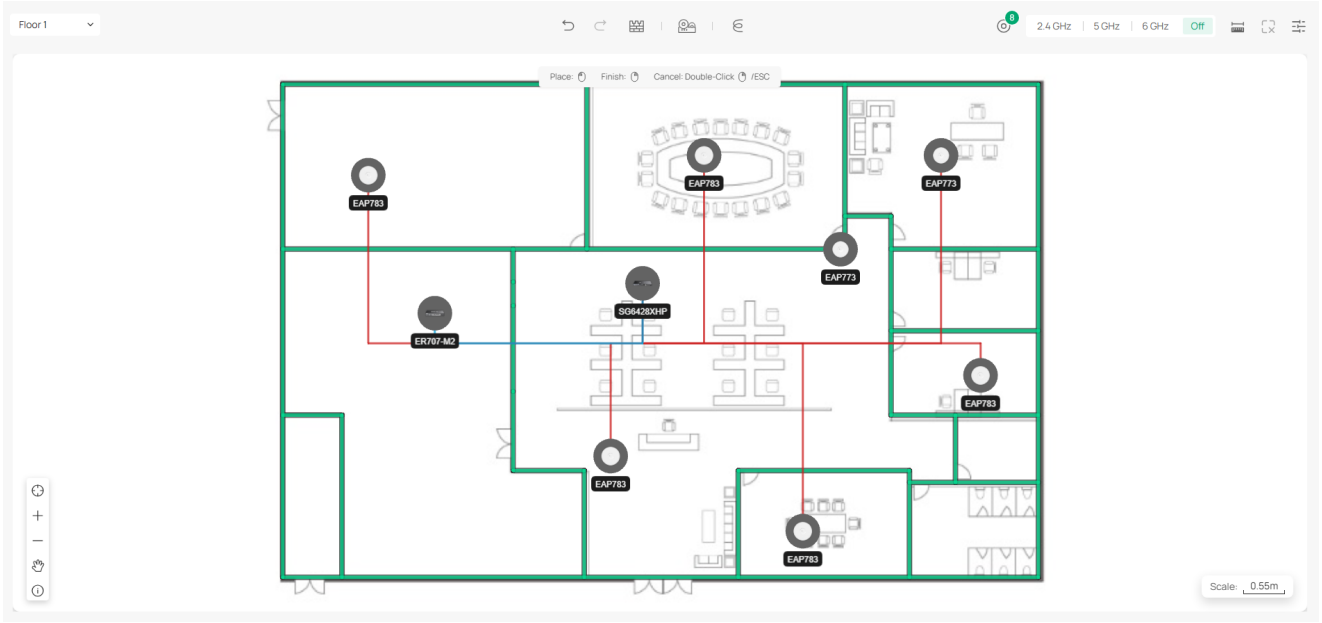
You can click **Omada Website** to go to the corresponding product page for more information on the device.

- Copy Device

Click the device icon on the map and click the **Copy Device** icon.

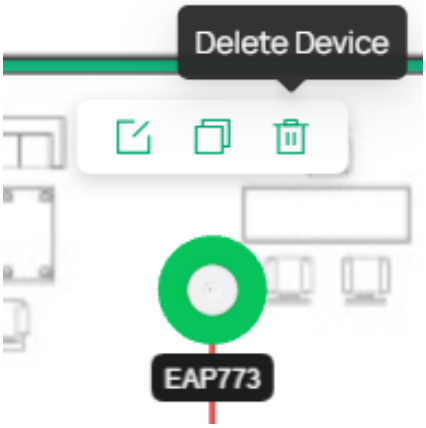


You can then place the device with the same configuration at the desired location.



