



# Monitoring and Managing Wireless Network via Omada Controller

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## CHAPTERS

1. Monitor the Network with the Map
2. View the Statistics of the Network
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
9. View Alerts



**This guide applies to:**

Omada Controller 2.6.0.

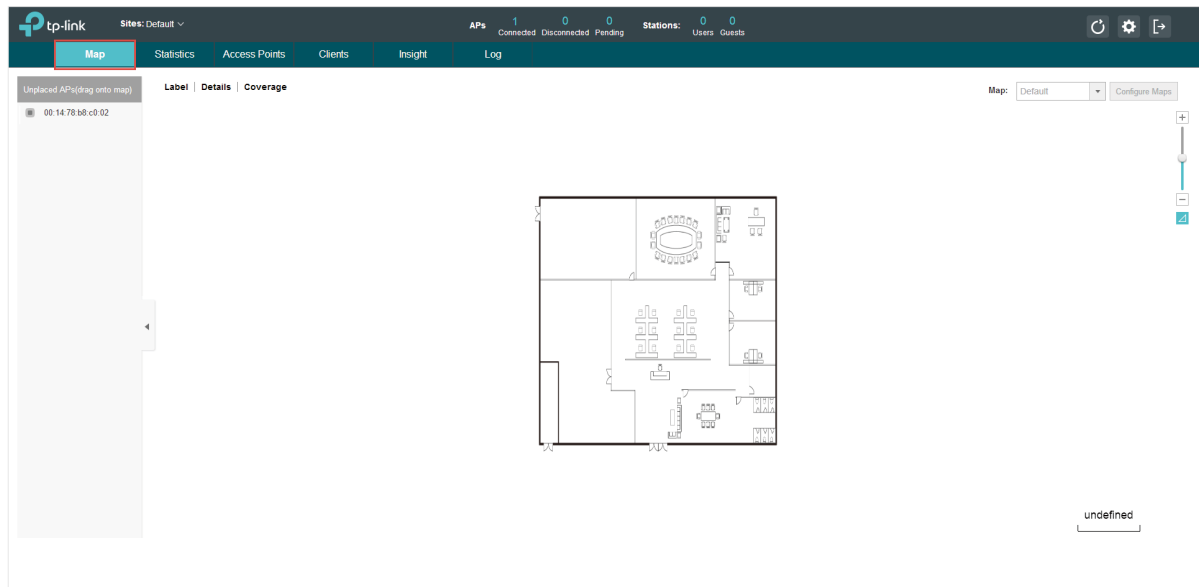
With Omada Controller you can monitor the EAP devices and centrally manage your wireless network. This guide includes the following sections:

1. Monitor the Network with the Map
2. View the Statistics of the Network
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
9. View Alerts

The following parts detailedly introduces how to monitor and manage your wireless network via Omada Controller:

# 1 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.



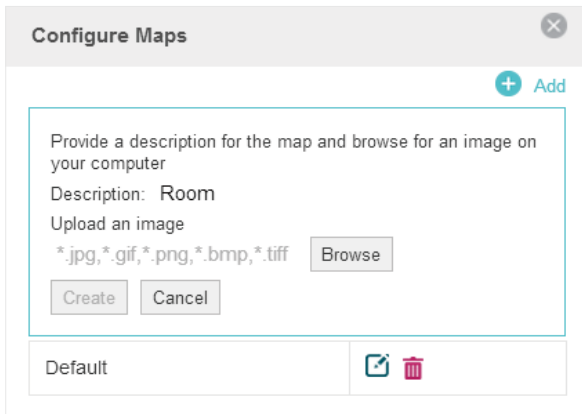
## 1.1 Add a Map

Prepare a map image in .jpg, .gif, or .png 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 map and click **Add**.



