

»» | ALEOS 4.8.0 Release Notes

ALEOS 4.8.0 is for AirLink RV50X, AirLink RV50, AirLink GX450, AirLink ES450, and AirLink MP70 gateways. For upgrade instructions, refer to the ALEOS 4.8.0 Software Configuration User Guide.

Gateways shipped with ALEOS 4.8.0 may not be downgradeable to ALEOS 4.7.0

New Features

Radio Modules

Updated recovery image to latest version

Updated radio module MC7455 for MP70 and RV50X:

- Generic: SWI9X30C_02.20.03.00
- Verizon Wireless: SWI9X30C_02.20.03.22
- AT&T: SWI9X30C_02.20.03.00
- Sprint: SWI9X30C_02.20.03.22

Updated radio module MC7430 for MP70 and RV50X:

- Generic: SWI9X30C_02.23.00.00
- DoCoMo: SWI9X30C_02.20.03.00

Radio module MC7430: Updated Telstra image to SWI9X30C_02.20.03.01

ALEOS implemented Telstra LANES specific retry backoff algorithm

Added Auto APN selection for Telstra LANES

User Interface

Reorganized Status and WAN/Cellular screens

Added new diagnostic features that allow ping tests and traffic tests on interfaces other than the active WAN interface. To accommodate these changes new fields were added to the WAN/Cellular screen and some fields were removed.

Configuring

The Viewer user account is now disabled by default. To enable it, the user must configure a password.

Corrected permissions for the Viewer account

GX450 and ES450 gateways now support Recovery mode.

Status

PRI and package information is now available on the in Status > About screen.

The Status screen now shows the network state for the currently active WAN interface.

WAN/Cellular

Added ability to use Ethernet as a WAN connection

Users can now manage WAN interface priority, selecting the order of priority for Cellular, Ethernet and Wi-Fi.

Added IPv6 gateway support

Users can now define up to 5 policy routing rules based on source IP, source netmask, source port, destination IP, destination netmask, and destination port. Users can target selected traffic for Ethernet, Wi-Fi or Cellular network interfaces.

Added support for Infrastructure Networks' automatic APN provisioning

Added support for WAN port mirroring

Firewall: Added a setting to ACCEPT rather than DROP unsolicited inbound packets on the WAN network

Added support for Verizon Private Network Traffic Management (PNTM)

LAN

Public mode renamed to IP Passthrough

The First Host Gets Public IP option has been removed from ALEOS

Wi-Fi

Added 802.1x PEAP support to WPA2-Enterprise

MP70: support added for up to 4 SSIDs

Note: To ensure maximum security, all 4 SSIDs are disabled by default.

Added CoovaChilli-based captive portal support

Security

MP70: DMZ is disabled by default.

Sierra Wireless, ALEOS, and product names (RV50, MP70, etc.) no longer appear in service welcome messages.

Non-Friend Port Forward has been removed from ACEmanager.

CVE Vulnerabilities

Addressed potential vulnerabilities related to CVE-2016-2107 (see <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-2107>)

Addressed potential vulnerabilities related to CVE-2016-5195 (Dirty Cow) (see <https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2016-5195>)

Addressed potential vulnerabilities related to CVE-2015-4000 (Logjam) (see <https://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2015-4000>)

Services

MSCI HTTP Server And ACEview Services can now be enabled and disabled independently from the ALMS protocol.

Location

Added a GPS no signal watchdog for troubleshooting location issues

RV50 and RV50X: Added the ability to enable or disable DC bias voltage to the GNSS antenna to the Location screen

Enhanced the GNSS user interface to show more info on the constellations in use. The number of and type of satellites in the fix now appear in Status > Location screen.

Events Reporting

Network Interface data is now included in an Event Report when Network State is a selected data point.

ES450: Events Reporting—Turn off Services is now supported.

Event Reporting is now available in ALMS for template import/export.

Applications

Updated AAF package (Agent: 14.0 - Build: 2216f1c) for ALEOS 4.8.0

ACEmanager can now be used to install, uninstall, start and stop AAF applications.

Neighboring cell information is now available from an AAF application. The underlying information is provided by the AT!LTEINFO AT command.

Improvements in AAF to increase resilience to corrupted asset data storage files.

Updated Lightweight M2M client to AVC_00.16.16.09

Admin

Added a field to enable generating a core dump to use for troubleshooting

Added RSRQ, RSRP and SINR to periodic log messages

Improved the remote syslog feature to enable the user to fully use the ALEOS remote logging capabilities.

The ALEOS logs can now be retrieved from the recovery UI using a new button, Get ALEOS Logs.

Added a new dedicated log subsystem specifically for ACEmanager in order to be able to debug the server

HTTP Server Services settings are now preserved when the gateway is reset to the factory default settings.

