

Release Notes for Cisco 8010 Series Routers, IOS XR Release 25.1.1

First Published: 2025-03-27

Cisco 8010 Series Routers

What's New in Cisco IOS XR 25.1.1

Cisco 8010 Series Routers are based on the new Cisco A100 ASIC. Cisco Silicon One enables a single silicon architecture that spans a massive portion of the networking market. The router can be positioned as CSG (Cell Site Gateway) or pre-aggregation router

The Cisco 8010 Series Routers offer versatile ethernet interface options ranging from 1G, 25G to 100G that are capable of Class C timing. The router hardware is capable of IPSEC encryption for data and future software releases are planned to support IPSEC encryption. It's powered by the industry-leading carrier-class version of Cisco IOS XR software.

This release introduces the 8011-4G24Y4H-I Large Density Router as part of the new Cisco 8010 Series Routers family. It's a temperature-hardened, fixed port, 1 rack unit form-factor router. It supports the following network interfaces:

- 4 x 1G Copper ports
- 24 x 1/10/25G SFP28 ports
- 4 x 100G QSFP28 ports

The router supports the following Timing Interfaces Card (TIC):

- Cisco 8010 Timing Interfaces Card (8000-TIC)
- Cisco 8010 Timing Interfaces Card with GNSS (8000-TIC-GNSS)

The TIC is modular. By default, the router comes with 8000-TIC. As an option, you can choose the 8000-TIC-GNSS, while ordering the router.

For more information about the router features and benefits, see the [Cisco 8010 Series Large Density Fixed Routers Datasheet](#).

Supported Software Features

The 8011-4G24Y4H-I Large Density Router supports many features provided by Cisco's trustworthy IOS XR operating system. .

Following is an exclusive feature developed for the 8011-4G24Y4H-I Large Density Router in this release:

Feature	Description
Dying Gasp for Loss of Power via SNMP	You can configure the SNMP agent to generate IPv4 and IPv6 SNMP traps when the router triggers a message to the Network Management System (NMS) that a node is going down. Such a message, known as a dying gasp event, is sent when a power failure occurs or the input power source is disconnected. Dying Gasp is supported for both AC and DC PSU.

Cisco 8010 Series Routers Support the Following Technologies

Technology	Guide
Telemetry	Telemetry Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
Timing and Synchronization	Timing and Synchronization Configuration Guide for Cisco 8000 Series Routers, Cisco IOS XR Releases
Programmability	Programmability Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
Routing	Routing Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
Segment Routing	Segment Routing Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
BGP	BGP Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
Interface and Hardware	Interface and Hardware Component Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
IP Addresses	IP Addresses and Services Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
L2VPN	L2VPN Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
L3VPN	L3VPN Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
EVPN	EVPN Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
MPLS	MPLS Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
QoS	Modular QoS Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
Netflow	NetFlow and sFlow Configuration on Cisco 8000 Series Routers, Cisco IOS XR Releases

Technology	Guide
Multicast	Multicast Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.1
System Security	System Security Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
System Management	System Management Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x
System Monitoring	System Monitoring Configuration Guide for Cisco 8000 Series Routers, IOS XR Release 25.1.x

Release 25.1.1 Packages

The Cisco IOS XR software is composed of a base image (ISO) that provides the XR infrastructure. The ISO image is made up of a set of packages (also called RPMs). These packages are of three types:

- A mandatory package that is included in the ISO
- An optional package that is included in the ISO
- An optional package that is not included in the ISO

Visit the [Cisco Software Download](#) page to download the Cisco IOS XR software images.