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



**Configure Maps** ✕

+ Add

Provide a description for the map and browse for an image on your computer

Description: Room

Upload an image  
\*.jpg, \*.gif, \*.png, \*.bmp, \*.tiff Browse


Create Cancel

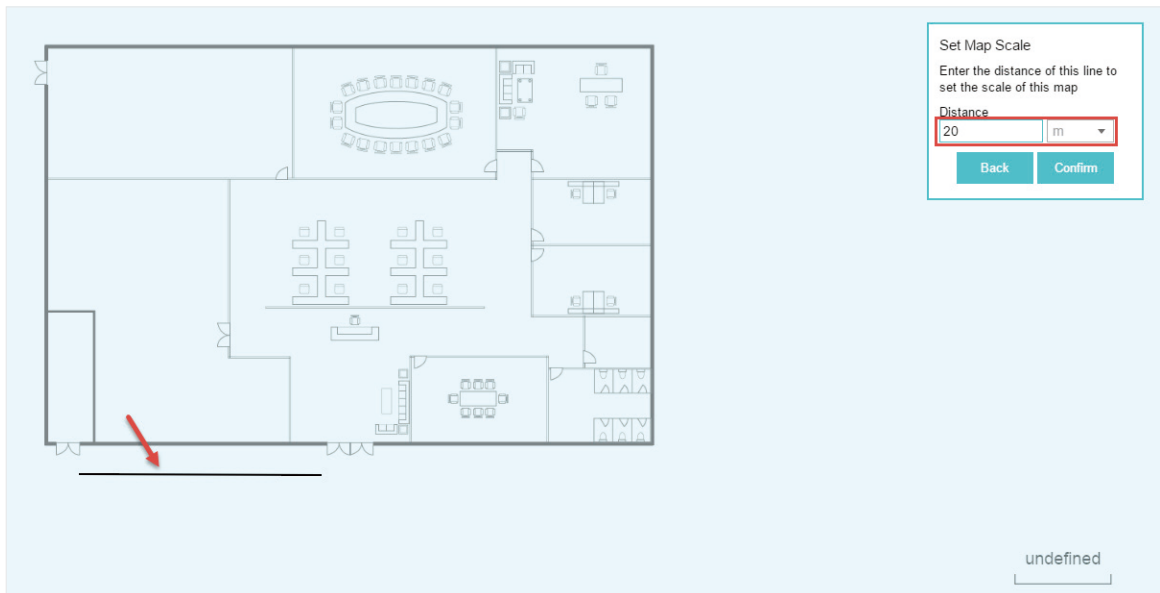
Default 📄 🗑️

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



Map:  ▼

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.



Set Map Scale

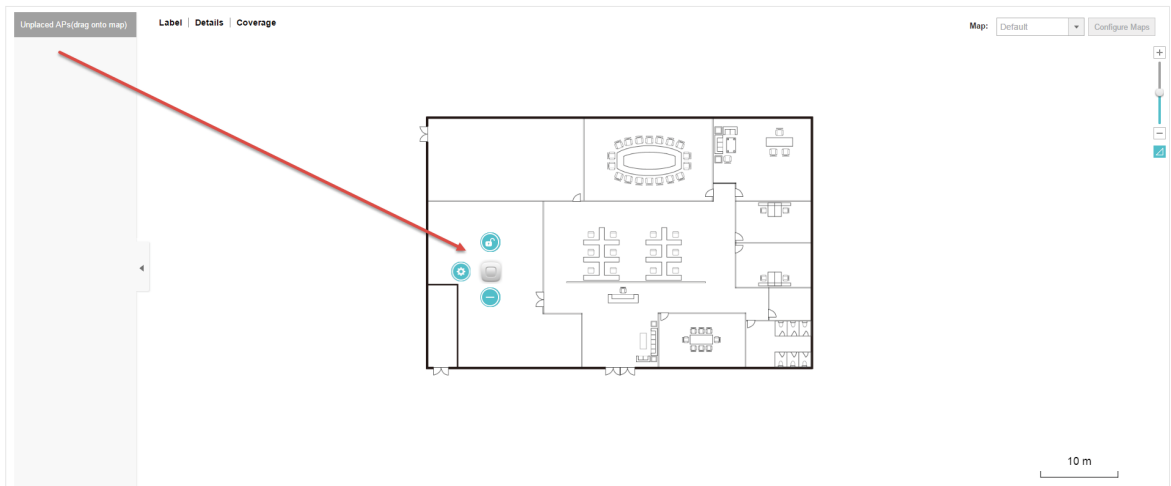
Enter the distance of this line to set the scale of this map

Distance  m ▼

Back Confirm

undefined

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 [Configure the EAPs Separately](#).



Remove the selected EAP back into the Unplaced APs list.

## 1.2 Monitor the EAPs on the Map

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

**Label** | **Details** | **Coverage**

### Label

Display the EAP's name. The default name is the MAC address of the EAP.

