Configuring the EAPs Separately via Omada Controller

CHAPTERS

This guide applies to:

Omada Controller 3.2.1.

In addition to global configuration, you can configure the EAPs separately and the configuration results will be applied to a specified EAP.

To configure a specified EAP, please click the EAP's name on the **Access Points** tab or click ⚙ of connected EAP on the map. Then you can view the EAP's detailed information and configure the EAP on the pop-up window.

This chapter includes the following contents:

1. View the Information of the EAP

2. View Clients Connecting to the EAP

3. View Mesh Information of the EAP

4. Configure the EAP

1 View the Information of the EAP

1.1 Active Channel Information

The active channel information on each radio band will be displayed in a bar graph, which indicates its percentages of the following: Rx Frames (blue), Tx Frames (green), Interference (orange), and Free bandwidth (gray). The percentage of channel utilization is also displayed with the corresponding evaluation.
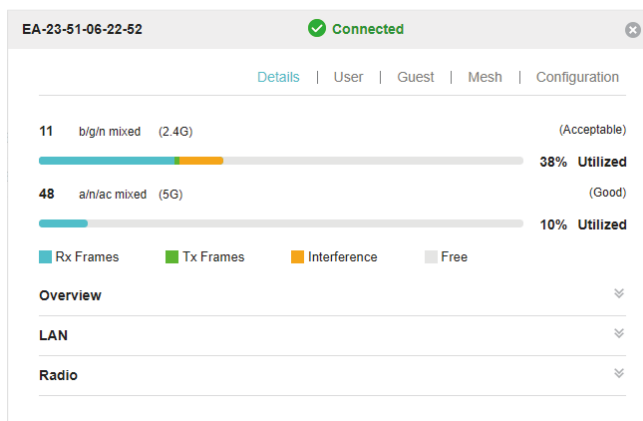
You can click a point on either bar graph for more details:

Tx Pkts/Bytes	Displays the amount of data transmitted as packets and bytes.
Rx Pkts/Bytes	Displays the amount of data received as packets and bytes.
Tx Error/Dropped	Displays the percentage of transmit packets that have errors and the percentage of packets that were dropped.
Rx Error/Dropped	Displays the percentage of receive packets that have errors and the percentage of packets that were dropped.

|	
Ch.Util.(Busy/Rx/Tx)	Displays channel utilization statistics.
	Busy: This number is the sum of Tx, Rx, and also non-WiFi interference, which indicates how busy the channel is.
	Rx: This number indicates how often the radio is in active receive mode.
	Tx: This number indicates how often the radio is in active transmit mode.

1.2   Overview

Click **Overview** to view the basic information of the EAP which includes EAP's MAC address (or name you set), IP address, model, firmware version, the usage rate of CPU and Memory and uptime (indicates how long the EAP has been running without interruption).
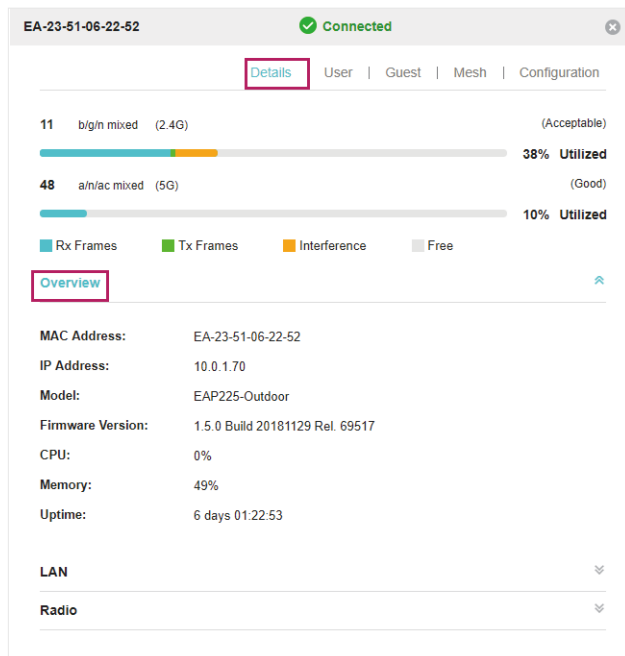
1.3   LAN

