

# Built-in Omada SDN Controller v5.9.32

#### 1. Supported Device Models and Firmware

### EAP

EAP690E HD, EAP 670, EAP660 HD, EAP653, EAP650, EAP650-Outdoor, EAP620 HD EAP615-Wall, EAP613, EAP610, EAP610-Outdoor EAP265 HD, EAP223, EAP230-Wall, EAP235-Wall, EAP225-Outdoor, EAP115-Wall EAP245 V3, EAP225 V3, EAP225-Wall V2, and above versions EAP115 V4, EAP110 V4, EAP110-Outdoor V3, and above versions

# • Switch

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

### • Gateway

ER8411 ER7206 (TL-ER7206) ER605 (TL-R605) v1 and v2

## 2. New Features & Enhancements

- 1. Added the Global View and decoupled it from the Site View. In the Global View, you can overview the controller, manage sites and all devices, view logs and make settings at the controller level, while in the Site View you can monitor and configure the sites.
- 2. Added support for the map function, you need to enter the Mapbox API Access Token with the default public token scopes to use the function. Divided into Site Map and Device Map, you can set the latitude and longitude for each site and each device.
- 3. Upgraded the account system. In addition to the existing three roles of Master Administrator, Administrator, and Viewer, now you can create new account roles, customize the permissions for the roles to access different features, and bind the roles to new accounts.

- 4. Added a Dark scheme, you can choose to enable by Global Settings --> Controller Settings --> User Interface --> Dark Settings.
- 5. Added support to copy configuration for Omada EAP and Switch. You can select another device at the same site to copy its configuration, which can facilitate you to batch configure or replace devices.
- 6. Optimized Quick Setup and eliminated the Default site, now you can choose "Config New Setup" or "Restore from backup file" at this stage and create sites later.
- 7. Added support to hide the portal's redirection countdown by unchecking the "Show Redirection Countdown After Authorized" option in Portal Customization settings.
- 8. Optimized the algorithms for Automatic Power Optimization.
- 9. Improved the Device page loading speed.
- 10. Added support for the following features to Omada Gateway, which requires firmware updates to be released later. Some Omada Gateway models may not support all features, details will be listed in the release notes of new firmware.
  - Bridge VLAN: you can bind multiple VLANs with one LAN interface.
  - Quality of Service (Site Settings --> Transmission)
  - LDAP Authentication for PPTP/L2TP/OpenVPN
  - Wireguard VPN
  - SHA-384 and SHA-512 for IPsec, and IPsec Failover
  - Full mode for OpenVPN
  - DNS Proxy (Site Settings --> Services), with DNSSEC, DoH, and DoT supported.
  - DDNS Customization
  - New DHCP Options:
    - Option 2: Time Offset
    - Option 42: NTP Server Network Boot,
    - Option 67: TFTP Server
    - Option 252: WPAD URL
    - DHCP Options Customization
  - PVID Config
  - MRU Config for PPPoE
  - Keywords mode for Gateway URL Filtering
  - Bonjour Service, Service, and Client Network options for Gateway mDNS

- VoIP Protocol and multiple WAN supported for Policy Routing
- Import DHCP Reservation Entry and Export to IP-MAC Binding Entry
- 11. Added the Tools page to the Site view, containing the following tools. New firmware updates for Omada devices are required and will be released later.
  - Network Check. Select an Omada device (EAP or Switch) and perform a ping or traceroute test to check the network connectivity.
  - Packet Capture. Select an Omada EAP, set the capture filter, and perform a packet capture for troubleshooting. Omada Controller uses TCP port 29815 to download the packets.
  - Terminal. Select an Omada device (EAP or Switch), open Terminal, and then you can execute CLI or Shell commands. Omada Controller uses TCP port 29816 to create remote control terminall sessions with the devices.
- 12. Added support to download device info, which helps to confirm the operational status of Omada devices and to perform troubleshooting. New firmware updates for Omada devices are required to obtain complete information. You can download a device's info by opening its Properties window, going to Config --> Manage Device, and clicking Download.
- 13. Added support for the following IPv6 features, all of which require firmware updates for Omada devices:
  - Omada EAPs and Switches obtain IPv6 addresses.
  - Display the IPv6 addresses of clients reported by Omada EAPs and Switches.
  - MLD Snooping and Legal DHCPv6 Server for Omada Switches.
  - Switch and EAP ACLs support IPv6.
  - EAP URL Filtering supports IPv6.
  - IPv6 Static Route for Omada Switches.
  - IPv6 Group and IPv6-Port Group.
- 14. Added the CLI Configuration, which can currently be used to supplement the switch's configuration and requires the firmware upgrade for Omada Switches to be released later. Please refer to FAQ#3569 for the precautions and instructions of the CLI Configuration.
- 15. Added the "Lock To AP" feature. Open a client's Properties window, go to Config, enable the function, and select one or multiple EAPs, then the client will be locked to the selected EAPs. This feature helps prevent a static client from roaming frequently between multiple EAPs and requires new firmware updates for Omada EAPs.

- 16. Added the "SSID Rate Limit" feature. Bandwidth is shared among all clients connected to the same wireless band of the same EAP. This feature requires new firmware updates for Omada EAP, and the rate limit settings will only take effect on those EAPs running firmware that supports the feature.
- 17. Added support to display the username used by the wireless client for WPA-Enterprise authentication in the 802.1X Authentication column of the Clients page.
- 18. Supported more flexible Port Forwarding settings for the controller access. Omada Controller uses TCP ports 8088 and 8043 as the HTTP and HTTPS ports for Controller Management, and ports 8843 and 8088 for Portal. If your Omada controller and Omada devices are not on the same LAN, you need to configure Port Forwarding on the router. For Omada Controller version 5.8 and earlier, the source and destination ports of the port forwarding rules must be the same as the above ports. From version 5.9, the source ports can be customized. For example, you can configure source ports 58043 to forward to destination ports 8043.
- 19. Added LLDP support for Omada EAPs, which can be enabled via Site Settings. New firmware updates for Omada EAPs are required.
- 20. Optimized the network topology by introducing LLDP information from Omada Switches. New firmware updates for Omada Switches are required.
- 21. Added support to display the status of WAN online detection. This requires new firmware updates for Omada Gateway.

# 3. Bug Fixed

- 1. Fixed the bug that the Port Forwarding entry cannot be created when the first value of the starting port greater than that of the ending port.
- 2. Fixed the incorrect display of the Welcome Information, Terms of Service, and Copyright of Portal.

## 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 4.7 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.