### Details

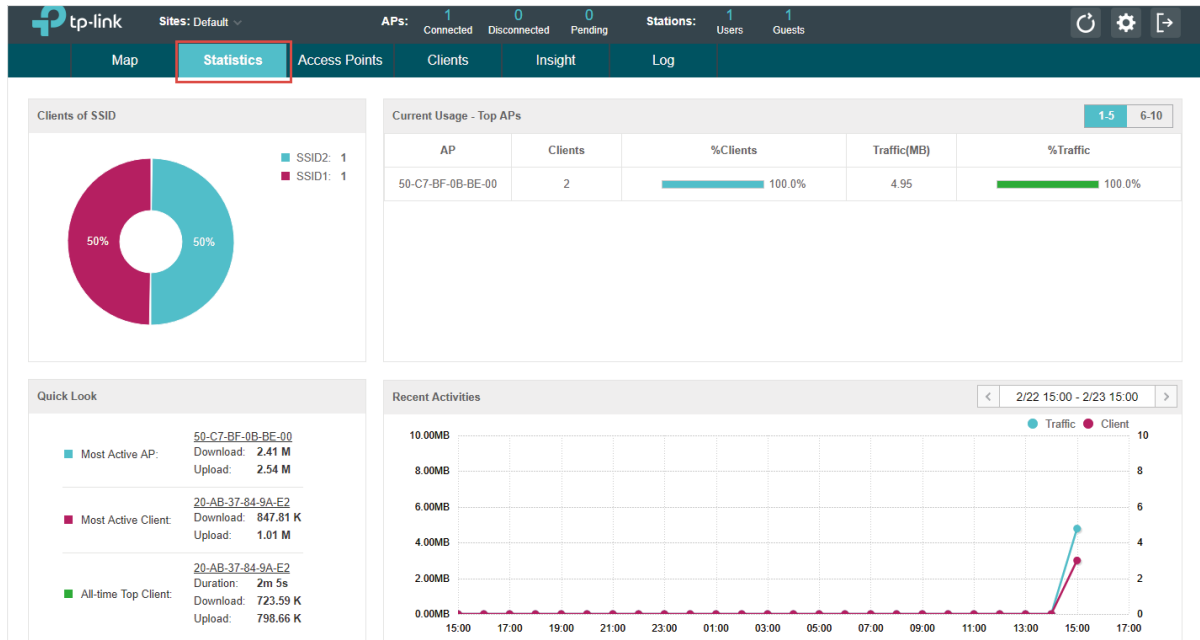
Display the EAP's name, MAC address, IP address, transmitting/receiving channel, number of connected users, and number of connected guests.

### 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.

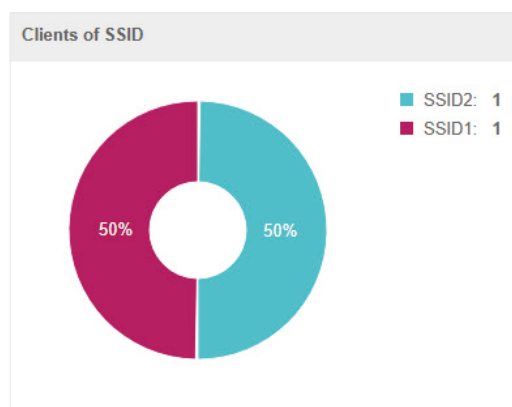
# 2 View the Statistics of the Network

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.



## 2.1 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.



## 2.2 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:	<u>50-C7-BF-0B-BE-00</u> Download: <b>2.41 M</b> Upload: <b>2.54 M</b>
■ Most Active Client:	<u>20-AB-37-84-9A-E2</u> Download: <b>847.81 K</b> Upload: <b>1.01 M</b>
■ All-time Top Client:	<u>20-AB-37-84-9A-E2</u> Duration: <b>2m 5s</b> Download: <b>723.59 K</b> Upload: <b>798.66 K</b>



**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.

## 2.3 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				
AP	Clients	%Clients	Traffic(MB)	%Traffic
50-C7-BF-0B-BE-00	2	 100.0%	4.95	 100.0%