Click **LAN** to view the traffic information of the LAN port, including the total number of packets, the total size of data, the total number of packets loss, and the total size of error data in the process of receiving and transmitting data.
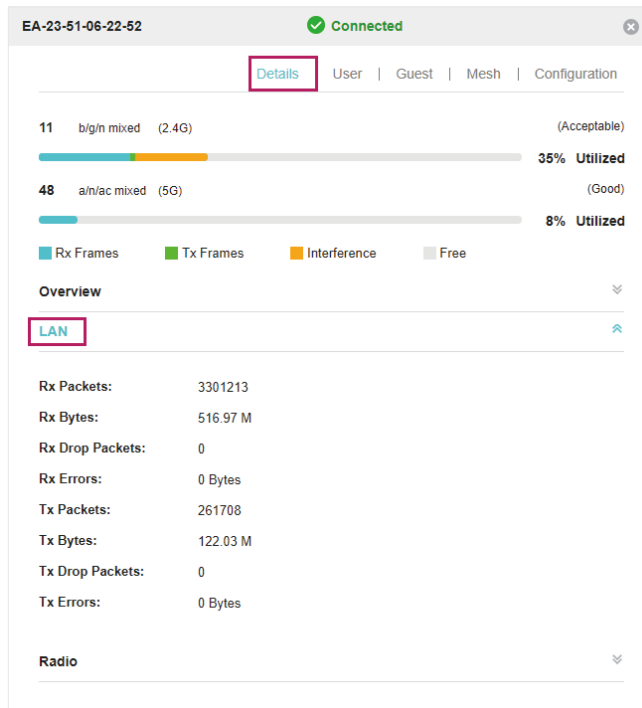
1.4   Radio

Click **Radio** to view the radio information including the frequency band, the wireless mode, the channel width, the channel, and the transmitting power. You can also view parameters of receiving/ transmitting data on each radio band.
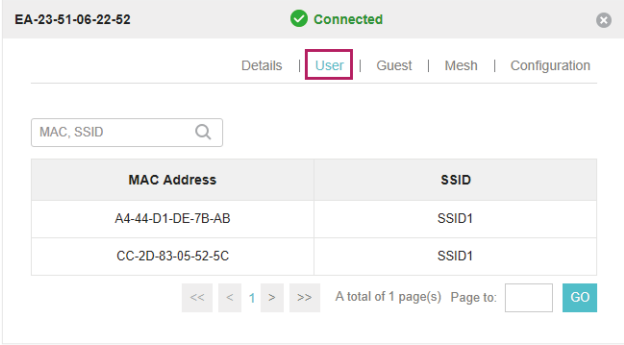
2 View Clients Connecting to the EAP

2.1 User

The **User** page displays the information of clients connecting to the SSID with Portal disabled, including their MAC addresses and connected SSIDs. You can click the client's MAC address to get its connection history.

2.2 Guest

The **Guest** page displays the information of clients connecting to the SSID with Portal enabled, including their MAC addresses and connected SSIDs. You can click the client's MAC address to get its connection history.
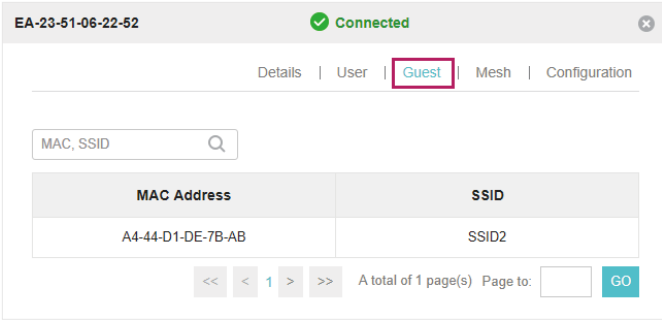
3 View Mesh Information of the EAP

The **Mesh** page is used to view and configure the mesh parameters of the EAP.

