



Release Note

Edgecore EAP101 Release v12.0.0

Document # EAP101-v12.0.0-673-03807931

Enhancement from v11.6.4-1333-0cbc88aa

Table of Contents

| | | |
|----------|---|-----------|
| 1 | Feature..... | 4 |
| 1.1 | Proxy ARP..... | 4 |
| 1.2 | Multicast-to-Unicast Conversion..... | 4 |
| 1.3 | Bandsteering..... | 5 |
| 1.4 | OWE..... | 5 |
| 1.5 | Short Guard Interval..... | 6 |
| 1.6 | Multicast / Broadcast rate..... | 6 |
| 1.7 | Hotspot 2.0 R1..... | 7 |
| 1.8 | UPnP..... | 8 |
| 1.9 | Port Forwarding..... | 8 |
| 1.10 | DHCP Snooping..... | 8 |
| 1.11 | ARP Inspection..... | 9 |
| 1.12 | IPv6..... | 9 |
| 1.13 | DHCP Relay..... | 10 |
| 1.14 | Discovery Tool..... | 11 |
| 1.15 | uCentral Mode..... | 11 |
| 1.16 | Enable Reset Button..... | 12 |
| 1.17 | Led Enable..... | 12 |
| 2 | Issue Fixed..... | 13 |
| 2.1 | iPhone can't associate to the dynamic VLAN SSID for the second time..... | 13 |
| 2.2 | The page can't be redirected to the login page after reboot..... | 13 |
| 2.3 | The ethernet port status is not correct in the trouble-shooting files..... | 13 |
| 2.4 | Dynamic Authorization is not working..... | 13 |
| 2.5 | The wireless status of dashboard is not correct when radio is disabled and mesh is enabled..... | 13 |
| 2.6 | The radio 5GHz is disabled sometimes when the mode is set from client to AP mode. . | 13 |
| 2.7 | The WAN of AP can't get the IP sometimes when AP is managed by ecCLOUD..... | 13 |
| 2.8 | The SSID name is not correct sometimes when deleting the SSID from UI..... | 14 |
| 2.9 | The mesh can't work normally sometimes when change the behavior of mesh..... | 14 |
| 2.10 | There is an error message when uploading the certificate to the AP..... | 14 |
| 2.11 | There is an error message in the log file..... | 14 |
| 2.12 | The Controller can't get the IP address of associated clients from the AP when the AP is managed by the controller..... | 14 |
| 2.13 | The AP configuration is not correct after upgrading the FW twice..... | 14 |
| 3 | Known issue..... | 15 |
| 3.1 | The connection of specific Microsoft surface devices is unstable using WPA2-PSK SSID..... | 15 |
| 3.2 | The SSID compatible issue in Windows 10 devices with the specific ethernet card..... | 15 |

| | | |
|----------|--|-----------|
| 3.3 | DFS channel can't be used when establishing mesh link. | 15 |
| 3.4 | The Multiple Keys of WPA3 Personal Transition can't work on iOS devices. | 15 |
| 3.5 | Hotspot with external captive portal can't work with https. | 15 |
| 3.6 | The dynamic VLAN can't work in the mesh network. | 15 |
| 3.7 | There is a low probability that the mesh connection can't recover after MAP is re-configured. | 15 |
| 3.8 | In smart indoor location solution, the binding page is not popped up with VLAN tag SSID. | 16 |
| 3.9 | Authport doesn't work in the 5GHz SSID with VLAN tag traffic. | 16 |
| 3.10 | Clients can't get the IP when AP is set to client mode and connected to SP-W2-AC1200. | 16 |
| 3.11 | AP can't create the network interface sometimes when managed by ecCLOUD and DHCP relay is enabled. | 16 |
| 4 | Compatible Version for AP Management | 17 |

1 Feature

1.1 Proxy ARP

NETWORK SETTINGS

Network Behavior

CAPWAP Tunnel Interface

Proxy ARP

Support Proxy ARP on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. Proxy ARP — This feature is enabled or disabled automatically based on the following scenarios. The button can't be modified manually. This feature is supported when network behavior is "Bridge to Internet" or "VLAN Tag Traffic".
 - a. This feature is enabled when client isolation is disabled.
 - b. This feature is disabled when client isolation is enabled.

