

# Release Notes

## OmniAccess Stellar AP

### AWOS Release 5.0.1 - MR1 Release

These release notes accompany the OmniAccess Stellar Operating System (AWOS) Release 5.0.1 MR1 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, AP1431, AP1411, AP1511, AP1521.

## Supported Mode

- The AWOS 5.0.1.1066 is applicable for Express mode and OmniVista 2500 and OmniVista Cirrus 4 and OmniVista Cirrus 10.

## New Software Features and Enhancements

The following software features are new with this release, subject to the feature exceptions and problem reports described later in this release note:

Feature	Platform Support
AWOS support Ethernet-over-USB	All Wi-Fi 7 Wi-Fi 6/6E products: AP1320 series, AP1360 series, AP1301, AP1301H, AP1311, AP1331, AP1351, AP1451, AP1431, AP1411, AP1511, AP1521
AWOS Must Completely stop the AP Management Web Server	All Wi-Fi 7 Wi-Fi 6/6E products: AP1320 series, AP1360 series, AP1301, AP1301H, AP1311, AP1331, AP1351, AP1451, AP1431, AP1411, AP1511, AP1521
Private Group PSK support	All Wi-Fi 7 Wi-Fi 6/6E products: AP1320 series, AP1360 series, AP1301, AP1301H, AP1311, AP1331, AP1351, AP1451, AP1431, AP1411, AP1511, AP1521
Dynamic VLAN	All Wi-Fi 7 Wi-Fi 6/6E products: AP1320 series, AP1360 series, AP1301, AP1301H, AP1311, AP1331, AP1351, AP1451, AP1431, AP1411, AP1511, AP1521

## Fixed Problem Reports Between Build 5.0.1.27 and 5.0.1.1066

PR	Description
ALEISSUE-1959 Case number: 00772579	<p><b>Summary:</b> Remote APs are down with reason 15, until reboot of Root AP, RSSI is 28.</p> <p><b>Explanation:</b> Add workaround for 11AX devices to ensure that AP can be restored to normal in case of interface abnormalities.</p> <p><a href="#">Click for additional information</a></p>
ALEISSUE-1969 Case number: 00772486	<p><b>Summary:</b> Hidden SSID feature not working when Out-of-band Discovery feature of 6G is enabled.</p> <p><b>Explanation:</b> Do not respond to probe request frames for hidden WLANs in this situation to prevent clients from seeing hidden WLANs.</p> <p><a href="#">Click for additional information</a></p>

<p>ALEISSUE-1985 Case number: 00770117</p>	<p><b>Summary:</b> AP-1321 with Static IP onboard on OVC with a delay more than 30 minutes after reboot.</p> <p><b>Explanation:</b> AP will actively detect the results of callhome and re execute callhome in case of failure, when it detects that the WAN port has been set to a static IP.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1986 Case number: 00774425</p>	<p><b>Summary:</b> Day light saving not getting updated automatically for summer time.</p> <p><b>Explanation:</b> Adapt to the correct daylight-saving time.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1996 Case number: 00780850</p>	<p><b>Summary:</b> Brazilian flag displayed for Portuguese language on Stellar Express Captive Portal.</p> <p><b>Explanation:</b> Display the Portugal flag on Stellar Express Captive Portal when selecting Portuguese language.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1999 Case number: 00773929</p>	<p><b>Summary:</b> Long roaming time when 802.11r is enabled for clients with Static IP.</p> <p><b>Explanation:</b> Advance the calculation time point of PMK for 11r to ensure that the terminal devices for 11r will now receive regular synchronization messages.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-2013 Case number: 00792008</p>	<p><b>Summary:</b> Syslog log message for failed SSH/Web GUI access.</p> <p><b>Explanation:</b> Add error message for SSH/Web GUI access failure.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-2025 Case number: 00785422</p>	<p><b>Summary:</b> Stellar external captive portal no longer working after upgrade to 5.0.1.</p> <p><b>Explanation:</b> Reopen port 8080 but close fastcgi to prevent access to the APUI page.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-2045 Case number: 00791556</p>	<p><b>Summary:</b> EIRP on AP1511 is well above the legal limit for FCC.</p> <p><b>Explanation:</b> Fix has been included to follow the regulatory standards.</p>

