

>> ALEOS 4.9.6 Release Notes

ALEOS 4.9.6 is for AirLink GX450 and ES450 gateways.

Note: Sierra Wireless recognizes that our customers deploy devices in a wide range of network environments with varying configurations. It is always good practice to install a new ALEOS release on a few trial devices to ensure that standard operation is maintained within your environment before deploying the new release across your fleet of AirLink devices.

Note: Devices manufactured on ALEOS 4.9.6 or later or devices that are reset to factory default on ALEOS 4.9.6 or later have the ACEmanager local access restricted to HTTPS only. ACEmanager should then be accessed using the default 9443 port: <https://192.168.13.31:9443/>

New Features

Radio Module Firmware

Added a mechanism to validate radio module firmware ISO files before they can be installed on the device. ALEOS will reject ISO files if they have been partially downloaded or are otherwise corrupt.

Cellular

Added support for Bell Jasper SIM. If left blank, the APN will now be auto-populated with "mnet.bell.ca.ioe".

Added support for different Sierra APNs based on ICCID.

Expanded the MSS clamping option to allow for automatic clamping.

LAN

Added support for DHCP Option 12 Hostname for both DHCP Client and Server, and added DHCP Client Options in ACEmanager.

Added support for DHCP Option 6 (Domain Name Server) in the DHCP Options list.

Wi-Fi

Added the ability to extend the four-way handshake timeout.

Services

Added a WAN option to Telnet/SSH Access Policy under Services > Telnet/SSH.

AT Commands

Removed the AT*RMUPDATE command.

Added AT+COPS=? to provide a list of available operators.

Enhanced the AT command parser so that if a concatenated AT command contains invalid characters or a failed command then the AT command will be aborted.

ACEmanager

Devices manufactured on ALEOS 4.9.6 or later or devices that are reset to factory default on ALEOS 4.9.6 or later have the ACEmanager local access forced to HTTPS only.

By default, ACEmanager should then be accessed using the default 9443 port:
<https://192.168.13.31:9443/>

Added the Template status to the Device Status Screen configuration.

Smart GPS Bias Control

Disabled Dynamic Power Optimization for GNSS on MC73xx radio.

The gateway powers off the GPS antenna when GPS is disabled.

Added the ability to intelligently control the GPS antenna bias to avoid issues with some multi-element antenna systems. This feature is enabled by default on upgrading to ALEOS 4.9.6.

Security Enhancements

General

Addressed potential buffer overflow in AT*WCC.

Added level 2 security to prevent being able to read/write the SMS password through AT commands when not identified as a user.

Security and CVE Vulnerabilities

Addressed potential vulnerabilities related to [CVE-2020-25692](#).

Addressed potential vulnerabilities related to [CVE-2020-1971](#).

Addressed potential vulnerabilities related to [CVE-2020-8285](#) and [CVE-2020-8286](#).

Addressed potential vulnerabilities related to [CVE-2019-20838](#).

Addressed potential vulnerabilities related to [CVE-2020-15862](#) and [CVE-2020-15861](#).

Addressed potential vulnerabilities related to [CVE-2018-1000517](#).

Addressed potential vulnerabilities related to [CVE-2019-13012](#).

Removed iperf to address [CVE-2016-4303](#).

Addressed potential vulnerabilities in keeplived related to [CVE-2018-19115](#).

Addressed potential vulnerabilities related to [CVE-2019-12450](#).

Addressed potential vulnerabilities related to [CVE-2020-27743](#).

Addressed potential vulnerabilities related to [CVE-2015-9059](#).

Updated coreutils to version 8.32 to address potential vulnerabilities related to [CVE-2015-4042](#).

Applied a patch to Bash to address potential vulnerabilities related to [CVE-2019-18276](#).

Bug Fixes

Location (GX450 only)

Updated SMS GPS and Status commands so that they will provide a correct location for latitudes and longitude values that are between 0 and -1 degrees.

Added configuration options for Local Report Destination IP to resolve issues when using IP Passthrough mode.

ALMS

Resolved an issue where bytes sent and received over the WAN could wrap around 32-bit value and show a drop in the counts.