EWW631-A1 Access Point Quick Setup Guide

v1.0

This Quick Setup Guide provides step-by-step instructions on how to install and begin using your CyberTAN EWW631-A1 dual-band 802.11ax indoor Wi-Fi access point (AP).

FIGURE 1 EWW631-A1 Access Point: Top View and Back View

Package Contents

A complete EWW631-A1 installation package includes all of the following items:

- EWW631-A1 Access Point
- One mounting kit, including four 1-inch No. 8 steel pan-headPhillips sheet metal screws, one anti-theft screw and wall-mount anchors
- One external upper plate bracket
- One external lower plate bracket
- Service Level Agreement/Limited Warranty Statement (Optional)
- Declaration of Conformity (Optional)
- Regulatory Statement (Optional)
- This *Quick Setup Guide* (Electrical)

Required Hardware Tools

- Cyber controller (Confirm that "Cyber Controller" has completed the first registration)
- Cat 5e (or better) Ethernet cable
- 802.3at-compliant Power over Ethernet (PoE) switch or PoE injector

Step 1:
Connecting Your CyberTAN Controller to the AP

1. Using an Ethernet cable to connect one of your controller LAN ports to the PoE port of the AP. Refer to Figure 2.

   FIGURE 2 EWW631-A1 AP Ports on Bottom Panel

TABLE 1 EWW631-A1 AP Ports

No.	Label	Description
1	1G ETH PoE	1 x 10/100/1000 Mbps PoE In Port: RJ-45 Ethernet port (supports 802.3af/at PoE)
2	Reset switch	Resets the AP

2. Verify that the PWR LED on the AP is lit a steady blue

Step 2: Login Controller website for setting

1. Using an Ethernet cable to connect your computer network port to one of the LAN ports on the controller.
2. Open a browser (we recommend Chrome) on the computer to visit https://**192.168.1.1** (or **https://CyberTAN.wlan.local**).
3. You will be directed to the CyberTAN controller login page.
4. Access the login page, input your registered account password, and then click **"Sign in"** to access the Controller dashboard

Step 3: Checking and find your EAP

NOTE: The CyberTAN controller must be directly connected to the EAP through one of the Ethernet ports and powered on, ready for setup.

1. Navigate to the **"Topology"** section in the left menu. The EAP you intend to adopt will be shown in the **"Pending Adoption"** block, and located at the bottom of the page.
2. Click **"Connected Devices/EAP"** on the left Menu
3. The EAP is linked to the **"Controller"** network by establishing a connection with the device. This connection status can be viewed on the **topology** page.
4. Navigate to the "Topology" section located in the left menu.
5. Locate the EAP icon and its corresponding MAC address. Once confirmed, proceed by clicking on the appropriate option.
6. During the adoption process, the status will indicate "Onboarding...". Once the process is successfully completed, the new EAP will seamlessly integrate into the current "topology" and its machine LED will display a blue light.

Step 4:
Placing the AP in Your Site

1. Position the AP in its designated permanent location, ensuring it is accessible for network connections. For detailed installation instructions, please consult the "**Mounting Instructions**" guide
2. Connect the Cat5 cable to the POE in port of the AP, and to a convenient power source (e.g., CyberTAN controller LAN port, POE Ethernet switch or POE Ethernet injector)

NOTE: To establish the connection between the AP and the PoE switch or PoE injector, it is essential to utilize a Cat 5e (or better) Ethernet cable.

3. Verify that the Uplink port LED is lit.
   After a short pause to re-establish the Internet connection, you can test the AP.

Step 5:
Verifying the Installation

1. Using any wireless-enabled computer or mobile device to search for default SSID **cyfi_25g** and connect to it.
2. Once connected, open a web browser and access any public website.

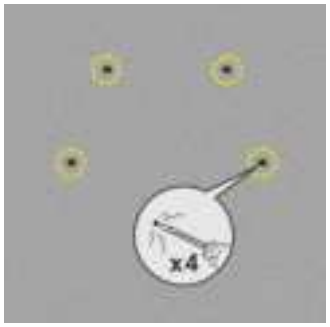
   Congratulations! Your wireless network is now active and operational.

Mounting Instructions

Without an Ethernet outlet:

This setting is in the case without Ethernet hole

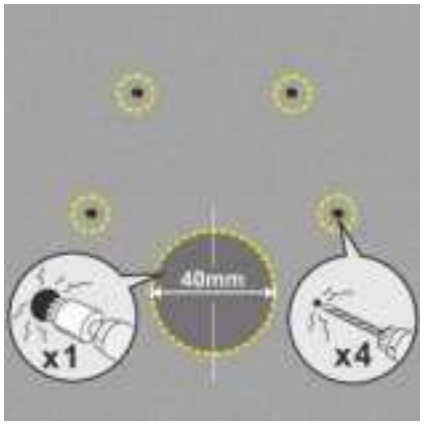
1. Attach the lower cover ceiling plate to the desired ceiling location.
2. Mark the positions of the four screw holes.
3. After removing the ceiling plate, proceed with drilling
4. Align the upper and lower ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.
5. Place four nuts onto the screws and tighten them securely.
6. Confirm the stability of the ceiling plate kit.
7. Connect the Ethernet cable with the EAP.
8. Align the EAP with the ceiling plate
9. Rotate the EAP clockwise to secure it in place.
10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.
11. Your EAP setup is now completed

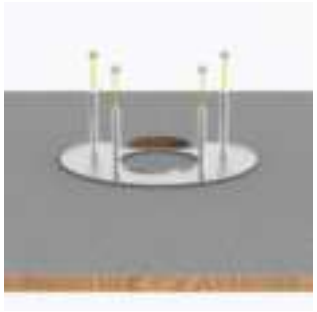


Using an Ethernet outlet:

Make sure the ceiling you want to use has an Ethernet outlet.

1. Attach the lower cover ceiling plate to the desired ceiling location.
2. Mark the positions of the four screw holes..
3. After removing the ceiling plate, proceed with drilling
4. Align the upper and lower ceiling plates, inserting screws through the holes in the plates and the newly drilled ceiling holes.
5. Place four nuts onto the screws and tighten them securely.
6. Confirm the stability of the ceiling plate kit.
7. Retrieve the Ethernet cable from the Ethernet hole and connect it to the EAP.
8. Align the EAP with the ceiling plate
9. Rotate the EAP clockwise to secure it in place.
10. Lock the anti-theft screw into the anti-theft hole to fix the AP and the lower cover ceiling plate.
11. Your EAP setup is now completed.





EY006-A1 Indoor SMB Enterprise Network Controller User Manual

V1.22

Abstract

Our network status dashboard simplifies the task of managing the entire network. With its user-friendly interface, you can effortlessly monitor and control the status of your network in real-time.

The dashboard presents an intuitive overview of key network metrics, such as availability, performance, and security alerts. You can easily navigate through interactive charts and graphs to gain valuable insights and quickly identify any issues.

With just a few clicks, you can take proactive measures to optimize network performance, minimize downtime, and ensure a seamless experience for your users. Our user-friendly network status dashboard empowers you to handle network management with ease and efficiency.

the **table** below shows the overview of each page

name	description
Dashboard	offers comprehensive information, including controller details, Traffic Overview, Client Table, WiFi Quality, and Internet Health, all presented through intuitive charts for easy understanding of the network's current status
Topology	displays a network topology, where each node is labeled as either a Controller, EAP, or end-user device. Additionally, each node is identified by name and provides relevant information
Connected Devices	lists all connected devices includes EAPs and client-devices and displays detail information about each of them
Statistics	provides statistics of upload, download and services
Wi-Fi Insights	shows a comprehensive list of Wi-Fi access points (APs) around the network
Settings	shows all other setup include Wi-Fi, Network, Internet, Static Route, Firewall, Port Forwarding, and System

Login the controller

The following are the procedures that how to login the controller.

Step1, Open a browser (we recommend Chrome) and visit https://192.168.1.1 (or https://sonicfi.wlan.local).

Step 2, You will be directed to the controller login page.

Step 3, Access the login page, input your registered account password, and then click "Sign in" to access the Controller dashboard

EY006-A1 SMB Controller Login Page

Step 4, To initiate the first login, you need to complete the account registration process. Use the default account / password: admin@sonicfi.com.tw / Eap@12345.

Step 5, After entering these, click "Sign in" to access the registration page.

EY006-A1 SMB Controller Registration Page

Step 6, On the registration page, you can establish your own new account and password. After entering the required information, simply click "Sign up". It will return to the Login Page.

Step 7, Access the login page, enter your registered account's password, and click "Sign in" to access the Controller dashboard.