To determine the Cisco IOS XR Software packages installed on your router, log in to the router and enter the **show install active** command:

```
RP/0/RP0/CPU0:TB8#show install active
```

```
Fri Mar 28 10:20:27.145 UTC
```

```
XR Software Hash: ef0af09bf2346e71384b87c8c23f15f1c2401011406fd9791bec5ccf305b3d23
```

```

Xr Package                                     Version
-----
xr-8000-af-ea                                25.1.1v1.0.0-1
xr-8000-aib                                  25.1.1v1.0.0-1
xr-8000-bfd                                  25.1.1v1.0.0-1
xr-8000-buffhdr-ea                           25.1.1v1.0.0-1
xr-8000-bundles                              25.1.1v1.0.0-1
xr-8000-card-support                         25.1.1v1.0.0-1
xr-8000-cdp-ea                               25.1.1v1.0.0-1
xr-8000-cem-driver                           25.1.1v1.0.0-1
xr-8000-cfm                                  25.1.1v1.0.0-1
xr-8000-common-otn                           25.1.1v1.0.0-1
xr-8000-core                                 25.1.1v1.0.0-1
xr-8000-cpa                                  25.1.1v1.0.0-1
xr-8000-cpa-devobj-gnss                      25.1.1v1.0.0-1
xr-8000-cpa-devobj-misc                      25.1.1v1.0.0-1
xr-8000-cpa-driver-fpgalib-kmod-oe           25.1.1v1.0.0-1
xr-8000-cpa-npu                              25.1.1v1.0.0-1
xr-8000-cpa-sb-data                          25.1.1v1.0.0-1
xr-8000-dot1x                                25.1.1v1.0.0-1
xr-8000-dsm                                  25.1.1v1.0.0-1
xr-8000-dyinggasp-pd                         25.1.1v1.0.0-1

```

xr-8000-edpl	25.1.1v1.0.0-1
xr-8000-encap-id	25.1.1v1.0.0-1
xr-8000-ether-ea	25.1.1v1.0.0-1
xr-8000-fabric	25.1.1v1.0.0-1
xr-8000-feat-mgr	25.1.1v1.0.0-1
xr-8000-fib-ea	25.1.1v1.0.0-1
xr-8000-forwarder	25.1.1v1.0.0-1
xr-8000-fpd	25.1.1v1.0.0-1
xr-8000-fwd-tools	25.1.1v1.0.0-1
xr-8000-fwdlib	25.1.1v1.0.0-1
xr-8000-gil-ea	25.1.1v1.0.0-1
xr-8000-host-core	25.1.1v1.0.0-1
xr-8000-hw-resmon	25.1.1v1.0.0-1
xr-8000-l2fib	25.1.1v1.0.0-1
xr-8000-l2mcast	25.1.1v1.0.0-1
xr-8000-leabaofa	25.1.1v1.0.0-1
xr-8000-libofaasync	25.1.1v1.0.0-1
xr-8000-lpts-ea	25.1.1v1.0.0-1
xr-8000-mcast	25.1.1v1.0.0-1
xr-8000-netflow	25.1.1v1.0.0-1
xr-8000-npu	25.1.1v1.0.0-1
xr-8000-oam	25.1.1v1.0.0-1
xr-8000-optics	25.1.1v1.0.0-1
xr-8000-os-oe	25.1.1v1.0.0-1
xr-8000-os-oe-extra	25.1.1v1.0.0-1
xr-8000-pbr	25.1.1v1.0.0-1
xr-8000-pd-port-mode	25.1.1v1.0.0-1
xr-8000-pfilter	25.1.1v1.0.0-1
xr-8000-pidb	25.1.1v1.0.0-1
xr-8000-pktio	25.1.1v1.0.0-1
xr-8000-ple-sdk	25.1.1v1.0.0-1
xr-8000-pm	25.1.1v1.0.0-1
xr-8000-port-mapper	25.1.1v1.0.0-1
xr-8000-ppinfo	25.1.1v1.0.0-1
xr-8000-pwhe-ea	25.1.1v1.0.0-1
xr-8000-qos-ea	25.1.1v1.0.0-1
xr-8000-ras	25.1.1v1.0.0-1
xr-8000-sat	25.1.1v1.0.0-1
xr-8000-span	25.1.1v1.0.0-1
xr-8000-spio	25.1.1v1.0.0-1
xr-8000-spp-ea	25.1.1v1.0.0-1
xr-8000-timing	25.1.1v1.0.0-1
xr-8000-tunnel-ip	25.1.1v1.0.0-1
xr-8000-utapp-blaze	25.1.1v1.0.0-1
xr-8000-vether	25.1.1v1.0.0-1
xr-8000-ztp-ea	25.1.1v1.0.0-1
xr-aaa	25.1.1v1.0.0-1
xr-acl	25.1.1v1.0.0-1
xr-apphosting	25.1.1v1.0.0-1
xr-appmgr	25.1.1v1.0.0-1
xr-bcdl	25.1.1v1.0.0-1
xr-bfd	25.1.1v1.0.0-1
xr-bgp	25.1.1v1.0.0-1
xr-bgputil	25.1.1v1.0.0-1
xr-bng-stubs	25.1.1v1.0.0-1
xr-bundles	25.1.1v1.0.0-1
xr-cal-pi	25.1.1v1.0.0-1
xr-cds	25.1.1v1.0.0-1
xr-cfgmgr	25.1.1v1.0.0-1
xr-cfm	25.1.1v1.0.0-1
xr-cofo	25.1.1v1.0.0-1
xr-core	25.1.1v1.0.0-1
xr-core-calv	25.1.1v1.0.0-1
xr-cpa-common	25.1.1v1.0.0-1

