

Cisco Catalyst Center Assurance Wi-Fi 6 Dashboard

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Cisco Catalyst Center Assurance Wi-Fi 6 Dashboard



Note We recommend you manage this feature using the Cisco Catalyst Center UI. The procedures are to be executed with for debugging purposes only.

The Cisco Catalyst Center Assurance Wi-Fi 6 Dashboard provides a visual representation of your wireless network. The dashboard contains various dashlets which show you the Wi-Fi 6 Readiness, and the efficiency of the Wi-Fi 6 networks compared to non-Wi-Fi 6 networks. For more information, see the **Monitor Wi-Fi** 6 **Readiness** section in the Cisco DNA Assurance User Guide.

- Client Distribution by Capability: This dashlet shows all the clients associated and their capability in the wireless network. The inner circle shows the wireless protocol capabilities of all the different clients in the network. Capability here is the ability of wireless clients to associate with Wi-Fi 6 APs or non-Wi-fi 6 APs. The outer arc segment shows how many 802.11ax capable clients are joined to a Wi-Fi 6 network as well as how many of them are not.
- Wi-Fi 6 Network Readiness: This dashlet shows all the APs in the network. The inner circle shows the APs which are Wi-Fi 6 APs and non Wi-Fi 6 APs. The outer arc segment shows the number of Wi-Fi 6 enabled AP in the network.
- AP Distribution by Protocol: This dashlet shows the protocols enabled on your APs in real time.
- Wireless Airtime Efficiency: This dashlet compares and displays the Airtime Efficiency between your Wi-Fi 6 network and Non-Wi-Fi 6 network for each of the access categories (voice, video, best effort, background).

The spectrum is efficiently utilized if the AP's radios can send more traffic (successful bytes transmitted to the client) in less airtime (microseconds) than other networks under similar RF conditions.

• Wireless Latency by Client Count: This Dashlet compares the Wireless Latency between your Wi-Fi 6 and Non-Wi-Fi 6 Network for each of the access categories (voice, video, best effort, background).

Wireless latency is measured by the time (microseconds) it takes for a packet to be successfully transmitted from an AP to the client. Hence, AP radios with a higher client count generally have higher latency than compared to those with a lower client count under similar RF conditions.



Note

Client count in this dashlet refers to the clients that are actively sending traffic for a given Access Category and are not just associated clients.

Configuring Cisco Catalyst Center Assurance Wi-Fi 6 Dashboard Parameters (CLI)

Procedure

	Command or Action	Purpose
Step 1	<pre>configure terminal Example: Device# configure terminal</pre>	Enters global configuration mode.
Step 2	<pre>ap profile profile-name Example: Device(config)# ap profile pp-1</pre>	Enables configuration for all the APs that are associated with the specified AP profile name.
Step 3	<pre>statistics traffic-distribution Example: Device (config-ap-profile) #statistics traffic-distribution</pre>	Enables traffic distribution feature with the specified AP profile.
Step 4	<pre>statistics traffic-distribution interval interval-secs Example: Device (config-ap-profile) #statistics traffic-distribution interval 300</pre>	 Configures the interval at which the AP sends the traffic distribution statistics. Default value is 300 seconds. Valid range is between 30 and 3600 seconds. Note Execute this command only with the assistance from Cisco Technical Assistance Center (TAC) support engineer.
Step 5	end Example: Device(config-ap-profile)#exit	Returns to privileged EXEC mode.

	Command or Action	Purpose
Step 6	<pre>show wireless stats ap name ap-name traffic-distribution slot slot-id packet-count signal {average good poor } [last-received] Example:</pre>	Displays traffic distribution data by signal strength, if received from the AP in the latest statistics update interval. Use last-received keyword to view the statistics received in any statistics update interval from the AP.
	Device#show wireless stats ap name ff123a traffic-distribution slot 1 packet-count signal good	
Step 7	<pre>show wireless stats ap name ap-name traffic-distribution slot slot-id airtime access-category {background best-effort video voice} [last-received] Example: Device#show wireless stats ap name ff123a traffic-distribution slot 1 airtime access-category best-effort</pre>	Displays the Airtime efficiency data based on access category, if received from the AP in the latest statistics update interval. Use last-received keyword to view the statistics received in any statistics update interval from the AP.
Step 8	<pre>show wireless stats ap name ap-name traffic-distribution slot slot-id airtime traffic-type {legacy mu ofdma su } [last-received] Example: Device#show wireless stats ap name ff123a traffic-distribution slot 1 traffic-type ofdma</pre>	Displays the Airtime efficiency data based on traffic type, if received from the AP in the latest statistics update interval. Use last-received keyword to view the statistics received in any statistics update interval from the AP.
Step 9	<pre>show wireless stats ap name ap-name traffic-distribution slot slot-id latency access-category { background best-effort video voice } [last-received] Example: Device#show wireless stats ap name ff123a traffic-distribution slot 1 latency access-category best-effort</pre>	Displays wireless latency data based on access category, if received from the AP in the latest statistics update interval. Use last-received keyword to view the statistics received in any statistics update interval from the AP.

Verifying AP DFS Counters (CLI)

Procedure

• To verify the DFS counter for the selected radio band, use the following command:

```
show ap auto-rf dot11 {24ghz | 5ghz | dual-band } ]
```

Example:

- Device#show ap auto-rf dot11 dual-band
- To verify the DFS counter for the selected radio band of a specific AP, use the following command:

show ap name *ap-name* auto-rf dot11 {24ghz | dual-band }

Example:

Device#show ap name ff32a auto-rf dot11 dual-band

• To verify the DFS counter for the selected 5-GHz slot of a specific AP, use the following command:

show ap name ap-name auto-rf dot11 5ghz slot slot-id

Example:

Device#show ap name ff32a auto-rf dot11 5ghz slot 1

Verifying Wi-Fi 6 Access Point Parameters

Enter these commands in the AP console.

- To verify the traffic distribution statistics configuration, use the following command: **show ap traffic distribution configuration**
- To verify the exported data from the AP to the controller, use the following command: show interfaces dot11Radio *slot-id* traffic distribution {cumulative | instantaneous | periodic} database
- To verify Access Point DFS counters, use the following command: show interfaces dot11radio slot-iddfs
- To debug the traffic distribution statistics, use the following command: {no} debug traffic wireless distribution dump {periodic | aggregated}
- To clear the traffic distribution dump, use the following command: clear traffic distribution dump