**Clients** The amount of clients connected to this EAP.

**%Clients** The proportion of current connected clients to the Top EAPs' total client amount.

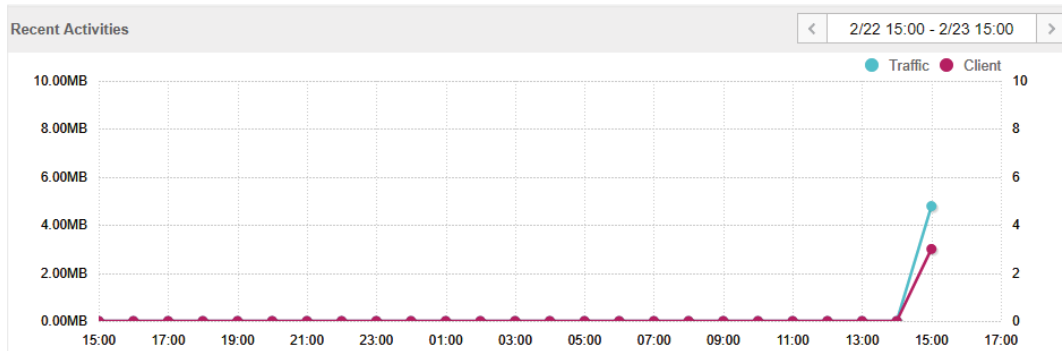
**Traffic (MB)** The total amount of data transmitted by this EAP, which equals the sum of the transmission traffic of all the current clients that connect to the AP.

**%Traffic** The proportion of the EAP's current data transmission amount to the Top EAPs' total transmission amount.

## 2.4 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.

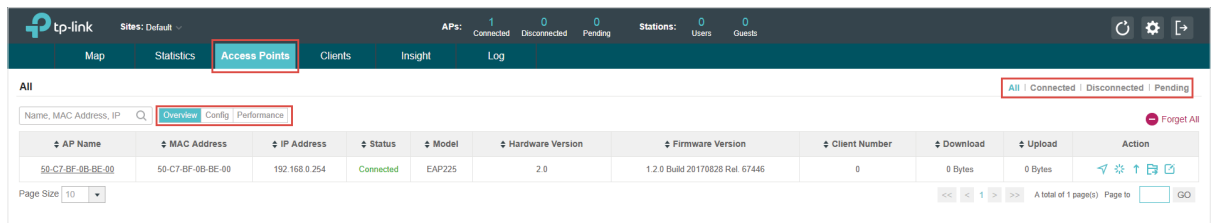
The left ordinate axis indicates the traffic and the right one represents the number of the clients. The abscissa axis shows the selected time period. **Traffic** indicates a visual graph of the network traffic during the selected time period. **Client** indicates a visual graph of the number of the 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 15 o'clock, the traffic is about 5MB and there is 3 clients connected to the AP.





# 3 Monitor and Manage the EAPs

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



## 3.1 Manage the EAPs in Different Status

According to their connection status, EAPs are divided into three categories: connected, disconnected and pending. You can view the EAPs in different status on different pages:

All | **Connected** | Disconnected | Pending

**All** Displays the information of all EAPs in different status.

**Pending** Displays the pending EAPs.

All the EAPs are in pending status by default when first discovered by Omada Controller, and only after they are adopted and connected, you can manage them. To adopt pending EAPs, refer to [Adopt EAPs](#).

**Connected** Displays the connected EAPs.

Only connected EAPs can be managed. After you adopt a pending EAP, its status will become provisioning and then connected. 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.

**Disconnected** Displays the disconnected EAPs.

If a connected or pending EAP powers off, it will be disconnected. 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.

## 3.2 View the Detailed Information of EAPs

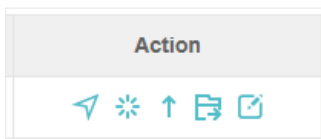
You can click **Overview**, **Config** or **Performance** tab to view different detailed information of EAPs.

Overview | **Config** | Performance

Overview	Displays the EAP's name/MAC address, IP address, status, model, software version, number of connected clients and download/upload bytes.
Config	Displays the EAP's name/MAC address, IP address, status, model, software 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, software version, number of connected 2G clients and 5G clients, TX(Downloaded Traffic), RX(Uploaded Traffic), TX 2G and TX 5G.

