

Release Notes

OmniAccess Stellar AP

AWOS Release 4.0.5 - MR4 Release

These release notes accompany the OmniAccess Stellar Operating System (AWOS) Release 4.0.5 software for the Stellar APs. This document provides important information on individual software and hardware features. Since much of the information in the release notes is not included in the hardware and software user manuals, it is important to read all sections of this document before installing new hardware or loading new software.

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Related Documentation

The release notes should be used in conjunction with the associated manuals as listed below.

User manuals can be downloaded at: <https://myportal.al-enterprise.com/>.

Stellar AP Quick Start Guide

The Quick Start Guide assists you in quickly connecting to and configuring the Stellar AP.

Stellar AP Installation Guide

Provides technical specifications and installation procedures for the Stellar AP.

Stellar AP Configuration Guide

Includes procedures for managing and configuring all aspects of the Stellar AP using the built-in web interface.

Technical Tips, Field Notices, Upgrade Instructions

Contracted customers can visit our customer service website at: <https://myportal.al-enterprise.com/>.

Hardware Supported

- AP1101, AP1201, AP1220 series, AP1230 series, AP1251, AP1251-RW-B, AP1261-RW-B, AP1201H, AP1201L, AP1201HL, AP1320 series, AP1360 series, AP1201BG, AP1301, AP1301H, AP1311, AP1331, AP1351, AP1451.

Fixed Problem Reports Between Build 4.0.5.3052 and 4.0.5.4064

PR	Description
Case: 00630930 ALEISSUE-1339 ALEISSUE-1508	<p>Summary: OAW-AP1101 stops forwarding traffic randomly.</p> <p>Explanation: OAW-AP1101 encountered problems with Wi-Fi firmware forwarding in High channel utilization environments, the issue was fixed by a new firmware update from the chip manufacturer.</p> <p>Click for additional information</p>
Case: N/A ALEISSUE-1490	<p>Summary: Mixed Express cluster of RW and ME access points changes country to US.</p> <p>Explanation: Optimize and modify the current synchronization logic for synchronizing country codes. When the country code of the rfprofile.conf in PVM's AP is ME, synchronize the country code information. There were restrictions on the ME country code before.</p>
Case: 00668870 ALEISSUE-1506	<p>Summary: IP Phone behind AP-1201H not working with VLAN info tagged from the phone.</p> <p>Explanation: On OV 2500 -> Access Auth Profile the field "trust tag" is enabled.</p> <p>IP Phone behind the AP-1201H does not work with VLAN tagged. DHCP Offer received from uplink is not forwarded to IP Phone.</p> <p>Click for additional information</p>
Case: 00669063 ALEISSUE-1515	<p>Summary: Include the MAC-Authentication failure into the WIPS dynamic blocklisting.</p> <p>Explanation: If the number of MAC authentication fails exceeds a threshold on specific time frame, the WLAN client's MAC Address is added into the blacklist.</p> <p>Click for additional information</p>
Case: 00675056 ALEISSUE-1518 ALEISSUE-1522	<p>Summary: Unable to connect to the SSID when passphrase contains special character " (quote).</p> <p>Explanation: When the password field in the configuration distributed by AP contains quotation, the AP fails to parse this configuration, resulting in an incorrectly configured password.</p>

	Click for additional information
Case: 00673509 ALEISSUE-1521	<p>Summary: AP stuck in upgrading mode in OV Cirrus.</p> <p>Explanation: The reason for getting stuck during the upgrade is that the activation_client.log has grown to more than 200M and filled up the memory. Solution is to limit the activation.log size to not exceed 1M.</p> <p>Click for additional information</p>