EY006-A1 SMB Controller Dashboard Page

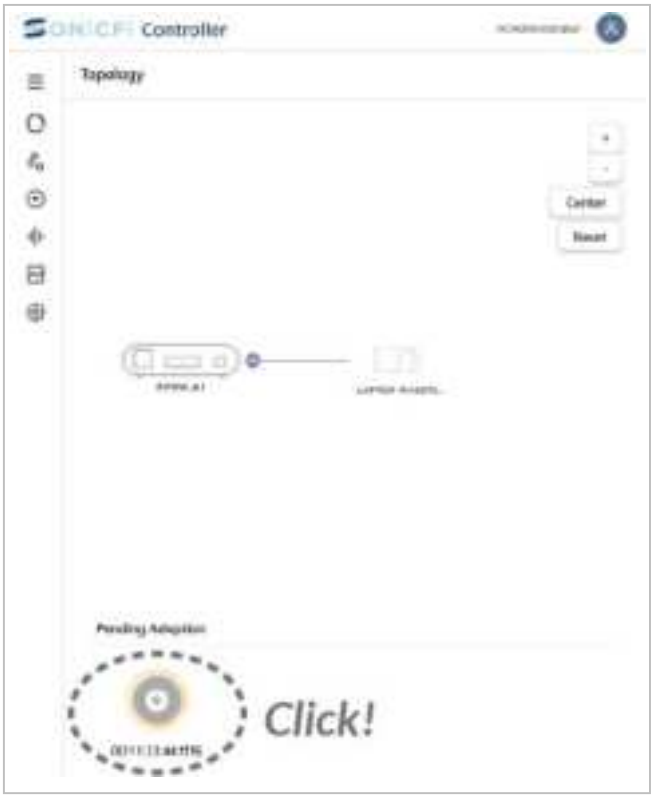
Onboarding the device

Once the dashboard page is visible, please follow the below procedures to install an access point. The installation procedures are shown in below.

> Note: We strongly suggest user to “onboard” the device first and then put the device in the service location.

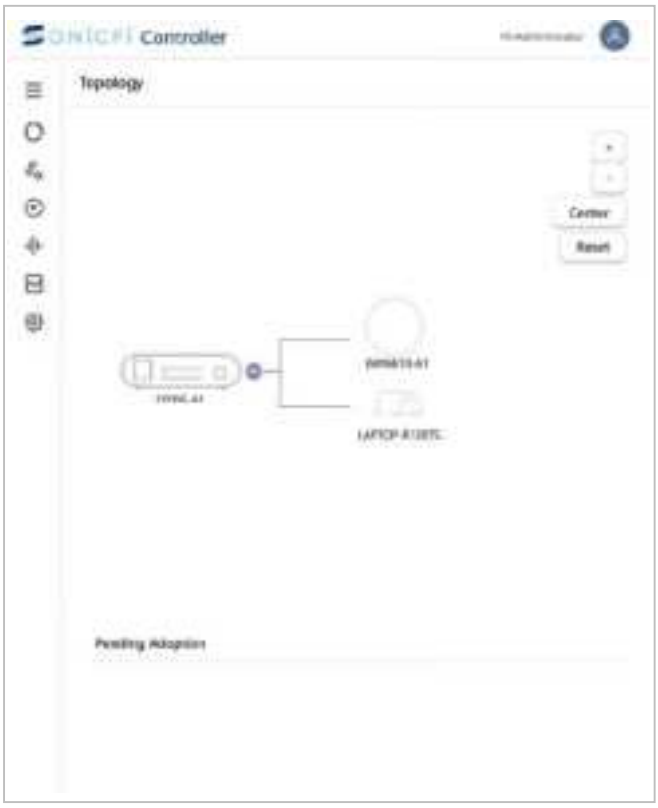
Step 1, The initial EAP must be connected to the controller's LAN port using a network cable.

Step 2, After that, on Topology page of the controller web GUI, you can locate “pending adoptions” in the bottom-left corner.



EY006-A1 SMB Controller Pending Adoption of Topology Page

Step 3, To adopt the access point, simply click on it and wait for the adoption process to complete. The process may take around two minutes.



EY006-A1 SMB Controller Onboarding of Topology Page

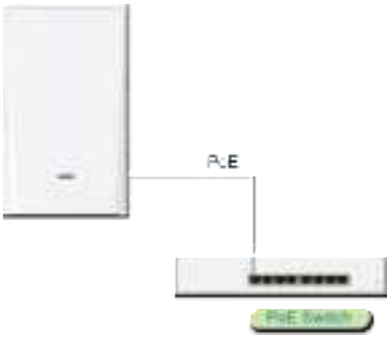
Step 4, For more information about the Controller Web GUI information and the usage, please refer to this manual.

Step 5, After setting up the basic network topology, you can adopt other access points through wire or wireless.

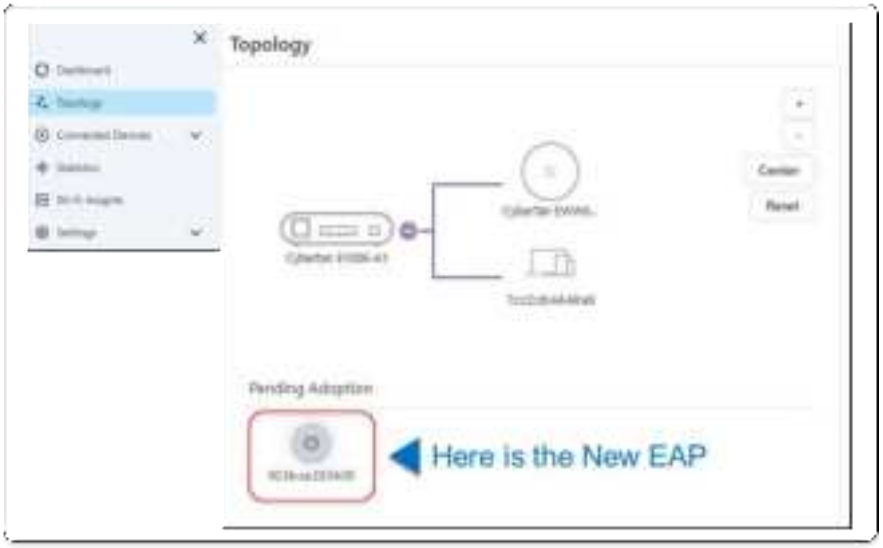
The result can setup the first tier access point which is shown on the above topology page. When user would like to use “wireless backhaul” architecture to install the second tier access point, please follow the below procedures.

Note: We strongly suggest user to “onboard” the device first and then put the access point in the service location.

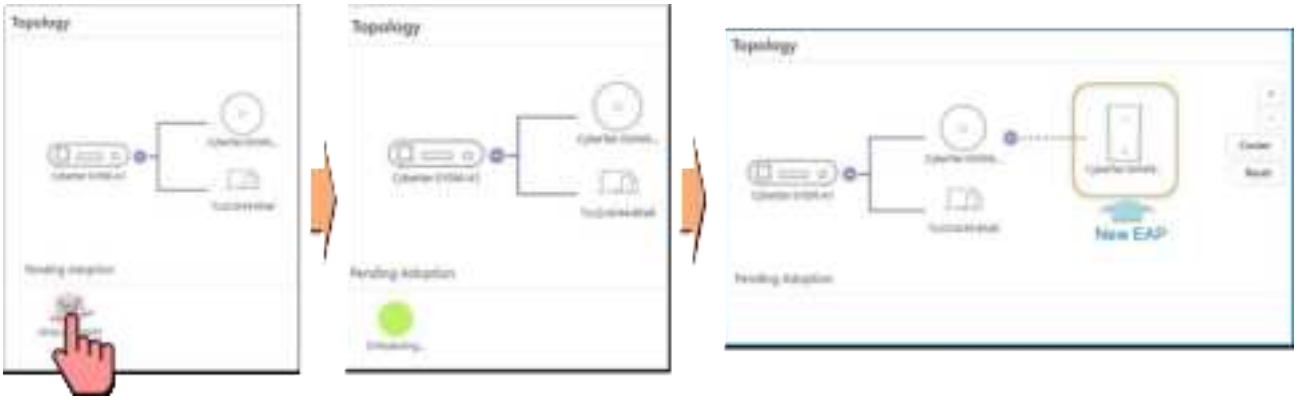
Step 1, The EAP can power on by PoE. Please find a PoE switch or PoE injector to connect to “LAN(PoE In)” port of EAP.



Step 2, Access the topology page of controller. Waiting the new EAP shows on the “pending adoption” area.



Step 3, Click the new EAP and then this EAP adds on the topology automatically.



Dashboard Page

The information provided on the Dashboard page includes controller information, Traffic Overview, Client Table, WiFi Quality, and Internet Health. Most of the information is presented in the form of charts to facilitate users in quickly understanding the current status.

