



Monitoring and Managing Wireless Network via Omada Controller

CHAPTERS

1. View the Statistics of the Network
2. Monitor the Network with the Map
3. Monitor and Manage the EAPs
4. Monitor and Manage Clients
5. View Clients Statistics During the Specified Period
6. Manage the Rogue APs List
7. View Past Guest Authorization
8. View Logs



This guide applies to:

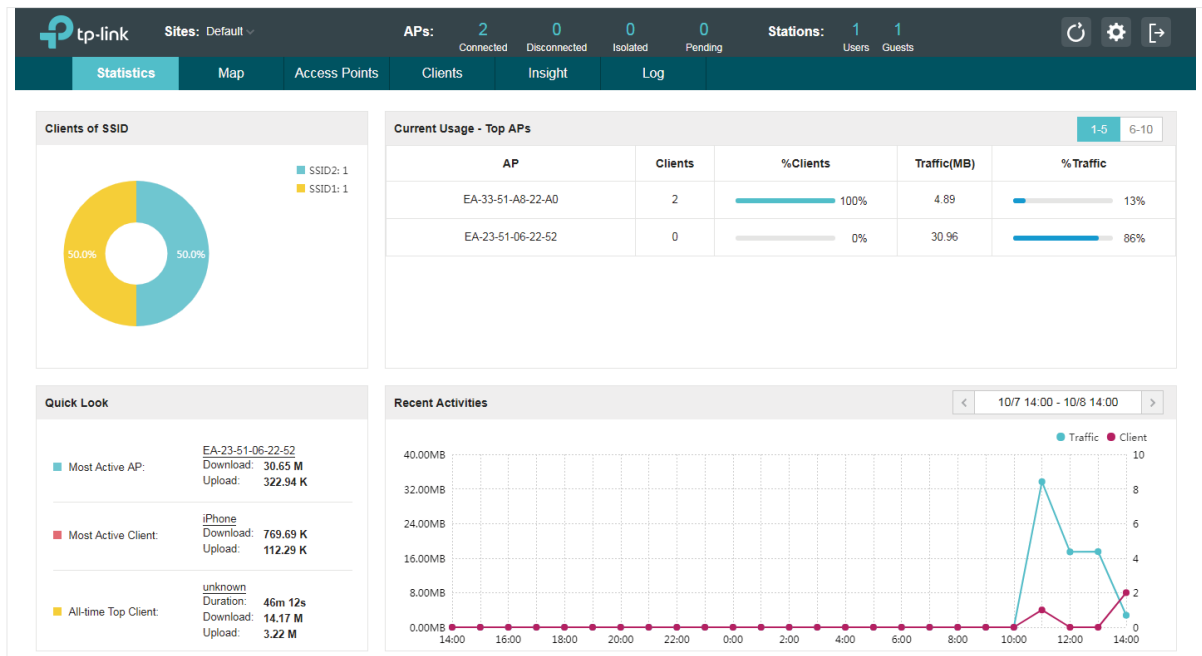
Omada Controller 3.2.1.

With Omada Controller you can monitor the EAP devices and centrally manage your wireless network. This chapter includes the following sections:

1. [View the Statistics of the Network](#)
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4. [Monitor and Manage Clients](#)
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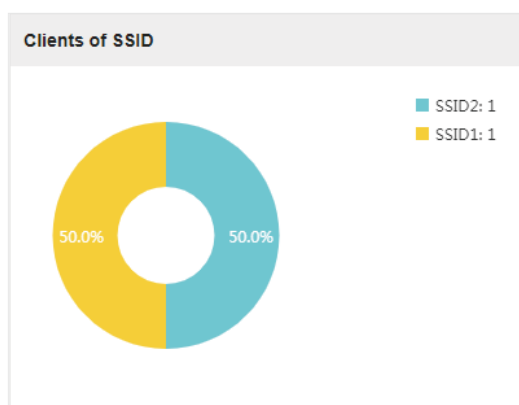
1 View the Statistics of the Network

Omada Controller collects all statistics of the managed EAPs and displays the statistical information via graphs, pie charts and tables, providing an overview of your wireless network.



1.1 View the Client Distribution on SSID

A visual pie chart shows the client distribution on each SSID. For example, the SSID1 has one client, which occupies 50% of all the clients.



1.2 Have a Quick Look at EAPs and Clients

This tab displays the **Most Active AP**, the **Most Active Clients** and the **All-Time Top Client**. You can click the MAC address of the EAP or the client to see more details.