1.2 Multicast-to-Unicast Conversion

GENERAL SETTINGS

Status

SSID Site Survey Broadcast

Local Configurable

Client Isolation

Multicast-to-Unicast Conversion

Support Multicast-to-Unicast conversion on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. Multicast-to-Unicast Conversion — This feature is enabled or disabled automatically based on the following scenarios. The button can't be modified manually.
 - a. This feature is enabled when client isolation is disabled.
 - b. This feature is disabled when client isolation is enabled.

1.3 Bandsteering

Wireless Settings(Radio 5 GHz)

PHYSICAL RADIO SETTINGS

Status ON

Mode

802.11 Mode

Channel Bandwidth

Channel

WME Configure

Beacon Interval

Bandsteering ON ?

Support bandsteering on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. Bandsteering — Enables or disables the feature that clients that support 2.4 GHz and 5 GHz are first connected to the 5 GHz radio.

1.4 OWE

SECURITY SETTINGS

Method

802.11k OFF

Radius MAC Auth OFF

Access Control List OFF

Support OWE on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. OWE— Add the “OWE” option. Apply this option to enable OWE (Wi-Fi Enhanced Open)

feature based on the Opportunistic Wireless Encryption (OWE) standard.

1.5 Short Guard Interval

ADVANCED RADIO SETTINGS

Tx Power

SIGI

Support short guard interval (SIGI) on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. SIGI— Enables or disables short guard interval feature. Enabling the SIGI sets guard interval to 400ns. Only support SIGI in the following mode.
 - a. 5G mode: 802.11a, 802.11a+n, 802.11ac+a+n
 - b. 2.4G mode: 802.11b+g+n

1.6 Multicast / Broadcast rate

Minimum signal allowed ?

BSS coloring ?

OFDMA

Target Wake Time

Multicast/Broadcast Rate

Support Multicast/Broadcast rate on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

1. Multicast/Broadcast rate: The rate of multicast and broadcast traffic on this Radio 5 GHz or 2.4 GHz.

1.7 Hotspot 2.0 R1

Limit Upload OFF

Limit Download OFF

Authentication OFF

Hotspot2.0 ON

Internet Access OFF

Access Network Type

Venue Group

Venue Type

Venue Name +

Roaming Consortium List +

IPv4 Address Type

ipv6 Address Type

NAI Realm List +

Domain Name List +

Cellular Network Information List(PLMN)

Support hotspot 2.0 R1 on the Radio 5 / 2.4 GHz page of Wireless.

The following item is displayed on this page:

- Hotspot 2.0 — Enables or Disables Hotspot 2.0 R1 that is also known as WiFi Certified Passpoint initiated by the WiFi Alliance to provide better bandwidth and services for public WiFi subscribers.

1.8 UPnP

The screenshot shows the 'Default Guest Network' configuration page. The 'UPnP' toggle is set to 'ON'. Other visible settings include: IP Address (192.168.3.1), Subnet Mask (255.255.255.0), MTU Size (1500), DHCP Server (ON), DHCP Start (100), DHCP Limit (150), DHCP Lease Time (12hr), STP (OFF), and Smart Isolation (Internet access onl).

Support UPnP on the LAN Settings page of Network.

The following item is displayed on this page:

1. UPnP — Enables or disables Universal Plug-and-Play broadcast messages.

1.9 Port Forwarding

Port forwarding

| Enabled | Name | Protocol | External port | Internal IP address | Internal port | |
|---------|------|----------|---------------|---------------------|---------------|--|
| YES | test | TCP | 12 | 1.2.3.4 | 30 | |

Support Port Forwarding on the Port Forwarding page of Network. Port forwarding can be used to map an inbound protocol type (TCP/UDP) and port to an "internal" IP address and port.

The following items are displayed on this page:

1. Enabled — Enables port forwarding.
2. Name — User defined name.
3. Protocol — Set the protocol to which port forwarding is applied.
4. External Port — The TCP/UDP port number.
5. Internal IP address — The internal destination IP address.
6. Internal Port — The internal destination protocol port.

1.10 DHCP Snooping

DHCP Snooping

Enable DHCP Snooping **ON**

| Trust DHCP Server MAC | Trust DHCP Server IP | Remark | |
|-----------------------|----------------------|--------|--|
| 00:11:22:33:44:5 | 10.1.1.1 | | |

Support DHCP Snooping on the DHCP Snooping page of Network.

