

## **Version Info:**

**Firmware for S4500-16GP(UN) 1.0, S4500-16GP(UN) 1.6.**

**Recommended Omada Controller V6.2.0.**

### New Features

1. Added NAT Traversal feature.
2. Supported Omada Config Tools V2.0.
3. Added support for Private VLAN.
4. Added support for Lightweight DHCPv6 Relay Agent (LDRA).
5. Extended L2PT functionality to support LLDP and 802.1X protocols.
6. Added IGMP Snooping VLAN SSDP Flood feature to ensure packets for multicast group 239.255.255.250 (commonly used for SSDP service discovery) are always flooded.
7. VLAN Isolation feature now supports configuration via SNMP.
8. Added CLI command to display STP Topology Change Notification (TCN) statistics per port.
9. Added statistics for ERPS ring port R-APS packet transmission and reception (RX/TX).
10. Add support for Type 8 (PBKDF2 with SHA-256) and Type 9 (Scrypt) password storage encryption type.
11. Add support for CPP (CPU protect policy).
12. Add support for MAC flapping.
13. Add support for packet capture.
14. Add support for ping and traceroute using domain names.
15. Add support for multiple RADIUS servers redundancy.
16. Add support for domain name RADIUS server.
17. Add support for RADIUS CoA & DM.
18. Add support for RADIUS accounting standard attributes Framed-IP-Address and Called-Station-ID.
19. Add support for IGMP auto-elect and TCN flood for IGMP.

20. Add support for Syslog protocol, custom UDP ports, and transmission over UDP/TCP with DTLS or TLS.
21. Add support for LACP fast timeout.
22. Add support for deleting quadruple binding entries by port.
23. Add support for displaying user configuration information based on interface VLAN.
24. Add support for configuring DHCPv6 relay by port.
25. Add support for RadSec in 802.1X authentication.
26. Add support for log filtering based on keywords.
27. Add support for route unknown for IGMP Snooping and MLD Snooping.
28. Add support for SNMPv3 AES encryption.
29. Add support for displaying MAC status of the address through SNMP.
30. Add support for cloud firmware check and upgrade under standalone usage.
31. Add support for VLAN specific port isolation.
32. Add support for RSPAN.
33. Add support for DHCP Option 43.
34. Add support for DHCP filter per VLAN under standalone usage.
35. Add support for assigning IP address with 31-bit subnet mask in VLAN interfaces.
36. Add support for using domain name when configuring NTP server.
37. Add support for static IP binding with MAC address wildcards.
38. Add support for enabling/disabling the switch sending Omada controller related broadcast packets via CLI.
39. Add support for auto import/export IMPB entries.
40. Add support for SSH on/off on WebUI when controller state is abnormal.
41. Add support for configuring static DNS server under standalone usage.
42. Add support for pushing port names configured on Omada controller to the switch.
43. Add support for commands switching blacklist/whitelist for ACL under standalone usage.
44. Add "Detected Loop" text in controller logs when detecting loops via loopback

detection.

45. Add support for cluster deployment.

46. Add support for showing port types as tagged or untagged when using the command "show vlan brief".

47. Add support for displaying port description in the log for link up/down events.

#### Enhancements

1. Supported common MAC address formats across all input fields.
2. Optimized ERPS convergence time on optical ports, achieving convergence within 50 ms.
3. Supported configuration of 802.1X authentication in MAB-only mode.
4. Added option to disable DNS Adoption to meet specific network management requirements.
5. Improved LLDP protocol compatibility.
6. Enhanced system self-healing capability to improve long-term stability.
7. Improved management link reliability.
8. Enhanced STP module reliability and overall spanning tree stability.
9. Optimize MAC group.
10. Optimize the initialization process and remove default username and password.
11. Optimize interaction between 802.1X and VLAN.
12. Optimize DDM configuration display.
13. Optimize log display for STP root bridge changes.
14. Improve packet capture functionality.
15. Improve FDB table display.
16. Optimized client alarm notifications in controller mode.
17. Optimize IGMP snooping and MLD snooping drop unknown configuration.
18. Enable spanning tree by default.
19. Display total aggregated bandwidth for LAG.

20. Optimize log port description display.
21. Improve adoption stability in specific scenarios.
22. Improve spanning tree stability in specific scenarios.
23. Optimize LBD detection efficiency.
24. Set loopback interface as SNMP global source interface.
25. Update default NTP servers.
26. Update OpenSSL library.
27. Disable HTTP access under standalone usage by default.
28. Add warning message when configuring PortFast on a port.
29. Uniform the DHCP Vendor Class Identifier attribute sent by all Omada switches.
30. Improve SNMP LLDP table compatibility.
31. Add "lldpRemTimeMark" field support in SNMP responses.
32. Support editing default OUI templates of voice VLAN.
33. Enable LLDP by default.

#### Bug Fixed

1. Fixed issues where SNMP nodes Q-BRIDGE-MIB and BRIDGE-MIB did not comply with protocol specifications.
2. Fixed QoS anomalies in specific scenarios.
3. Fixed wired client list display issues in certain scenarios.
4. Fixed security vulnerabilities related to interaction with Omada Controller.
5. Fixed port authentication anomalies during upgrade.
6. Eliminated the risk of management instability when multiple NTP servers are configured.
7. Fixed a bug causing unstable SSH connections.
8. Fixed client authentication failures in specific scenarios.
9. Fixed aggregation group and port isolation linkage issues.

10. Fixed frequent DNS requests for NTP server under specific scenarios.
11. Fixed SNMPv3 security level restriction access problem.
12. Fixed spanning tree anomalies in special scenarios.
13. Fixed Remote Syslog compatibility issues.
14. Fixed abnormal convergence of spanning tree under high client conditions.
15. Fixed sFlow configuration errors without description in WebUI under standalone usage.
16. Fixed SNMPv3 user configuration errors.
17. Fixed RCE and DoS vulnerabilities.
18. Fixed Broken Access Control vulnerabilities.
19. Fixed abnormal SNMP QBridge FDB reporting on LAG ports.
20. Fixed IPv6 ND deployment issues via CLI templates in controller mode.
21. Fixed 802.1X authentication issue with IP phone + PC daisy-chain scenario when PoE toggles.

Others

None.