Quick Look	
Most Active AP:	EA-23-51-06-22-52 Download: 30.65 M Upload: 322.94 K
Most Active Client:	iPhone Download: 769.69 K Upload: 112.29 K
All-time Top Client:	unknown Duration: 46m 12s Download: 14.17 M Upload: 3.22 M

Most Active AP	The current connected AP with the maximum traffic.
Most Active Client	The current connected client with the maximum traffic.
All-time Top Client	The client with the maximum traffic among all the clients that have ever accessed the EAP network.

1.3 View Current Usage-Top EAPs

This tab lists the number of connected clients and the data traffic condition of the ten APs that use the most traffic currently.

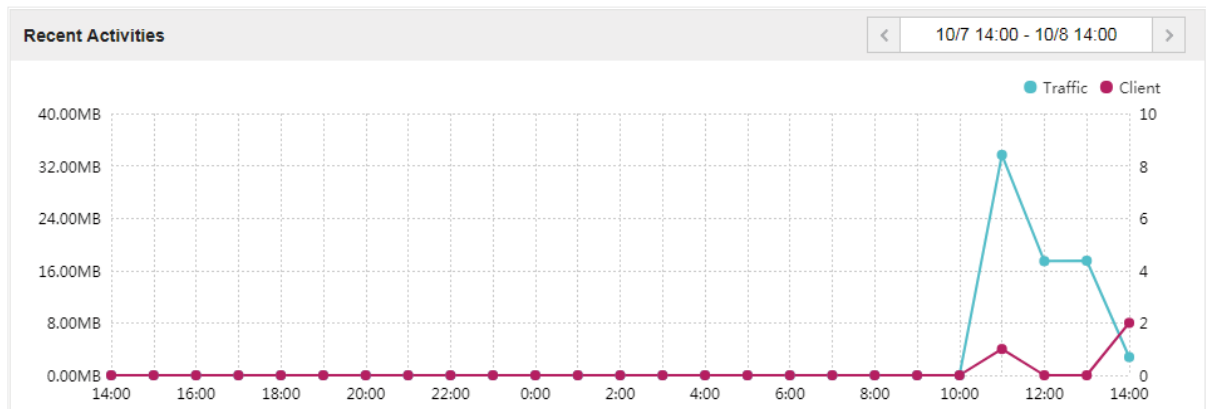
Current Usage - Top APs					1-5	6-10
AP	Clients	%Clients	Traffic(MB)	%Traffic		
EA-33-51-A8-22-A0	2	<div><div></div></div> 100%	4.89	<div><div></div></div> 13%		
EA-23-51-06-22-52	0	<div><div></div></div> 0%	30.96	<div><div></div></div> 86%		

Clients	The amount of clients connected to this EAP.
%Clients	The proportion of current connected clients to the Top EAPs' total client amount.
Traffic (MB)	The total amount of data transmitted by this EAP, which equals the sum of the transmission traffic of all the current clients that connect to the AP.
%Traffic	The proportion of the EAP's current data transmission amount to the Top EAPs' total transmission amount.

1.4 View Recent Activities

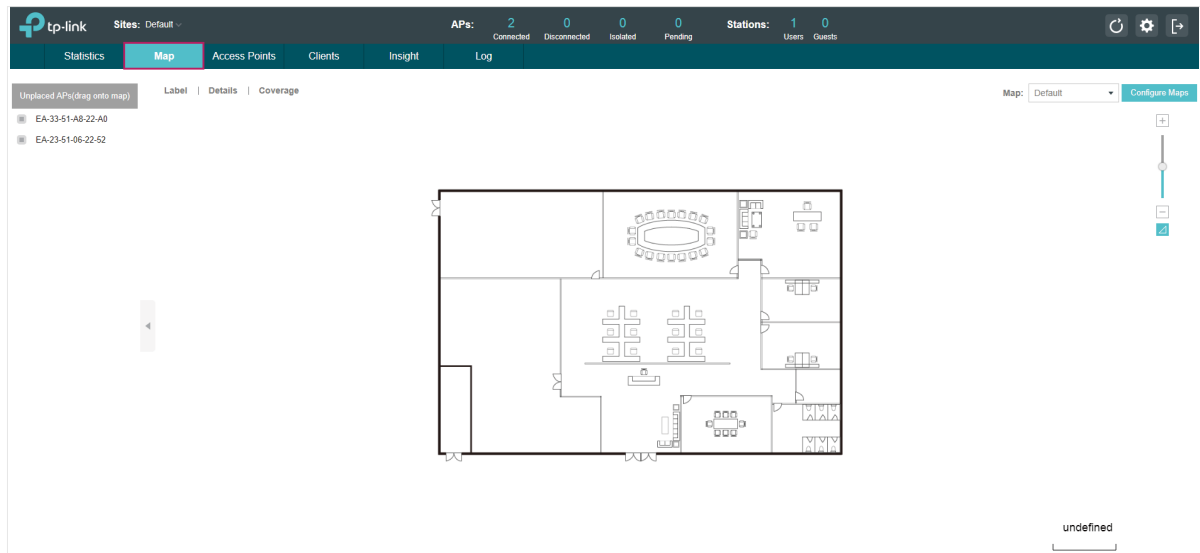
The **Recent Activities** statistics can be toggled between a view for the past specific 24 hours and one for the past specific 30 days.