3.1   Uplinks

Here you can view the parameters of the uplink APs or click Link to change the uplink AP.

AC-84-C6-02-E0-CE		✅ **Connected (Wireless)**			✕

Details | User | Guest | Mesh | Configuration

Uplinks   ↟

🔄 Rescan

⇕ AP Name	⇕ Channel	⇕ Signal	⇕ Hop	⇕ Downlink	Action
EA-23-51-06-22-52	40	-35 dBm	0	2	Linked ⓘ
EA-33-51-A8-22-A0	40	-38 dBm	1	0	Link
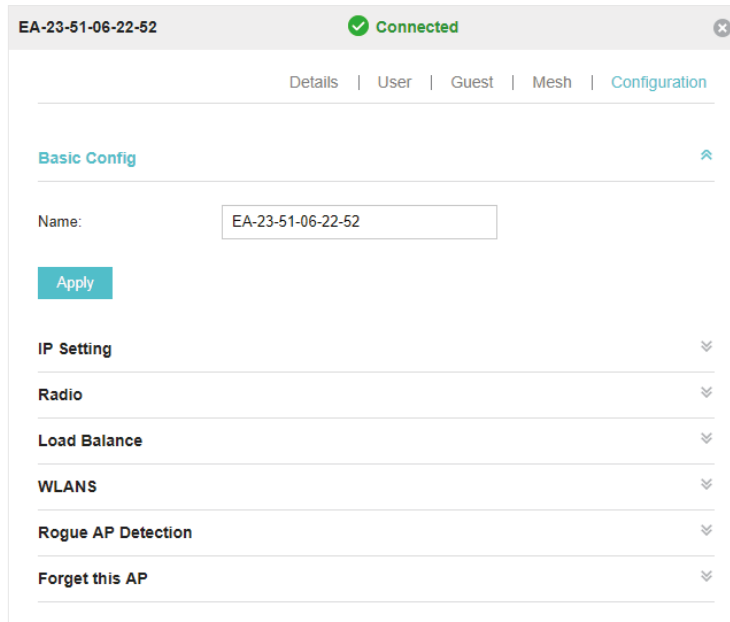
<< < 1 > >>   A total of 1 page(s) Page to: [   ] GO

Downlinks   ↡

☞ Note:

- You can click 🔄 Rescan to search the available uplink APs and the Uplink list will refresh.

- To build a mesh network with better performance, we recommend that you select the Uplink AP with the strongest signal, least hop and least Downlink AP.

3.2 Downlinks

Here you can view the downlink APs.
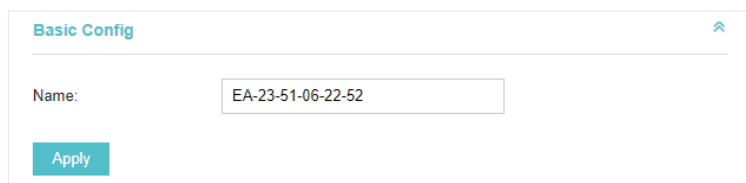
4 Configure the EAP

