Release Notes for Cisco Ultra Reliable Wireless Backhaul on Catalyst IW Access Points, Release 17.12.1

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Introduction to Unified Industrial Wireless Software

The Cisco Unified Industrial Wireless (UIW) software image is supported on specific Catalyst Industrial Wireless Access Points. IoT and industrial use cases are intended for this image. It has specific features and fast boot times. This software image is also called the “k9c1” feature set.

The Cisco Unified Industrial Wireless (UIW) software can operate in two modes of operation:

- Ultra-Reliable Wireless Backhaul (URWB): URWB support provides ultra-reliable wireless connectivity for fixed and mobile use cases.
- Workgroup Bridge (WGB): WGB functions as a wireless device to connect one or more wire-connected devices to a Catalyst wireless network. This mode also support Universal Workgroup Bridge (uWGB) that can connect one wired device to any WiFi network.

This Release Note primarily provides information about the URWB mode of operation. For more details about Workgroup Bridge (WGB), check the Release Notes for Cisco Catalyst 9800 Series Wireless Controller, Cisco IOS XE Dublin 17.12.x.

Note Cisco recommends as best practice to upgrade the latest firmware version to use the Cisco URWB software features.

What's New in Ultra-Reliable Wireless Backhaul on Catalyst IW Access Points, Release 17.12.1

The following features are introduced in Unified Industrial Wireless (UIW) release 17.12.1 and are applicable to Cisco Catalyst IW9167E, IW9165E, and IW9165D Heavy Duty Access Points:

Supporting Functionalities for IW9165E and IW9165D Platform:

- Catalyst IW9165E is a rugged IP30-rated Access Point with external antenna connectors. It supports dual-radio 2x2 5 GHz operation and hardware ready for 6GHz operation.
- Catalyst IW9165D is a heavy-duty IP67-rated Access Point with a internal direction antenna and external antennas connectors. It supports 2x2 5 Ghz operation on the internal direction antenna. The external antenna connectors support 2x2 5 GHz operation and is hardware ready for 6GHz.

New Features that Support all Platforms:

- The Layer-2 mesh transparency feature allows forwarding non-IPv4 Layer 2 protocols across the URWB network by selectively filtering which ether types are permitted. Using the CLI or Web UI, you can add and remove ether types to configure or enable all layer-2 protocols and access the allow list.
- Multipath Operation (MPO): MPO enhances reliability by sending duplicate copies of packets across multiple wireless paths and configure only using CLI.
- Ability to enable and disable specific wired interfaces (wired0, wired1) and configure only using CLI.
- Ability to change MTU (Maximum Transmission Unit) value for wired interfaces to prevent packet fragmentation and configure only using CLI.
- Supports IW Monitor dashboard with attach and detach functions and configure using CLI and Web UI.
- Introduces Cisco URWB telemetry protocol and configure only using CLI.
- Supports smart license for the Catalyst IW9165 and IW9167 platforms and configure using CLI and Web UI.

Software Matrix

The following table provides software matrix information:

Unified Industrial Wireless Software Release	Access Point Image Version Number	Supported Access Points
17.12.1	17.12.1.5	Catalyst IW9167E Heavy Duty Access Point Catalyst IW9165E Heavy Duty Access Point Catalyst IW9165D Heavy Duty Access Point

Note The Cisco URWB feature is part of the Unified Industrial Wireless software image.

Supported Software and Hardware

The Catalyst IW9167E and IW9165 Heavy Duty Access Point supports following software and hardware:

Access Point Model	Unified Industrial Wireless Image	Supported Hardware
Catalyst IW9165	ap1g6m-k9c1	IW9165E-x IW9165D-x
Catalyst IW9167E	ap1g6j-k9c1	IW9167EH-x

Note The Cisco URWB feature is part of the Unified Industrial Wireless software image.

Caveats

Caveats describe unexpected behavior in Cisco releases in a product. Caveats that are listed as Open in a prior release are carried forward to the next release as either Open or Resolved.

Cisco Bug Search Tool

The Cisco Bug Search Tool allows partners and customers to search for software bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. The BST is designed to improve the effectiveness in network risk management and device troubleshooting. The tool has a provision to filter bugs based on credentials to provide external and internal bug views for the search input. To view the details of a caveat, click the corresponding identifier.

Open Caveats

To know more information about the open caveats, see Cisco Bug Search Tool for Open Caveats.

Resolved Caveats

To know more information about the resolved caveats, see Cisco Bug Search Tool for Resolved Caveats.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, refer to https://www.cisco.com/c/en/us/support/index.html

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