

## >> | ALEOS 4.5.0 Release Notes

The ALEOS 4.5.0 release is for AirLink RV50 gateways. It is not compatible with AirLink LS300, AirLink GX Series, or AirLink ES Series gateways.

Refer to the ALEOS Software Configuration User Guide for update instructions.

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*Important: The default setting for remotely accessing ACEmanager (Services > ACEmanager) has been changed to "Disable".*

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## New Features

### New Radio Module Firmware

- Updated Sprint radio module firmware to 05.05.63.01

### ALEOS and Radio Module Firmware Update Process

While the gateway is rebooting as part of the ALEOS and radio module firmware update, a new window appears, indicating that the reboot is in progress. Once the reboot is complete, the Login screen appears.

Added new LED pattern to indicate when a software or firmware update is underway:

- Green LED chase—Radio module reconfiguration/firmware update is in progress.
- Amber LED chase—ALEOS software update is in progress.

### Status

Removed support for incremental upgrade packages; Status > Home > Installation Type was removed

A new Active Frequency Band field added to the Status > WAN/Cellular screen indicates the active frequency band (e.g. LTE Band 4).

The Power State field was removed from the Status > Services screen.

### WAN/Cellular

Network Operator Switching—AirLink gateways with ALEOS 4.5.0 come preloaded with more than one version of radio module firmware. When the gateway is powered on, it checks the stored radio module firmware versions and automatically uses the firmware that is appropriate for the installed SIM card.

The AirLink RV50 has two SIM card slots. Users can provide individual configuration settings for each slot.

A new "Set Carrier (Operator) Selection" field was added to the WAN/Cellular screen to allow users to manually specify an operator. This field is intended to restrict unwanted roaming.

### Security

Access to diagnostic and AAF development accounts is disabled by default.

The AirLink Management Service (ALMS) default URL now uses TLS protocol security. The new URL is <https://na.m2mop.net/device/msci/com>.

All passwords are now hidden in ALMS and ACEmanager.

The number of port forwarding rules has been increased to 48.

User accounts are temporarily locked if there are too many failed login attempts.

### Services

Added new Services > Power Management screen to enable simplified Low Power mode configuration. Settings include:

- Time delay for the gateway to enter Low Power mode after the ignition is switched off
- Time delay for the gateway to enter Standby after voltage has dropped below a configured threshold (and to exit Standby when the voltage rises above the configured threshold)
- Time of day to enter and exit Low Power mode
- Time delay to enter or exit Low Power mode based on the I/O input going high or low

Added new LED power saving mode. When enabled, the Signal LED is off when the signal strength is good or average, but still indicates when there is a poor signal or no signal. The Network LED is off when the gateway is connected to a network, but still indicates when the gateway is connecting to the network and when there is no network available.

The I/O line can be used as an input for Low Power mode or pulled high or low to act as an output. The modes cannot be used concurrently.

### GPS

GPS Global Settings is now the first item in the left menu (above Server 1).

### I/O

Added a field on the I/O screen to control the internal pull-up resistor on the digital input.

### Admin

The new Admin > Radio Module Firmware screen allows users to manage the radio module firmware stored on the gateway.

The new Software and Firmware log subsystem gathers logs related to ALEOS updates, radio module updates, and Network Operator Switching, some of which were previously logged in *System* and *ALMS*.

When users select "Preserve Cellular Authentication Settings" in the Reset Mode field (Admin > Advanced), the Network Operator Switching settings are preserved over a reboot.

Network Operator Switching: The Network LED flashes yellow/red if firmware associated with the SIM card is not stored on the gateway.

Data usage can be configured independently for the SIM cards in slot 1 and slot 2.

## AT Commands

AT Commands to configure Dual SIMs

Query or set the Primary SIM:

- AT\*PRIMARYSIM[?|=1|=2]

Configure the APN, network user ID, and network password for SIM Card 1 or SIM Card 2:

- AT\*SIM1NETAPN[?|=<apn>]
- AT\*SIM2NETAPN[?|=<apn>]
- AT\*NETUIDSIM1[?|=<uid>]
- AT\*NETUIDSIM2[?|=<uid>]
- AT\*NETPWSIM1[?|=<pw>]
- AT\*NETPWSIM2[?|=<pw>]
- AT\*CLIENT\_PPP\_AUTHSIM1[?|=1|=2]
- AT\*CLIENT\_PPP\_AUTHSIM2[?|=1|=2]

Configure the SIM PIN for SIM Card 1 or SIM Card 2:

- AT\*SIM1PINENABLE[?|=0|=1|=2]
- AT\*SIM2PINENABLE[?|=0|=1|=2]
- AT\*SIM1PIN[?|=<pin>]
- AT\*SIM2PIN[?|=<pin>]

Query the active SIM:

- AT\*ACTIVESIM[?]

Query the number of SIMs present:

- AT\*NBSIMPRESENT[?]

AT Commands to configure and query data usage by SIM Card slot

- AT\*DATACURDAYSIM1[?]
- AT\*DATACURDAYSIM2[?]
- AT\*DATAPLANUNITSSIM1[?|=1|=2]
- AT\*DATAPLANUNITSSIM2[?|=1|=2]
- AT\*DATAPREVDAYSIM1[?]
- AT\*DATAPREVDAYSIM2[?]
- AT\*DATAUSAGEENABLESIM1[=0|=1]
- AT\*DATAUSAGEENABLESIM2[=0|=1]

## Miscellaneous

Improved the reset button behavior:

- Reboot—Pressing the reset button for less than 5 seconds causes the Power LED to flash green. Releasing the reset button at that point reboots the gateway.
- Reset to factory default settings—Pressing the reset button for more than 5 seconds causes the Power LED to flash red. Releasing the reset button at that point resets the gateway to the factory default settings.

UI—AirVantage Management Service (AVMS) renamed to AirLink Management Service (ALMS)

## Bug Fixes

### Common Vulnerabilities and Exposures (CVE®)

Disabled the RC4 cipher algorithm and enabled DHE and ECDHE to mitigate possible issues related to CVE-2013-2566

Updated the firmware to mitigate possible issues related to CVE-2015-0235, aka “Ghost”

Updated the firmware to mitigate possible issues related to CVE-2014-3566 and CVE-2014-8730, aka “Poodle”

Updated the firmware to mitigate possible issues related to CA-2000-02

### User Interface

Clarified the field names related to remotely accessing ACEmanager, and set the default value for remote access to “Disable”

The “Use CTS” field was removed from the Serial > Advanced screen.

### WAN/Cellular

The back-up APN is now limited to 100 characters, as per the 3GPP specification.

Auto APN is disabled on the Verizon Wireless and Sprint networks.

Fixed a keepalive ping problem. The gateway now uses the configured interval after a successful test or configuration change. Keepalive Ping no longer needs a reboot after configuration.

### GPS

The Diversity/GPS Antenna Bias field was removed from the UI.

### Security

The ACEmanager default certificate signature algorithm was upgraded to SHA-256, and the key size was increased to 2048. Alternative names were added to mitigate the name mismatch error.

### Admin

Added three new levels to VPN logging: Error, Warning and Notice (Default is Warning.)

Added additional information to log messages to aid Sierra Wireless in troubleshooting issues

### Miscellaneous

Added additional radio module diagnostic data collection