## Fixed Problem Reports Between Build 4.0.7MR6 and 5.0.1.27

PR	Description
<p>ALEISSUE-1773 Case number: 00729492</p>	<p><b>Summary:</b> The WIPS functionality is not performing as expected with the Stellar AP.</p> <p><b>Explanation:</b> 1. Change the WIPS suppression message interval to 1 second 2. Simulate bidirectional sending of disassociation request messages</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1798 Case number: 00658943</p>	<p><b>Summary:</b> AP1101 rebooted due to kernel panic   Kernel panic - not syncing: Fatal exception in interrupt.</p> <p><b>Explanation:</b> Chipset vendor provides two patches for wireless driver to solve this problem.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1854 Case number: 00744752</p>	<p><b>Summary:</b> Certificate-based authentication (EAP-TLS) fails.</p> <p><b>Explanation:</b> Modify gso-size to ensure that UDP packets can be properly fragmented and forwarded through the GRE tunnel.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1956 Case number: 00770918</p>	<p><b>Summary:</b> Stellar AP1361: eth1 and SFP interface not visible on GUI.</p> <p><b>Explanation:</b> Add eth1 and eth2 interface to the default configuration for AP1361.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1954 Case number: 00770720</p>	<p><b>Summary:</b> Request for Remediation of Reported Vulnerabilities (Stellar AP) TCP ports 8883 and 1884.</p> <p><b>Explanation:</b> Fix related vulnerabilities.</p> <p><a href="#">Click for additional information</a></p>
<p>ALEISSUE-1964 Case number: 00773223</p>	<p><b>Summary:</b> Stellar AP1321-1301: After rebooting, the Ap restart in loop</p> <p><b>Explanation:</b> Remove redundant and non-valuable power supply from lldp module.</p> <p><a href="#">Click for additional information</a></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
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.
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 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.	No workaround.
WCF	WCF does not support L3 roaming scenarios.	No workaround.
Option82	After enabling option82 feature, in some scenarios, user roaming and reacquiring IP addresses can cause a brief broadcast storm.	Will be fixed in future release.
AP1411 Radio Configuration	After switching the radio, the previously unused band is set to a disabled state (Express).	Manually enable the band in AP RF.
SNMPv3	Some special characters can cause SNMP communication issues. The special characters include the following: \$, ", (	Don't using these special characters.
6G wIPS	6G radio does not support wIPS feature.	Will be supported in future release.
mDNS	AP1411/AP1431 does not support mDNS feature.	Will be supported in future release.
DPI	DPI memory leak issue.	Will be fixed in future release.
Mesh	1.If AP working on DFS channel, the client/mesh client can't connect to AP.  2.Create new WLAN on band different from Mesh, will cause reconnect on mesh network.	1.Change the channel to non-DFS channel.  2.Will be fixed in future release.
Captive Portal	The client can access the network without CP authentication in roaming scenarios.	Set a default ARP in Authentication Strategy.
Dynamic VLAN	1. When dynamic VLAN is assigned for client, ACL and Client isolation for wired user will not take effect. 2. When client roaming with dynamic VLAN, client IP may not be displayed on UI.	Will be supported in future release.

