Firmware for AWK-3131A Series Release Notes

Version: v1.13	Build: Build_18121215
Release Date: Dec 26, 2018	

Applicable Products

AWK-3131A-JP-T, AWK-4131A-JP-T, AWK-3131A-EU-T, AWK-3131A-US-T, AWK-3131A-EU, AWK-3131A-US, AWK-4131A-US-T, AWK-3131A-JP, AWK-4131A-EU-T

Supported Operating Systems

N/A

New Features

- IEC 62443-4-2 support
- 3rd SNMP trap server
- Web certificate support

Enhancements

N/A

Bugs Fixed

- Abnormal roaming handoff time if MAC clone is enabled
- Device reboots if it receives an abnormal beacon, which does not follow the IEEE standards.
- Issue with the error handler for abnormal Wi-Fi packets
- Static route of the WLAN iface does not work for DHCP client in Client-Router mode

Changes

N/A

Notes

N/A

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• DFS: Abnormal behavior of DFS function.

Changes

• AeroMag: Hides the unnecessary SSID when AWK is configured as an AeroMag AP.

Notes

N/A

Version: v1.11	Build: Build_18062617
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

- [AeroMag] Supports AeroMag client.
- [NAT] Supports 1-to-1 NAT.
- [DHCP client] Supports DHCP option 12 (hostname = device name).
- [DHCP client] Supports DHCP option 50 (requested IP address).
- [Network Status] Provides bridge status via SNMP.

Enhancements

- WLAN: Supports the WLAN system log version 2.
- AeroMag: Adds system log for channel analysis and applying the configuration.
- MAC clone: Adds system log for MAC clone.
- Quick setup: If RF type is pure N, WEP is not supported.
- Quick setup: Adds WEP length checker for WEP security.
- Quick setup: Supports TKIP on B/G/BGMixed/A only.
- Quick setup: If RF type is pure N, AES/TKIP mixed is not supported.

Bugs Fixed

- WLAN:Rx stuck issue.
- WLAN: Tx hang caused by interrupt (0x0000 0000) messages.
- WLAN: DUT reboots if it roams for many times.
- WLAN: AP always works on 20 MHz, if there is an another AP on the specified channel when it booting up.
- WLAN: AP with multiple VAPs just only works on 20 MHz, even if its bandwidth is configured at 20/40MHz.
- WLAN: GARP is not sent out, if driver cannot get the interface IP or cannot allocate malloc (skb).
- WLAN Status: Value of WLAN assoc rx/tx pkts/bytes always is 2147483647, if the value is over 2147483647.
- Turbo roaming: Unexpected roaming occurs because the AP Alive check timer resumes after receiving packets on a foreign channel.
- Turbo roaming: The AP candidate threshold is not effective when both the AP alive check and Client-based Turbo Roaming ere enabled.
- Turbo roaming: Roaming log has wrong SNR.
- AeroMag: Web console cannot get the latest information after channel refresh or reconfigure.
- AeroMag: MAC Clone does not work after applying the new configuration.
- AeroMag: AeroMag AP assigns configuration to other devices in the same group before regenerating a new configuration.
- RSSI report: Scanned node which is not updated for 1 sec is not included in the report.
- RSSI report: Facility and severity parameters in the RSSI report are inot correct.
- RSSI report: Noise/SNR values are sometimes inaccurate.
- Configuration: Cannot change the bandwidth to 20/40MHz in client mode in some cases.
- WEB: Login message should use the activated configuration.
- WEB: Length of SSID can't be longer than 32.
- WEB: Cannot input 240 characters in web login message and login authentication failure message.

- WEB: UI does not show unit of the roaming threshold (SNR).
- WEB: System log cannot be exported via Firefox 59.0.223.
- WEB: Cannot enable Turbo Roaming via web UI, if RF type is 2.4G type.
- WEB: Linux command can be injected in POST data commands.
- WEB: Web server crash, if user modifies the password during login.
- WEB: User can't increase the minimum length of the password, if current password is less than the specific length.
- WEB: User-level user can't use "Diagnostics" and "Wi-Fi Mirror Port".
- WEB: User-lever user can't export current device information on Troubleshooting page.
- Utility: Cannot reboot the device through MXconfig.

Changes

- MAC Clone: Changes the STA MAC to the MAC of the backend PC, even if it has not connected to the AP.
- Configuration: To enhance RX accuracy, new roaming configuration is created to replace the current configuration; "AP candidate threshold" configurations are different from legacy mode, 2.4GN-related mode, and 5GN-related mode.
- Configuration: Changed the range of "Inactive timeout" from 1 -240 seconds to 8-240 seconds in AP mode.
- Configuration: Operation mode is changed automatically once AeroMag is enabled.
- Configuration: Changed the max length of user's password from 16 to 32.
- Configuration: SNMP settings includes secondaryKey1, ro_community, and rw_community; settings will be encrypted in exported configuration.
- DHCP Client: Initial network IP is set to 169.254.0.1 before getting an IP from DHCP for the 1st time.
- Network Settings: Device IP shall not be the network ID.
- WEB/Utility: Network information can't be the current IP/netmask/Gateway when AWK acts as a DHCP client.
- WEB: Disabled all buttons when the logs on the system log page are cleared.
- WEB: Add "Skip" option where user is asked to modify the password on login page.
- Troubleshooting: Changed all the special characters in file name except dash to underscore.