The **Configuration** page is used to configure the EAP. All the configurations will only take effect on this device.
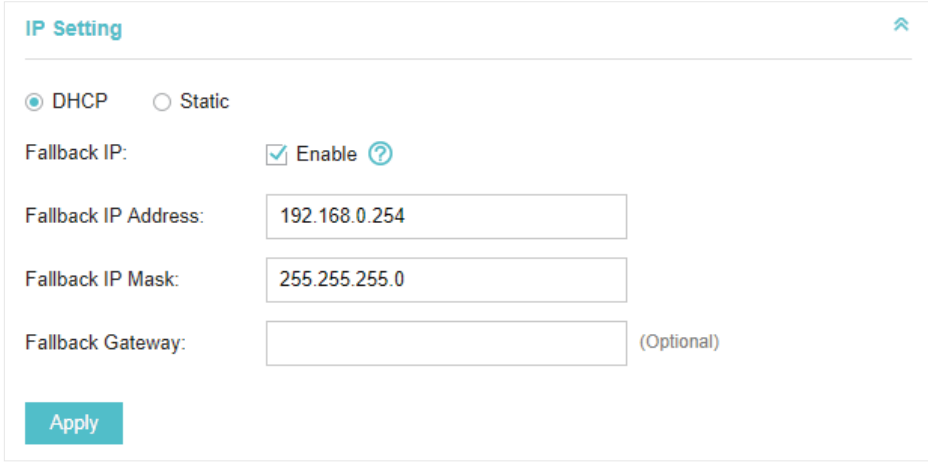
4.1   Basic Config

Here you can change the name of the EAP.

4.2 IP Setting

You can configure an IP address for this EAP. Two options are provided: DHCP and Static.

Get a Dynamic IP Address From the DHCP Server
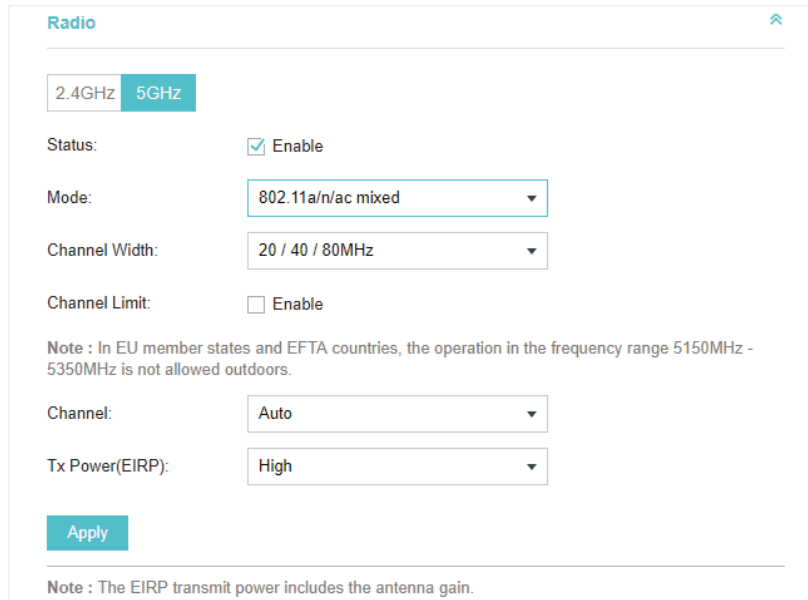
1. Configure your DHCP server.

2. Select **DHCP** on the page above.

3. Enable the Fallback IP feature. When the device cannot get a dynamic IP address, the fallback IP address will be used.

4. Set IP address, IP mask and gateway for the fallback address and click **Apply**.

Manually Set a Static IP Address for the EAP

1. Select **Static**.

2. Set the IP address, IP mask and gateway for the static address and click **Apply**.

4.3   Radio

Radio settings directly control the behavior of the radio in the EAP and its interaction with the physical medium; that is, how and what type of signal the EAP emits.

Select the frequency band (2.4GHz/5GHz) and configure the following parameters.

