



# Firmware Release Notes

Cisco Ultra Reliable Wireless Backhaul (formerly Fluidmesh) gateways and radio transceivers

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## Applicability

These firmware release notes are applicable to all Cisco Ultra Reliable Wireless Backhaul gateway and radio transceiver devices.

This document contains important change information regarding the most current device firmware versions on all devices. These are as follows:

- FM1000 Gateway (1.5.0)
- FM10000 Gateway (Gen. 1) (1.5.0)
- FM10000 Gateway (Gen. 2) (2.2.0)
- FM Ponte 50 (1.2.6)
- FM1200 Volo (7.8.0)
- All FM3200-series and FM4200-series radio transceivers (8.5.0)
- FM3500 Endo and all 4500-series radio transceivers (9.3.0)

## Firmware changelog

The following device-specific changes were introduced for the firmware versions mentioned in this document:

- RADIUS TLS support was added, with security certificate uploads through WebUI and TFTP (CLI only).
- CLI: *mpls arp-limit* command added.
- A new packet fragmenter was added.
- The Offline Configurator interface received an updated PHP version with long-term security support.
- Support for advanced Rate Controller options was added.
- The user-interface country code list was arranged in alphabetical order.
- Fixed antenna gain was added for FM1200 Volo and FM Ponte 50 devices.
- The country code list was updated for EIRP management.
- The firmware upgrade procedure was improved for FM1000 and FM10000 Gateway devices.
- CLI: output from the *show-running-config* command was improved.
- LDP: multicast flow was optimized.

- The *txpower* setting in AUTO mode has been improved (for Europe, the system now imposes limits according to frequency and country code).
- FMQuadro enable/disable performance checks for each KPI: LER, PER, RSSI.
- FMQuadro: response times have been improved.
- PROFINET and QNET traffic on layer 2 can be enabled or disabled (discarded) according to configuration parameters (FM1k and FM10k, already available for other product lines in past releases).
- SNMP traps are now sent for failed offline Configurator interface login attempts (FM1k and FM10k, already available for other product lines in past releases).
- A feature was added to increase the eth MTU to up to 2000 bytes, and a relevant CLI command was added to set the MTU size.
- Support was added for applets (user-defined, small CLI code portions that can be executed upon coloring triggers).
- Cisco rebranding was applied to the offline Configurator interface, CLI and FMQuadro.
- CLI: multicast management support has been added.
- CLI: User-prerogative enablement and disablement of interfaces has been added (for FM1k and FM10k ONLY).
- CLI: Plug-in management (activation/deactivation) has been added.
- CLI: Username/password management has been added.
- CLI: A configurable session timeout feature has been added.
- CLI: A *country* command has been added to manage the country code change
- RADIUS: Support for the filtering of RADIUS traffic during authentication has been added.
- CLI: Refactoring of ethernet/SFP commands has been added, with ethernet/sfp, mtu and speed commands grouped into a single command.
- Outdated Fluidmesh Wi-Fi AP support has been removed.

## Bug fix changelog

The following bug fixes were introduced for the firmware versions mentioned in this document:

- LDP: All routes are sent if the node is GGW in Topology.
- A plug-in issue was fixed.
- Several telemetry issues were fixed.
- CLI: An issue was fixed in which incorrect WLAN telemetry throughput would be shown if the device was in Bridge mode.
- An issue with temporary route loss between mobile primary and secondary radios was fixed.
- An issue with action/ack packets being sent after radar detection was fixed.
- An issue with TFTP upgrades from a Windows TFTP server was fixed (FM1000 and FM10000 only).
- A Fluidity scanning bug was fixed.
- An issue with DNS configuration handling in Provisioning mode was fixed.

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### Bug fix changelog

- A bug was fixed in L3 multicast route management, involving faulty vehicle connection to the primary mesh-end of a cluster.
- LDP: A race condition between LSP replacement and node reboot was fixed, in cases where routes flap multiple times in the same manner as large, daisy-chained topologies.
- Configurator interface: An issue with the *manage plugins* page not showing/clearing plugin logs was fixed.
- Configurator interface: An issue with static route setup, in which the live static route was not set, or was deleted, was fixed.

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