	3. Kick off iPhone client, and then connect to WLAN with dynamic VLAN, it can't obtain IP address sometimes, it can be recovered by forgetting the network and connect again. No issue on other type of client.	
Enhanced Open	Modify Enhanced Open WLAN to Open, Client can't obtain IP address, this issue happens only on AP1101.	Disable/Enable WLAN. Will be fixed in future release.
Static WEP	Wireless client can still connect to WLAN when configured index value different from the WLAN's index.	Will be fixed in future release.
Wired Client	For devices which supports downlink port, there are issues below: 1. Wired Client will go offline and online when modify Wireless WLAN or Downlink port config. 2. Plug and unplug Wired Client to OAW-AP1301H and move it to other ports of Switches in the same LAN, then plug it back to OAW-AP1301H, will cause FDB learn error in rare cases. Disable and enable the corresponding port can recover.	Will be fixed in future release.
DPI	The memory of AP1431/AP1411 may suddenly decrease, causing the AP to reboot due to memory issues after enabling DPI function.	Disable DPI for AP1431/AP1411. Will be fixed in future release.
Client Isolation	If the wired client is configured with a static IP, the wired isolation function for this client will not take effect	Will be fixed in future release.
Roaming	AP will not resend client information to its neighbors after they restart for some reason. This can lead to some roaming failure issues.	Will be fixed in future release.
DRM	DRM will not trigger active scanning if the current channel is not in the user configured channel list. This will lead to uneven distribution of channels.	Will be fixed in future release.
Wi-Fi 7 MLO	Simultaneously enabling MLO and 11R roaming will cause the client's 11R roaming to fail for AP1511/AP1521.	Will be fixed in future release.
Wi-Fi 7 MLO	When the MLO client accesses AP1511/AP1521, the Rx rate/Tx rate values in the throughput graph of the monitoring module are incorrect.	Will be fixed in future release.
Wi-Fi 7 MLO	Clients that do not support the 'BIP-GMAC-256' algorithm cannot connect to MLO+WPA3 WLAN	Will be fixed in future release.
6G band	AP1521 6G frequency band experiences interruption during traffic testing.	Will be fixed in future release.
WIDs	After enabling WIDS functions, the WIDs detection results may show garbled characters on AP1511/AP1521 devices.	Will be fixed in future release.
mDNS	When mDNS clients and servers are in different VLANs, clients can discover shared services but cannot access it.	Will be fixed in future release.

MESH	When the root AP restarts abnormally or the mesh becomes disabled, the BE devices under the root are offline for a long time	Will be fixed in future release.
DRM	Due to the inability of BE devices to correctly obtain the channel utilization rate of 5G/6G frequency bands, channel selection is not optimal in automatic channel selection scenarios.	Will be fixed in future release.
WLAN	The Beacon Interval configuration for MLO WLAN devices on the BE platform will not take effect	Will be fixed in future release.
WLAN	The channel utilization and transmission power of the AP1521/AP1511 device may display as 0 in the 2.4G frequency band configuration scenario	Will be fixed in future release.
8021x-WPA3+80211r	The encryption display on the page is incorrect when the client connects to the WLAN of 8021x-WPA3+80211r	Will be fixed in future release.
Multicast Optimization	The multicast optimization function of devices on the AX/BE platform is abnormal	Will be fixed in future release.
PG-PSK	After successful roaming of PGPSK Layer 3 or Layer 2 80211r, if the ARP assigned to the client in AP2 is incorrect, the client will go offline and reconnect when roaming to AP1 again.	Will be fixed in future release.
ARP Proxy	ARP proxy does not delete client entries after the client goes offline in some cases. If a server in the environment continues to send broadcast ARP requests to clients, it may cause multiple APs to respond to ARP, resulting in multiple FDB table entries in the switch.	Will be fixed in future release.

### Limitations and/or Dependencies

Feature	AP Model	Limitations and/or Dependencies
WCF	All	<ol style="list-style-type: none"> <li>1. WCF does not support http over proxy scenario.</li> <li>2. 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)</li> <li>3. WCF does not support RAP scenario.</li> <li>4. 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</li> <li>5. If the mobile device has already cached the DNS for the corresponding URL, the WCF functionality will not take effect.</li> <li>6. WCF Feature is not supported when WLAN Client enabled secure DNS (DoT or DoH).</li> </ol>
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	<ol style="list-style-type: none"> <li>1. AP1201HL switches to a Group with downlink configuration, wired client cannot access it.</li> <li>2. AP1201HL enables trust tag and option 82, wired client may not obtain IP address.</li> </ol>
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	All	1. 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. 2. In case of Express mode, configure WLAN using internal portal + external MAC authentication, client isolation will not work, suggest using internal or external portal authentication only.
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. • AP1301H, AP132x, AP1331, AP136x, AP1351 & AP1451 If a cluster has any of the following models, limit remains at 7 user SSIDs. • 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.	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.
Certificate management	All	In express mode, the password of the certificate does not support special characters.
WPA3+11r	All	Some clients do not support WPA3+11r.

