Built-in Omada SDN Controller V5.12.9

1. Supported Device Models and Firmware

EAP

> EAP113-Outdoor, EAP615-WE, EAP680, EAP683 LR
> EAP690E HD, EAP670, EAP660 HD, EAP655-Wall, EAP653
> EAP650-Outdoor, EAP650-Wall, EAP650, EAP620 HD
> EAP615-Wall, EAP613, EAP610-Outdoor, EAP610
> EAP265 HD, EAP235-Wall, EAP230-Wall, EAP225-Outdoor, EAP223, EAP115-Wall
> EAP245 V3, EAP225 V3, EAP225-Wall V2, and above versions
> EAP115 V4, EAP110 V4, EAP110-Outdoor V3, and above versions

Switch(No **TL-** prefix on new models)

> SG3218XP-M2, SG3210X-M2, SG3210XHP-M2
> TL-SX3016F, TL-SX3008F, TL-SX3206HPP
> TL-SG3452XP, TL-SG3452X, TL-SG3452P, TL-SG3452
> TL-SG3428X-M2, TL-SG3428XPP-M2
> TL-SG3428XMP, TL-SG3428XF, TL-SG3428X, TL-SG3428X-UPS
> TL-SG3428MP, TL-SG3428, TL-SG3210XHP-M2
> TL-SG2428P, TL-SG2218P, TL-SG2218, TL-SG2016P, TL-SG2210MP, TL-SG2008P
> TL-SG3210 V3, TL-SG2210P V3.2, TL-SG2008 V3, TL-SL2428P V4, and above versions

Gateway

> ER706W
> ER8411
> ER7206 V1 (TL-ER7206 V1) and V2, ER707-M2
> ER605 V1 (TL-R605 V1) and V2

2. New Features & Enhancements

Notice: If you are using Web API, please take note that Cookie name has been changed from TPEAP_SESSIONID to TPOMADA_SESSIONID.

New Features

1. **Facebook Wi-Fi Removal**: Due to changes implemented by Facebook, the Facebook Wi-Fi function has been removed.

2. **Expanded Language Support**: Added support for Deutsch, العربية, Polski, Čeština, Slovenčina and Magyar. Please note that the content of some pages has not yet been fully adapted to العربية, and will be improved subsequently.

3. **Open API**: Omada Controller now supports Open API integration. You can access it through Global view > Settings > Platform Integration. This feature enables you to develop custom applications, embed APIs, or combine your own applications. Refer to the Online API Document for guidance on usage, and view more by toggling the drop-down menu in the upper left corner.

4. **Multi-language Voucher Code Print**: Added support for printing voucher codes in multiple languages. You could choose your preferred language to be displayed on vouchers. The available language choices include English, Čeština, Deutsch, Français, Español, Nederlands, Italiano, Polski, Português, Русский, Türkçe, العربية, 日本語, 中文(繁體), 한국어, Slovenčina and Magyar.

5. **Intrusion Detection and Prevention System (IDS/IPS)**: IDS/IPS feature has been introduced to monitor network intrusions. Device firmware update is required to use this feature. Once updated, you could access it in Site view > Settings > Network Security. Results are listed in Site view > Insight > Threat Management and mapped in Global view > Security. Please refer to the release note of the device firmware for details on which Omada devices support this feature.

6. **Port Schedule**: Added support for schedules applied to ports of switch in Site View > Settings > Services > Port Schedule, allowing you to make schedule of when PoE or Port works for desired ports.

7. **MAC Group Export**: Added support for exporting MAC groups, making it easier to migrate MAC groups or edit MAC addresses.

8. **Hotspot Operator Role**: Added Role Admin/Viewer for Hotspot operator in Hotspot Manager, allowing you to assign write or read only privileges for different users according to demand.

9. **Switch ACL Binding with VLAN on Desired Switches**: Added support for applying VLAN bound ACL to switches as your needs.

10. **CHAP and LDAP in Portal**: Added support for CHAP encryption in portal, allowing for secure authentication when used in conjunction with External Portal functionality; added support for LDAP (Lightweight Directory Access Protocol), enabling seamless integration with LDAP server for user authentication.

11. **Account Permission Transfer**: Added support for transferring account permissions. This feature is available in Global view > Account, and it allows you to change the Main Administrator account.

12. **Multiple Upgrade Schedules**: Added support for creating more schedules on upgrade plan.

13. **Built-in RADIUS Server**: A built-in RADIUS server has been added in Global > Settings > Server Settings, which can be used for WPA-Enterprise, PPSK with RADIUS, Portal RADIUS Server and 802.1X.

14. **Public IP Address Display**: Remotely managed devices now show their public IP addresses in Devices > PUBLIC IP ADDRESS column.

15. **Voucher Group and Voucher Statistics**: Introduced Voucher Group and Voucher Statistics in the Hotspot Manager, which enables you to manage and monitor vouchers by group.

16. **Omada Gateway New Features**: Several new features have been made to the Omada Gateway, requiring firmware update:

    - **IPv6 Support in Gateway ACL**: You could now block IPv6 traffic through Gateway ACL settings.

