



AirLink OS 4.1.33

RELEASE NOTES

About AirLink OS 4.1.33

This release of AirLink OS 4.1.33 is for the AirLink XR90, XR80 and RX55. This release resolves issues with previous AirLink OS 4.1 releases where upgrading routers may result in SIM Database settings reverting to their default values, which can result in routers losing their connectivity. For additional details, see [Bug Fixes](#).

Semtech encourages all customers to maintain their AirLink routers with the current AirLink OS release and security patches via our AirLink Management Service (ALMS). Semtech tests and validates upgrades from the previous major software releases. See [Upgrade Notes](#) on page 2.

Bug Fixes

Cellular

Resolved an issue where the router's SIM configuration and corresponding radio module would be reset to defaults upon upgrade from AirLink OS 3.1 or 4.0 to 4.1.30.

Resolved an issue where SIM configuration names may be reset upon upgrade to AirLink OS 4.1 for AirLink XR80 and XR90 routers using SIM cards installed when running AirLink OS 2.1.x or prior.

Resolved issues with the Preferred Technology setting for Multi APN virtual interfaces. In AirLink OS 4.0 it was possible to specify a different preferred technology for each virtual interface even though each virtual interface will, in practice, have the same preferred technology.

In AirLink OS 4.1 the preferred technology can now only be set for the parent interface, and each virtual interface will use the same value.

Upgrading to AirLink OS 4.1 will set the preferred technology to Auto unless every virtual interface specified the same preferred technology, in which case that will be used instead. If a preferred technology is required for your deployment, Semtech recommends setting it to the same value on each AirLink OS 4.0 virtual interface before upgrading to 4.1. See also [Known Issue](#) on page 2.

Networking

Addressed client DNS resolution failures when a Multi-WAN policy rule fully segregated all traffic (0.0.0.0/0 or ::/0) from a LAN segment to a constrained set of WAN interfaces. In some circumstances, DNS queries by hosts connected to the router would fail.

Resolved an issue where captive portal authentication information was lost following an upgrade to AirLink OS 4.1.

Resolved an issue where a GRE tunnel with a [or] character in the name would fail to migrate following an upgrade to AirLink OS 4.1.

Wi-Fi

Resolved an issue where a Wi-Fi SSID containing a [or] character would fail to be preserved following an upgrade to AirLink OS 4.1, causing loss of Wi-Fi connectivity to any SSID with the affected characters.

Resolved an issue where an upgrade from AirLink OS 4.0 to 4.1 reset any manually configured Wi-Fi SSID priorities to their default values.

User Accounts

Resolved issues where access to the configuration WebUI using LDAP, RADIUS, or TACACS+ authentication failed after upgrading the router to AirLink OS 4.1.

Known Issue

Cellular

There is a known issue in AirLink OS where Preferred Technology on the cellular interface may be modified on upgrade from 4.0.23 to 4.1.33, but only if multi APN had previously been configured on the router.

The issue will not occur if each APN in the multi APN list has the same Preferred Technology as the manual (or Auto) APN.

Upon upgrade, the Preferred Technology will be set to the common value of the multi APN list if the value is the same, or to Auto if the values differ. Changing the configuration to use the desired preferred technology will correct this.

If the Preferred Technology is set to Auto by the upgrade, the router will connect to the network after rebooting using the previous Preferred Technology, but may move to another technology if instructed to do so by the network.

Upgrade Notes

Semtech has tested and validated upgrading to AirLink OS 4.1.33 from the following release:

- 4.0.23

Warning: Downgrade from AirLink OS 4.1.33 to an earlier build is not supported. The Software Image Management features (Admin > Software Image Management), including "Switch to backup image", are disabled (and will be re-enabled in future releases). Please contact Semtech for further guidance if you need to downgrade.

Warning: Your routers must have AirLink OS 4.0 installed before they can be upgraded to AirLink OS 4.1.33. Direct upgrade to AirLink OS 4.1.33 from AirLink OS 3.1 and earlier is not supported.

Upgrade Path Matrix

If the router is running AirLink OS version...	Upgrade to...	Notes
2.0.49 2.0.52	3.0.35	Upgrading directly from 2.0.49/2.0.52 to 3.1.26 or 4.0 will fail, resulting in radio module failure and WAN disconnection.
2.1.30	3.1.26	Downgrading from 3.0 to 2.1 is not supported.
3.0.35 3.1.24 3.1.26	4.0.23	
4.0.23	4.1.33	Downgrading from AirLink OS 4.1 to an earlier build is not supported.

Semtech 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 AirLink OS release with the planned operation workflow 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: If the AirLink OS upgrade includes an LPWA radio module firmware update, the module update may take five minutes.