Fixed Problem Reports Between Build 4.0.5.2038 and 4.0.5.3052

PR	Description
Case: 00639601 ALEISSUE-1385	<p>Summary: 802.11k Neighbor report response from stellar AP contains no AP information.</p> <p>Explanation: The neighbor report relies on the AP scan results and aging mechanism, this issue fixes the aging time of the scan results, which increased to 12 hours.</p> <p>Click for additional information</p>
Case: 00670757 ALEISSUE-1491	<p>Summary: tech_support_command 12 does not work when executed remotely thru SSH on AP models Wifi5</p> <p>Explanation: When executing a remote command using the SSH, if a subcommand of the remote command is executed incorrectly, then the entire command will stop executing on the other side of SSH.</p> <p>Click for additional information</p>
Case: 00660918/ 00663590 ALEISSUE-1454 ALEISSUE-1465	<p>Summary: Users facing issue while roaming got disconnected and have to manually reconnect.</p> <p>Explanation: When the roaming client table entry exceeds 1200, no new client table entries will be saved, and the new roaming client will fail to associate. We optimize the roaming context process and sync speed.</p> <p>Click for additional information</p>
Case: 00646672 ALEISSUE-1411	<p>Summary: IPAD disconnecting multiple times with deauth reason code as 1.</p> <p>Explanation: Same root cause as 00660918/ ALEISSUE-1454 when the number of maximum roaming clients is reached</p> <p>Click for additional information</p>

<p>Case: 00668202 ALEISSUE-1498</p>	<p>Summary: RAP user not able to get IP after upgrade from 4.0.4.MR6 to 4.0.5 MR2.</p> <p>Explanation: Trust tag is supported as of AWOS 4.0.5, issue is observed when trust tag and untagged VLAN are bound to bridged interfaces.</p> <p>Click for additional information</p>
<p>Case: 00660089 ALEISSUE-1447</p>	<p>Summary: AP 1101 rebooted due to Core mon.</p> <p>Explanation: AP memory leak at EAG task causes reboot.</p>
<p>Case:N/A ALEISSUE-1497</p>	<p>Summary: Client not able to connect after roaming.</p> <p>Explanation: The client sends a dissociation to the Home AP before starting roaming to the target AP, resulting in not getting the correct roaming role in the process of target AP association.</p>
<p>Case: 00667454 ALEISSUE-1488</p>	<p>Summary: Flow drop is noticed on Stellar AP when conntrack table reached the limit.</p> <p>Explanation: Save kernel configuration conntrack_max after upgrading AP version.</p> <p>Click for additional information</p>
<p>Case: N/A ALEISSUE-1458</p>	<p>Summary: 6 GHz disappears from AP1451 Web GUI although it is operational.</p>
<p>Case: 00659365 ALEISSUE-1438</p>	<p>Summary: Stellar-AP Announces itself as target AP in 11v BSS-TM Request.</p> <p>Explanation: Change in the wireless driver, the AP no longer includes its own BSSID when sending BSS-TM responses.</p> <p>Click for additional information</p>
<p>Case: 00659843 ALEISSUE-1467</p>	<p>Summary: Static IP assigned to the VLAN configured is being lost after reboot.</p> <p>Explanation: The network management module caused the static IP configuration to not apply to AP and then the IP address wasn't set to the VLAN interface.</p> <p>Click for additional information</p>

<p>Case: 00668847 ALEISSUE-1417</p>	<p>Summary: For APs with individual scan radio, their WLAN radio didn't have the whole channel scan information.</p> <p>Explanation: Share the scan result of the scan radio for other WLAN radios, make the 802.11k works correctly.</p> <p>Click for additional information</p>
<p>Case: N/A ALEISSUE-1376</p>	<p>Summary: AP should optimize the action that notify its neighbor AP to delete the synchronization table entry after the client authentication fails.</p>

Fixed Problem Reports Between Build 4.0.5.1025 and 4.0.5.2038

PR	Description
<p>Case: 00658064 ALEISSUE-1435</p>	<p>Summary: "AP Name" and "Data Innovations North America" Vendor Specific Information Elements missing from Probe Response.</p> <p>Explanation: Add "AP Name" in the Probe Response frame due to it only included in the Beacon frame in previous build.</p> <p>Click for additional information</p>
<p>Case: N/A ALEISSUE-1432</p>	<p>Summary: DPSK problem.</p> <p>Explanation: It's related to station's MAC auth state before it enters the WPA stage; issue is fixed by improving the condition for requesting station's MAC auth process.</p>
<p>Case: N/A ALEISSUE-1463</p>	<p>Summary: OAW-AP1451 doesn't give correct output for 6 GHz via SNMP.</p>
<p>Case: 00639601 ALEISSUE-1385</p>	<p>Summary: Neighbor report response from stellar AP contains no AP information.</p> <p>Explanation: The neighbor report relies on the AP scan results and aging mechanism, this issue fixes the aging length of the scan results, which increased to 12h, this fix is only included in WiFi5 APs.</p> <p>Click for additional information</p>
<p>Case: 00660891 ALEISSUE-1446</p>	<p>Summary: All WLAN Users not able to associate to Stellar AP after upgrade of OVE to 4.7 R01.</p> <p>Explanation: After the upgrade, OVE issued an illegal Tunnel parameters, the AP cannot be correctly parsed resulting in the restart of the WAM module and block clients to associate, the problem fixes the handling of illegal parameters to increase robustness.</p> <p>Click for additional information</p>
<p>Case: N/A ALEISSUE-1464</p>	<p>Summary: Association of 6 GHz clients will fail if you disable 11b and 11g on 6 GHz SSID.</p>
<p>Case: 000069332 ALEISSUE-1426</p>	<p>Summary: In OV 2500/OV Cirrus Web AP Registration page - APs are seen with IPV6 addresses.</p> <p>Explanation: Optimize the AP IP address displaying logic to show IPv6 address if OV address is IPv6 but not show local IPv6 address, else show the IPv4 address.</p>

