



Release Note

Edgecore EWS5203 Release v3.70.0000

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Enhancement from v3.60.0102

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1 AP Management Compatibility

1.1 Compatible Versions for AP Management

| AP type | LAPM | WAPM | Compatible version |
|---------------|------|------|---------------------|
| OAP100 | V | V | 3.45.0000 or newer |
| OAP100e | V | V | 3.45.0000 or newer |
| EAP100 | V | V | 3.45.0000 or newer |
| ECW100 | V | V | 3.45.0000 or newer |
| ECW5210-L | V | V | 3.45.0000 or newer |
| ECW5211-L | V | V | 3.45.0000 or newer |
| ECW5410-L | V | V | 3.45.0000 or newer |
| ECWO5210-L | V | V | 3.45.0000 or newer |
| ECWO5211-L | V | V | 3.45.0000 or newer |
| ECWO5213-L | V | V | 3.45.0000 or newer |
| OAP103-BR | | V | 11.6.4 or newer |
| EAP101 | | V | 11.2.0-795 or newer |
| EAP102 | | V | 11.2.0-796 or newer |
| EAP104 | | V | 12.0.0 or newer |
| SP-W2M-AC1200 | | V | 7.0.0-2987 or newer |
| 3rd Party | | V | |

2 Feature Enhancement

2.1 Enhance the WAPM Detection Method

In WAPM, a new WAPM detection method is adopted to add the WAPM process (od_emcd) to the process monitor page. Once the WAPM process crashes or becomes abnormal, the process will be restarted automatically to make sure the related service is normal.

The screenshot shows the 'Process Monitor' configuration page. At the top, there is a breadcrumb 'Main > Status > Process Monitor'. Below it, the title 'Process Monitor' is displayed. A sidebar on the left contains navigation links: System Summary, Interfaces, Monitor Users, WiFi Monitor, Process Monitor (highlighted), Logs & Reports, Reporting, Sessions, DHCP Leases, and Routing Tables. The main content area features a 'Process Monitor' header with an 'Enable Monitor' toggle set to 'Enable'. Below this is a table with the following data:

| Process Name | Status | Process ID |
|--------------|--------|------------|
| proxy | ● | 15008 |
| proxy_logout | ● | 15079 |
| proxy_fake | ● | 15147 |
| cipgwsrv | ● | 13087 |
| cipgwlnsrv | ● | 13088 |
| dnsmasq-dns | ● | 12676 |
| dnsmasq-fake | ● | 13036 |
| snmpd | ● | 14440 |
| radiusd | ● | 14979 |
| cipgrd | ● | down |
| od_emcd | ● | 5895 |
| dnsmasq-sz0 | ● | 18746 |
| lighttpd-v4 | ● | 17337 |

At the bottom of the table, there are 'Apply' and 'Cancel' buttons.

2.2 Support Interference Detection in WAPM

In WAPM > New Generation Template > Radio Settings, the interference detection can be applied to the WiFi6 AP. When Utilization of the current channel or adjacent channel reaches the configured threshold (in %), the AP switches to a different Channel. Set this field to 0 to disable this feature. Apply the template with interference detection to the WiFi6 AP to check if the value is correct on the AP.

Interference Detection *(0 - 99)

2.3 Support Offline Status Red Font Display in WAPM AP List

In WAPM > AP List, if the AP status is offline, it is shown in red font.

| | | | | | | | | | | | |
|--------------------------|--------|----------|------------|-------------------|----------|-----|---------|---|-----|-----------------------------------|-----|
| <input type="checkbox"/> | EAP101 | eth1_231 | 10.83.23.1 | AA:AA:BB:BB:17:01 | Overview | N/A | Offline | 0 | N/A | <input type="button" value="Go"/> | N/A |
| <input type="checkbox"/> | EAP101 | eth1_232 | 10.83.23.2 | AA:AA:BB:BB:17:02 | Overview | N/A | Offline | 0 | N/A | <input type="button" value="Go"/> | N/A |
| <input type="checkbox"/> | EAP101 | eth1_233 | 10.83.23.3 | AA:AA:BB:BB:17:03 | Overview | N/A | Offline | 0 | N/A | <input type="button" value="Go"/> | N/A |
| <input type="checkbox"/> | EAP101 | eth1_234 | 10.83.23.4 | AA:AA:BB:BB:17:04 | Overview | N/A | Offline | 0 | N/A | <input type="button" value="Go"/> | N/A |
| <input type="checkbox"/> | EAP101 | eth1_235 | 10.83.23.5 | AA:AA:BB:BB:17:05 | Overview | N/A | Offline | 0 | N/A | <input type="button" value="Go"/> | N/A |

2.4 Support Sorting Algorithm for all devices in WAPM AP List

In WAPM > AP List, the sorting algorithm is supported for all devices listed on all pages when clicking the column. The APs are sorted by the column users clicked. When the refresh button is clicked, the sorting result keeps unchanged, only update the AP status.