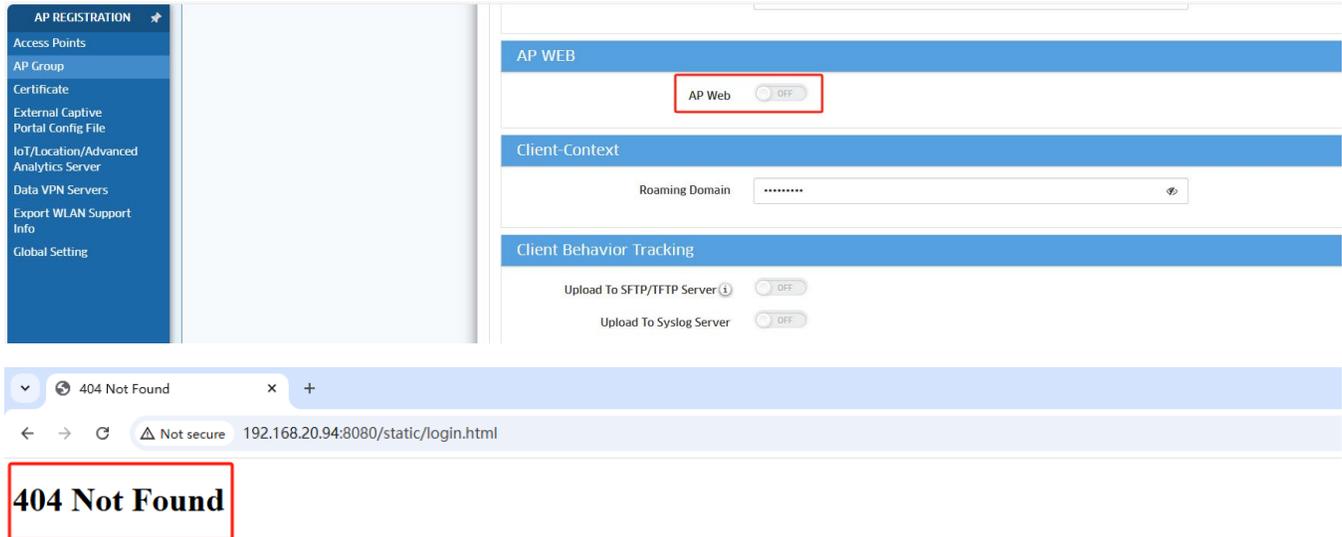
Enhanced Open Transition Mode	All	Mobile devices with Android OS connects to Enhanced Open Transition Mode WLAN, sometimes it connects to Open WLAN and sometimes it connects to OWE WLAN, When the issue happens AP works as expected broadcasting beacons with related Transition mode info IE. It is suggested to upgrade mobile devices to latest software version.
Mesh	All	When AP create a new WLAN on MESH AP, the mesh connection will be interrupted briefly.
802.1x	All	AP doesn't support CoA messages in case of 802.1x authentication.
Wi-Fi 7 MLO	AP1511/A P1521	Clients that support Wi-Fi 7 MLO features may not be able to access the MLO 6G radio configured on AP1511/AP1521 due to compatibility issues.
Wi-Fi 7 MLO	AP1511/A P1521	WPA3 encryption is required for WLAN configured with MLO.
Wi-Fi 7 MLO	AP1511/A P1521	Enhanced Open (Transition Mode) WLAN does not support MLO configuration.
Second Radius Server	All	The current logic of switching from backup server to primary server has issues with adapting to radsec scenarios.
Wired Port	All Stellar AP with downlink wired port.	The scenario where the AP wired downstream port is connected to a switch and the switch is connected to a wired PC is currently not supported, which will cause the 1x authentication of the PC under the switch to fail.
BLE	All Stellar AP with BLE chip	When the Discover all Devices/iBeaconRawData configuration is issued to an old version AP, it may result in no scan data reporting due to the AP's inability to parse the configuration.
DPI	AP1511/A P1521	AP1511/AP1521 does not support DPI function.
Dynamic VLAN	ALL	Client does not apply dynamic VLAN ID after connecting to WLAN in some scenarios.
MESH	ALL	The cluster setup failed due to isolation settings between client APs under root in MESH scenario.
CLUSTER	ALL	The device with 5.0.1.x build cannot join the cluster which PVC is device with build before 5.0.1
DRM	AP1511/A P1521	Automatic channel selection function does not take effect When the 6G bandwidth is set to 320M