xr-cpa-common-optics	25.1.1v1.0.0-1
xr-cpa-common-psu	25.1.1v1.0.0-1
xr-cpa-driver-devobj-misc	25.1.1v1.0.0-1
xr-cpa-driver-devobj-npu	25.1.1v1.0.0-1
xr-cpa-driver-devobj-phy	25.1.1v1.0.0-1
xr-cpa-driver-devobj-sensors	25.1.1v1.0.0-1
xr-cpa-driver-devobj-storage	25.1.1v1.0.0-1
xr-cpa-driver-devobj-test	25.1.1v1.0.0-1
xr-cpa-driver-devobj-timing	25.1.1v1.0.0-1
xr-cpa-driver-fpgalib-access	25.1.1v1.0.0-1
xr-cpa-driver-fpgalib-common	25.1.1v1.0.0-1
xr-cpa-driver-fpgalib-infra	25.1.1v1.0.0-1
xr-cpa-driver-fpgalib-misc	25.1.1v1.0.0-1
xr-cpa-driver-fpgalib-optics	25.1.1v1.0.0-1
xr-cpa-driver-optics	25.1.1v1.0.0-1
xr-cpa-ethsw	25.1.1v1.0.0-1
xr-cpa-idprom	25.1.1v1.0.0-1
xr-cpa-tamlib	25.1.1v1.0.0-1
xr-ctc	25.1.1v1.0.0-1
xr-debug	25.1.1v1.0.0-1
xr-dhcp	25.1.1v1.0.0-1
xr-diags	25.1.1v1.0.0-1
xr-diskboot	25.1.1v1.0.0-1
xr-drivers	25.1.1v1.0.0-1
xr-edpl	25.1.1v1.0.0-1
xr-eem	25.1.1v1.0.0-1
xr-elmi-stubs	25.1.1v1.0.0-1
xr-ema	25.1.1v1.0.0-1
xr-enhancedmanageability	25.1.1v1.0.0-1
xr-erp	25.1.1v1.0.0-1
xr-featurecapability	25.1.1v1.0.0-1
xr-fib	25.1.1v1.0.0-1
xr-filesysinv	25.1.1v1.0.0-1
xr-foundation-8000	25.1.1v1.0.0-1
xr-fpd	25.1.1v1.0.0-1
xr-gil	25.1.1v1.0.0-1
xr-ha-infra	25.1.1v1.0.0-1
xr-host-core	25.1.1v1.0.0-1
xr-httpclient	25.1.1v1.0.0-1
xr-icpe-eth	25.1.1v1.0.0-1
xr-icpe-opt	25.1.1v1.0.0-1
xr-identifier	25.1.1v1.0.0-1
xr-infra-sla	25.1.1v1.0.0-1
xr-install	25.1.1v1.0.0-1
xr-ip-apps	25.1.1v1.0.0-1
xr-ip-core	25.1.1v1.0.0-1
xr-ip-infra-vrf	25.1.1v1.0.0-1
xr-ip-mibs	25.1.1v1.0.0-1
xr-ip-static	25.1.1v1.0.0-1
xr-ipc	25.1.1v1.0.0-1
xr-ipsla	25.1.1v1.0.0-1
xr-is-is	25.1.1v1.0.0-1
xr-l2snooptransport	25.1.1v1.0.0-1
xr-l2vpn	25.1.1v1.0.0-1
xr-ldp	25.1.1v1.0.0-1
xr-licensing	25.1.1v1.0.0-1
xr-link-oam	25.1.1v1.0.0-1
xr-linuxnetworking	25.1.1v1.0.0-1
xr-linuxsecurity	25.1.1v1.0.0-1
xr-lldp	25.1.1v1.0.0-1
xr-lpts	25.1.1v1.0.0-1
xr-manageabilityxml	25.1.1v1.0.0-1
xr-mandatory	25.1.1v1.0.0-1
xr-mcast	25.1.1v1.0.0-1