### 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.

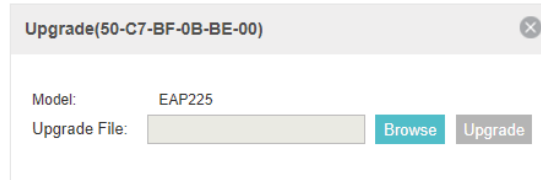


Reboot the EAP.



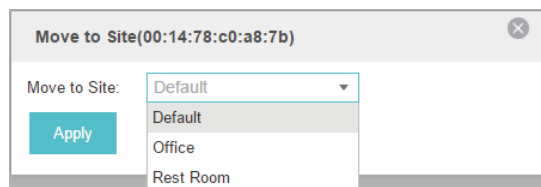
Upgrade the EAP.

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 [Configure the EAP Separately](#).

50-C7-BF-0B-BE-00 <span>✓ Connected</span>	
<a href="#">Details</a>   <a href="#">User</a>   <a href="#">Guest</a>   <a href="#">Configuration</a>	
<b>Overview</b>	
<b>MAC Address:</b>	50-C7-BF-0B-BE-00
<b>IP Address:</b>	192.168.0.254
<b>Model:</b>	EAP225
<b>Firmware Version:</b>	1.2.0 Build 20170828 Rel. 67446
<b>CPU:</b>	2%
<b>Memory:</b>	48%
<b>Uptime:</b>	0 days 13:31:25
<b>LAN</b>	⌵
<b>Radio</b>	⌵

- Only managed EAPs can be rebooted or upgraded.
- If you want to log in to the EAP's own management interface, you need to forget the EAP 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
Unknown	20-AB-37-84-9A-E2	192.168.0.103	50-C7-BF-0B-BE-00	SSID1	User	5GHz	330 Bytes	59.36 K	6.0	1m 28s		

## 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](#)

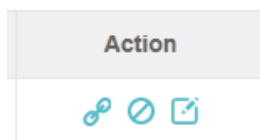
**All Clients** The page displays the information of all clients including users and guests.

**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:



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**.

Unknown (20-AB-37-84-9A-E2) ✕

[Rate Limit](#) | [Connection History](#)

Download Limit	<input type="text" value="0"/>	Kbps (0-10240000. 0 means no limit)
Upload Limit	<input type="text" value="0"/>	Kbps (0-10240000. 0 means no limit)

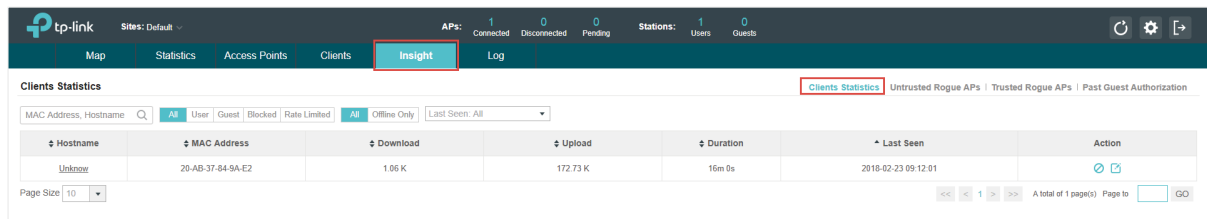
[Apply](#)



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

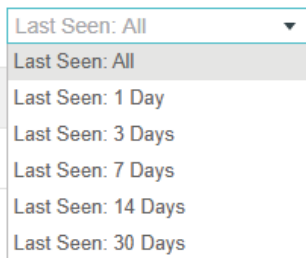
# 5 View Clients Statistics During the Specified Period

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



## 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.



## 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	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 <i>Portal Authentication</i> .
Guest	The page displays the history information of Guests.  Guests are the clients connected to the EAP wireless network with the <i>Portal Authentication</i> .

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**Blocked**      The page displays the clients that have been blocked.