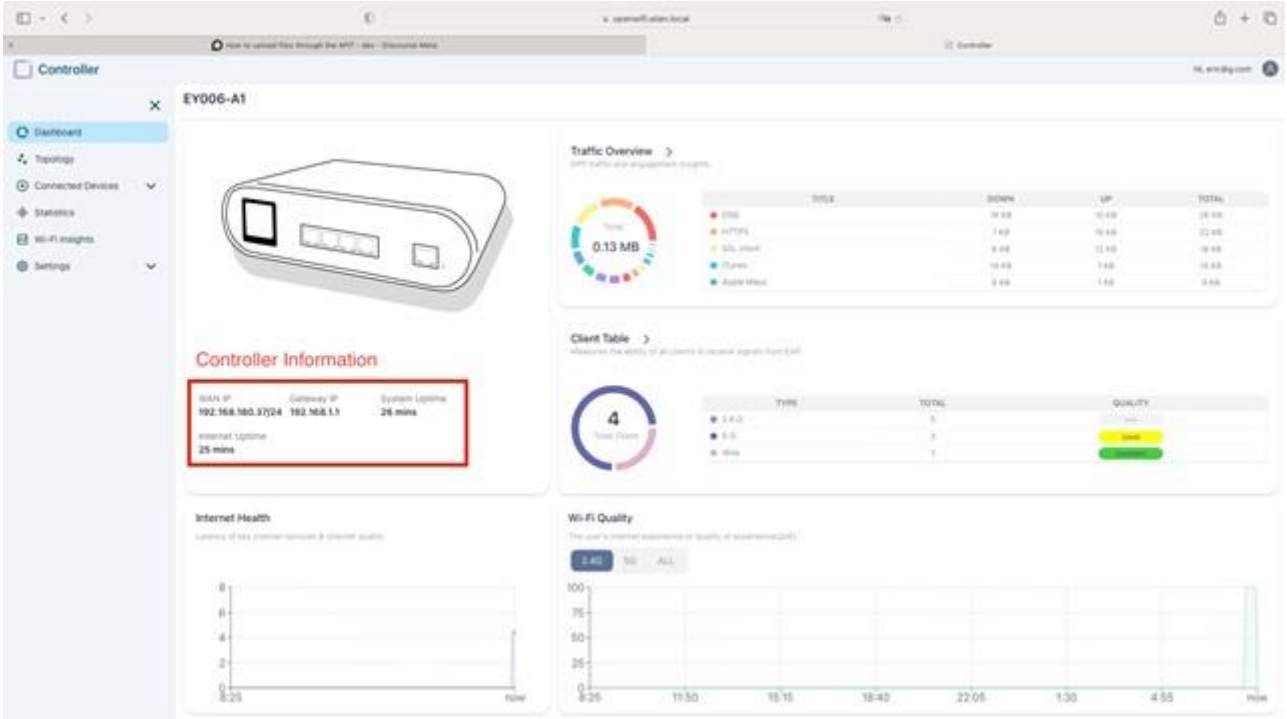


Figure 1. Dashboard overview

Controller Information provides below information (Figure 1.)

WAN IP, Gateway IP, System Uptime (the amount of time since the system was last rebooted or turned on), Internet Uptime (the amount of time that an internet connection has been available), and Internet Health (include latency of internet services and usage of broadband)

Traffic Overview presented in chart form shows which network service uses the most data, and provide information on upload, download, and total usage for each service (Figure 1.)

Client Table shows how many clients connected and what kind of connection type (2.4G, 5G, or wired) they used. It shows us the quality of each connection type as well (Figure 1.)

WiFi Quality uses chart to present user's internet experience or quality of experience (QoE) (Figure 1.)

Internet Health shows latency of key internet services and internet quality in chart (Figure 1.)

When you click on the "Traffic Overview" in Dashboard page, it will take you to a statistics page that provides a more detailed view of your controller's traffic status, which we will explain further later on.

When you click "Client Table" on the Dashboard page, a list of devices will appear along with more detailed information for each device. This information includes the connection status, name, connection type, IP address, channel, quality, signal strength (RSSI), receive rate (RX rate), transmit rate (TX rate), and history. (Figure 2.)

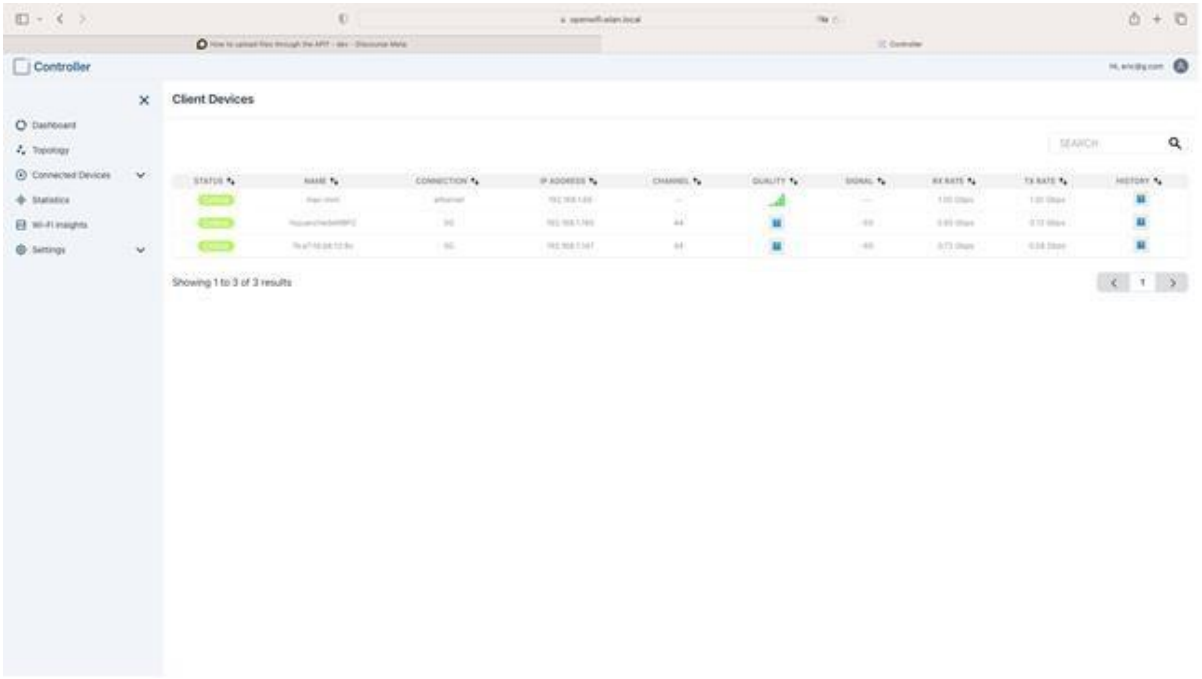


Figure 2. Client Devices Details

Topology Page

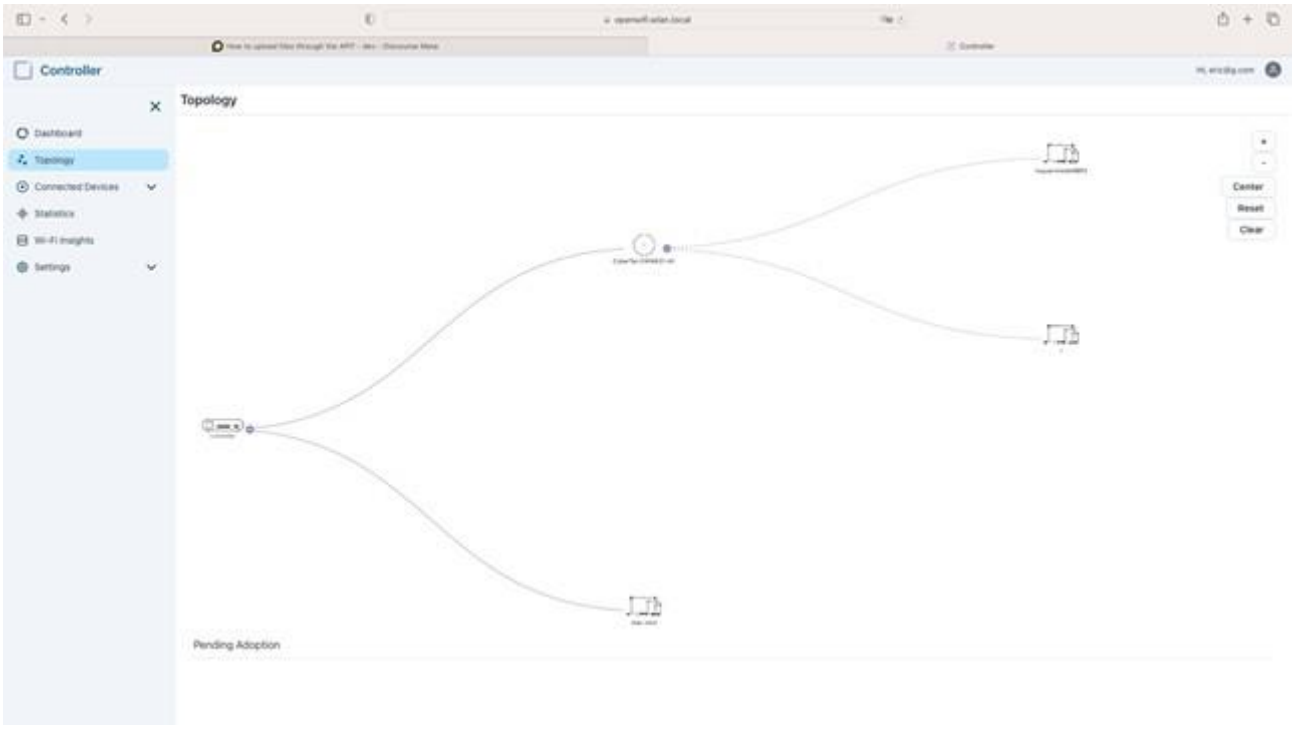


Figure 3. Topology Page

The Topology page displays a network topology, where each node is labeled as either a Controller, EAP, or end-user device. Additionally, each node is identified by name and provides relevant information. (Figure 3.)