2.5 Add the Information in WAPM AP Online Users List

In WAPM > AP List > # of Users, the following information is supported on the page. When the clients are connected to the SSID, check whether the associated client information is correct or not.

1. Client OS: The OS of the client. It is only compatible with the latest AP version which supports Client OS.
2. Radio: The radio of the client.
3. Channel: The channel running on the radio.
4. Connected Time: The time the client is connected.
5. SSID: The SSID the client is connected to.

AP Online Users : EAP104

| User Name | IP Address | MAC Address | Host Name | SSID | Radio | Channel | Bytes In/Bytes Out | RSSI | SNR | Idle | Access From | Connected Time | Client OS | Log out |
|-----------|--------------|-------------------|------------------------|-----------------|-------|---------|--------------------|------|-----|------|-------------|----------------|-----------|---------------------------------------|
| 3@local | 172.21.10.28 | 2A:C6:6C:91:D3:23 | Galaxy-A7-2018-nai-hao | 4C_5G_Com_TL100 | 5GHz | 100 | 2M/30M | -63 | 37 | 12s | EAP104 | 8 min 25 sec | N/A | <input type="button" value="Logout"/> |

2.6 Support LAN Settings in New Generation Template

In WAPM > Template > New Generation > LAN Settings, the default local network and default guest network of LAN interface can be configured in the template. Apply the template with the default local and guest network to the WiFi6 AP to check if the configurations are correct on the AP.

Main > Device Management > Wide Area AP Management > Template > Local Network Settings

Local Network Settings - 11: Template 11

| | |
|-------------------------|--|
| LAN Interface | Default Local Network |
| Enabled | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| IP Address | 192.168.2.1 |
| Subnet Mask | 255.255.255.0 |
| MTU Size | 1500 *(1400-1500) |
| DHCP Server | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| DHCP Start | 100 *(1-254) |
| DHCP Limit | 150 |
| DHCP Lease Time | 12hr |
| Custom DHCP DNS Servers | <input type="text"/> *Please enter a list of no more than 3 IPs of DNS servers, separated by comma |
| STP | <input checked="" type="radio"/> Disable <input type="radio"/> Enable |
| UPnP | <input checked="" type="radio"/> Disable <input type="radio"/> Enable |
| Smart Isolation | Disable (full access) |

Main > Device Management > Wide Area AP Management > Template > Local Network Settings

Local Network Settings - 11: Template 11

| | |
|-------------------------|--|
| LAN Interface | Default Guest Network |
| Enabled | <input type="radio"/> No <input checked="" type="radio"/> Yes |
| IP Address | 192.168.3.1 |
| Subnet Mask | 255.255.255.0 |
| MTU Size | 1500 *(1400-1500) |
| DHCP Server | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| DHCP Start | 100 *(1-254) |
| DHCP Limit | 150 |
| DHCP Lease Time | 12hr |
| Custom DHCP DNS Servers | <input type="text"/> *Please enter a list of no more than 3 IPs of DNS servers, separated by comma |
| STP | <input checked="" type="radio"/> Disable <input type="radio"/> Enable |
| UPnP | <input checked="" type="radio"/> Disable <input type="radio"/> Enable |
| Smart Isolation | internet access only |

2.7 Add User Account in New Generation Template

In WAPM > Template > New Generation > User Accounts, User Account can be configured in the template. Apply the template with the user account to the WiFi6 AP to check if the configurations are correct on the AP.

Main > Device Management > Wide Area AP Management > Template > User Account Settings

User Account Settings 13: BillTest

| | | | |
|---------------------|---|-----|--------|
| Select User Account | root | Add | Remove |
| User Name | root | | |
| User Password | admin123 | | |
| Enabled | <input type="radio"/> No <input checked="" type="radio"/> Yes | | |

2.8 Add SSH in New Generation Template

In WAPM > Template > New Generation > Services, SSH can be configured in the template. Apply the template with SSH to the WiFi6 AP to check if the configurations are correct on the AP.

| | |
|--------------------|---|
| SSH Server | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| SSH port | <input type="text" value="22"/> *(0 - 65535) |
| Allow SSH from WAN | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |

2.9 Add SNMP in New Generation Template

In WAPM > Template > New Generation > Services, SNMP related configuration can be configured in the template. Apply the template with SNMP related configurations to the WiFi6 AP to check if the configurations are correct on the AP.