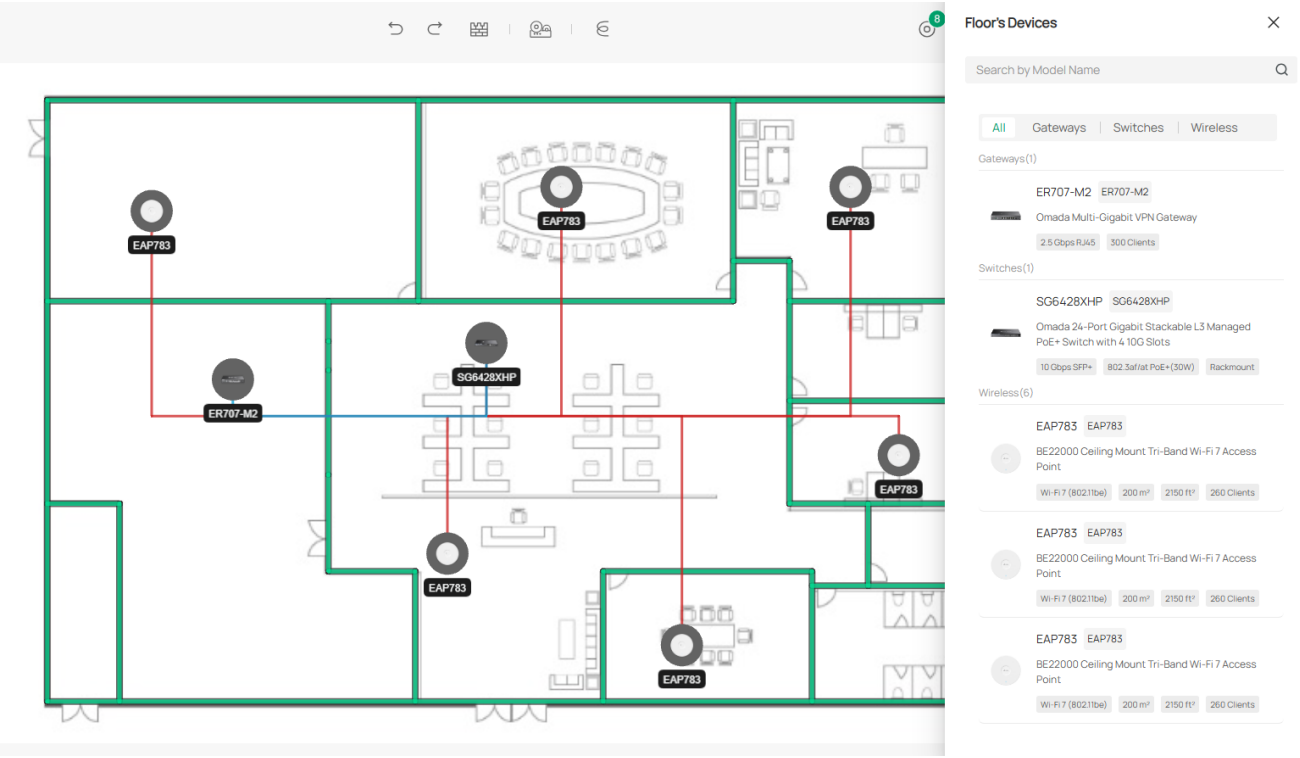
- Delete Device

Click the device icon on the map and click the **Delete Device** icon.

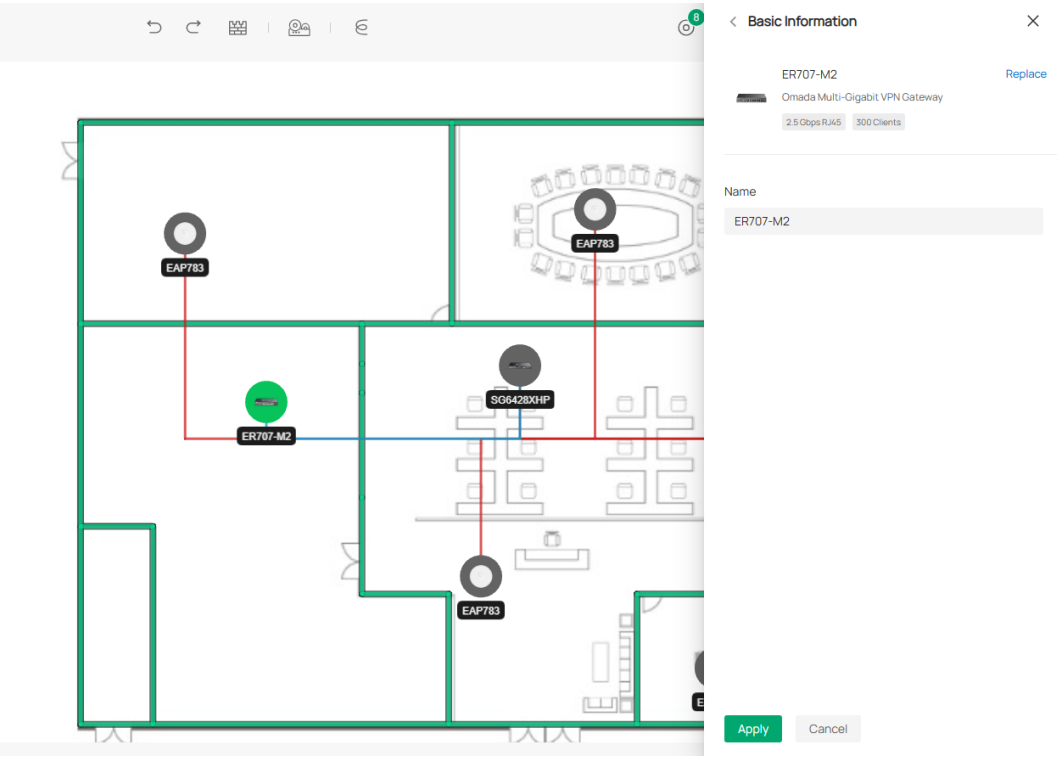


- View Floor's Devices

Click 8 to view the device list of the current floor. You can search a specific device by model name or filter the devices via the filter tab.