When you click on a node in the network topology, detailed information about the node will appear on the right side of the screen. The type of node will determine what information is displayed in addition to the overview section.

In the Overview tab of the Controller nodes, you'll find information on the Controller Model, Clients, General, WAN, Downlink, and Statistics. Additionally, the Port tab lists all the ports on the Controller and displays the status of each, including Speed, Activity, TX Counts, and RX Counts. Lastly, in the Settings tab, you'll find options to restart or factory reset the Controller, as well as the ability to use the Controller to ping other devices. (Figure 4.)

In the Overview tab of the Controller nodes, you can find several information sections. The Controller Model Info Section displays the WAN IP, IP Address, and Device Version. The Clients section provides a list of all clients connected to the Controller, including their status, name, and quality of connection. In the General Section, you can find information such as IP Address (WAN), IP Address (LAN), MAC Address, Uptime, Memory Usage, and Load Average. The WAN Section provides details on the IP Address, Speed, ISP, Down Pkts/Bytes, Up Pkts/Bytes, Down Activity, and Up Activity. The Downlink Section lists all SonicFi devices connected to the Controller and their respective device name and quality of connection. Finally, the Statistics Section shows a chart displaying CPU and RAM usage. (Figure 4.)

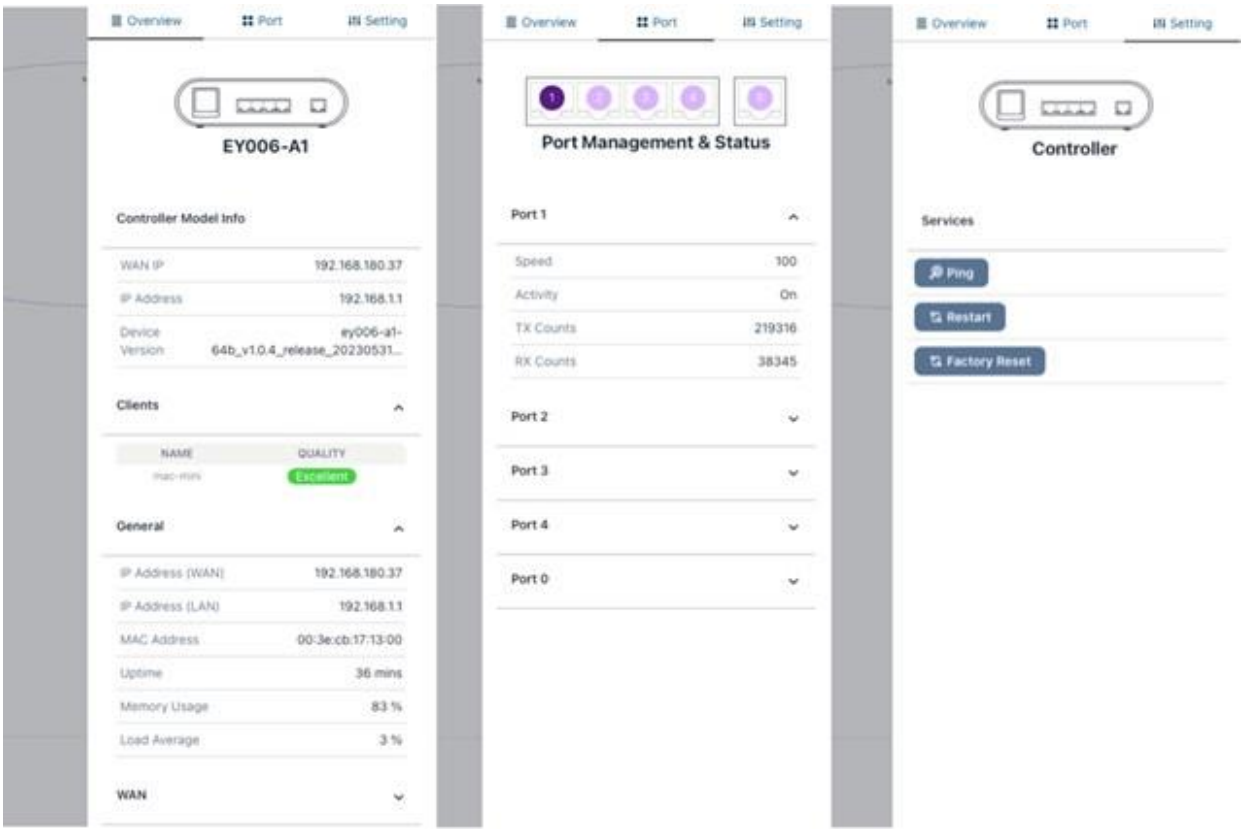


Figure 4. Controller Node Details

The Overview tab for EAP nodes provides information on the EAP model, clients, general settings, uplink (wired/wireless), and air stats (2.4G, 5G). In addition, the Traffic Statistics tab displays the total data download/upload usage in separate charts and lists all services and their corresponding data usage for both download and upload through the EAP. Finally, within the Settings tab, users can manage the EAP by updating, locating, restarting, factory resetting, or removing it. (Figure 5.)

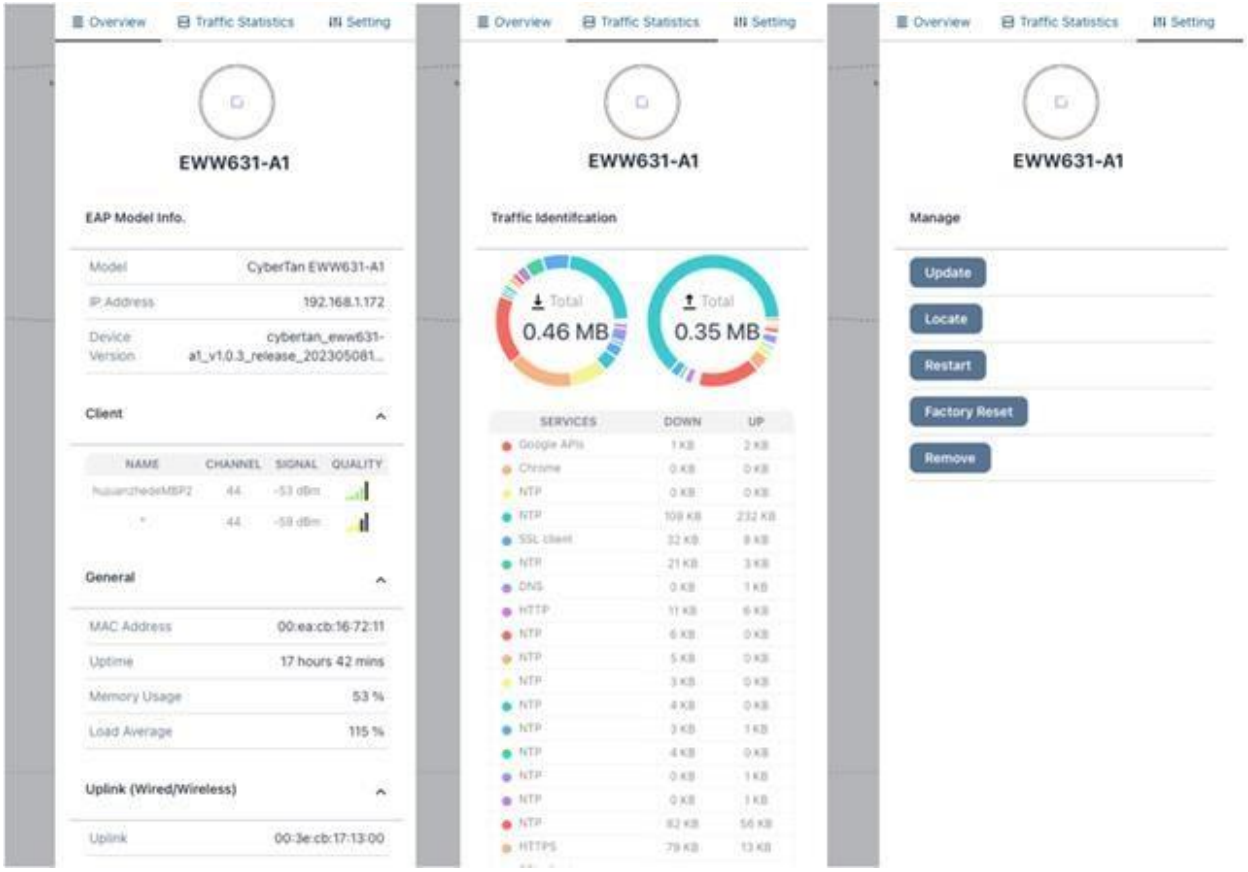


Figure 5. EAP Node Details

In the EAP nodes' Overview tab, you can access various sections with different types of information. The EAP Model Info Section displays important information such as the Model Name, IP Address, and Device Version. Additionally, the Clients section provides a comprehensive list of all connected clients, including their name, channel, signal (RSSI), and connection quality. The General Section contains crucial details such as the MAC Address, Uptime, Memory Usage, and Load Average. Furthermore, the Uplink Section (Wired/Wireless) provides specific statistics on the Uplink, Down Pkts/Bytes, Up Pkts/Bytes, and Activity. Lastly, the Air Stats Section showcases the status of both 2.4GHz and 5GHz, including Channel, Transmit Power, Tx Pkts/Bytes, Rx Pkts/Bytes, Tx Retry/Dropped, Rx Retry/Dropped, Ch. Util. (Busy/Rx/Tx), and Clients. These sections offer a comprehensive overview of all essential aspects of the EAP nodes. (Figure 5.)