| | |
|----------------------|---|
| SNMP Server | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| Read Community | <input type="text" value="public"/> |
| Write Community | <input type="text" value="private"/> |
| IPv6 Read Community | <input type="text" value="public6"/> |
| IPv6 Write Community | <input type="text" value="private6"/> |
| SNMP Trap | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| SNMP Trap Server IP | <input type="text"/> |

2.10 Add NTP in New Generation Template

In WAPM > Template > New Generation > Services, NTP can be configured in the template. Apply the template with NTP configurations to the WiFi6 AP to check if the configurations are correct on the AP.

| | |
|---------------|---|
| NTP Service | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
| NTP Server 1: | <input type="text" value="tock.stdtime.gov.tw"/> |
| NTP Server 2: | <input type="text" value="watch.stdtime.gov.tw"/> |
| NTP Server 3: | <input type="text" value="time.stdtime.gov.tw"/> |
| NTP Server 4: | <input type="text" value="clock.stdtime.gov.tw"/> |
| NTP Server 5: | <input type="text" value="tock.stdtime.gov.tw"/> |
| Time Zone | <input type="text" value="UTC"/> |

2.11 Add Multicast DNS in New Generation Template

In WAPM > Template > New Generation > Services, mDNS can be configured in the template. Apply the template with multicast DNS to the WiFi6 AP to check if the configuration is correct on the AP.

| | |
|---------------|---|
| Multicast DNS | <input type="radio"/> Disable <input checked="" type="radio"/> Enable |
|---------------|---|

2.12 Support the SNMP OID of DHCP Scope Threshold

The OID of DHCP scope threshold is added in SNMP MIB files. Set and get the OID to check if the OID can work normally when the utilization of DHCP scope in the service zone is changed.

1. edgecoreDHCPScopeThreshold: The threshold of DHCP scope. If the utilization of DHCP scope exceeds the threshold, edgecoreACDHCPAddressExhaustTrap of SNMP trap will be sent. After the utilization of DHCP scope is below the threshold, edgecoreACDHCPAddressExhaustRecovTrap of SNMP trap will be sent.

2.13 The WAPM Backup Configuration Enhancement

In WAPM > Backup Configuration, the following items has been enhanced.

1. The default value of Daily Backup Time is set to Disabled.
2. The configuration of 3rd party AP will not be backed up if the daily backup time is enabled.
3. The device name is added into the backup configuration page. It shows the device name when the configuration is backed up.

Backup Config

Daily Backup Time

| <input type="checkbox"/> | Device Type | Device Name | Version | Size | Backup Time | File Name | Actions |
|--------------------------|-------------|---------------|------------|--------|---------------------|---------------------|---|
| <input type="checkbox"/> | EAP101 | EAP101 | 12.3.0-825 | 40064 | 2022/12/23 16:16:00 | 111 | <input type="button" value="Download"/> |
| <input type="checkbox"/> | EAP104 | EAP104-TTTTTT | 12.3.0-814 | 39720 | 2022/12/23 16:27:27 | ggg | <input type="button" value="Download"/> |
| <input type="checkbox"/> | ECW5211-L | ECW5211-L | 3.45.0007 | 474885 | 2022/12/26 00:01:09 | 18BHNM00176#period | <input type="button" value="Download"/> |
| <input type="checkbox"/> | EAP104 | EAP104-SSSS | 12.3.0-828 | 40400 | 2022/12/26 00:01:10 | EC2219005441#period | <input type="button" value="Download"/> |

(Total 4) Go to Page Row per Page

2.14 Add Airtime Fairness in New Generation Template

In WAPM > Template > New Generation > Radio Settings, Airtime Fairness can be configured in the template. Apply the template with airtime fairness to the WiFi6 AP to check if the configuration is correct on the AP.



2.15 Add 802.11v in New Generation Template

In WAPM > Template > New Generation > Wireless Network, 802.11v can be configured in the template. Apply the template with 802.11v to the WiFi6 AP to check if the configuration is correct on the AP.



2.16 Modify the Default Value of Minimum Signal Allowed in New Generation Template

In WAPM > Template > New Generation > Radio Settings, the default value of minimum signal allowed is changed from 0 to 30. Apply the template with minimum signal allowed to the WiFi6 AP to check if the configuration is correct on the AP.



2.17 Support Local Cluster in WAPM AP Load Balancing

In WAPM > AP Load Balancing, the local cluster is added if the Method is selected to Manual. Keep the

original AP load balancing when the Method is selected to Auto.

If the method is manual, it uses the local cluster to determine the AP in the WAPM is in which group without using google map. The controller can also perform transmit power management to spread the network load among APs of the same group. Check the power level of APs is adjusted if the AP in the same cluster satisfy the threshold.