Click a device on the device list, you can locate the device on the map, and check and edit its information.

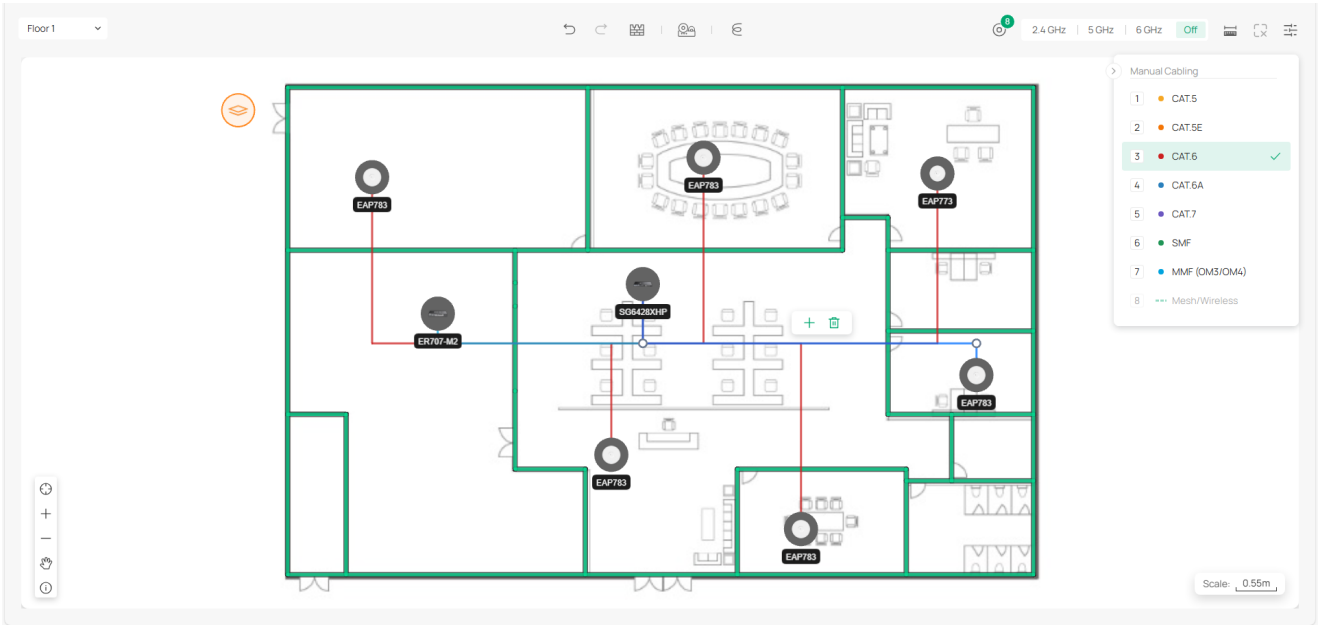


Cabling

After cabling, you can edit the cables by modifying the cable types, and moving or deleting the cables. Cabling assistance such as ELV risers and cable trays is also available to facilitate the cabling process.