The Overview tab of the end-user nodes provides information about the Client Model and RSSI History. Additionally, the Traffic Statistics tab presents charts that display the total data download/upload usage separately, and lists all services along with their corresponding data usage for both download and upload on the end-user device. (Figure 6.)

On the Overview tab of the end-user nodes, there are two sections: Client Model Info and RSSI History. The Client Model Info section displays basic information about the end-user device, including its name, uplink, wireless quality, IP address, MAC address, manufacturer, operating

system, and uptime. Meanwhile, the RSSI History section shows the quality of RSSI in both 2.4G

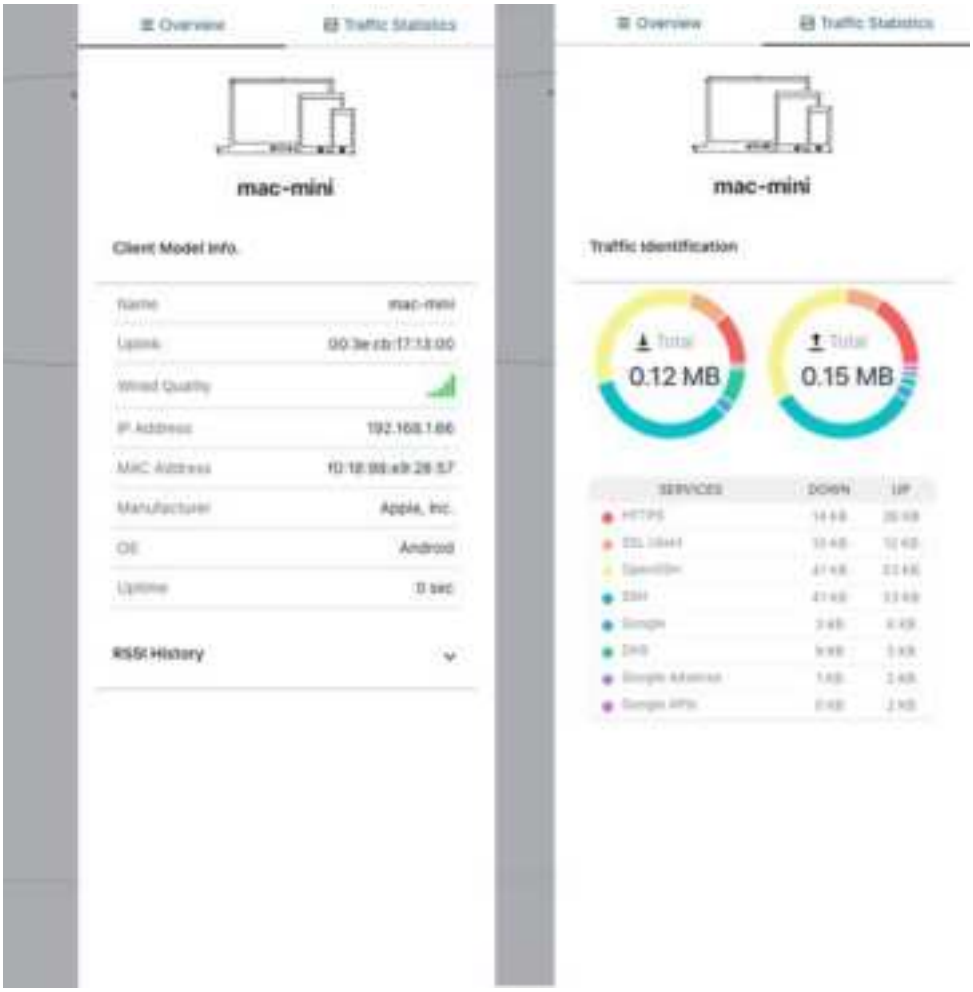


Figure 6. End-user Node Details

and 5G bands in the form of a chart that tracks the device's connectivity over time. (Figure 6.)

Statistics Page

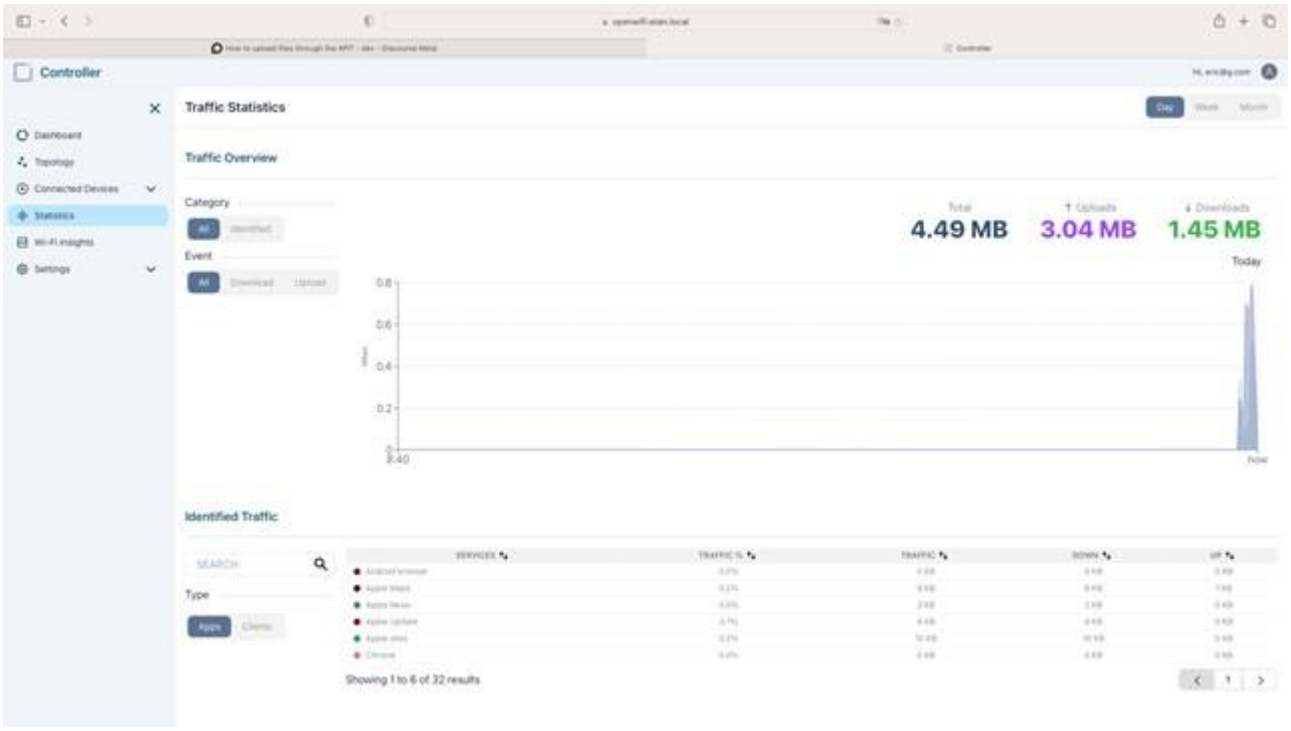


Figure 7. Statistics Page

This page consists of two sections of information - the “Traffic Overview” section and the “Identified Traffic” section.

The “Traffic Overview” section offers details on the amount of data uploaded, downloaded, and used in total. You have the option to filter the information by selecting the category type (All or Identified) and the event type (All, Download, or Upload).

The “Identified Traffic” section has two types: Apps and Clients. The Apps type displays a list of services and provides information on each service's name, traffic, download, and upload. The

Clients type displays all the information offered in the Apps type, except that it shows the client's name instead of the service's name. (Figure 8.)