The left ordinate axis indicates the traffic and the right one represents the number of the clients. The abscissa axis shows the selected time period. **Traffic** indicates a visual graph of the network traffic during the selected time period. **Client** indicates a visual graph of the number of the connected clients during the selected time period. For example, the statistics information at 15:00 indicates the traffic size and client number from 14:00 to 15:00. In the following figure, at 11 o'clock, the traffic is about 34MB and there is 1 clients connected to the AP.



2 Monitor the Network with the Map

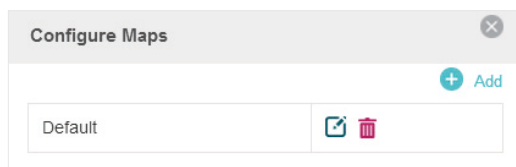
You can upload your local map images and monitor the status and coverage range of each EAP with the map. When you initially launch Omada Controller, a default map is displayed as the following figure shows. Follow the instructions below to add your own map and manage the EAPs via the map.



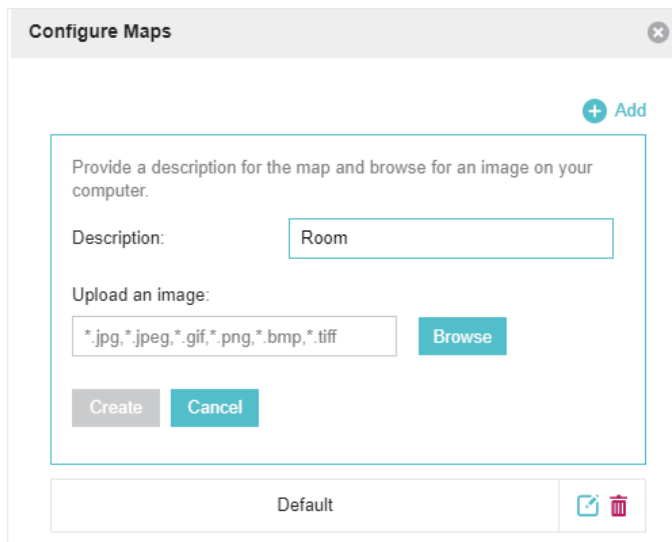
2.1 Add a Map

Prepare a map image in .jpg, .jpeg, .gif, .png, .bmp, .tiff format. And then follow the steps below to add the map to the Omada Controller.

