



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 Wi-Fi6 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/aplg8t-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.