

# Collect diagnostics on Industrial Wireless (IW) 9167 in CURWB mode

## Contents

## Introduction

This document describes the steps need to collect diagnostic files on the IW 9167. The Cisco® Catalyst® IW9167 Series provides reliable wireless connectivity for mission-critical applications in a state-of-the-art platform. It can operate in Wi-Fi 6, Workgroup Bridge (WGB), or Cisco Ultra-Reliable Wireless Backhaul (Cisco URWB) mode.

## Collecting log files

Login to the web UI of the FM device by accessing <https://<IP-address>>

## Fixed Infrastructure:

1. Diagnostics files for all radios

Login to the web UI of the FM device, click the **status** link under MANAGEMENTSETTINGS in the left-hand settings menu, and then click download diagnostics

#### ADVANCED SETTINGS

- advanced radio settings
- static routes
- allowlist / blocklist
- snmp
- radius
- ntp
- l2tp configuration
- vlan settings
- Fluidity
- misc settings

#### MANAGEMENT SETTINGS

- remote access
- status
- reboot
- logout

Channel: 36  
Channel Width: 80 MHz  
Current tx power: 10 dBm  
Current tx power level: 1  
Antenna gain: not selected  
Antenna number: 2  
Radio Mode: csma/ca  
Maximum link length: 3 km

#### Radio 2

Interface: disabled  
Mode: fixed infrastructure  
Frequency: 5180 MHz  
Channel: 36  
Channel Width: 80 MHz  
Current tx power: 10 dBm  
Current tx power level: 1  
Antenna gain: not selected  
Antenna number: 2  
Radio Mode: csma/ca  
Maximum link length: 3 km

#### DIAGNOSTIC TOOL

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2. Traffic Capture on the connected port on each radio (using Wireshark/tcpdump) (not mandatory, needed depending on the issue)

#### Fluidity:

1. Diagnostics files for all radios (mandatory)

Login to the web UI of the FM device, click the **status** link under MANAGEMENTSETTINGS in the left-hand settings menu and then click download diagnostics as

2. Fluidstats captures when the problem is occurring (if needed)

- a. Open the Fluidstats app
- b. SSH to the mobile radio in question and issue the command below:

fluidity monitor <destination IP address> <destination UDP port>

- c. Click "start capture", stop when it finishes, and click to save the pcap file

### 3. Download the analytical graph

Navigate to data analysis, specify the timeframe, put the mesh ID/IP of the radio in question, and click confirm. Export all the data.

4. Traffic Capture on the connected port on each radio (using Wireshark/tcpdump) (not mandatory, needed in very special cases)

### LED Pattern definition for CURWB mode

AP State	LED State
General warning; insufficient inline power	Cycling through Red, Green, Amber
Limbo (Provisioning) mode: Fallback	Chirping Amber
Limbo (Provisioning) mode: DHCP	Amber
SNR Excellent ( $\geq 25$ )	Blinking Green
SNR Good ( $15 \leq x < 25$ )	Fade-in Green
SNR BAD ( $10 \leq x < 15$ )	Fade-in Amber
SNR Unbearable ( $< 10$ )	Fade-in Red

Including the LED state information as relevant to the problem at hand would be beneficial.

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