1. Click **Configure Maps** on the upper right corner of the Map page and click **Add**.



2. Enter the map description, select your map image, and click **Create**.




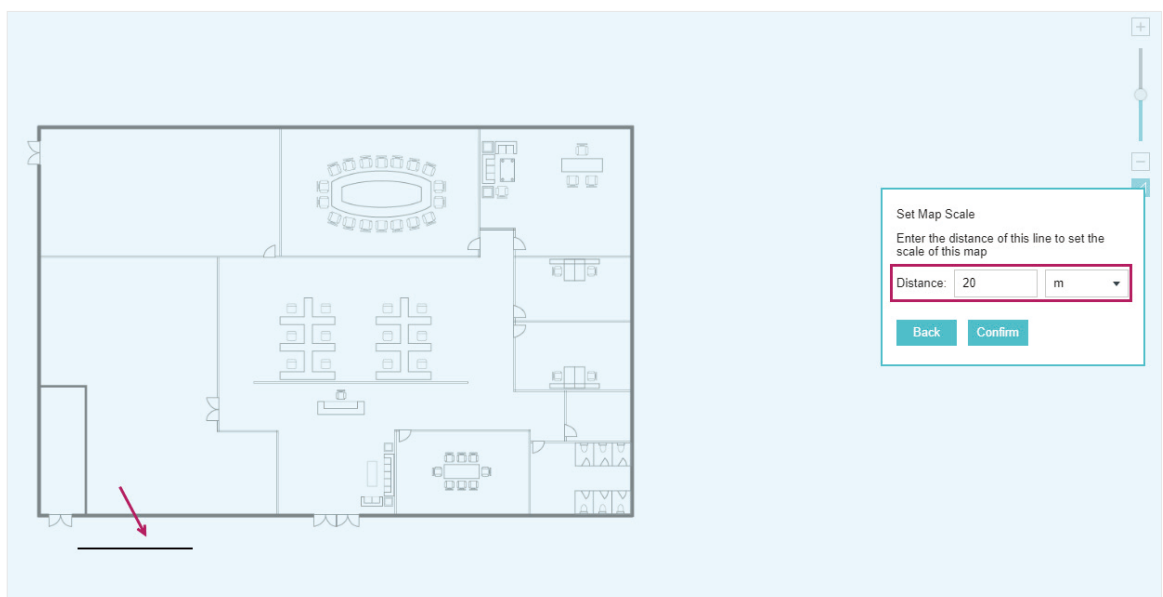
The 'Configure Maps' dialog box has a title bar with a close button. Inside, there's an '+ Add' button in the top right. The main area contains instructions: 'Provide a description for the map and browse for an image on your computer.' Below this is a 'Description:' label followed by a text input field containing 'Room'. Underneath is 'Upload an image:' with a file type filter '*.jpg,*.jpeg,*.gif,*.png,*.bmp,*.tiff' and a 'Browse' button. At the bottom left are 'Create' and 'Cancel' buttons. At the bottom right, there's a 'Default' label and a trash icon.

3. Select your local map from the drop-down list on the upper right corner of the map area.

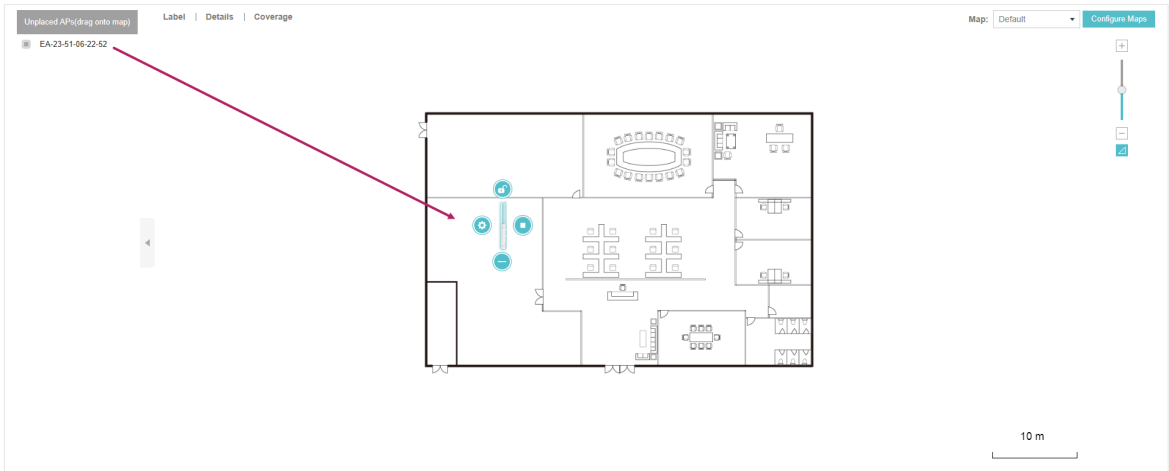


A dropdown menu labeled 'Map:' with 'Default' selected and a downward arrow.

4. Click . Draw a line on the map and enter the distance the line represents. Then the Omada Controller will compute and generate the map scale automatically based on your configuration.









5. Drag the EAPs from the **Unplaced APs** list to the appropriate locations on the map according to their actual locations.



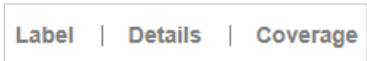
You can click  to reveal additional options:



	Lock the selected EAP in the current location on the map.
	Unlock the selected EAP and you can drag it to another location.
	Display the EAP's details and configure the wireless parameters. Refer to Configuring the EAPs Separately via Omada Controller .
	Remove the selected EAP back into the Unplaced APs list.
	Flash the LED of the EAP on the map. Then the LED will flash for 10 minutes or until the cancel button is clicked again.
	Click the button to stop the LED from flashing.

2.2 Monitor the EAPs on the Map

Click any of the following options to display EAP Label, Details, and Coverage on the map.