Status	Enabled by default. If you disable the option, the radio on the frequency band will turn off.
Mode	Select the IEEE 802.11 mode the radio uses.
	When the frequency of 2.4GHz is selected, 802.11b/g/n mixed, 802.11b/g mixed, and 802.11n only modes are available:
	802.11b/g/n mixed: All of 802.11b, 802.11g, and 802.11n clients operating in the 2.4GHz frequency can connect to the EAP. We recommend that you select the 802.11b/g/n mixed mode.
	802.11b/g mixed: Both 802.11b and 802.11g clients can connect to the EAP.
	802.11n only: Only 802.11n clients can connect to the EAP.
	When the frequency of 5GHz is selected, 802.11 n/ac mixed, 802.11a/n mixed, 802.11 ac only, 802.11a only, and 802.11n only modes are available:
	802.11n/ac mixed: Both 802.11n clients and 802.11ac clients operating in the 5GHz frequency can connect to the EAP.
	802.11a/n mixed: Both 802.11a clients and 802.11n clients operating in the 5GHz frequency can connect to the EAP.
	802.11ac only: Only 802.11ac clients can connect to the EAP.
	802.11a only: Only 802.11a clients can connect to the EAP.
	802.11n only: Only 802.11n clients can connect to the EAP.

Channel Limit	For the EAPs that support DFS in EU version, there is a Channel Limit option. If you want to use your EAP outdoors, enable this option to comply with the laws in your country.
Channel Width	Select the channel width of the EAP. The available options differ among different EAPs. For some EAPs, available options include **20MHz**, **40MHz** and **20/40MHz**. For other EAPs, available options include **20MHz**, **40MHz**, **80MHz** and **20/40/80MHz**. The 20/40 MHz and 20/40/80MHz channels enable higher data rates but leave fewer channels available for use by other 2.4GHz and 5GHz devices. When the radio mode includes 802.11n, we recommend that you set the channel bandwidth to 20/40 MHz or 20/40/80MHz to improve the transmission speed.
Channel	Select the channel used by the EAP to improve wireless performance. The range of available channels is determined by the radio mode and the country setting. If you select Auto for the channel setting, the EAP scans available channels and selects a channel where the least amount of traffic is detected.
Tx Power (EIRP)	Select the Tx Power (Transmit Power) in the 4 options: **Low, Medium, High** and **Custom**. Low, Medium and High are based on the Min. Txpower (Minimum transmit power) and Max. TxPower (Maximum transmit power. It may vary among different countries and regions). **Low**: Min. TxPower + (Max. TxPower-Min. TxPower) * 20% (round off the value) **Medium**: Min. TxPower + (Max. TxPower-Min. TxPower) * 60% (round off the value) **High**: Max. TxPower **Custom**: Enter a value manually.

4.4 Load Balance

By setting the maximum number of clients accessing the EAPs, Load Balance helps to achieve rational use of network resources.

Select the frequency band (2.4GHz/5GHz) and configure the parameters.

Max Associated Clients	Enable this function and specify the maximum number of connected clients. While more clients requesting to connect, the EAP will disconnect those with weaker signals.
RSSI Threshold	Enable this function and enter the threshold of **RSSI** (Received Signal Strength Indication). When the clients' signal is weaker than the **RSSI Threshold** you've set, the clients will be disconnected from the EAP.

4.5   WLANs

You can specify a different SSID name and password to override the previous SSID. After that, clients can only see the new SSID and use the new password to access the network. Follow the steps below to override the SSID.

1. Select the WLAN group.

2. Click and the following window will pop up.
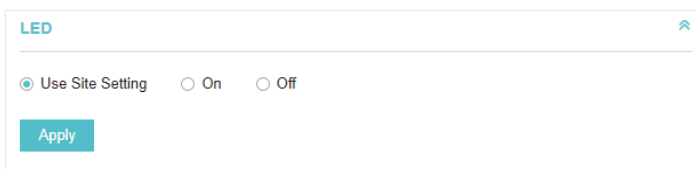
3. Check the box to enable the feature.