Figure 8. Identified Traffic

Connected Devices Page

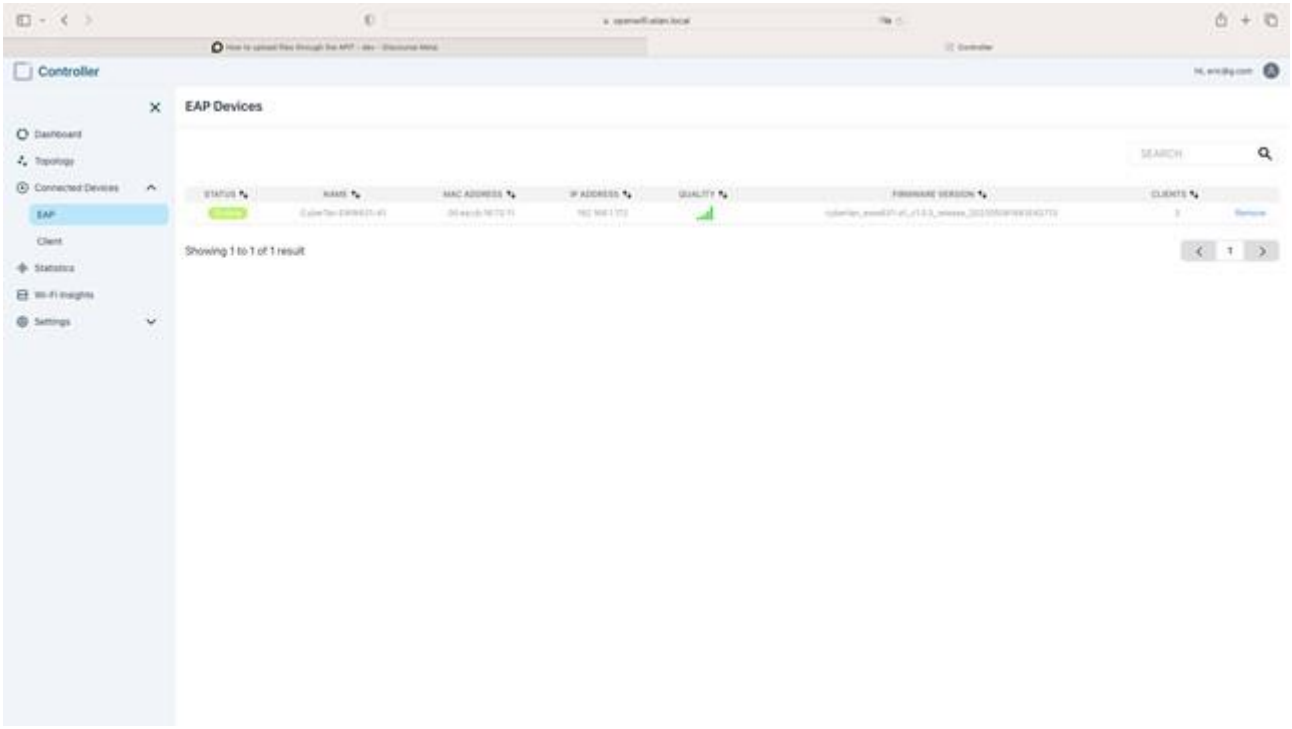


Figure 9. Connected Devices Page (EAP)

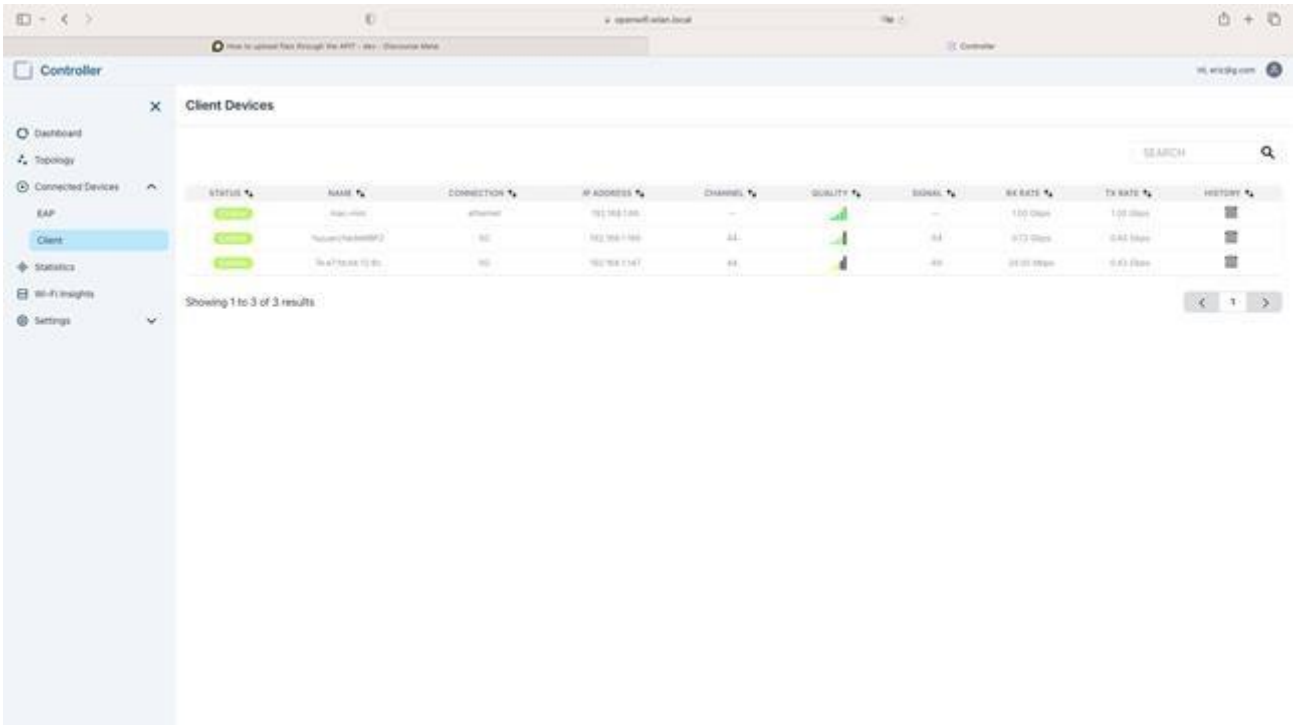


Figure 10. Connected Devices Page (Client)

To view all connected devices, simply click on “Connected Devices” in the left sidebar. This will expand to display all kind of connected devices, including EAP and Client. By clicking on the specific kind of device of interest, you will be directed to its corresponding Devices page, which lists all relative devices. By selecting the particular type of device you are interested in, you will be directed to its corresponding Devices page, which provides a list of all the related devices. The EAP Devices page lists all the EAP devices and provides detailed information such as connection status, name, MAC address, IP address, connection quality, firmware version, and clients associated with each device. On the other hand, the Client Devices page lists all the end-user devices and provides information such as connection status, name, connection type, IP address, channel connection quality, RSSI signal, RX Rate, TX Rate, and history of each device.

Wi-Fi Insights Page

To view a comprehensive list of Wi-Fi access points (APs) around the Controller, simply access the