The following items are displayed on this page:

1. Trust DHCP Server MAC — The MAC address of the trust DHCP Server.
2. Trust DHCP Server IP — The IP address of the trust DHCP Server.
3. Remarks — The note of the trust DHCP server.

1.11 ARP Inspection

ARP Inspection

ARP Inspection ON

Force DHCP ON

Trust List Broadcast ON

Static Trust List ON

[+ Add new](#)

| MAC | IP | State |
|------------------|-------------|------------------------------|
| 00:11:22:33:44:5 | 10.101.10.5 | YES <input type="checkbox"/> |

Support ARP Inspection on the ARP Inspection page of Network.

The following items are displayed on this page:

1. ARP Inspection — Enables or disables ARP inspection feature.
2. Force DHCP — Enables or disables force DHCP feature only to learn MAC/IP pair information through DHCP packets.
3. Trust List Broadcast — Enables or disables the trust list broadcast to let other APs learn the trusted MAC/IP pairs to issue ARP requests.
4. Static Trust List —
 - a. MAC – The MAC address of the static trust list.
 - b. IP – The IP address of the static trust list.
 - c. State – Enables or disables the static trust list.

1.12 IPv6

IPV6 SETTINGS

IP Address Mode

Client Id

Support IPv6 on the Internet page of Network.

1. IP Address Mode — The method used to provide an IP address for the Internet access port.
 - a. DHCP — To configure options displayed for DHCP.
 - b. Static IP — To configure a static IP address for the selected Ethernet interface.

1.13 DHCP Relay

DHCP Relay

Enable DHCP Relay ON

DHCP Relay Server

DHCP Relay Port

Backup DHCP Relay OFF

Remote ID

Default Local Network

Members ETH1 ETH2 5 GHz: EC2038000720 2.4 GHz: EC2038000720

IP Address DHCP Server OFF DHCP Relay Id

Subnet Mask DHCP Start Manual Name

MTU Size DHCP Limit STP OFF

DHCP Lease Time UPNP OFF

Custom DHCP DNS Servers

Smart Isolation

Wireless VLAN Settings

Create up to 16 VLAN-tagged networks.

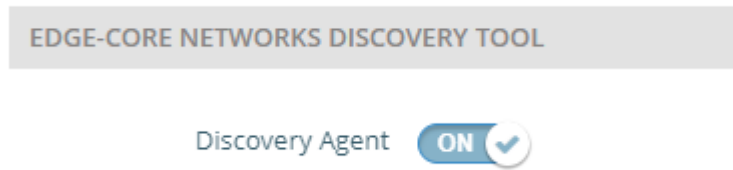
[+ Add new](#)

| VLAN Id | Ports | DHCP Relay |
|----------------------------------|--|--|
| <input type="text" value="100"/> | <input checked="" type="checkbox"/> Ethernet Port #0 <input type="checkbox"/> Ethernet Port #1 <input type="checkbox"/> Ethernet Port #2 | Circuit Id <input type="text" value="Hostname"/> |

Support DHCP relay on the DHCP relay page of Network.

When enabling DHCP relay server, the DHCP relay server and port must be input. After DHCP relay is enabled, circuit Id can be set on the VLAN settings or LAN settings page. When clients connect to the SSID with DHCP relay enabled, the IP of clients will be obtained by DHCP relay server. The IP range will be distinguished from different remote Id and circuit Id.

1.14 Discovery Tool



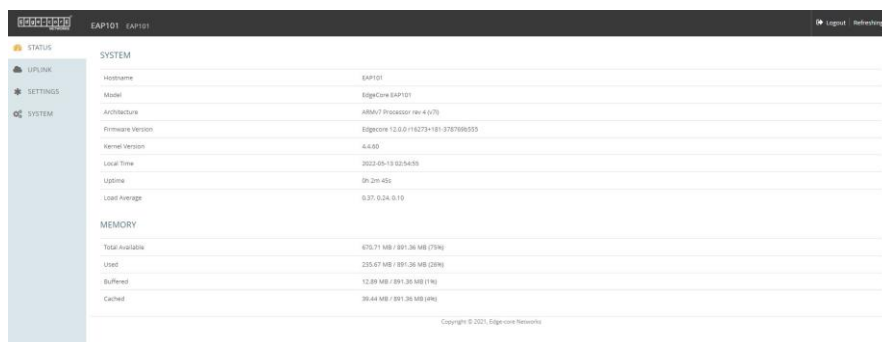
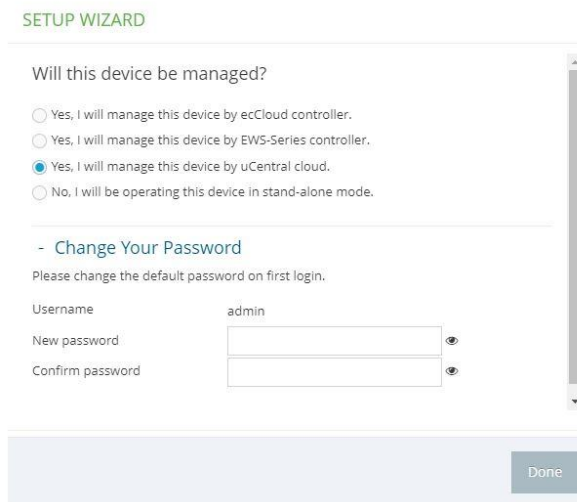
Device Discovery Tool