---

**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.

---

# 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 AP 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
B6-4E-26-CA-64-41	deco wifi_Guest	2.4G	7	OFF	100	-46	2018-02-23 15:49:46	
30-B5-C2-BD-04-6E	TP-Link_Outdoor_BD046E	2.4G	6	OFF	100	-62	2018-02-23 15:49:46	
C4-6E-1F-C7-4F-AE	Neostrada	2.4G	10	ON	100	-49	2018-02-23 15:49:46	
C8-E7-D8-60-1C-86	mercusys	2.4G	11	ON	100	-25	2018-02-23 15:49:46	
BA-4E-26-CA-64-1F		5G	44	ON	100	-45	2018-02-23 15:49:46	
70-4F-57-BF-31-9C	TP-Link_319A_5G	5G	44	ON	100	-64	2018-02-23 15:49:46	
7C-11-CB-F3-22-D4		5G	161	OFF	100	-101	2018-02-23 15:49:46	
B0-95-8E-42-6B-F6	TP-LINK_6BF6	2.4G	1	ON	100	-57	2018-02-23 15:49:46	
60-E3-27-29-D9-0F	server2016	5G	36	ON	100	-42	2018-02-23 15:49:46	
D4-6E-0E-AE-FE-D8	1452855	2.4G	10	ON	100	-13	2018-02-23 15:49:46	

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.



tp-link Sites: Default APs: 1 Connected 0 Disconnected 0 Pending Stations: 1 Users 0 Guests

Map Statistics Access Points Clients **Insight** Log

Trusted Rogue APs Clients Statistics | Untrusted Rogue APs **Trusted Rogue APs** Past Guest Authorization

MAC, SSID

MAC	SSID	Band	Channel	Security	Last Seen	Action
B6-4E-26-CA-64-41	deco wifi_Guest	2.4G	7	OFF	2018-02-23 15:51:48	<input type="button" value="Speech Bubble"/>
C4-6E-1F-C7-4F-AE	Neostrada	2.4G	10	ON	2018-02-23 15:51:48	<input type="button" value="Speech Bubble"/>

Page Size: 10  A total of 1 page(s) Page to:

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

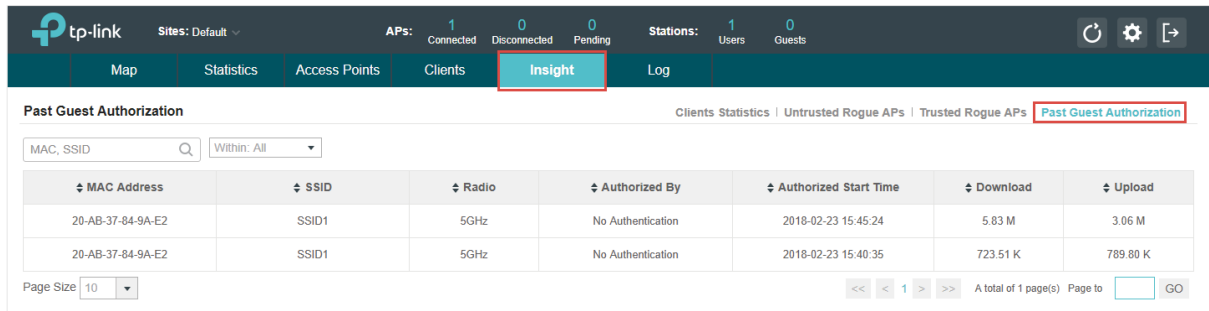
Import Source File:

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.



tp-link Sites: Default APs: 1 Connected 0 Disconnected 0 Pending Stations: 1 Users 0 Guests

Map Statistics Access Points Clients **Insight** Log

Past Guest Authorization Clients Statistics | Untrusted Rogue APs | Trusted Rogue APs **Past Guest Authorization**

MAC, SSID Within: All

MAC Address	SSID	Radio	Authorized By	Authorized Start Time	Download	Upload
20-AB-37-84-9A-E2	SSID1	5GHz	No Authentication	2018-02-23 15:45:24	5.83 M	3.06 M
20-AB-37-84-9A-E2	SSID1	5GHz	No Authentication	2018-02-23 15:40:35	723.51 K	789.80 K

Page Size 10 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 Logs page displays EAP's MAC address, level, occurred time and content.