Notes

N/A

Version: v1.10	Build: Build_18032720
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• CVE-2017-14459; Telnet, Serial console, SSH will reject invalid characters to prevent injection attacks.

Changes

N/A

Notes

N/A

Version: v1.9	Build: Build_18012818
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• Web server will reject invalid characters including ` ' " | ; &

Changes

• Changes the format of device name to AWK-3131A_[the last six digits of MAC address].
• Shows complete S/N information.

Notes

N/A

Version: v1.8	Build: Build_17122516
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

• Supports Wi-Fi Mirror Port.
• Supports AeroLink Protection with SNR check.
• Supports AeroLink Protection with VLAN.
• Supports the SNR/Noise floor on MXview dashboard.

Enhancements

• Optimized the roaming recovery time for the scenario that 4-4 EAPOL packet is dropped.
• Optimized the packets lost under following two conditions: Master and Slave connection under 802.11n mode and WPA/WPA2, the traffic comes behind Master to the slave and the devices behind the slave at the same time.

Bugs Fixed

• Wi-Fi client signal strength is not correct and not accessible after connected AP disappeared.
• Syslog server still work while server port is not assigned.
• Roaming event is recorded as connection event, if the first bytes of AP's MAC is 0x00.
• If the operation mode is client-router, AWK could not use WPA/WPA2 enterprise mode.
• If AP using channel 140 changes to client mode, channel width cannot be set to 20/40.
• User cannot access web console if AWK received IP again from DHCP server.
• If the AWK is DHCP client and enables MAC clone, AWK cannot receive the IP from Cisco AP and then Cisco AP will disconnect AWK.
• Network looping causes AeroLink Projection works abnormally.
• AeroLink does not support slave mode.
• If the roaming message is larger than 128 bytes, the some syslog messages are missing.
• The maximum transmission power is allow to set the value which is out of the valid range.
• Error message for account settings is incorrect if account name is duplicated.
• The cookie paring is incorrect.
• Cannot retrieve information via OneKeyInfo.
• AWK cannot reboot and configure via MXconfig under some circumstances.
• If the size of configured value is larger than 64 bytes, the configuration setting will not succeed.

Changes

• Does not support the configuration 0 for all TCP/UDP port settings (TCP/UDP 0 port is a reserved port).

Notes

N/A

Version: v1.7	Build: Build_17102616
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

The following CVE's are fixed: CVE-2017-13077, CVE-2017-13078, and CVE-2017-13080.

Changes

N/A

Notes

N/A

Version: v1.6	Build: Build 17091517
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

- Supports AeroMag.
- Supports quick setup.
- Supports Moxa security level 1.
- Supports WPA/WPA2 Mixed.
- Supports Trouble shooting.
- Supports management encryption.
- Master mode supports multiple slaves.
- Supports Enable/Disable Ethernet LAN interface.
- Supports static MAC Clone.
- Supports channel 120 to 128 in US model.

Enhancements

- 802.3az is not supported.
- [SNMP] Use iface speed as ifHighSpeed on ifXTable.
- [Web] Do not show inactive timeout in client-router mode.
- LLDP does not support 802.3.
- Encrypt/Decrypt Remote Protocol data payload.
- [LLDP] Delete the 1000baseT_Half/1000baseT_Full when the AR934x_ETH_FAST feature enable on the mvport ethtool.
- Porting OpenSSL 1.1.0e is supported.
- Change roaming threshold default value to -65 under legacy mode, -55 under 2.4 GHz N mode, and to -50 under 5 GHz N mode
- Max TX Power changes as following.

Bugs Fixed

- Issue with simultaneous RF type mixed mode connectivity to different pure RF type modes.
- Rebooting issue while scanning DFS.
- Boot up failure issue.
- Interoperability with Cisco/Aruba/Ruckus AP by sending EAPOL frame with QOS data.
- Ping web console page attack from unknown commands.
- Rx stuck by patching qca-wifi-10.4 (QSDK).
- AP kernel panic when 128 clients connect and some clients are trying to reconnect.
- CCA will reset to default when channel changed.
- Roaming with multicast traffic will causing client cannot connect issue.
- Abnormal roaming time recorded in system log when client connection fail.
- Multi-channel roaming fail issue.
- Fixed bmiss will not trigger while bgscan due to bmiss counter reset issue.
- RSSI report format incorrect.
- rror when old log version upgrade to the new log version.
- RSTP looping because of no preroot_port.
- RSTP recovery too long issue and web display bug.
- SNMP cannot provide wireless status information.