	Click for additional information
Case: 00610440 ALEISSUE-1265	<p>Summary: High rate of tx retry and latency observed at one location with AP 1321.</p> <p>Explanation: The Uplink MU-MIMO 802.11 trigger frame makes the environment channel utilization very high, a new Wi-Fi firmware provided by Qualcomm fixes this issue.</p> <p>Click for additional information</p>
Case: 00658514 ALEISSUE-1445	<p>Summary: Stellar AP running in Express mode - clients IP showing 0.0.0.0 in Web page.</p> <p>Explanation: The client IP address display depends on a module to hook DHCP packets, in case of the high CPU utilization or too many DHCP packets need to handle, the DHCP packets will be dropped by the module. This affects another module that relies on DHCP packets to display user IP addresses. Module is improved gets a valid client IP address.</p> <p>Click for additional information</p>
Case: N/A ALEISSUE-1444	<p>Summary: AP suddenly stops sending LLDP packets.</p> <p>Explanation: Added a workaround for restarting the LLDP process after it stops, and also added a method to record the crash dump log.</p>
Case: 00663120 ALEISSUE-1468	<p>Summary: L2GRE GTTS Failover not working as expected.</p> <p>Explanation: The network detection program failed to calculate the time difference because the character length of the stored time overflowed and failed to calculate the current network condition in time.</p> <p>Click for additional information</p>
Case: 00641061 ALEISSUE-1368	<p>Summary: Need to display error message in the browser using external captive portal.</p>

Fixed Problem Reports Between Build 4.0.5.23 and 4.0.5.1025

PR	Description
Case: 00639594 ALEISSUE-1384	<p>Summary: Broadcast Filter All not working fine, as a consequence lot of broadcast “Who has” requests are generated by AP impacting battery life time and network link</p> <p>Click for additional information</p>
Case: 00647231 ALEISSUE-1383	<p>Summary: Wrong Access Role Profile applied after roaming when captive portal (authentication Open) is used.</p> <p>Explanation: Because the conditions were not reached, the context (ARP / Client MAC Address) was not exchanged between APs during roaming.</p> <p>Click for additional information</p>
Case: N/A ALEISSUE-1375	<p>Summary: APs generating ACI (Adjacent Channel Interference) when selecting wrong channels in the 2.4Ghz frequency.</p> <p>Explanation: As of AWOS 4.0.5 MR-1, the conditions that need to be met when moving from manual adjustment to automatic channel selection is improved.</p>
Case: 00645897 ALEISSUE-1402	<p>Summary: Some Wi-Fi stations are assigned VLAN 0, making them to get IP address from AP management subnet when using VLAN pooling.</p> <p>Explanation: The clients roaming from one band to another in the same AP, the AP will delete the clients roaming context information after it disassociated one band, and this happened before connecting another band. AP can't find the clients original ARP and apply a wrong ARP.</p> <p>Click for additional information</p>
Case: 00647242 ALEISSUE-1410	<p>Summary: Syslog logs lldp message , the AP MAC address omits the zero.</p> <p>Explanation: It is an issue to process display the clients MAC address.</p> <p>Click for additional information</p>
Case: 00642426 ALEISSUE-1413	<p>Summary: Add broadcast and multicast traffic limitation via UI for Stellar AP model AP1251.</p>

Open/Known Problems

The problems listed here include problems known at the time of the product's release. Any problems not discussed in this section should be brought to the attention of the Service and Support organization as soon as possible. Please contact customer support for updates on problem reports (PRs) where no known workaround was available at the time of release.