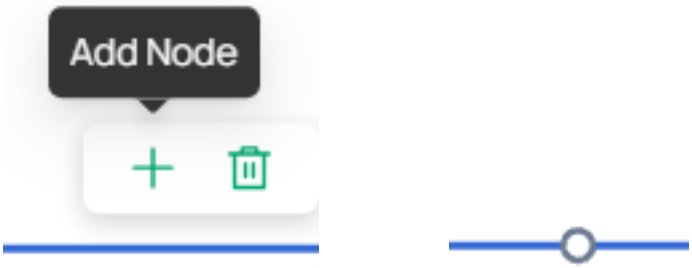
- Modify Cable Type

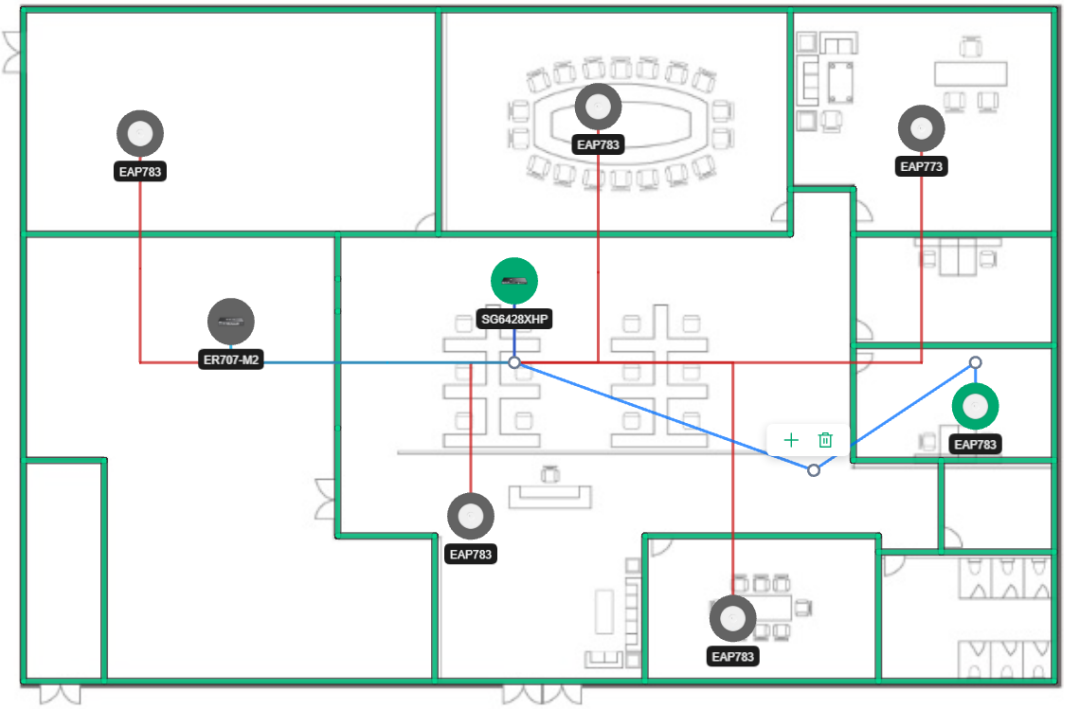
Click the cable you want to modify and select the cable type on the right. You can also press the corresponding number key on your keyboard to select the cable type.



- Move Cables

To adjust the cable routing path, click the cable and click + to add a node on the cable. The click and hold the node and drag it to the desired location.





- Delete Cables

Click the cable you want to delete and click . The cable connecting two devices will be deleted.

- Cabling Assistance

ELV risers and cable trays are available to help you route the cables.

ELV Riser

To connect cross-floor devices, deploy an ELV riser on each floor.

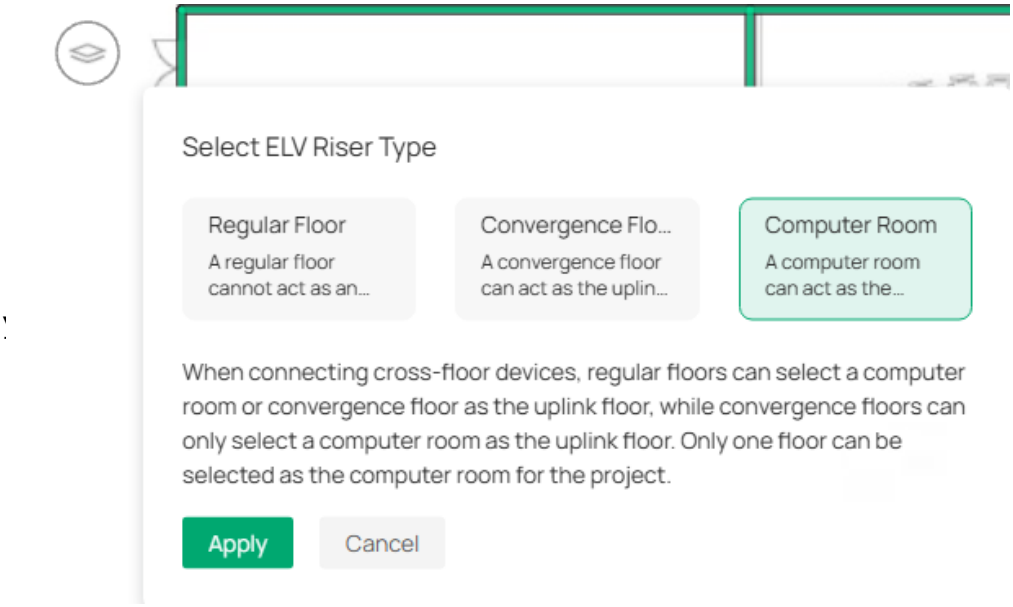
Note:

Devices on the current floor can be connected to devices on other floors through the riser.

Select the ELV riser type for the current floor.