Label	Display the EAP's name. The default name is the MAC address of the EAP.
Details	Display the EAP's name, MAC address, IP address, transmitting/receiving channel, number of connected users, and number of connected guests.
Coverage	Display a visual representation of the wireless range covered by EAPs. The actual signal coverage may be smaller than the visual coverage on the map because the obstacles around the EAPs will weaken the signal.

3 Monitor and Manage the EAPs

Omada Controller can discover all the EAPs currently connected to the network and display the information of them on the **Access Points** page.

AP Name	MAC Address	IP Address	Status	Model	Hardware Version	Firmware Version	Channel	Client Number	Download	Upload	Action
EA-33-51-A8-22-A0	EA-33-51-A8-22-A0	192.168.0.103	Connected	EAP225-Outdoor(EU)	1.0	1.3.0 Build 20180614 Rel. 50359	11(2.4G), 48(SG)	0	22.50 M	258.15 K	[Icons]
EA-23-51-06-22-52	EA-23-51-06-22-52	192.168.0.100	Connected	EAP225-Outdoor(EU)	1.0	1.3.0 Build 20180614 Rel. 50359	1(2.4G), 48(SG)	1	62.07 M	1.65 M	[Icons]

3.1 Manage the EAPs in Different Status

According to their connection status, EAPs are divided into four categories: **Connected**, **Disconnected**, **Isolated** and **Pending**. You can view the EAPs in different status on different pages:

All	Connected	Disconnected	Isolated	Pending
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All	Displays the information of all EAPs in different status.
Connected	<p>Displays the connected EAPs.</p> <p>The status of connected EAPs includes two cases: Connected and Connected (Wireless).</p> <p>Connected: After you adopt a wired EAP in Pending status, its status will become Provisioning, then Configuring and Connected eventually.</p> <p>Connected (Wireless): In a mesh network, if an EAP has a successful wireless uplink, its status will become Adopting (Wireless) and then Connected (Wireless).</p> <p>Only connected EAPs can be managed. A connected EAP will turn into a pending one after you forget it. You can refer to Forget this AP to forget an EAP or click Forget All on the page to forget all the connected EAPs.</p>
Disconnected	<p>Displays the disconnected EAPs.</p> <p>If a connected EAP powers off or disconnects from the Omada Controller, it will be in Disconnected status. When a disconnected EAP is reset to factory defaults or forgot, it will turn into a pending one again. You can refer to Forget this AP to forget a EAP or click Forget All on the page to forget all the disconnected EAPs.</p>

Isolated	<p>Displays the isolated EAPs.</p> <p>In a mesh network, when the EAP which has been managed before by Omada Controller connects to the network wirelessly and cannot reach the gateway, it goes into the Isolated state. The isolated EAP searches for wireless uplink and the LED on the device turns green and flashes off every 5 seconds. To know more about mesh network, refer to Configure Mesh.</p>
Pending	<p>Displays the pending EAPs.</p> <p>The status of pending EAPs includes three cases: Pending, Pending (Wireless) and Managed by others.</p> <p>Pending: All the EAPs with wired network connection are in pending status by default when first discovered by Omada Controller.</p> <p>Pending (Wireless): The factory default EAP with mesh functions and no wired network connection is in Pending (Wireless) status when first discovered by Omada Controller.</p> <p>Managed by others: An EAP is located on the same network as the controller, but has been already managed by an existing controller before. You can provide the username/password to unbind the EAP from the existing controller and begin adoption in current controller.</p> <p>Only after pending EAPs are adopted and connected, can you manage them. To adopt pending EAPs, refer to Adopt the EAPs.</p>

3.2 View the Detailed Information of EAPs

You can click **Overview**, **Config**, **Performance** or **Mesh Network** tab to view different detailed information of EAPs.

Overview	Config	Performance	Mesh Network
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Overview	Displays the EAP's name, MAC address, IP address, status, model, hardware version, firmware version, channel number of connected clients and download/upload bytes.
Config	Displays the EAP's name, MAC address, IP address, status, model, hardware version, firmware version, WLAN Group bounded with the 2G and 5G of the EAP, and radio of the 2G and 5G.
Performance	Displays the EAP's name, MAC address, IP address, status, model, hardware version, firmware version, number of connected 2G clients and 5G clients, TX(Downloaded Traffic), RX(Uploaded Traffic), TX 2G and TX 5G.
Mesh Network	Displays the EAP's name, MAC address, IP address, status, model, hardware version, firmware version, number of connected clients, hops, uplink APs and downlink APs.

3.3 Manage the EAPs in the Action Column

You can execute the corresponding operation to the EAP by clicking an icon in the **Action** column.