PR	Description	Workaround
ALEISSUE-990	Deauthentication reason 34(Disassociated because excessive number of frames need to be acknowledged, but are not acknowledged due to AP transmissions and/or poor channel conditions).	No workaround
WCF	WCF Feature is not supported when WLAN Client is running behind an HTTP Proxy	No workaround
WCF	WCF Feature is not supported when WLAN Client is using mobile applications, there is no restrictions (packets are not dropped by AP, no redirection to Restricted Web page)	No workaround
WCF	WCF Feature is not supported when WLAN Client is running IPv6	No workaround
Management VLAN	When the management VLAN is enabled, setting the static IP may fail	The static IP must be set first, and then enable the management VLAN.
DPI	[reflexive] configure link tracking. DPI_DROP does not take effect.	After modifying the reflexive, the client needs to go online and offline again, which can return to normal.
AP stateful ipv6 address	The ipv6 address of the dual-stack AP, AP is a stateful address. After configuring the open type of WLAN, to associate the WLAN, with the wireless network card of win 7 11n set to single-stack V6, check the network on-off condition of the V6 address.	When you manually configure a V6 address of the same network segment on the client as the gateway address, you can communicate with the same network address.
DPI FTP policy	Create one policy list binding and two policies, results that the user cannot access the ftp	There is no known workaround at this time.
ALEISSUE-1327	WCF not working very frequently on Mobile devices using browser.	No workaround.
ALEISSUE-1308	Interface vlan configuration lost when WLAN access timer is configured.	Will be fixed on AWOS 4.0.6
DHCP Server	DHCP Server is not available on AP1231 model.	Will be fixed on AWOS 4.0.6

RAP	Clients may not be access to network when switching desired AP from Group of RAP to a regular AP Group on 11AX platform devices.	Will be fixed on AWOS 4.0.6
DSCP	AP1451 DSCP mapping has issue.	Will be fixed on AWOS 4.0.7
WCF	WCF does not support L3 roaming scenarios.	No workaround.
L3 roaming	There is an issue with the incorrect allocation of the Access Role Profile in L3 roaming.	Will be fixed on AWOS 406 MR1.
Lbd	Lbd process has a problem where it runs for some time and then exits abnormally.	Will be fixed on AWOS 4.0.6.
Wired port	AP 1201HL, 1301H firstboot then registered to OVE, wired authentication client configuration cannot obtain IP.	Will be fixed on AWOS 406 MR1.
Wired port	AP 1201H/HL edited the bypass parameters and applied the configuration, but the previous configuration was not deleted.	Will be fixed on AWOS 406 MR1.

Limitations and/or Dependencies

Feature	AP Model	Limitations and/or Dependencies
Dynamic VLAN	All	1. In Express mode the support of Dynamic VLAN Attribute returned by the Radius Server is not supported since AWOS 4.0.x
WCF	All	2. WCF does not support http over proxy scenario. 3. WCF does not support blocking mobile applications access. Client’s packets are not restricted (packet not dropped by AP, no redirection to Restricted Web Page) 4. WCF does not support RAP scenario. 5. When using Iphone roaming between Aps, reject page can’t be redirected when using Safari, but it works ok for other browser such as Chrome
HTTPs CP over proxy	All	For iOS does not support to configure URL to bypass the proxy, this function does not work on iOS devices.
AP 802.1x client	All	Wireless clients can’t connect to internet on untag VLAN with AOS switch due to AOS switch treat all untag devices as 802.1x client.
Wired Port	AP1201HL	1. AP1201HL switches to a Group with downlink configuration, wired client cannot access it. 2. AP1201HL enables trust tag and option 82, wired client may not obtain IP address
DRM	All	In some cases, when the channel utilization reaches more than 90%, the channel does not switch automatically, which seriously affects the user experience.