Added logging subsystems for:

- Cellular
- Connection Management
- Link Management

To help with customer troubleshooting, a new log message at the Notice level was added. The notice appears in the log when the device would have rebooted but did not because the cellular watchdog was disabled.

Added a banner to warn customers when the default password is being used

Added the ability to disable NAT Helper functions

The helper functions parse traffic on (some) well known ports and may choke if these ports are not using the protocol associated with the well known port

ALEOS AT Commands

ALEOS now supports the following standard AT commands:

- * AT+CMGL (to list/read SMS messages)
- * AT+CMGD (to manage incoming SMS messages)

Added two new AT commands to:

- Change SIM PIN (AT*CHGSIMPIN=<OldPIN>,<NewPIN>)
- Activate/Deactivate the PIN lock (AT*ENASIMPIN=<lock>)

Added AT command (*MSCI_SERVER_ENABLE) to enable the HTTP MSCI SERVER

Bug Fixes

Recovery Mode

Resolved an issue where recovery mode was not running on the GX450 and ES450 gateways

Template

Resolved an issue where the Ethernet port could not be disabled via a template

Resolved an issue where templates could not be downloaded using ACEmanager when using TLS/SS

Status

Resolved an issue where the host signal level was not being displayed in ACEmanager (Host Signal Level field on the Status screen) or via the AT*HOSTCOMMLVL? AT command

WAN/Cellular

Resolved an issue where the gateway sometimes remained in "Connecting to Network" state when the Link Radio Coverage to Interface was configured for Ethernet

Improved the escape sequence detection algorithm in PAD mode

Resolved an issue where ICMP error packets were going out on the WAN interface using local IP as the source IP when the gateway was in public mode (IP Passthrough)

Resolved an issue where attempts to establish a data session were halted if ALEOS could not determine the Operator name

Resolved an issue where the count of the non-persistent transmit and receive bytes reported in ACEmanager reverted to zero after reaching approximately 4 GB

Resolved an issue where after having reset a gateway to the factory defaults, while preserving ALEOS cellular and ALMS settings, the device could not reconnect to ALMS through LWM2M

Resolved an issue where TCP and UDP PAD mode were not available if there is no WAN connectivity

MP70 (MC7430): Resolved an issue where WAN connections were not stable due to a race condition when setting the APN in ALEOS

Resolved an issue where UDP Keepalive IMEI was not displayed properly

Resolved an issue where settings for Display Device Status could not be applied from ALMS

Resolved an issue where Three Austria (drei.at) was not correctly assigned in our products and therefore auto APN configuration could not be used

RV50 and MP70: Resolved an issue where the SINR value was not reflected in the Signal LED behavior

Resolved a random/intermittent condition where the gateway is unable to check in with AVMS

LAN

Resolved an issue where after disconnecting/reconnecting the USB cable, the gateway went into a state where it did not successfully enumerate

RV50 and MP70: Resolved an issue where an ALEOS AT Command session could not be opened over SSH

Resolved an issue where the Link Radio Coverage to Ethernet feature was not working properly

Wi-Fi

Resolved an issue where a gateway in Client + AP mode, erroneously displayed “Not Connected” in the Access Point Mode field on the Status > Wi-Fi tab

Resolved an issue where the Wi-Fi Authentication mode was shown as Open on the Status screen when using WPA Authentication

VPN

Resolved an issue where HTTPS and HTTP access to ACEmanager in IPSEC tunnel was failing

Security

Resolved an issue where Port forwarding was blocking packets bound for the LAN interface. Packets bound for the LAN interface are no longer dropped

Services

MP70: Resolved an issue where the gateway was not exiting standby mode properly

Resolved an issue where the LEDs of gateways in Periodic Low power mode showed only a red Power LED

Location

If the GPS tracking session cannot be restarted, ALEOS now reboots to recover the GPS operation

Events Reporting

GX450: Resolved an issue where “Turn Off Services” in Event Reporting was not working properly

Resolved an issue where odometer values were not being updated properly

Serial

Resolved an issue on the serial port where the port was became unresponsive. The problem was related to recent changes in the +++ escape sequence in ALEOS 4.6.0

Resolved an issue where there was no login prompt when using an AT terminal over USB serial

Resolved an issue when a PPP connection was terminated, the serial port switched to AT Command mode instead of the default setting as configured in the serial port configuration

Applications

Resolved an issue where ALMS defined CPU load as integer instead of fractional. The ALMS CPU load type is now correct

Resolved an issue where the M3DA server hostname was badly provisioned when the MSC1 URL contained a port definition

Resolved an issue where Data usage daily and monthly limits were not being reported in ALMS

Resolved an issue where the AAF pushdata API failed to send nested data with timestamp

Admin

Resolved an issue with CDMA operation on the NA-generic GX450 and ES450 gateways

ALEOS AT Commands

Resolved an issue where an AT command session over SSH could not be opened on the RV50 and MP70

Resolved an issue with the AT*NETOP? not working when the operator was AT&T