| Device Model | Hostname | MAC Address | Device IP Address |
|-----------------|----------|-------------------|-------------------|
| Edge-core Wave2 | EAP101 | 90:3c:b3:b1:6fff | 10.73.16.148 |
| Edge-core Wave2 | EAP102 | 98:19:2c:8d:58:a5 | 10.73.16.153 |

Support Discovery Tool on the Device Discovery page of System. Discovery agent can be disabled on the Services page of System.

Connect Edgecore AP within the same Layer 2 from the ports of the current system, and press the Scan Network button to execute the Device Discovery Tool. The scanning results would be Device Model, Hostname, MAC address, Device IP address, SSIDs, and VLAN ID.

1.15 uCentral Mode



Support uCentral mode on the setup wizard page.

To manage AP using uCentral cloud, select "Yes, I will manage this device by uCentral cloud."

1.16 Enable Reset Button

System Settings

Hostname

Enable reset button

Local Time Thu May 12 06:19:22 2022 GMT0 [Configure Network Time](#)

Number of boot retries

MSP mode

Led Enable

Support Enable reset button on the System Settings page of System.

The following item is displayed on this page:

1. Enable reset button — Enables or disables the hardware reset button.

1.17 Led Enable

System Settings

Hostname

Enable reset button

Local Time Thu May 12 06:19:22 2022 GMT0 [Configure Network Time](#)

Number of boot retries

MSP mode

Led Enable

Support LED Enable on the System Settings page of System.

The following item is displayed on this page:

1. LED Enable — Enables or disables the LED on the AP.

2 Issue Fixed

2.1 iPhone can't associate to the dynamic VLAN SSID for the second time.

Create the SSID with WPA2-EAP, dynamic VLAN and PMF enabled. iPhone can connect to this SSID. After disassociating and forgetting the SSID, iPhone can't connect to this SSID. This issue has been resolved in this version.

2.2 The page can't be redirected to the login page after reboot.

Reboot the AP from Web UI. The page can't be redirected to the login page even if the AP is ready for login. This issue has been resolved in this version. The page will be redirected to the login page after rebooting the AP.

2.3 The ethernet port status is not correct in the trouble-shooting files.

The ethernet port status is not correct in the trouble-shooting files. This issue has been resolved in this version. The ethernet port status recorded in the trouble-shooting files.

2.4 Dynamic Authorization is not working.

When SSID works with open security, radius MAC authentication and Dynamic VLAN, Dynamic Authorization is not working. Dynamic Authorization can only be supported in WPA/WPA2/WPA3-Enterprise/WPA3-Enterprise Transition/WPA3 Enterprise 192-bit. UI has been modified in this version.

2.5 The wireless status of dashboard is not correct when radio is disabled and mesh is enabled.

In radio 5 or 2.4 GHz page of wireless, enable open mesh and disable the status button to turn off the radio. Go to the wireless status of dashboard. The open mesh status can't display correct. This issue has been fixed in this version.

2.6 The radio 5GHz is disabled sometimes when the mode is set from client to AP mode.

Set the mode of radio 5GHz to client. Modify the network behavior of 2.4GHz from route to internet to bridge to internet. Apply the settings to the AP. Modify the mode of 5GHz to AP mode and 2.4GHz to client mode. Sometimes, the radio 5GHz will be disabled. This issue has been fixed in this version.