IGMP Snooping	All Stellar Wi-Fi 6 AP Models	For 11AX devices, if there is no multicast querier in the environment, the conversion from multicast to unicast may fail. We recommend that the switch of IGMP Snooping feature be turned on by default.
Mesh	All	Multicast to unicast is not supported in Mesh mode.
DPI	AP1201/ AP1220 series/ AP1251	When DPI function is enabled, it is recommended to have an initial free memory size of about 30MB after AP booting up for system stable running. If the booting up free memory size is far less than 30MB, suggest removing unnecessary WLAN/VLAN/Policy/DPI rule on AP1201/AP1220/AP1251.
Bypass VLAN	AP1201H/ AP1201HL	If the bypass VLAN function is enabled, setting VLAN id A, and setting the management VLAN to tag VLAN id is also A, which will cause the AP itself to be inaccessible and affect the operation of AP. Therefore, there is a restriction here that the tag for managing VLAN cannot be the same as bypass.
mDNS	AP1201H/ AP1201HL /AP1261- RW-B	AP1201H/1201HL/AP1261-RW-B Downlink Terminal does not support mDNS message forwarding.
Show device name	All	When some clients connect to wlan, there is no option12 field in the dhcp message, so its hostname cannot be displayed.
Management VLAN Static IP LACP	AP1351/A P1451	When configure LACP + Management VLAN + Static IP for AP1351, the network will not be reachable after AP reboot if LACP aggregated link is formed, the workaround of this issue should be disable LACP on switch side.
Link aggregation	All	Link aggregation with management VLANs has a certain probability of failure
Link aggregation	AP1351	There is very low probability on AP1351 that ethernet PHY fail to receive messages in the scenario of link aggregation.
ALEISSUE-1294	All	This improvement might cause some lower version of SSH clients cannot connect to Stellar AP running this new build, upgrade SSH client version will avoid this problem.
ALEISSUE-1343	AP1201H(L)	VLAN 4090-4094 is not allowed configured.
11K	Aps without scan radio	To make sure 11k function work as expected, we should configure the AP background scanning on “Working Channel and Non-working Channel”.
Enhanced Open WLAN	All	Mobile devices with Apple iOS do not support OWE, Mobile devices with Android 10 or later support OWE, Computers with Windows 10 version 2004 or later and a wireless adapter that supports OWE.
Client Isolation Whitelist	All	Client A connect to WLAN1 with ARP1, and Client B connect to WLAN2 with ARP2, in this case, If Client A and B needs to communicate to each other, both of the two clients need to be added into whitelist, either one of Clients add into whitelist can’t ensure communication between these two clients.
Express mode WLAN number	All	Starting with AWOS 4.0.5 in Express mode, we can create 15 user SSIDs on clusters with following models.

		<ul style="list-style-type: none"> • AP1301H, AP132x, AP1331, AP136x, AP1351 & AP1451 <p>If a cluster has any of the following models, limit remains at 7 user SSIDs.</p> <ul style="list-style-type: none"> • AP1311, AP1301, AP12xx and AP1101
ALEISSUE-1367	All	OV IP was not supposed to be included in the local breakout IP range.
RAP wired downlink port	All Stellar AP with downlink wired port.	<ol style="list-style-type: none"> 1. Trust tag VLAN ID should not be same as Mac VLAN ID. 2. After enabled trust tag, should not use VLAN0. 3. Don't support authentication and policy rules.

New Software Feature Descriptions

There is no new feature in this release.

Technical Support

Alcatel-Lucent Enterprise technical support is committed to resolving our customer’s technical issues in a timely manner. Customers with inquiries should contact us at:

Region	Phone Number
North America	1-800-995-2696
Latin America	1-877-919-9526
Europe Union	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484

Email: ale.welcomecenter@al-enterprise.com

Internet: Customers with Alcatel-Lucent service agreements may open cases 24 hours a day via Alcatel-Lucent’s support web page at: <https://myportal.al-enterprise.com/>.

Upon opening a case, customers will receive a case number and may review, update, or escalate support cases on-line. Please specify the severity level of the issue per the definitions below. For fastest resolution, please have telnet or dial-in access, hardware configuration—module type and revision by slot, software revision, and configuration file available for each switch.

Severity 1 - Production network is down resulting in critical impact on business—no workaround available.

Severity 2 - Segment or Ring is down or intermittent loss of connectivity across network.

Severity 3 - Network performance is slow or impaired—no loss of connectivity or data.

Severity 4 - Information or assistance on product feature, functionality, configuration, or installation.

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