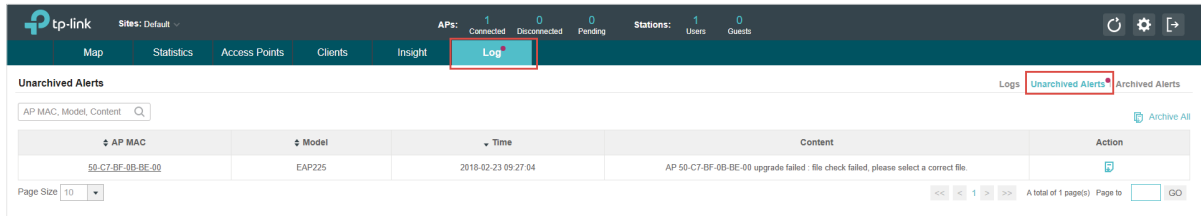
The screenshot shows the Omada Controller interface with the 'Log' menu item highlighted. The 'Logs' page displays a table of log entries. The table has the following columns: AP MAC, Level, Time, Content, and Action. The log entries are as follows:

AP MAC	Level	Time	Content	Action
00:14:78:c0:a8:7b	WARNING	2016-09-16 14:00:26	Fail to Connect the mail server	
00:14:78:b8:c0:02	WARNING	2016-09-16 13:38:42	Fail to Connect the mail server	
00:14:78:c0:a8:7b	WARNING	2016-09-15 15:00:26	Fail to Connect the mail server	
00:14:78:b8:c0:02	WARNING	2016-09-15 14:38:42	Fail to Connect the mail server	
00:14:78:c0:a8:7b	WARNING	2016-09-14 15:56:26	Fail to Connect the mail server	
00:14:78:c0:a8:7b	WARNING	2016-09-14 15:56:08	Username and password are successfully updated	
00:14:78:b8:c0:02	WARNING	2016-09-14 15:36:38	Fail to Connect the mail server	
00:14:78:b8:c0:02	INFO	2016-09-14 15:31:42	System started	
00:14:78:b8:c0:02	WARNING	2016-09-14 15:31:42	LAN IP and mask changed to 192.168.0.101 255.255.255.0	
00:14:78:b8:c0:02	WARNING	2016-09-14 15:31:42	Username and password are successfully updated	


The page also includes a search bar for 'AP MAC, Level, Content', a 'Delete All' button, and pagination controls showing 'Page Size: 10' and 'A total of 2 page(s)'.

# 9 View Alerts



You can see the status change of your EAPs on the **Unarchived Alerts** page. You can click  or  **Archive All** to move unarchived alerts to the Archived Alerts page.

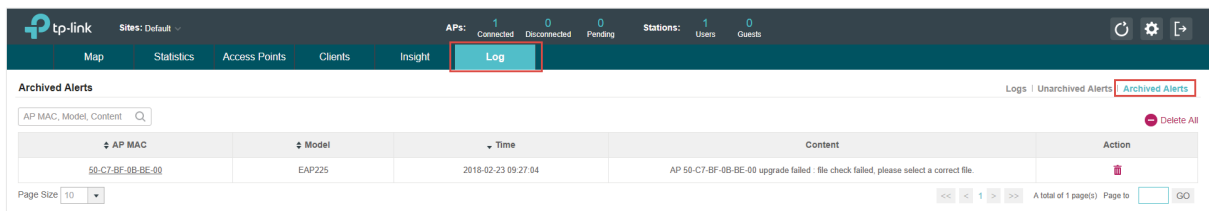


The screenshot shows the 'Unarchived Alerts' page. The top navigation bar includes 'Log' (highlighted in red), 'Map', 'Statistics', 'Access Points', 'Clients', and 'Insight'. The status bar shows 1 Connected AP, 0 Disconnected APs, and 0 Pending APs. The table below contains the following data:


AP MAC	Model	Time	Content	Action
50-C7-BF-0B-BE-00	EAP225	2018-02-23 09:27:04	AP 50-C7-BF-0B-BE-00 upgrade failed: file check failed, please select a correct file.	

Page Size: 10. A total of 1 page(s). Page to:  GO

As follows, the Archived Alerts page displays the alerts archived by you. You can click  or  **Delete All** to delete the records.




The screenshot shows the 'Archived Alerts' page. The top navigation bar includes 'Log' (highlighted in red), 'Map', 'Statistics', 'Access Points', 'Clients', and 'Insight'. The status bar shows 1 Connected AP, 0 Disconnected APs, and 0 Pending APs. The table below contains the following data:

AP MAC	Model	Time	Content	Action
50-C7-BF-0B-BE-00	EAP225	2018-02-23 09:27:04	AP 50-C7-BF-0B-BE-00 upgrade failed: file check failed, please select a correct file.	

Page Size: 10. A total of 1 page(s). Page to:  GO

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