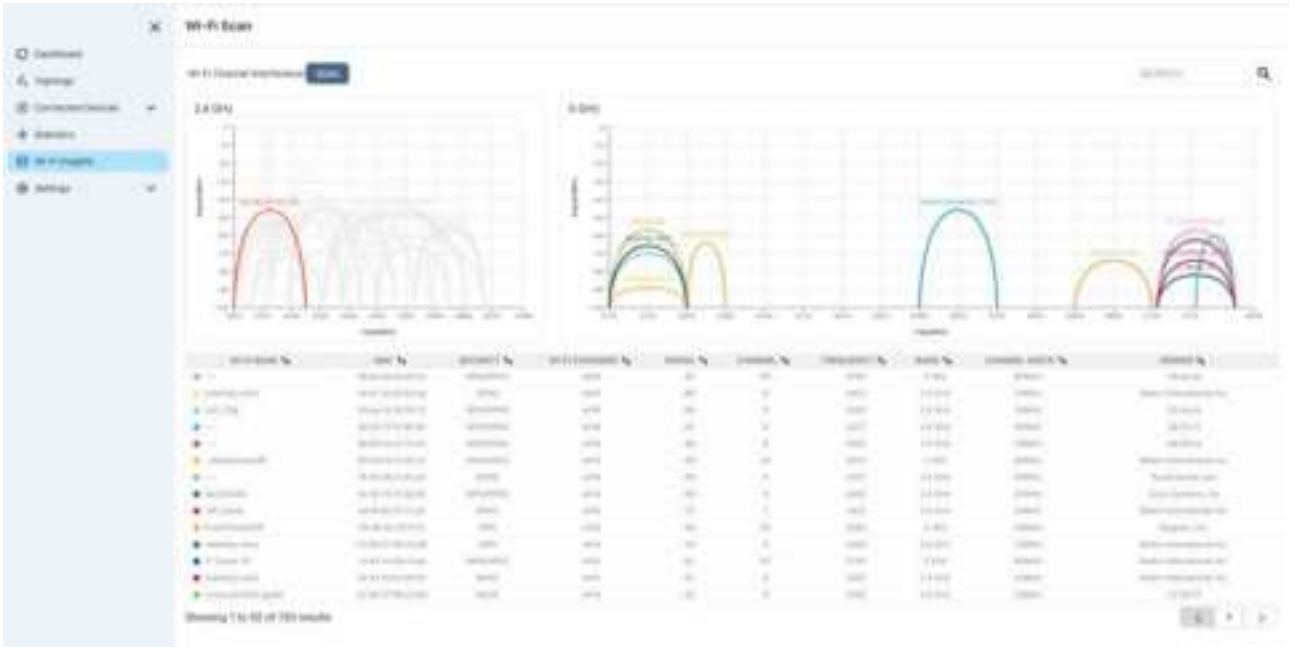


Figure 11. Wi-Fi Insights Page

“Wi-Fi Insights” option located on the left sidebar. This will redirect you to the Wi-Fi Scan page, where you can see details such as the name of the Wi-Fi, MAC address, security type, Wi-Fi standard, RSSI signal strength, channel, frequency, band, channel width, and vendor information for each scanned AP. Moreover, the page also features detailed charts for the 2.4 GHz and 5 GHz bands. Initially, the page may be empty with no information displayed, but by clicking on the “Scan” button, the Controller will initiate a scan of all potential APs. Please note that the scanning process may take anywhere between 3 to 5 minutes.

Settings Page

When you click on “Settings” in the left sidebar, a list of all possible settings to manage the Controller and the EAPs will expand. These settings include Wi-Fi, Network, Internet, Static Route, Firewall, Port Forwarding, and System.

- The Wi-Fi settings page allows you to customize Channel Width, Transmit Power, and Channels in both the 2.4G and 5G bands, along with Steering and Sensitivity options. Additionally, you can create new Wi-Fi settings or edit existing ones with fields such as Name, Password, Wi-Fi Band, Fast Roaming, Security Protocol, Group Rekey Interval, Hide Wi-Fi Name, and MAC Address Filtering. (Figure 12., Figure 13.)

- The Network Settings page enables you to configure your LAN by setting up the IP address and Netmask, as well as the DHCP server with a range of IPs and lease time. (Figure 14.)

- The Internet Settings page displays the current Internet status, including active status, name, IP address, and uptime. From this page, you can also edit WAN settings and the IPv4 connection type. WAN settings include name, VLAN ID, MAC address clone, and DNS server. (Figure 15., Figure 16.)

- The Static Route & Firewall Settings page displays a comprehensive list of the current settings for Static Routes, Firewalls, and Port Forwarding (Figure 17.). You have the ability to modify or create new Static Routes with fields such as Enable, Name, Target Network IP, Netmask, Gateway IP, and Interface (Figure 18.). Similarly, you can create or modify Firewalls with fields such as Enable, Name, Action, Input Interface, Output Interface, IP Type, Source IP, Source Port, Destination IP, and Destination Port (Figure 19.). Additionally, you can set up Port Forwarding by creating or editing entries with fields such as Enable, Name, Private IP, Interface Private Port, Type, and Source Port (Figure 20.). The Firewall and Port Forwarding functions can be easily switched on or off as needed.

- On the System Settings page, you can configure your language settings, check for firmware updates, restore from a backup, download backup configurations, enable or disable system logging and set up an NTP server IP (Figure 21).

