

Integrated Packet Capture in CBW

Objective

The objective of this article is to go over the new Packet Capture feature in Cisco Business Wireless 140/240 series in firmware version 10.8.1.0 and later.

Applicable Devices | Software Version

CBW140 | 10.8.1.0 ([Download latest](#))

CBW145 | 10.8.1.0 ([Download latest](#))

CBW240 | 10.8.1.0 ([Download latest](#))

Introduction

In CBW firmware version 10.8.1.0, an integrated Packet Capture feature has been added for enhanced troubleshooting functionality or performance optimization.

The Packet Capture feature enables capturing and storing TCP, UDP, or all IP traffic going through an ethernet interface on the access point (AP) or mesh extender (ME). It will capture the file as a standard PCAP file that you can download and analyze in [Wireshark](#) or some other network protocol analyzer. Due to limited space on the AP and ME, Packet Captures are limited to 5 MB.

It is also important to note that you can only have one packet capture running at any given time.

Access Packet Capture

To access the packet capture function:

Step 1

Login to your CBW AP.

Cisco Business Wireless Access Point

Welcome! Please click the login button to enter your user name and password



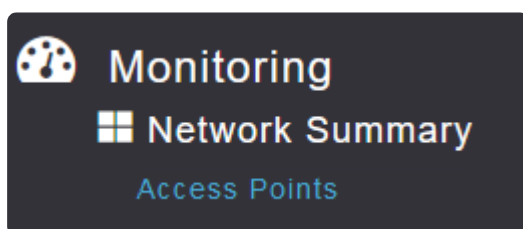
Step 2

Go to Expert View by clicking the **bi-directional arrow** on the top of the screen.



Step 3

Navigate to **Monitoring** > **Network Summary** > **Access Points** menu.








Step 4

Select the AP or ME that you want to capture data on by clicking on it.

Access Points

2.4GHz 5GHz

AP Name	Role	Type
CBW140-1		Primary AP
CBW140-2		Primary Capa...
cbw240		Primary Capa...
CBW145		Primary Capa...
CBW141		Mesh Extender

Step 5

Click on **Packet Capture** tab near the bottom of the screen.

CBW140-1 DETAILS

CLIENTS

RF TROUBLESHOOT

SPECTRUM INTELLIGENCE

Note:

If you do not see a Packet Capture option, you are either still in the Basic view or you are on a CBW142ACM that does not support Packet Capture as it does not have ethernet ports.

Step 6

Configure the *Protocol* that you want to capture. The options are:

- IP
- TCP
- UDP

CBW140-1 DETAILS

CLIENTS

RF TROUBLESHOOT

SPECTRUM INTELLIGENCE

The screenshot shows the configuration interface for CBW140-1. It has three tabs: CLIENTS, RF TROUBLESHOOT, and SPECTRUM INTELLIGENCE. The main configuration area contains the following settings:

- Interface:** Wired [?] Primary AP [?]
- Wired Interface:** 0
- Protocol:** IP TCP UDP

Below the settings are three buttons: Start, Stop, and Download.

Note:

Interface and *Wired Interface* settings are not configurable on a non-primary AP with only one interface.

Step 7

On multi-interface devices like the CBW240 (top Image), CBW 141ACM (middle Image), or CBW145 (bottom image) in addition to selecting the *Protocol*, you can choose the ethernet port to be captured.

• Ethernet 0 will always be the Uplink port connecting to the wired network; all other ports are the bridge ports.

• On the CBW141ACM, all ports are bridge ports.

CBW240 DETAILS

CLIENTS

RF TROUBLESHOOT

SPECTRUM INTELLIGENCE

TOOLS

Interface

Wired [?]

Wired Interface

0 1

Protocol

IP TCP UDP

Start

Stop

Download

CBW141

CLIENTS

RF TROUBLESHOOT

SPECTRUM INTELLIGENCE

TOOLS

Interface

Wired [?]

Wired Interface

0 [?] 1 2 3

Protocol

IP TCP UDP

Start

Stop

Download

CBW145

CLIENTS

RF TROUBLESHOOT

SPECTRUM INTELLIGENCE

TOOLS

Interface

Wired [?]