xr-mcastl2snoop	25.1.1v1.0.0-1
xr-mds	25.1.1v1.0.0-1
xr-minimalboot	25.1.1v1.0.0-1
xr-mps	25.1.1v1.0.0-1
xr-mps-oam	25.1.1v1.0.0-1
xr-mps-oam-client	25.1.1v1.0.0-1
xr-mps-static	25.1.1v1.0.0-1
xr-netflow	25.1.1v1.0.0-1
xr-netflow-minimal	25.1.1v1.0.0-1
xr-nosi	25.1.1v1.0.0-1
xr-ntp	25.1.1v1.0.0-1
xr-ofa	25.1.1v1.0.0-1
xr-optics	25.1.1v1.0.0-1
xr-orrspf	25.1.1v1.0.0-1
xr-os-oe-apps	25.1.1v1.0.0-1
xr-os-oe-core	25.1.1v1.0.0-1
xr-os-oe-docker	25.1.1v1.0.0-1
xr-os-oe-hardware	25.1.1v1.0.0-1
xr-ospf	25.1.1v1.0.0-1
xr-p4rt	25.1.1v1.0.0-1
xr-perf-meas	25.1.1v1.0.0-1
xr-perf-meas-client	25.1.1v1.0.0-1
xr-perfmgmt	25.1.1v1.0.0-1
xr-pfi	25.1.1v1.0.0-1
xr-pird-stubs	25.1.1v1.0.0-1
xr-pkt-trace	25.1.1v1.0.0-1
xr-pm-alarm	25.1.1v1.0.0-1
xr-portmode	25.1.1v1.0.0-1
xr-procmgr	25.1.1v1.0.0-1
xr-python	25.1.1v1.0.0-1
xr-qos	25.1.1v1.0.0-1
xr-rid-mgr	25.1.1v1.0.0-1
xr-routing	25.1.1v1.0.0-1
xr-rpl	25.1.1v1.0.0-1
xr-rsvp-te	25.1.1v1.0.0-1
xr-sanitizer-tools	25.1.1v1.0.0-1
xr-security	25.1.1v1.0.0-1
xr-security-tams	25.1.1v1.0.0-1
xr-secy-driver	25.1.1v1.0.0-1
xr-servicelayer	25.1.1v1.0.0-1
xr-snmpp	25.1.1v1.0.0-1
xr-snmpp-hw	25.1.1v1.0.0-1
xr-span	25.1.1v1.0.0-1
xr-spi-core	25.1.1v1.0.0-1
xr-spi-hw	25.1.1v1.0.0-1
xr-spp	25.1.1v1.0.0-1
xr-sr	25.1.1v1.0.0-1
xr-stats	25.1.1v1.0.0-1
xr-stp	25.1.1v1.0.0-1
xr-stubs	25.1.1v1.0.0-1
xr-sysdb	25.1.1v1.0.0-1
xr-syslog	25.1.1v1.0.0-1
xr-telemetry	25.1.1v1.0.0-1
xr-timing	25.1.1v1.0.0-1
xr-tmpdir-cleanup	25.1.1v1.0.0-1
xr-track	25.1.1v1.0.0-1
xr-transport	25.1.1v1.0.0-1
xr-tty	25.1.1v1.0.0-1
xr-tunnel-ip	25.1.1v1.0.0-1
xr-tunnel-nve	25.1.1v1.0.0-1
xr-udld	25.1.1v1.0.0-1
xr-upgradematrix	25.1.1v1.0.0-1
xr-utils	25.1.1v1.0.0-1
xr-vether	25.1.1v1.0.0-1

```

xr-vpnmib                25.1.1v1.0.0-1
xr-xmlinfra              25.1.1v1.0.0-1
xr-xrllibcurl            25.1.1v1.0.0-1
xr-ztp                   25.1.1v1.0.0-1

```

To know about all the RPMs installed including XR, OS, and other components use the **show install active all** command.

The software modularity approach provides a flexible model that allows you to install a subset of IOS XR packages on devices based on your individual requirements. All critical components are modularized as packages so that you can select the features that you want to run on your router.