Locate the EAP in the map.



Reboot the EAP.

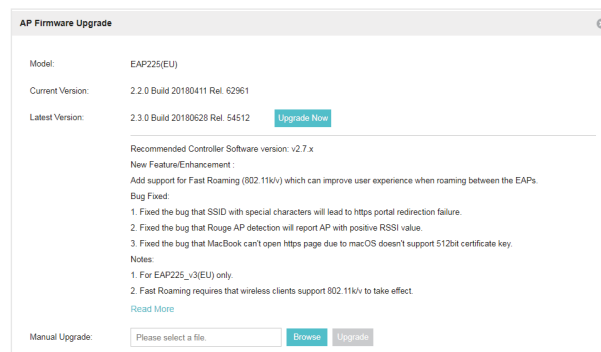


Upgrade the EAP.

Two options are available for upgrading: upgrade online and upgrade manually.

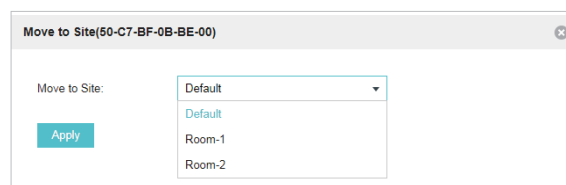
Upgrade online: With Cloud Access enabled on the controller and a TP-Link ID bound with the controller, the latest firmware for the EAP can be detected by the controller automatically. And you can upgrade the EAP online by clicking **Upgrade Now**. For more details about Cloud Access, refer to [Configuring Omada Cloud Service for Omada Controller](#).

Upgrade manually: Click **Browse** to locate and choose the upgrade file in your computer, then click **Upgrade** to install the latest EAP firmware. The Status will appear as **Upgrading** until the process is complete and the EAP reconnects to the Omada Controller.



Move the EAP to a site.

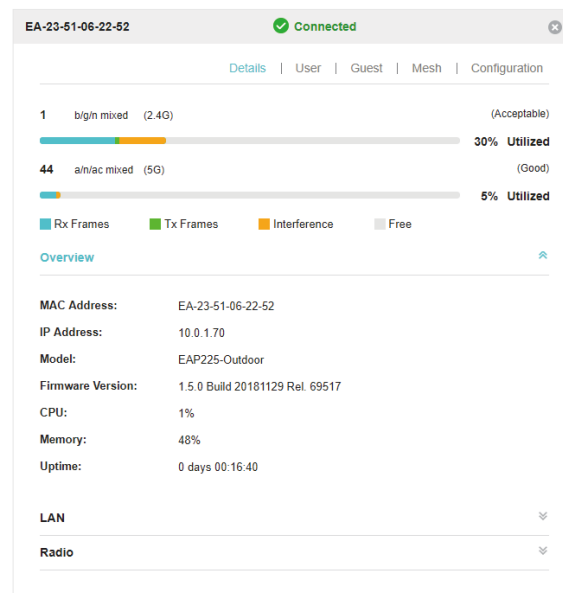
Select a site that has been created and click **Apply**. You can group all the EAPs by this way and centrally manage them on each site.





Configure the EAP.

For detailed instructions about how to configure the EAP on this window, refer to [Configuring the EAPs Separately via Omada Controller](#).



Note:

- Only managed EAPs can be rebooted or upgraded.
- The EAP which is managed by the controller can not be logged in to its own management interface. To log in to the EAP's own management interface, forget the EAP in the controller first.

4 Monitor and Manage Clients

The **Clients** tab displays the clients connected to the EAP network.

Hostname	MAC Address	IP Address	Access Point	SSID	User / Guest	2.4GHz / 5GHz	Download	Upload	Rate (Mbps)	Active Time	Signal	Action
Phone	D0-A6-37-83-DA-99	192.168.0.104	EA-23-51-06-22-52	1122	User	2.4GHz	19.74 K	46.76 K	65.0	14m 45s		

4.1 View the Current Information of Clients

The clients are divided into two types: User and Guest. Users are the clients connected to the EAP wireless network without the [Portal Authentication](#). Guests are the clients connected to the EAP wireless network with the [Portal Authentication](#).

You can click the following tabs to respectively view the detailed information of users and guests.

[All Clients](#) | [Users](#) | [Guests](#)

All Clients The page displays the information of all clients including users and guests.

Users The page displays the information of Users.

Guests The page displays the information of Guests.

4.2 Manage Clients in the Action Column

You can execute the corresponding operation to the EAP by clicking an icon in the **Action** column:

Action



Reconnect the client to the network.