## New Software Feature Descriptions

### AWOS Must Completely Stop the AP Management Web Server

In the previous build, when Web access is disabled, no users can access the AP, but the Web Server is still running and user can see the Web Login page.

On AWOS 5.0.1 MR1, users cannot access Web Server of AP and will be returned 404 error when attempting to access Web Server.

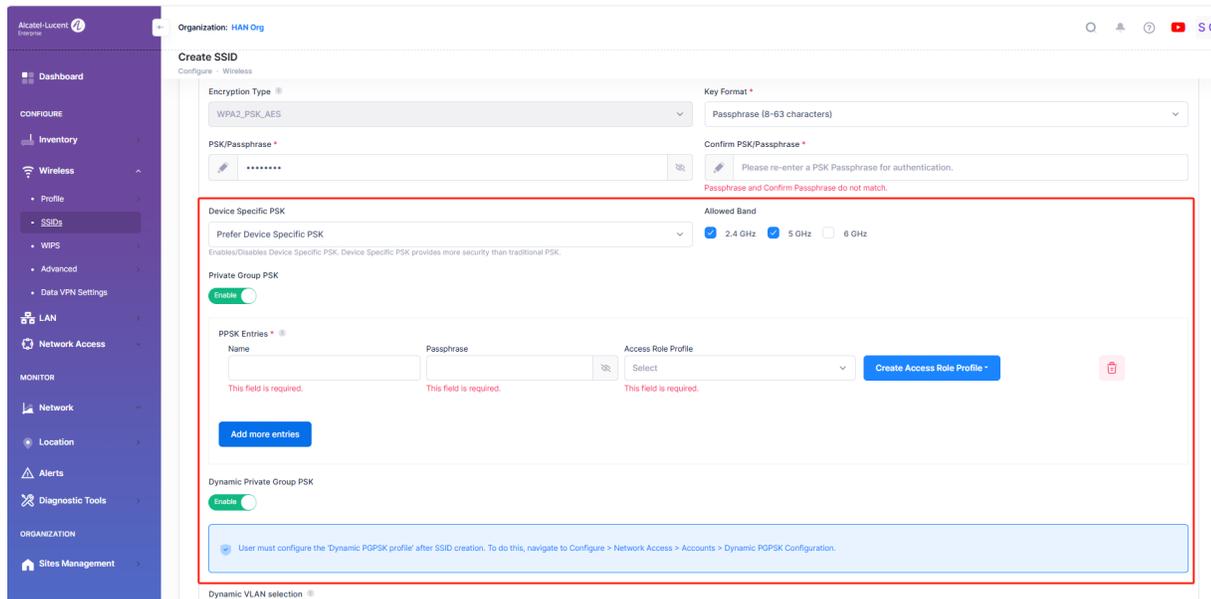
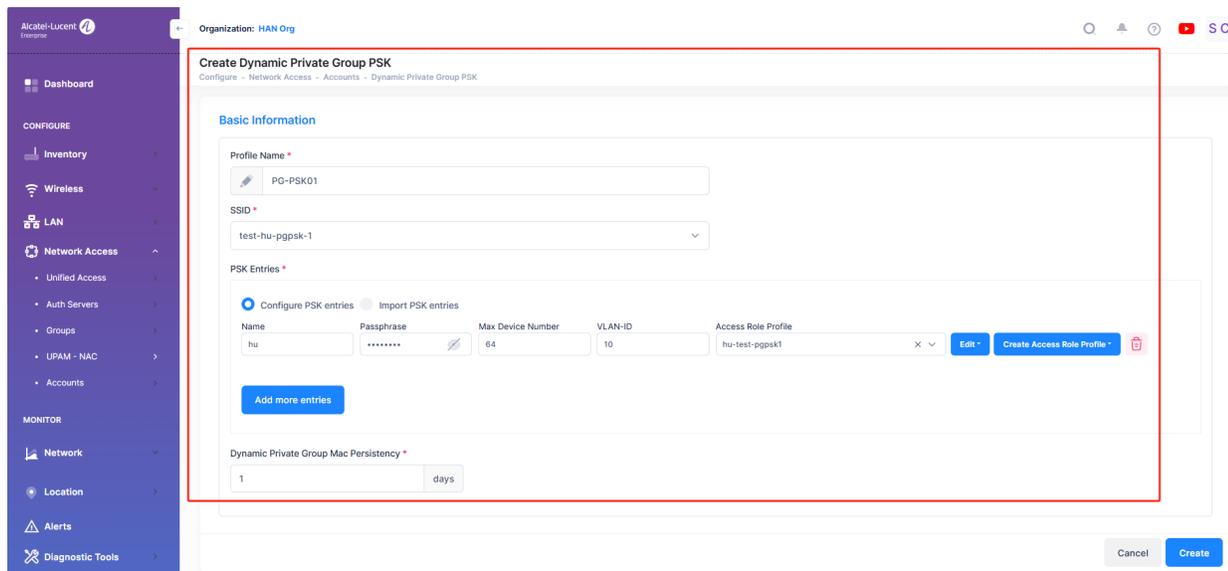