Note:

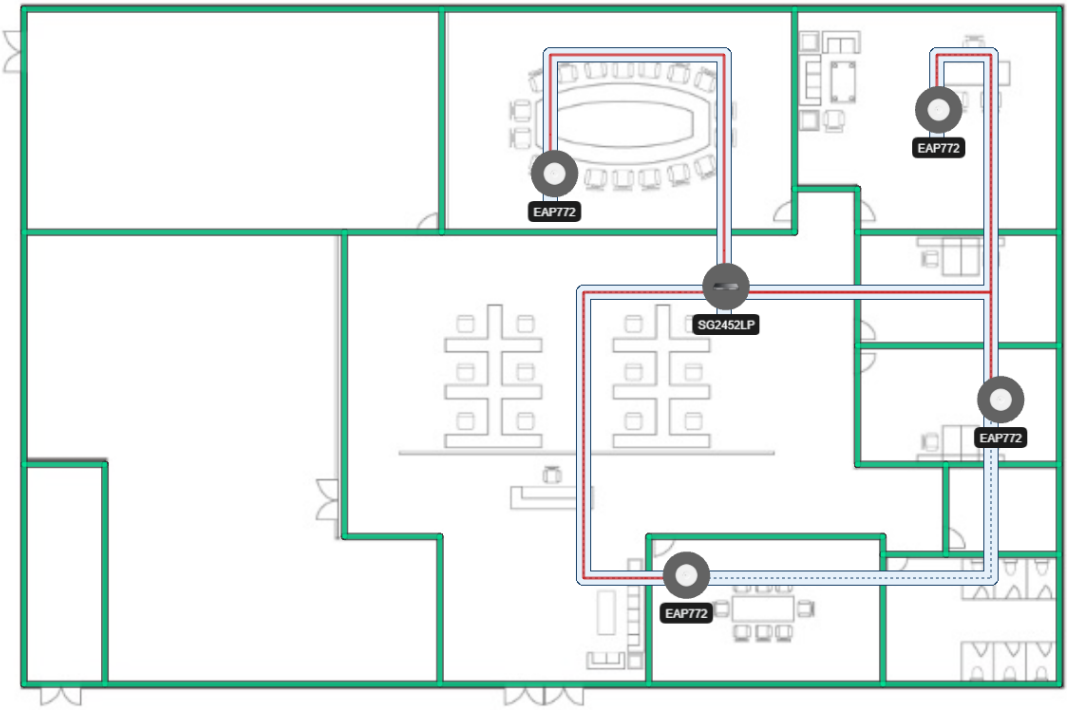
When connecting cross-floor devices, regular floors can select a computer room or convergence floor as the uplink floor, while convergence floors can only select a computer room as the uplink floor. Only one floor can be selected as the computer room for the project.



Regular Floor	A regular floor cannot act as an uplink floor.
Convergence Floor	A convergence floor can act as the uplink floor for regular floors.
Computer Room	A computer room can act as the uplink floor for all floors.

Cable Tray

Cable trays provide a structured cabling system to route and organize cables effectively. Draw the cable trays according to your actual environment, so that cables can be routed along the cable trays.