Restrict the client's access to the network.



Configure the rate limit of the client and view the connection history.

Enter the download limit and upload limit and click **Apply**.

iPhone (D0-A6-37-83-DA-99)

Rate Limit

Connection History

Note: You can limit the download and upload rate of the client to balance bandwidth usage. The download and upload rate will be limited to the minimum of the value configured in SSID, client and portal configuration.

Download Limit:

Kbps (0-10240000. 0 means no limit.)

Upload Limit:

Kbps (0-10240000. 0 means no limit.)

Apply



If the client is a Guest, you can click this icon to cancel the authorization for it.

5 View Clients Statistics During the Specified Period

The **Clients Statistics** page under the **Insight** tab displays the information of clients that have connected to the EAPs network during a specified period.

Hostname	MAC Address	Download	Upload	Duration	Last Seen	Action
iPhone	D6-A6-37-83-DA-99	872.76 K	240.61 K	29m 12s	2018-10-08 15:32:58	🔗 🔗
unknown	A4-44-D1-DE-7B-AB	27.52 M	4.81 M	1h 5m 47s	2018-10-08 16:40:27	🔗 🔗

5.1 Select a Specified Period

Select a period from the drop-down menu. Then the page will display clients that have connected to the EAPs network during the period.

Last Seen
All
1 Day
3 Days
7 Days
14 Days
30 Days

5.2 View the History Information of Clients

You can click the client's MAC address to get its connection history and configure the Rate Limit feature for this client. In addition, you can click the following tabs to view the information of different types of clients:

All	User	Guest	Blocked	Rate Limited
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All The page displays the history information of all the clients.

User The page displays the history information of Users.

Users are the clients connected to the EAP wireless network without the [Portal Authentication](#).





Guest	The page displays the history information of Guests. Guests are the clients connected to the EAP wireless network with the Portal Authentication .
Blocked	The page displays the clients that have been blocked.
Rate Limited	The page displays the clients that have been limited upload or download rate.

All	Offline Only
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All	The page displays the history information of all clients.
Offline Only	The page displays the history information of the off-line clients.

5.3 Manage Clients in the Action Column

You can execute the corresponding operation to the EAP in the **Action** column:

	Block the client's access to the network.
	Resume the client's access.
	Configure the rate limit of the client and view the connection history.
	Remove the limit to the client's upload or download rates.

6 Manage the Rogue APs List

A Rogue AP is an access point that has been installed on a secure network without explicit authorization from a system administrator. The Omada Controller can scan all channels to detect all nearby EAPs. If rogue APs are detected, they will be shown on the **Untrusted Rogue APs** list. Besides, you can move the untrusted rogue APs to the **Trusted Rogue APs** list.

By default, the Rogue AP Detection feature is disabled. To allow your EAP to detect nearby APs, you need to enable this feature for this EAP. You can refer to [Rogue APs Detection](#).

6.1 Manage the Untrusted Rogue APs List

The **Untrusted Rogue APs** page displays the detailed information of untrusted rogue APs.

MAC	SSID	Band	Channel	Security	Beacon	Signal	Last Seen	Action
F4-83-CD-D3-8C-32	rubin	2.4G	1	ON	100	-91	2018-10-08 17:06:14	
50-C7-BF-48-57-1E		2.4G	2	ON	100	-80	2018-10-08 17:06:14	
50-C7-BF-3F-19-F0		5G	36	ON	100	-86	2018-10-08 17:06:14	
98-9C-57-DE-1E-78	Neusoft	2.4G	1	ON	100	-88	2018-10-08 17:06:14	
06-69-6C-56-94-64	NanS	2.4G	1	ON	100	-85	2018-10-08 17:06:14	
C4-71-54-F7-33-8A	Louis_c9_5	5G	36	ON	100	-71	2018-10-08 17:06:14	
50-C7-BF-1C-87-C5	SSID_1	5G	36	ON	100	-52	2018-10-08 17:06:14	
70-4F-57-BF-31-9A	TP-Link_730E	2.4G	1	ON	100	-76	2018-10-08 17:06:14	
C0-4A-90-0A-AA-F7	TP-LINK_AAF7_5G	5G	36	ON	100	-72	2018-10-08 17:06:14	
50-C7-BF-83-F8-4B	RE365-5G	5G	36	ON	100	-72	2018-10-08 17:06:14	

You can execute the corresponding operation to the EAP in the **Action** column:



Move the untrusted rogue AP to the Trusted Rogue APs list.



Delete this record.



Delete all records.