4. You can join the overridden SSID in to a VLAN. Check the **Use VLAN ID** box and specify a VLAN ID.

5. Specify a new name and password for the SSID.

6. Click **Apply** to save the configuration.

4.6   LED
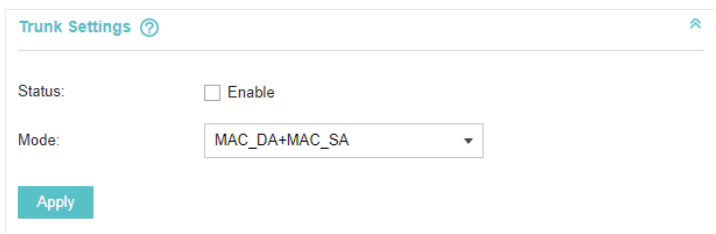
You can change the LED status of each EAP.

Using Site Setting	The LED status will be the same as the site settings.
On	Turn on the LED.
Off	Turn off the LED.

4.7   Trunk Settings (Only for EAP330)

The trunk function can bundles multiple Ethernet links into a logical link to increase bandwidth and improve network reliability.

Status	Enable this function.
	The EAP330 has two 1000Mbps Ethernet ports. If the Trunk function is enabled and the ports are in the speed of 1000Mbps Full Duplex, the whole bandwidth of the trunk link is up to 4Gbps (2000Mbps * 2).

| Mode	Select the applied mode of Trunk Arithmetic from the drop-down list.
	MAC_DA+MAC_SA: When this option is selected, the arithmetic will be based on the source and destination MAC addresses of the packets.
	MAC_DA: When this option is selected, the arithmetic will be based on the destination MAC addresses of the packets.
	MAC_SA: When this option is selected, the arithmetic will be based on the source MAC addresses of the packets.

4.8   Rogue APs Detection

With this option enabled, the EAP will detect rogue APs in all channels. You can view the results in **Insight** > **Untrusted Rogue APs** page.
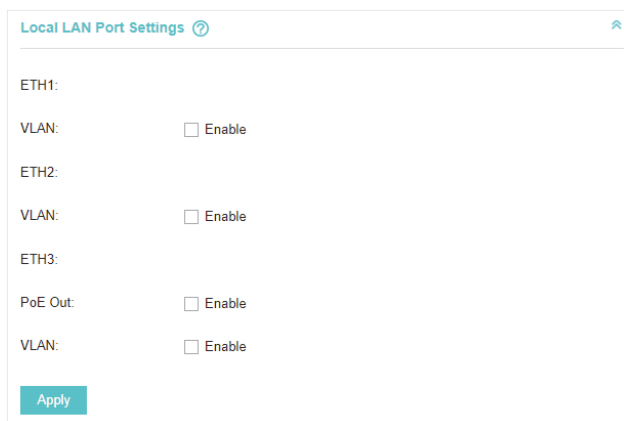
Rogue AP Detection

Scan
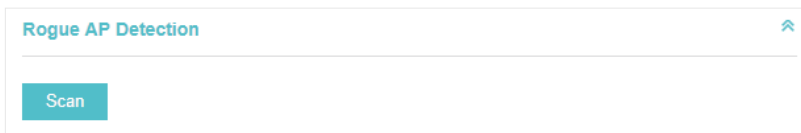
Note:

For some specific versions of the firmware, some EAPs will detect rogue APs automatically when this option is enabled.

4.9   Local LAN Port Settings (Only for EAP115-Wall and EAP225-Wall)

You can configure the LAN port of the EAP.

Local LAN Port Settings ⑦

ETH1:

VLAN: ☐ Enable

ETH2:

VLAN: ☐ Enable

ETH3:

PoE Out: ☐ Enable

VLAN: ☐ Enable

Apply

VLAN	Enable this feature and specify the VLAN that the EAP is added to, and then the hosts connected to this EAP can only communicate with the devices in this VLAN. The valid values are from 1 to 4094, and the default is 1.
PoE Out	If your EAP has PoE OUT port, you can enable this option to supply power to the connected device on this port.
	The EAP that has no PoE OUT port does not support this feature.

4.10 Forget this AP

If you no longer want to manage this EAP, you may remove it. All the configurations and history about this EAP will be deleted. It is recommended to back up the configurations of this EAP before you forget it.