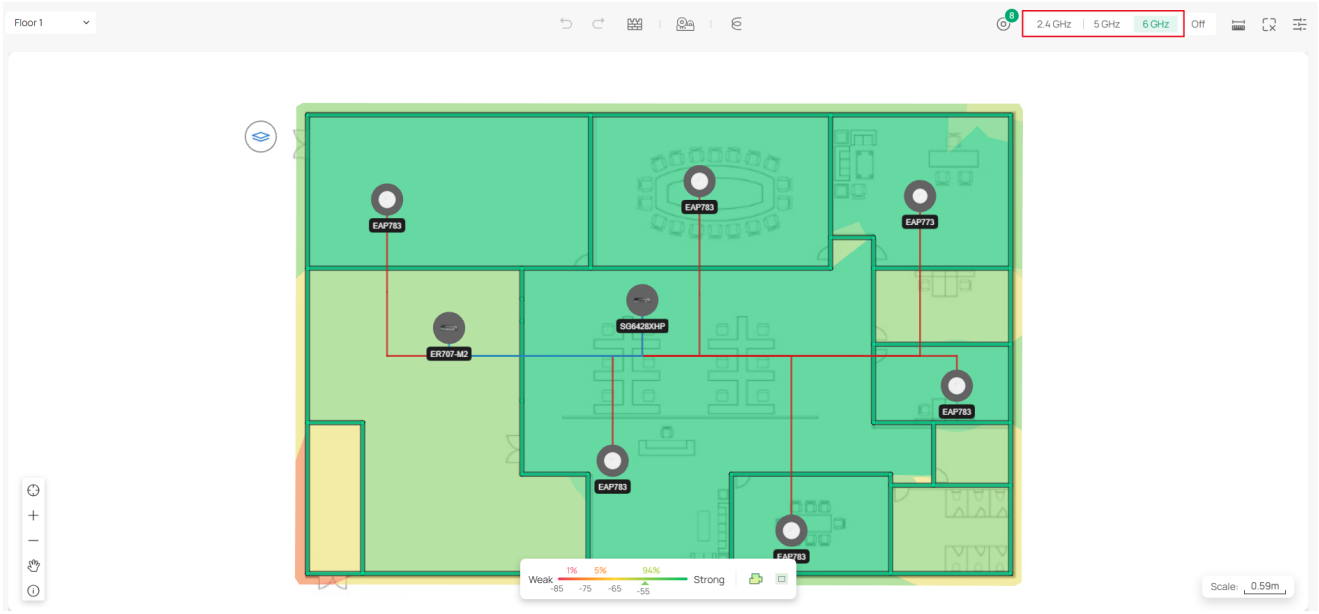


Simulation

After the network design, a Wi-Fi heatmap can help simulate the wireless signal coverage and provide a visualized result.

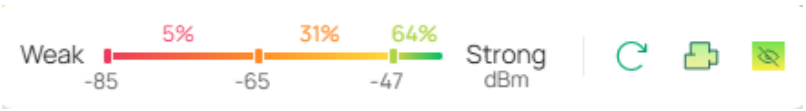
- Check Simulation Result

Click **2.4 GHz / 5 GHz / 6 GHz** to check the simulation result in the corresponding frequency band.

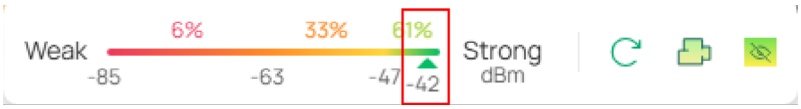


Note:

- When the simulation function is enabled, the heatmap will provide an instant simulation result when you modify the devices, walls, and frequency bands on the map, helping you optimize the network design in real time.
- Signal strength are represented by different colors (Green - Strong, Yellow - Medium, Red - Weak). You can drag the slider to adjust the signal strength color shown on the map. The percentages on the heatmap legend indicate how much area on the floor plan meets the corresponding threshold.

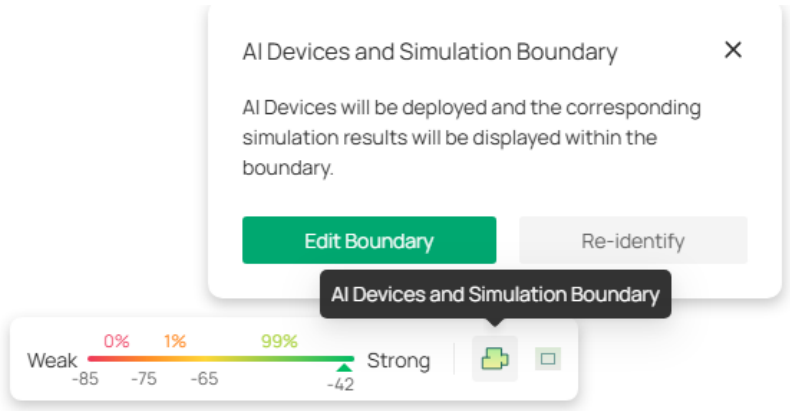


- When you hover your mouse over the map, the heatmap legend will show the signal strength at that specific point.

