

Cisco Wi-Fi Interface Module (WIM)

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Cisco Wi-Fi Interface Module (WIM) Overview

This chapter of the configuration guide has been turned into a stand-alone book called Cisco Wi-Fi Interface Module (WIM) Configuration Guide to provide more details on the configuration of the WIM.

Cisco IoT Operations Dashboard (OD) Support to Configure and Manage the WP-WIFI6-x Module

Cisco IOS XE release 17.11.1a provides additional capabilities to the Cisco Wi-Fi Interface Module (WIM).

This section contains the following:

WIM firmware upgrades

A WiFi6 Interface Module (WIM) firmware upgrade is a process that:

- Automates the transfer of firmware images from a router's local flash to the WiFi6 Interface Module (WIM).
- Ensures the WiFi6 module remains consistently up to date through seamless integration with the Cisco SD-WAN controller.
- Simplifies ongoing maintenance for network operators.

You can enable seamless WIM firmware upgrades through the Cisco SD-WAN controller by automating image transfers from the router's local flash. This enhancement streamlines maintenance and ensures the WiFi6 module is always current.

Key enhancements

To facilitate the firmware upgrade process these key enhancements are added:

- VLAN 2371 is now reserved exclusively for WIM management traffic. This VLAN handles the secure transfer of firmware images from the IR1800 to the WIM.
- A new VRF named `wifi6-mgmt-vrf` has been added. The Vlan2371 interface is assigned to this VRF to isolate management traffic from standard data traffic.
- A new Switch Virtual Interface (SVI) for VLAN 2371 is created with a dedicated management IP address within the `192.168.3.1` range to communicate with the module.
- The WIM management IP address is 192.168.3.4
- The interface Wlan-GigabitEthernet0/1/4 is now configured in Trunk Mode. VLAN 2371 is automatically allowed on this trunk to ensure management connectivity.
- An internal TFTP server is automatically enabled on the IR1800, pointing to the firmware image stored in the local flash for the WIM to retrieve.
- You need to add the data traffic vlans to the allowed vlan list in Wlan-GigabitEthernet0/1/4.

List of WIM firmware upgrade commands

These commands are used for upgrading the WIM firmware on the Cisco Catalyst IR1800 Rugged Series Router.

```
vrf definition wifi6-mgmt-vrf

interface Wlan-GigabitEthernet0/1/4
 switchport mode trunk

interface Vlan2371
 vrf forwarding wifi6-mgmt-vrf
 ip address 192.168.3.1 255.255.255.240

tftp-server bootflash:WIM-FW-IMAGES/ap1g8t-wim-image-tar
```

Note

- **vrf definition** *vrf -name* is used for creating VRF. It creates a Virtual Routing and Forwarding (VRF) instance named `wifi6-mgmt-vrf`. This is used to segment network traffic, ensuring that the management traffic for your Wi-Fi 6 environment is isolated from other network traffic. WIM management traffic is forwarded on `Vlan 2371`.
- **interface** *interface-name* is used for assigning an interface to VRF.
- **tftp-server bootflash:** *file-name* is used for configuring the router to act as a TFTP server, pointing to a specific firmware image.