    - **IPv6 RA (Router Advertisement)**: Added support to configure IPv6 RA for the Omada Gateway.

    - **MAC Filtering**: Added support for MAC filter in Site view > Settings > Network Security > MAC Filtering.

    - **Session Limit Monitoring**: Introduced support for monitoring session limits in Site view Insight. This feature displays the number of sessions being used by a single IP address.

    - **MSS Clamping**: Added support for MSS (Maximum Segment Size) clamping in Site view > Settings > Wired Networks > Internet > PPPoE > Advanced Settings. MSS Clamping allows you to specify the upper limit for the value of the MSS field negotiated during TPC connection establishment, preventing IP fragmentation.

    - **DNS Cache**: Added support for DNS cache in Site view > Settings > Services. DNS cache improves domain name resolution speed by handling recent address resolutions locally before sending request to Internet.

    - **Gateway Tools**: Added Ping, Traceroute and Terminal tools to the Gateway.

    - **Device Info Download**: Introduced the ability to download device info of the Gateway. To access the feature, open the sidebar of Gateway, navigate to Config > Manage

Device, and click Download. Omada Controller uses TCP port 29815 to receive device info.

- **IPsec Algorithm Enhancements**: Added DH 14, DH 15 support for PFS.
- **IPsec Client-to Site VPN**: Added support for 0.0.0.0/0 IP range of local network when using IPsec for Client-to Site VPN.
- **Internet VLAN**: Added support for tagging the same VLAN ID on different Internet networks.
- **WAN IP Alias**: Added support for WAN IP Alias in Site view > Settings > Wired Networks > Internet. This feature allows you to configure multiple IP addresses on a single WAN port and use these IP addresses for port forwarding.
- **Location Group in Gateway ACL**: Introduced Location Group support in Gateway ACL, allowing you to block data from or to specific locations.
- **Log Enhancements**: Logs now show the source IP address of TCP no-Flag /ping of death attacks and changes in ISP network during link backup. Besides, added support for more logs of Gateway, which helps to manage and maintain the network.
- **Flow Control**: Added support for Flow Control in Devices > Ports of Omada Gateways.
- **Custom Update Interval for DDNS**: Added support for changing update interval of DDNS to 1~60 minutes.

17. **Client Idle Threshold**: Added the Client Idle Threshold option in Global view > Settings > Controller Settings. This allows you to specify the interval after which Omada Controller will claim a client is disconnected if it fails to report its status within that timeframe.
18. **Map Enhancements**: Added support for exportation of topology.
19. **Release Note Display**: You can now view release note directly in Omada Controller when clicking the device upgrade mark. This provides easier access to information about changes in new firmware versions.
20. **Wireless Mode Configuration**: Added support for changing the wireless mode of EAP in Devices > Config > Radios, which allows you to select the desired 802.11 mode for Omada EAP.
21. **Device search in Statistics**: Introduced the ability to search for devices in Statistics. This feature enables you to quickly find statistical results of specific devices.
22. **Cloud Access Data Export**: Added support for exporting data through cloud access.

23. **System Logging level**: Added support for changing System Logging level in Global view > Settings > System Settings. This feature facilitates debug log collection by allowing you to set the Logging Level Type to "custom" and select the desired debug level for the logs you need.

Enhancements

1. **Time Settings**: Added manual time set for Controller.
2. **Voucher Usage Calculation**: Voucher now could calculate the usage time based on the user's actual online time.
3. **AI WLAN optimization**: Improved algorithm and interaction for better optimization results.
4. **MAC Group**: Added support for Add by Range when importing MAC address, which allows you to add multiple continuous MAC addresses through their range.
5. **IP Address Input**: Verification rule of input IP addresses has been updated to allow you to add legitimate IP address with 0 in the last segment.
6. **Invitation E-mail**: Added inviter username and Controller Name into e-mail body.
7. **Client**: Added support for showing SNR (Signal to Noise Ratio) in Client page.
8. **Backup & Restore**: Settings only backup will not include device information.
9. **DHCP Reservation**: Added support for search box and batch delete in DHCP reservation items, which helps you manage these items conveniently.
10. **SMTP Server Location**: Moved SMTP server from Site view > Settings > Controller Settings to Global view > Settings > Server Settings.
11. **Alert E-mail**: Added Controller and site name into title of alert e-mail.
12. **Portal Profile Background**: Background picture of portal profile could adapt to different screen sizes of laptops and mobiles; support for uploading images with transparent backgrounds.
13. **Update Notification**: Added choice of Controller/Device Update notification in Quick Setup process.
14. **Client Page Illustration**: Added illustration of icons in Clients Page, such as in Connection Type and Wireless Connection.

Notes

1. For OC300(UN) v1.0 and v1.6.
2. This version of the Controller is fully applied to the Omada APP of **version 4.10** or above.
3. Omada SDN Controller can only manage certain devices running the supported firmware. Please confirm that your device is compatible with the SDN Controller.
4. Once upgraded to this version of Omada Controller, you will be **NOT able** to downgrade to version 3.2.17 or below.