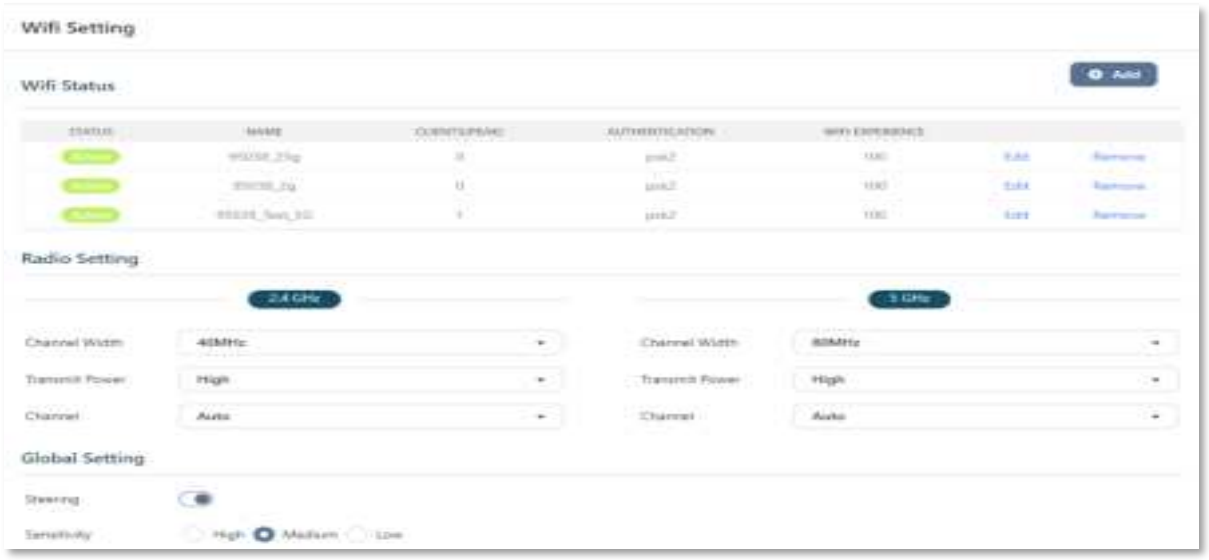


Figure 12. Wi-Fi Setting

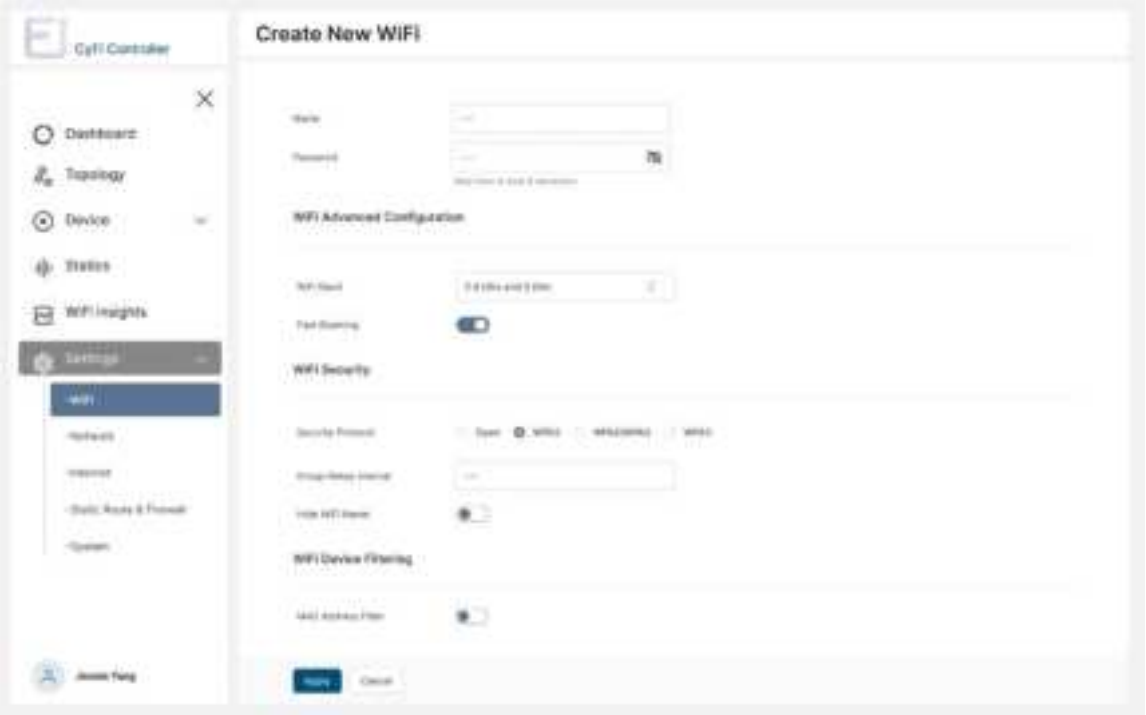


Figure 13. Create a New WiFi

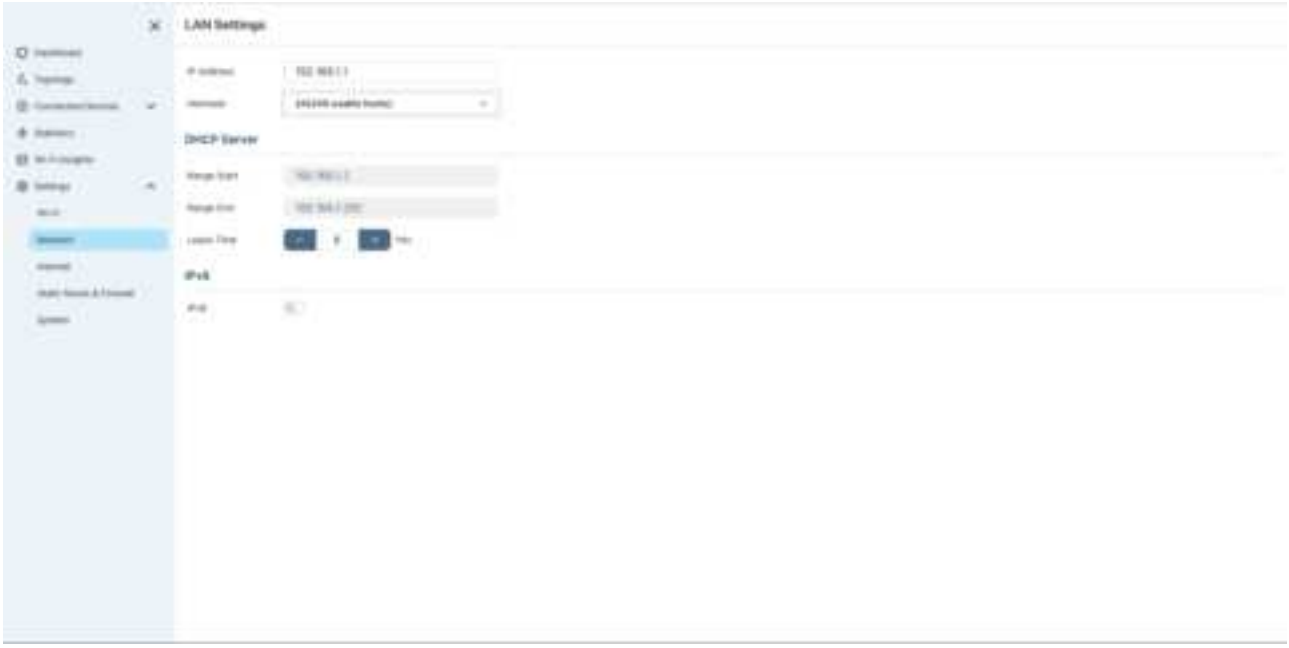


Figure 14. Network Settings

Figure 15. Internet Settings (1/2)

Figure 16. Internet Settings (2/2)

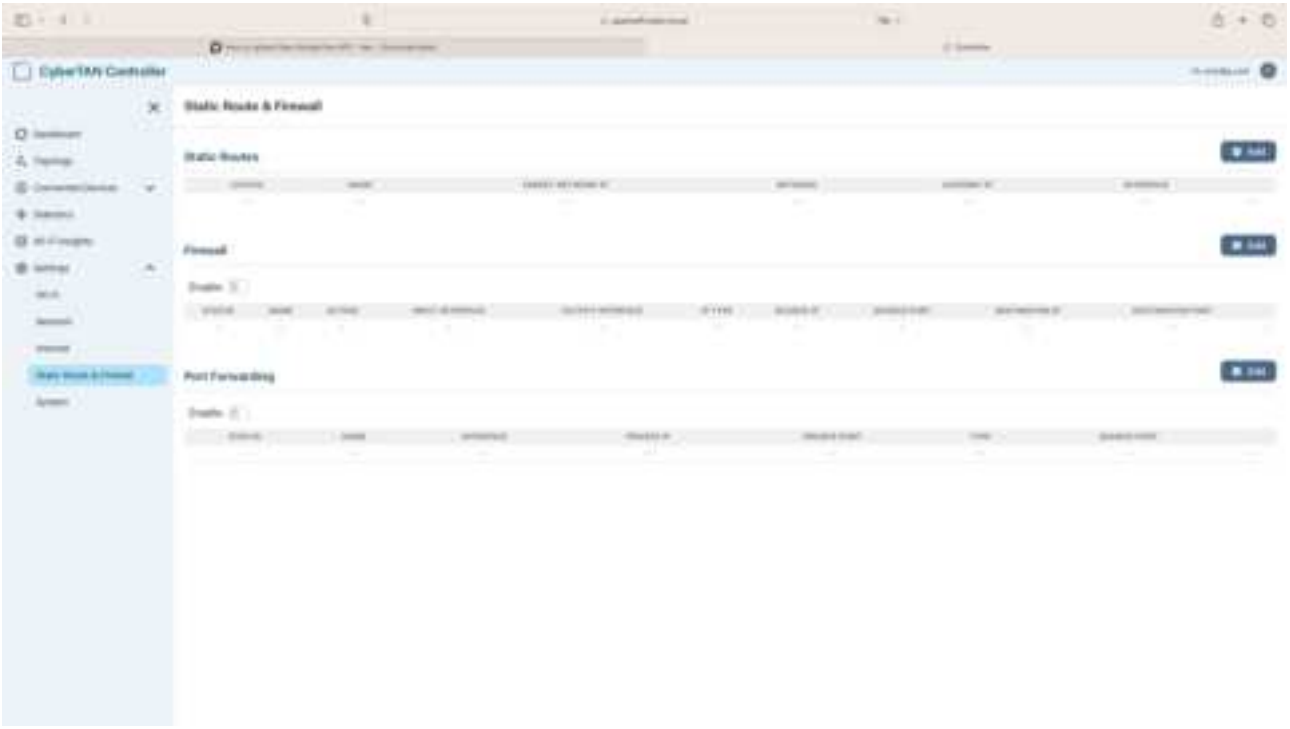


Figure 17. Static Route and Firewall Overview

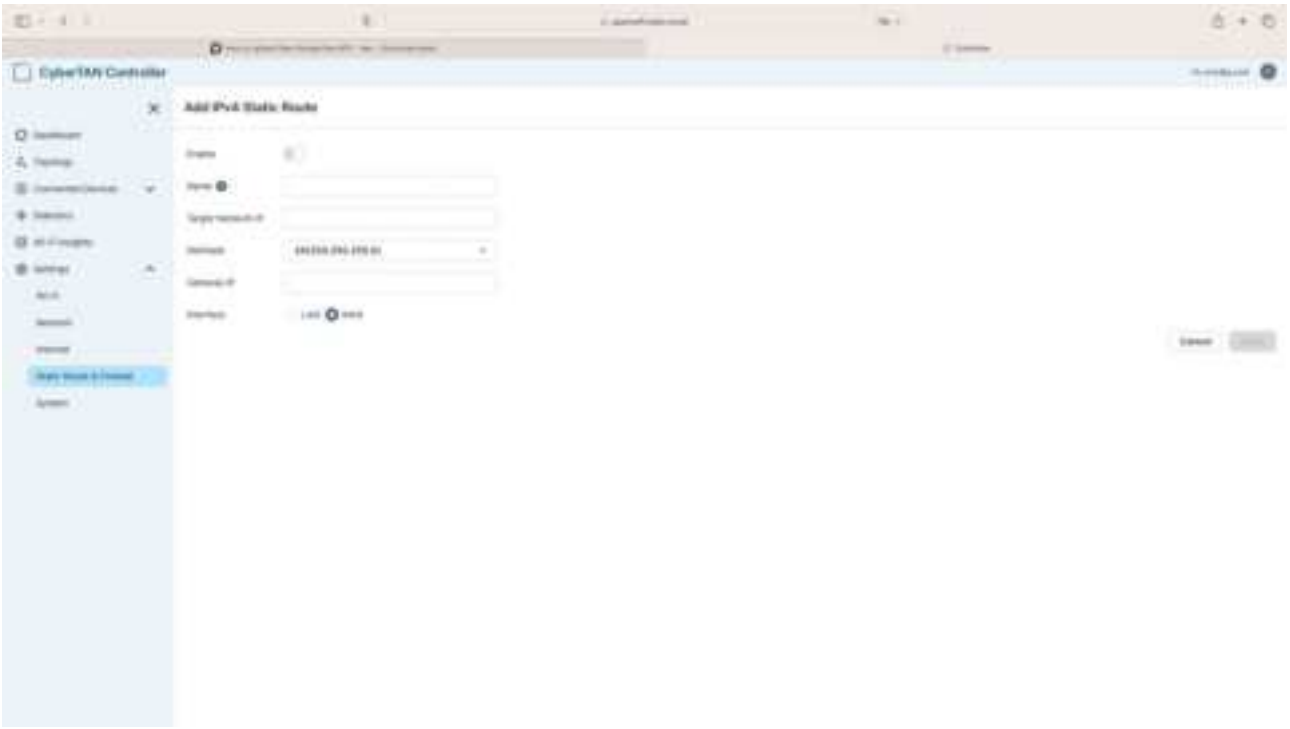


Figure 18. Static Route Settings

Figure 19. Firewall Settings

Figure 20. Port Forward Settings

Figure 21. System Settings

Figure 22. Account Profile

Account Profile

On the top right corner of the main page, you will find your personal icon. Clicking on it will take you to the Configuration Manager page. Here, you can change your password, create cloud credentials, and log out.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC regulations restrict the operation of this device to indoor use only.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 43cm between the radiator & your body.