2.7 The WAN of AP can't get the IP sometimes when AP is managed by

ecCLOUD.

AP is managed by ecCLOUD. When AP is managed by ecCLOUD, the WAN of AP can't get the IP sometimes. After AP is rebooted, AP can get the IP from WAN. This issue has been resolved in this version.

2.8 The SSID name is not correct sometimes when deleting the SSID from UI.

Create the multiple 2.4GHz and 5GHz SSID. When deleting the SSID from UI, the name of remaining SSID will be changed sometimes. This issue has been resolved in this version.

2.9 The mesh can't work normally sometimes when change the behavior of mesh.

Enable the mesh on 2.4GHz or 5Ghz. Switch the network behavior of mesh or reenale the mesh. Sometimes, the mesh can't work normally. This issue has been resolved in this version.

2.10 There is an error message when uploading the certificate to the AP.

Upload the certificate to the Upload certificate page of system. The UI will display an error message "The uploaded file does not contain a supported format". This issue has been resolved in this version.

2.11 There is an error message in the log file.

In the log file, an error message " daemon.info cipfwd[1893]: Can't open the status file" is displayed. This version has fixed this issue.

2.12 The Controller can't get the IP address of associated clients from the AP when the AP is managed by the controller.

The AP is managed by controller. When clients are connected to the SSID, the controller can get the IP address of associated clients from the AP correctly on the AP online users list page.

2.13 The AP configuration is not correct after upgrading the FW twice.

Upgrading the FW from version 11 to version 12 twice. The configuration of AP will be reset to default. This issue has been resolved in this version.

3 Known issue

3.1 The connection of specific Microsoft surface devices is unstable using WPA2-PSK SSID.

If the 5Ghz SSID is set to WPA2-PSK SSID, the connection of some Microsoft surface devices is unstable.

3.2 The SSID compatible issue in Windows 10 devices with the specific ethernet card.

Using Intel AX200 (old version) or Realtek RTL8822BE with Windows 10 devices, the connection of the devices is unstable connecting to the SSID.

Note that there is no connection issue if the driver of Intel AX200 is updated to 22.60.0.6 or later version.

3.3 DFS channel can't be used when establishing mesh link.

If DFS channel is used, mesh link can't be established successfully. This is the limitation of mesh link. The AP channel must use non-DFS channel to establish the mesh connection.

3.4 The Multiple Keys of WPA3 Personal Transition can't work on iOS devices.

Create the SSID with WPA3 personal transition. Enter the password in the multiple keys field. The iOS devices can't connect to this SSID using multiple keys.

3.5 Hotspot with external captive portal can't work with https.

Enable https in the hotspot settings page of network. Create the SSID with Hotspot controlled. This SSID can't work properly.

3.6 The dynamic VLAN can't work in the mesh network.

In the mesh topology, create the SSID with dynamic VLAN. Clients can't connect to the internet after associated to this SSID.

3.7 There is a low probability that the mesh connection can't recover after MAP is re-configured.

In mesh topology, after MAP reboots or reconfigures the network configuration, there is a low probability that it can't establish the mesh connection. After rebooting all the AP, the mesh

connection recovers.

3.8 In smart indoor location solution, the binding page is not popped up with VLAN tag SSID.

Enable smart indoor location solution on ecCLOUD. Create the SSID with VLAN tag SSID. When clients associated to this SSID, the binding page is not popped up. This issue can be solved after AP is rebooted.

3.9 Authport doesn't work in the 5GHz SSID with VLAN tag traffic.

Enable Authport on ecCLOUD, create the multiple SSIDs. Clients can't connect to the internet when clients are associated to the some 5GHz SSID with VLAN tag. This issue can be solved after AP is rebooted.

3.10 Clients can't get the IP when AP is set to client mode and connected to SP-W2-AC1200.

Set AP to client mode in the radio 5 GHz. AP is connected to the SSID in SP-W2-AC1200 with AP mode. When clients are connected to the 2.4G SSID of the client mode AP, clients can't get the IP.

3.11 AP can't create the network interface sometimes when managed by ecCLOUD and DHCP relay is enabled.

AP is managed by ecCLOUD. Enabled DHCP relay on ecCLOUD. AP can't create the network interface sometimes. This issue can be solved after AP is rebooted.

4 Compatible Version for AP Management

Compatible with ecCLOUD

Compatible with EWS5203 v3.50.0000 or later