### Private Group PSK support

In the current DSPSK feature definition, there must be a strict MAC database on the AAA server, and each MAC address needs to be accurately matched to find the specified network configuration. When it is necessary to allocate a private network to a user and require all wireless devices under their name to enter a unified key to access the private network, it is necessary to add the MAC addresses of all devices under that username to the database in advance. Coupled with the random MAC mechanism of wireless devices, deployment becomes difficult.

On AWOS 5.0.1 MR1, we support PG-PSK mode, which allows devices with the same key to belong to a private network. Enable servers with better performance to compute a large number of keys and negotiation processes to alleviate performance pressure on the AP side.

Below is the configuration display:



**Note:** There are several guidelines as follows:

1. When the DSPSK status is Forced, the Private Group PSK function should be disabled and the page should not display any configuration parameters.
2. When the DSPSK status is Preferred, Private Group PSK can set multiple key binding strategies with ARP, and wireless terminals should prioritize key matching for DSPSK functionality; If the matching fails, then perform key matching for the Private Group PSK function using its mapped ARP policy; If the correct key cannot be found, default key matching will be performed until the AP is unlinked from the terminal.
3. When DSPSK status is disabled, Private Group PSK can still set multiple key binding policies with ARP. And the wireless terminal prioritizes key matching for Private Group PSK function, using its mapped ARP strategy; If the correct key cannot be found, default key matching will be performed until the AP is unlinked from the terminal.
4. Private Group PSK is disabled by default and can only be enabled when the SSID encryption method is configured as WPA2-PSK.

## Dynamic VLAN

Dynamic VLAN expansion is a further optimization of existing solutions, solving the problem of not being able to apply ARP before and making the configuration scheme more flexible.

Below is the configuration display:

The screenshot shows the configuration interface for a new SSID named 'test-Dynamic-VLAN'. Key settings include:
 

- Profile Name:** test-Dynamic-VLAN
- Usage:** Enterprise Network for Employees (802.1X)
- Encryption Type:** WPA3\_AES
- 802.1X Bypass:** Disabled
- MAC Allow EAP:** PASS
- Dynamic VLAN selection:** Priority VLAN-ID over ARP (selected)
- SSID:** test-Dynamic-VLAN
- Enable BYOD Registration:** No
- Allowed Band:** 2.4 GHz and 5 GHz (checked), 6 GHz (unchecked)
- MAC Authentication:** Disabled

## 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](mailto: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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