- Loading the file which cannot be decrypted would cause iw_web crash.
- Incorrect interface name on LLDP status page and incorrect device name on bridge table page issue.
- Setting the LAN IP failed when the client-router mode via wireless search utility.
- ifXTable has null vale on SNMP.
- Web console has incorrect information under client-router mode
- Kernel panic while Turbo roaming is enabled.
- Kernel panic while interface is cannot fetch noise floor at the same time.
- Turbo Roaming chooses next AP with accurate roaming difference.
- MAC Clone should not be assigned as the multicast address.
- If DUT is in sniffer mode, device behind Ethernet cannot access DUT.
- Kernel panic while detecting specific DFS signal.
- Incomplete record of LFPT event in system log.
- Incorrect antenna selection under client mode.
- SNMP NID not correct.
- lients using enterprise mode cannot reconnect while AP reboots.
- IP setting issue via wireless search utility under client-router mode.
- Incorrect TX power information on the web console.
- Incorrect Wi-Fi driver state machine.
- Cannot import decrypted configuration.
- Issue finding AP with hidden node while turbo roaming is triggered.

Changes

N/A

Notes

N/A

Version: v1.5	Build: Build 17041601
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• [Web] Login denied when CSRF (Cross-Site Request Forgery) attack is detected.

Bugs Fixed

• [Accounts] Backdoor account is transparent to unauthorized users.
• [Wireless Search Utility] Service crash during data encryption for some commands.
• [Web] Cookies are same when multiple users access the website at the same time.
• [Web] Web server crash, if the HTTP POST is in invalid format.
• [Web] Web server crash, if the cookie is NULL for some URLs.

Changes

N/A

Notes

N/A

Version: v1.4	Build: Build 17031018
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

• [Accounts] Supports 8 accounts, including Administrators and normal users; administrators can read/write all settings, users are only allowed to read information.
• [SNMP] AWK uses the first account (list in the first entry) out of 8 accounts for your SNMP v3.
• [Web] Cookie is generated every time users login.
• [Web] Web server only allows one user to send the data back to avoid CSRF (Cross-Site Request Forgery) Vulnerability.
• [Web] A warning message suggesting using HTTPS is displayed when user is changing password via HTTP.
• [Web] Encrypts password, before transmitting it.
• [Wireless Search Utility] Encrypts the data between the device and Wireless Search Utility.

Enhancements

• Default password changes from root to moxa.

Bugs Fixed

• [Web] File/information accessible even if user does not log in.
• [Web] Browser will redirect to invalid web page, if the web page is tampered.
• [Web] Unauthorized Linux commands can be run via the webpage.
• [Web] Web server crash if the URL is invalid.

Changes

N/A

Notes

N/A

Version: v1.3	Build: Build 16100315
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T, AWK-4131A-EU-T, AWK-4131A-US-T, AWK-4131A-JP-T

Supported Operating Systems

N/A

New Features

• SNMP supports WLAN connection status and Client/Slave connecting time.
• Supports new regulatory standards of CE certificate and EN 300 328 V1.9.1.
• KC and RCM certification.
• Supports MXview Wireless Dashboard.

Enhancements

• SNMP does not support "Disable" for WLAN operation mode.
• Default value setting of TX Power is 20dBm.

Bugs Fixed

• Kernel panic when AP serves over 120 clients simultaneously.
• Web crash when there are too many web error messages.
• Channel information on overview page not updated when DFS channel changes.
• SNR information issue in MXview.
• Channel information issue in Sniffer mode.

Changes

N/A

Notes

N/A

Version: v1.1	Build: Build 15122211
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T

Supported Operating Systems

N/A

New Features

• [Channel] 5 GHz DFS channel support.
• [Distance] 5 GHz long-distance communication support.
• [Diagnostics] One-key information support.
• [Network Status] ARP Table, Bridge Status, LLDP Status, Routing Table, and RSTP Status.

Enhancements

• Increased the Tx buffer from 1024 to 4096.
• Modified Rx Packet Count (ATHR_RX_PKTS_CNT) to 100 and number of Rx Packet (AG7240_NUMBER_RX_PKTS) to 4096.
• Removed "select all" checkboxes in all "lkogs and Notification" pages.
• Shows SNTP in a string instead of a selection box if "IWCONFIG_SUPPORT_NTF" is not set and there's only one time-protocol option.
• Changed the "Restart" logo.

Bugs Fixed

N/A

Changes

• Kernel panic when AP serves over 120 Client at the same time.
• Web crash when there are too many web error messages.
• Fixed the channel information on Overview page when the DFS channel keeps changing.
• Issue with the SNR information in MXview.
• Issue with channel information in Sniffer mode.

Notes

N/A

Version: v1.0	Build: Build 15061120
Release Date: N/A	

Applicable Products

AWK-3131A-EU, AWK-3131A-EU-T, AWK-3131A-US, AWK-3131A-US-T, AWK-3131A-JP, AWK-3131A-JP-T

Supported Operating Systems

N/A

New Features

• First release.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A