Note The above show command output displays mandatory packages that are installed on the router. To view the optional and bug fix RPM packages, first install the package and use the **show install active summary** command.

To view the optional and bug fix RPM packages, enter the **show install active summary** command:

```

RP/0/RP0/CPU0:TB8#show install active summary
Fri Mar 28 10:21:05.098 UTC
Active Packages:   XR: 216    All: 1341
Label:             25.1.1
XR Software Hash:  ef0af09bf2346e71384b87c8c23f15f1c2401011406fd9791bec5ccf305b3d23

Optional Packages
-----
xr-8000-l2mcast      25.1.1v1.0.0-1
xr-8000-mcast        25.1.1v1.0.0-1
xr-8000-netflow      25.1.1v1.0.0-1
xr-bgp               25.1.1v1.0.0-1
xr-ipsla             25.1.1v1.0.0-1
xr-is-is             25.1.1v1.0.0-1
xr-lldp              25.1.1v1.0.0-1
xr-mcast             25.1.1v1.0.0-1
xr-mps-oam           25.1.1v1.0.0-1
xr-netflow           25.1.1v1.0.0-1
xr-ospf              25.1.1v1.0.0-1
xr-perf-meas         25.1.1v1.0.0-1
xr-perfmgmt          25.1.1v1.0.0-1
xr-track             25.1.1v1.0.0-1

```

Caveats

Table 1: Cisco 8010 Series Router Specific Bugs

Bug ID	Headline
CSCwn71985	Packets drops are observed after router reload or OIR with ANLT applied on 10G or 25G Cu interfaces.
CSCwo14491	Default AN and AN mismatch scenario for Native Copper Ports (P28-P31) needs to be fixed.

Determine Software Version

Log in to the router and enter the **show version** command:

```
RP/0/RP0/CPU0:TB8#show version
Fri Mar 28 10:19:42.907 UTC
Cisco IOS XR Software, Version 25.1.1 LNT
Copyright (c) 2013-2024 by Cisco Systems, Inc.

Build Information:
  Built By       : cisco
  Built On       : Mon Mar 24 19:58:08 UTC 2025
  Build Host     : iox-ucs-003
  Workspace      : /auto/srcarchive12/prod/25.1.1/8000-aarch64/ws/
  Version        : 25.1.1
  Label          : 25.1.1

cisco 8000 (CN9130H board )
cisco 8011-4G24Y4H-I (CN9130H board ) processor with 16GB of memory
TB8 uptime is 1 hour, 7 minutes
Cisco 8011 Series Fixed 1RU Router 4x100G, 24x1/10/25G, 4xCu
```

Determine Firmware Support

Log in to the router and enter **show fpd package** command:

```
RP/0/RP0/CPU0:TB8#show fpd package
Fri Mar 28 10:22:15.007 UTC

=====
                        Field Programmable Device Package
=====
```

Card Type	FPD Description	Req Reload	SW Ver	Min Req SW Ver	Min Req Board Ver
8011-4G24Y4H-I	ADMConfig	YES	4.01	4.01	0.0
	ADMConfig	YES	5.00	5.00	8.0
	BckUp-BootLoader	YES	52.02	52.02	0.0
	IoFpga	YES	0.84	0.84	0.0
	IoFpgaGolden	YES	0.70	0.70	0.0
	Prim-BootLoader	YES	52.13	52.13	0.0
	StdbbyFpga	YES	1.23	1.23	0.0
	StdbbyFpgaGolden	YES	1.23	1.23	0.0
	TamFw	YES	9.04	9.04	0.0
PWR-400-AC	TamFwGolden	YES	9.04	9.04	0.0
	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	ME-PrimMCU	NO	0.04	0.00	0.0
	ME-SecMCU	NO	0.04	0.00	0.0
	PrimMCU	NO	1.02	1.02	0.0
PWR-400-DC	SecMCU	NO	1.03	1.03	0.0
	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	ME-PrimMCU	NO	0.03	0.00	0.0
	ME-SecMCU	NO	0.04	0.00	0.0


```

PrimMCU          NO      1.03      1.03      0.0
SecMCU           NO      1.03      1.03      0.0