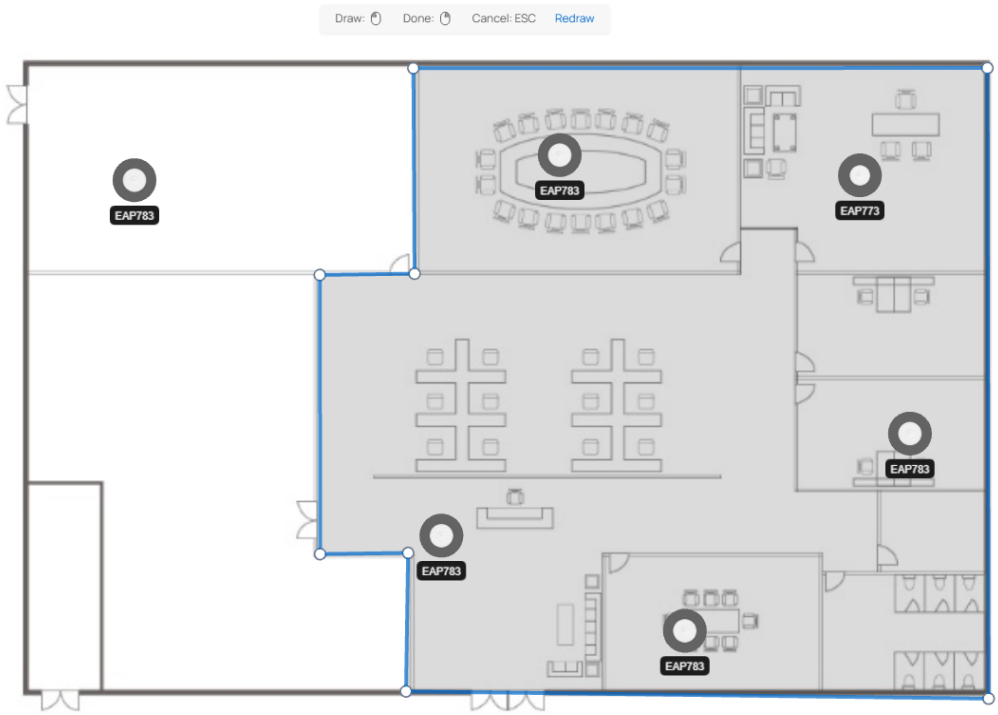


■ Edit Simulation Boundary

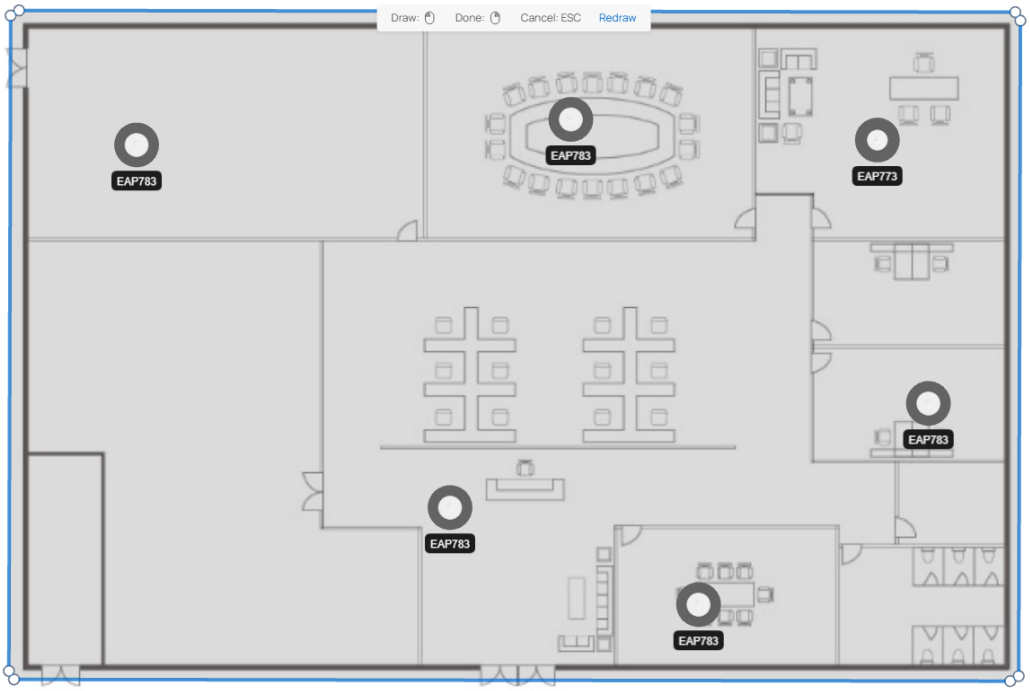
To modify the simulation area, click .



Click **Edit Boundary** to designate the area manually.



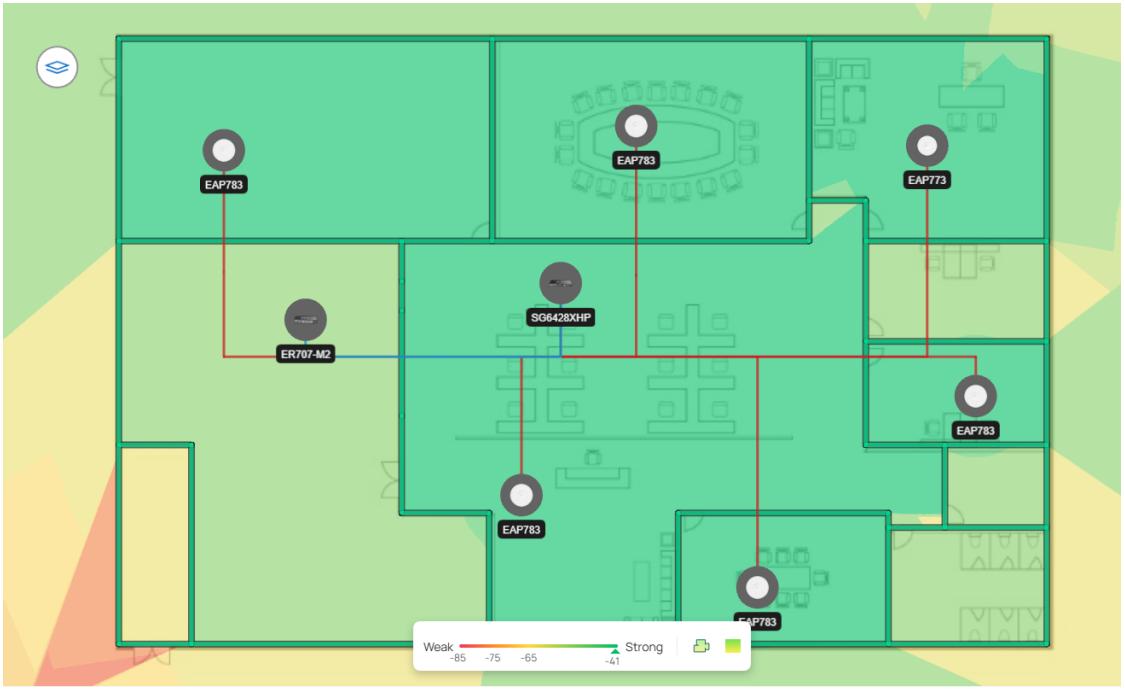
Click **Re-identify**, and the boundary will be automatically generated based on your map.