Wired Interface

0 1 2 3

Protocol

IP TCP UDP

Start

Stop

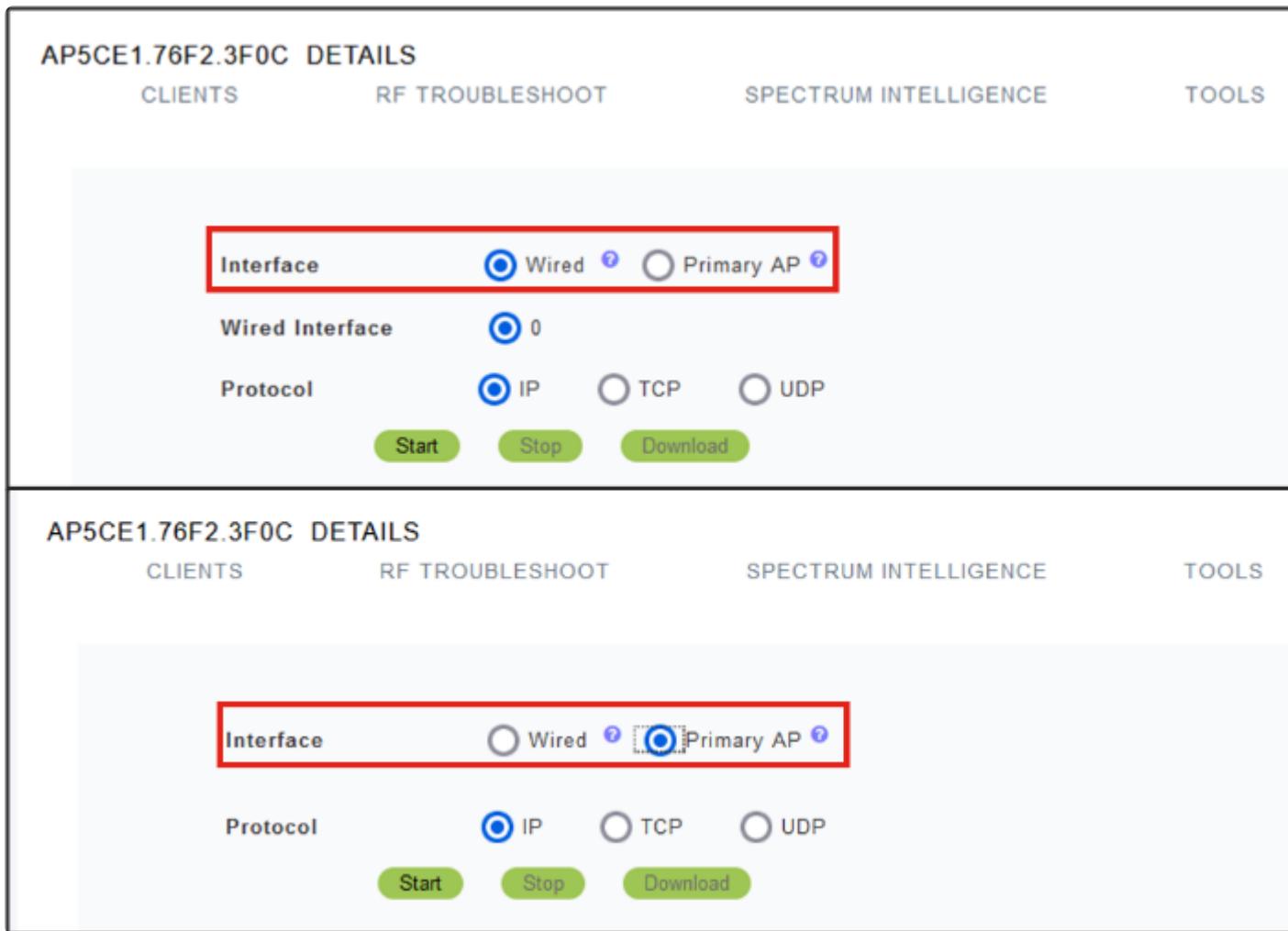
Download

Note:

You cannot configure packet captures on the pass-through port on CBW145.

Step 8

On the Primary AP, you can either capture wired traffic going through the ethernet port or you can capture traffic going to and from the Primary AP itself. This could be useful for capturing and troubleshooting internal CBW communications.



Step 9

To perform the capture, click the **Start** button.

CBW140-1 DETAILS

CLIENTS

RF TROUBLESHOOT

SPECTRUM

Interface Wired [?] Primary AP [?]

Wired Interface 0

Protocol IP TCP UDP

Start Stop Download

You will see the **Packet Capture In progress** notification on the screen.

Packet Capture In

Interface Wired [?] Primary AP [?]

Wired Interface 0

Protocol IP TCP UDP

Start Stop Download

Step 10

It will then capture traffic until you either click *Stop* the capture or it fills the buffer. When the capture stops, it will then prepare the file and transfer it to the Primary AP role via a background TFTP process.

Packet Capture Stopped. Please wait until the

Interface Wired [?] Primary AP [?]

Wired Interface 0

Protocol IP TCP UDP

Step 11

Once the capture file is ready, click **Download**.

Capture File is ready to

Interface Wired [?] Primary AP [?]

Wired Interface 0

Protocol IP TCP UDP

Note:

The file is deleted after it is downloaded. The capture file is also deleted if the Primary AP is rebooted before the file is downloaded.

Conclusion

You did it! You have successfully performed Packet Capture on your CBW access point.

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