```

```

RP/0/RP0/CPU0:G1-RFC#show fpd package
Thu Mar 27 10:52:45.338 IST

```

Field Programmable Device Package					
Card Type	FPD Description	Req Reload	SW Ver	Min Req SW Ver	Min Req Board Ver
8011-4G24Y4H-I	ADMConfig	YES	4.01	4.01	0.0
	ADMConfig	YES	5.00	5.00	8.0
	BckUp-BootLoader	YES	52.02	52.02	0.0
	IoFpga	YES	0.84	0.84	0.0
	IoFpgaGolden	YES	0.70	0.70	0.0
	Prim-BootLoader	YES	52.13	52.13	0.0
	StdbbyFpga	YES	1.23	1.23	0.0
	StdbbyFpgaGolden	YES	1.23	1.23	0.0
	TamFw	YES	9.04	9.04	0.0
	TamFwGolden	YES	9.04	9.04	0.0
PWR-400-AC	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	ME-PrimMCU	NO	0.04	0.00	0.0
	ME-SecMCU	NO	0.04	0.00	0.0
	PrimMCU	NO	1.02	1.02	0.0
	SecMCU	NO	1.03	1.03	0.0
PWR-400-DC	LI-PrimMCU	NO	0.04	0.04	0.0
	LI-SecMCU	NO	0.06	0.06	0.0
	ME-PrimMCU	NO	0.03	0.00	0.0
	ME-SecMCU	NO	0.04	0.00	0.0
	PrimMCU	NO	1.03	1.03	0.0
	SecMCU	NO	1.03	1.03	0.0

Log in to the router and enter **show hw-module fpd** command:

```

RP/0/RP0/CPU0:TB8#show hw-module fpd
Fri Mar 28 10:21:30.602 UTC

```

Auto-upgrade:Enabled,PM excluded

Attribute codes: B golden, P protect, S secure, A Anti Theft aware

						FPD Version		
Location	Card type	HWver	FPD device	ATR	Status	Running	Programd	Reload Loc
0/RP0/CPU0	8011-4G24Y4H-I	9.0	ADMConfig	S	CURRENT	5.00	5.00	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	IoFpga		CURRENT	0.84	0.84	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	IoFpgaGolden	B	CURRENT		0.70	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	Prim-BootLoader	S	CURRENT	52.13	52.13	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	StdbbyFpga	S	CURRENT	1.23	1.23	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	StdbbyFpgaGolden	BS	CURRENT		1.23	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	TamFw	S	CURRENT	9.04	9.04	0/RP0
0/RP0/CPU0	8011-4G24Y4H-I	9.0	TamFwGolden	BS	CURRENT		9.04	0/RP0
0/PM1	PWR-400-AC	1.0	LI-PrimMCU	S	CURRENT	0.04	0.04	NOT REQ
0/PM1	PWR-400-AC	1.0	LI-SecMCU	S	CURRENT	0.07	0.07	NOT REQ

Compatibility Matrix for EPNM and Crosswork with Cisco IOS XR Software

The compatibility matrix lists the features that are supported for each platform.

Table 2: Compatibility Matrix

Cisco IOS XR	Crosswork	EPNM
Release 25.1.1	Crosswork Optimization Engine 6.0	Evolved Programmable Network Manager 7.1.1

Important Notes

Supported Transceiver Modules

To determine the transceivers that Cisco hardware device supports, refer to the [Transceiver Module Group \(TMG\) Compatibility Matrix](#) tool.

Production Software Maintenance Updates (SMUs)

A production SMU is a SMU that is formally requested, developed, tested, and released. Production SMUs are intended for use in a live network environment and are formally supported by the Cisco TAC and the relevant development teams. Software bugs identified through software recommendations or Bug Search Tools are not a basis for production SMU requests.

For information on production SMU types, refer the [Production SMU Types](#) section of the *IOS XR Software Maintenance Updates (SMUs)* guide.

Cisco IOS XR Error messages

To view, search, compare, and download Cisco IOS XR Error Messages, refer to the [Cisco IOS XR Error messages](#) tool.

Cisco IOS XR MIBs

To determine the MIBs supported by platform and release, refer to the [Cisco IOS XR MIBs](#) tool.

Related Documentation

The most current Cisco router documentation is located at the following URL:

<https://www.cisco.com/c/en/us/td/docs/iosxr/8000-series-routers.html>