6.2 Manage the Trusted Rogue APs List

The Trusted Rogue APs page displays the detailed information of trusted rogue APs.

MAC	SSID	Band	Channel	Security	Last Seen	Action
70-4F-57-BF-31-9A	TP-Link_730E	2.4G	1	ON	2018-10-08 17:08:28	
C0-4A-00-0A-AA-F7	TP-LINK_AAF7_5G	5G	36	ON	2018-10-08 17:08:28	

You can execute the corresponding operation to the EAP by clicking an icon in the **Action** column:



Move the trusted rogue AP to the Untrusted Rogue APs list.



Export and download the current Trusted Rogue APs list and save it on your PC.



Import a saved Trusted Rogue APs list. If the MAC address of an AP appears in list, it will not be detected as a rogue AP.

Import Trusted AP List

Import Mode: ☒ Replace ☐ Merge

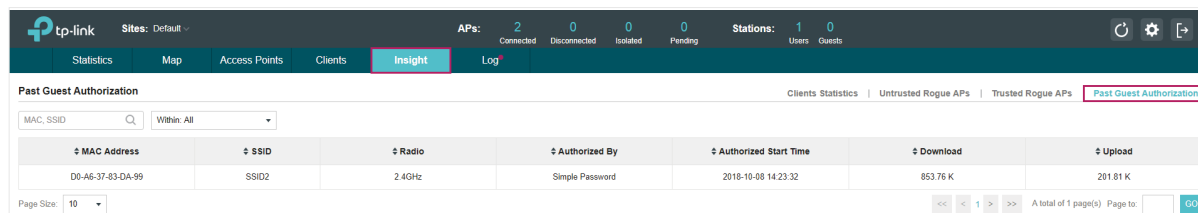
Import Source File:

Please follow the steps below:

1. Select **Replace** (replace the current Trusted Rogue APs list with the one you import) or **Merge** (add the APs in the file to the current Trusted Rogue APs list).
2. Click **Browse** to locate the file and choose it.
3. Click **Import** to import the Trusted Rogue APs list.

7 View Past Guest Authorization

The Past Guest Authorization page displays the details about all the clients that accessed the network during a certain time period. You can select a period in the drop-down list.



The screenshot shows the TP-Link Omada Controller interface. The top navigation bar includes tabs for Statistics, Map, Access Points, Clients, Insight (highlighted), and Log. The Insight tab is active, and the 'Past Guest Authorization' sub-tab is selected. The page displays a table of client authorization details.

MAC Address	SSID	Radio	Authorized By	Authorized Start Time	Download	Upload
D0-A6-37-83-DA-99	SSID2	2.4GHz	Simple Password	2018-10-08 14:23:32	853.76 K	201.81 K

Page Size: 10 | Navigation: << 1 >> | A total of 1 page(s) | Page to: | GO

8 View Logs

The logs of Omada Controller can effectively record, classify and manage the system information of the managed EAPs, providing powerful support for you to monitor network operation and diagnose malfunctions. The Log page displays the log's module, level, content, operator and occurred time.

Module	Level	Content	Operator	Time	Action
AP	Alert	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) disconnected from LAN	--	2018-12-14 15:46:11	
System	Information	admin(administrator) logged in successfully	admin	2018-12-14 15:44:13	
AP	Information	EA-23-51-06-22-52(EA-23-51-06-22-52) connected to LAN	--	2018-12-14 15:43:54	
System	Information	admin(administrator) logged in successfully	admin	2018-12-14 15:38:34	
AP	Information	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) connected to LAN	--	2018-12-14 15:34:19	
AP	Notice	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) changed LAN IP and mask to 10.0.0.195/255.255.252.0	--	2018-12-14 15:33:20	
AP	Notice	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) changed LAN IP and mask to 192.168.0.254/255.255.255.0	--	2018-12-14 15:33:17	
System	Information	admin(administrator) logged in successfully	admin	2018-12-14 15:32:17	
AP	Information	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) connected to LAN	--	2018-12-14 15:29:40	
AP	Information	EA-23-51-06-22-52(EA-23-51-06-22-52) connected to LAN	--	2018-12-14 11:31:33	

You can view the alerts on a separate page by clicking **Alerts** in the top right corner of the page. As follows, you can click to mark the alerts as read.

Module	Level	Content	Operator	Time	Action
AP	Alert	EA-33-51-A8-22-A0(EA-33-51-A8-22-A0) disconnected from LAN	--	2018-12-14 15:46:11	

Note:

The logs and alerts of the controller with version 3.0.5 or below will be discarded after the controller is upgraded to version 3.1.4 or above.