Note:

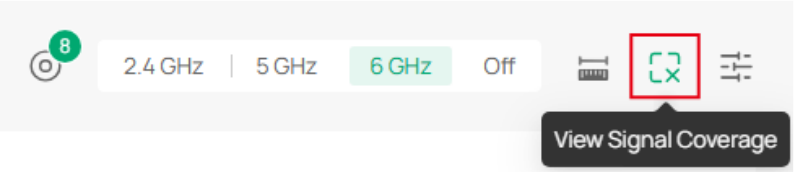
AI Devices will deploy EAPs and the corresponding simulation results will appear within the boundary.

Click to show simulation results outside the boundary. Click to hide simulation results outside the boundary.

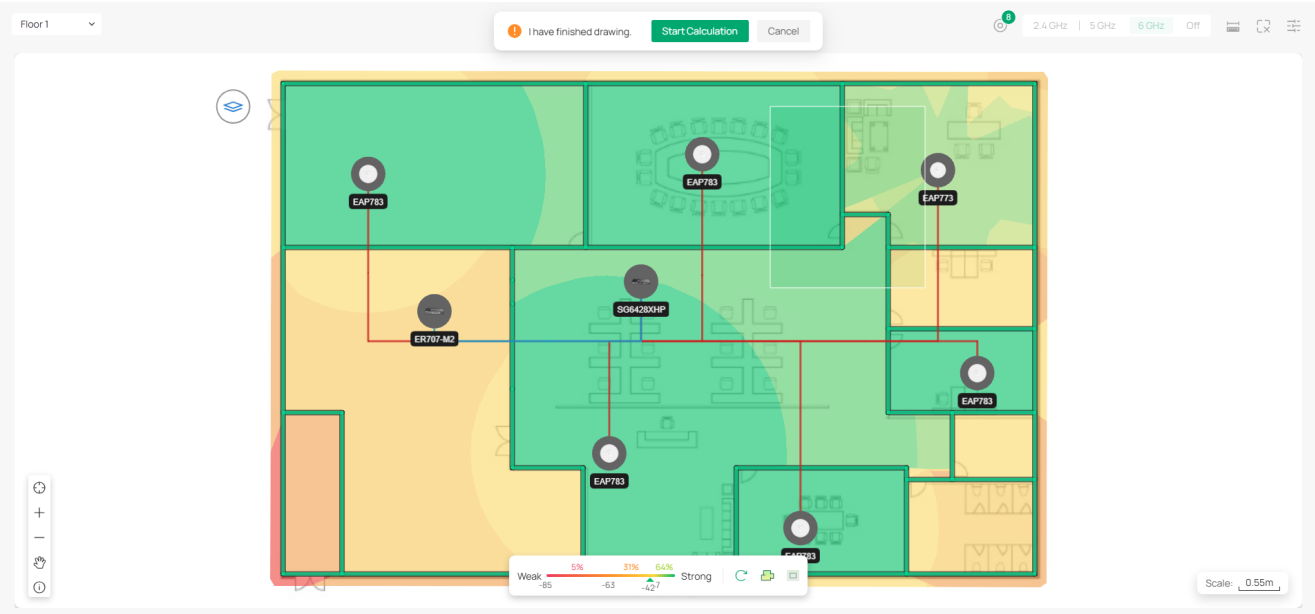


■ View Signal Coverage

To view the signal coverage of a specific area on the map, click in the upper right.



Draw a rectangle to select the area, and click **Start Calculation**.



You will see the signal strength distribution within the selected area. The instant result can help you quickly evaluate the network coverage quality.