Main > Device Management > Wide Area AP Management > AP Load Balancing

WAPM Load Balancing

Load Balancing Enable Disable

Method

Interval minute(s)

Threshold Number of Clients clients Number of Packets

Map Cluster Setting

Add to Cluster AP Type

| ■ | Cluster | Device Name | IP Address | RF | Power Level | # of Users | Log |
|--------------------------|---------|-------------|--------------|----|------------------|------------|----------------------|
| <input type="checkbox"/> | None | ECW5211-L | 10.132.5.40 | 1 | Level 1 (20 dBm) | 0 | View |
| <input type="checkbox"/> | None | ECW5211-L | 10.132.5.40 | 2 | Level 1 (20 dBm) | 0 | View |
| <input type="checkbox"/> | None | EAP101 | 10.131.5.12 | 1 | 20 dBm | 0 | View |
| <input type="checkbox"/> | None | EAP101 | 10.131.5.12 | 2 | 22 dBm | 1 | View |
| <input type="checkbox"/> | None | EAP104ZZZZ | 10.132.5.111 | 1 | 20 dBm | 0 | View |
| <input type="checkbox"/> | None | EAP104ZZZZ | 10.132.5.111 | 2 | 22 dBm | 0 | View |

2.18 Support BLE TX Power in New Generation Template

In WAPM > Template > New Generation > Services, BLE TX power can be configured in the template. This configuration is only applied to supported APs. Apply the template with BLE TX power to the supported WiFi6 AP to check if the configuration is correct on the AP.

iBeacon Status Disable Enable

UUID - - - -

Major *(0 - 65535)

Minor *(0 - 65535)

TX Power

2.19 Support 160MHz in New Generation Template

In WAPM > Template > New Generation > Radio, 160MHz of channel bandwidth can be configured in the template. Apply the template with 160MHz to the supported WiFi6 AP to check if the configuration is correct on the AP.

| | |
|-------------------|---|
| Channel Bandwidth | 160 MHz ▾ |
| Channel | Auto ▾ |
| Channel Selector | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 36 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 100 |

2.20 Support Service Schedule in New Generation Template

In WAPM > Template > New Generation > Wireless Network, service schedule can be configured in the template. The service hour of the SSID can be customized. Apply the template with service schedule to the WiFi6 AP to check if the SSIDs of AP are enabled or disabled at the correct time.

| | |
|------------------|----------------|
| Service Schedule | 24/7 Service ▾ |
|------------------|----------------|

2.21 Support Ethernet Setting in New Generation Template

In WAPM > Template > New Generation > Ethernet Settings, the network behavior of Ethernet port can be configured in the template. Apply the template with Ethernet configuration to the supported WiFi6 AP to check if the configurations are correct on the AP.

| | |
|-------------------|-------------------------|
| Ethernet Settings | Ethernet port 1 ▾ |
| Network Behavior | Route to Internet ▾ |
| Network Name | Default local network ▾ |

2.22 Add the Information in the MIB OID edgecoreAccessPointInfo

In the MIB OID edgecoreAccessPointInfo, the following information is added. Get the OID to check if the value of OID is the same as the information of WAPM AP list.

1. edgecoreAPIpAddress: List the IP address of all APs on the WAPM AP list.
2. edgecoreAPStatus: List the AP status of all APs on the WAPM AP list.

3 Issue Fixed

- 3.1 In WAPM, the WiFi5 AP information and online users are not correct in the AP list when the WAN2 port is not connected and the WAN failover is enabled.**
- 3.2 In WAPM > New Generation Template > Wireless Network, WMM can't display the "Disabled" option.**
- 3.3 The upload image of Login Page Editor in Service Zones is not working when connecting the controller through the port forwarding.**
- 3.4 The radius setting of the AP is empty if applying the New Generation template to the AP with WPA3 Enterprise 192-bit and split tunnel.**
- 3.5 When the WAN2 and WAN failover functions are enabled, some logs are lost in syslog if WAN2 is not connected.**
- 3.6 The syntax of edgecoreAccessAddr is not correct in the MIB file.**
- 3.7 The result of snmp command is not correct when setting multiple SNMP server in edgecoreAccessAddr.**
- 3.8 The value of edgecoreTrapOnOff is not correct in the unsupported SNMP trap.**
- 3.9 The edgecoreACDHCPAddressExhaustTrap of SNMP trap is not working.**
- 3.10 The SNMP trap behavior of warm start, cold start, and link up is not correct.**

4 Known Issue

4.1 In WAPM, the Access Control List in New Generation template can't have more than 64 MACs.

4.2 The SNMP trap message of warm start, cold start, link down, and link up can't be sent to the LAN port.

4.3 The SNMP trap message of link down and link up can't be sent to the WAN port if the LAN port interface is down or up.