



# Upgrading Firmware of the Power Supply Monitoring Device

**Table 1: Feature History**

Feature Name	Release Information	Feature Description
Upgrading Power Supply Monitoring Firmware	Cisco IOS XE Bengaluru 17.6.1	This feature allows you to manually upgrade the firmware of the power supply monitoring device in a router. The firmware upgrade reduces unplanned hardware-related downtime caused by input voltage transients during a power outage.

Starting with Cisco IOS XE Bengaluru 17.6.1, you can manually upgrade the firmware of the power supply monitoring device in a router. The firmware upgrade reduces unplanned hardware-related downtime caused by input voltage transients during a power outage.

- [Supported Platforms, on page 1](#)
- [Restrictions for Upgrading the Firmware , on page 2](#)
- [Upgrading the Firmware Manually, on page 2](#)

## Supported Platforms

**Table 2: Feature History**

Feature Name	Release Information	Description
Support for Firmware Upgrade	Cisco IOS XE Cupertino 17.9.1	This release introduces the firmware upgrade support for ASR 920-10SZ-PD and Cisco ASR-920-24SZ-IM, Cisco ASR-920-24SZ-M, and Cisco ASR-920-24TZ-M routers.

Starting with Cisco IOS XE Cupertino Release 17.9.1, firmware upgrade is supported on the following routers:

- ASR 920-10SZ-PD
- ASR-920-24SZ-IM
- ASR-920-24SZ-M
- ASR-920-24TZ-M

The firmware upgrade reduces unplanned hardware-related downtime caused by input voltage transients during a power outage.

- ASR-920-12CZ-D
- ASR-920-4SZ-D
- ASR-920-12SZ-IM and ASR-920-12SZ-IM-CC using ASR-920-PWR-D power supply

## Restrictions for Upgrading the Firmware

- Automatic firmware upgrade is not supported, you must upgrade it manually.
- For the upgrade to take effect, the router reboots automatically, which results in a service interruption for a few minutes.



**Caution** Ensure that there's a stable power supply during the firmware upgrade. This mitigates any unplanned hardware-related downtime in a router.

## Upgrading the Firmware Manually

To upgrade the firmware, you should perform the following steps:

**Step 1** Execute the **show upgrade hw-programmable** command to display the current firmware version.

**Example:**

```
Router#show upgrade hw-programmable adm 0 firmware-version
Hw-programmable ADM Firmware Versions

version[0]                version[1]                version[2]
-----
0                          1                          0
```

**Step 2** Execute the **upgrade hw-programmable** command to upgrade the firmware.

**Example:**

```
Router#upgrade hw-programmable adm 0
*Jan 27 06:47:45.760: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 f/w upgrade,
*Jan 27 06:47:45.764: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 CONF EEPROM erase,
*Jan 27 06:47:46.312: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 CONF EEPROM program,
*Jan 27 06:47:47.089: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 CONF EEPROM verify,
*Jan 27 06:47:47.546: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 CONF EEPROM verify done,
```

```

*Jan 27 06:47:47.547: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 SE EEPROM erase,
*Jan 27 06:47:48.222: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 SE EEPROM program,
*Jan 27 06:47:49.213: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 SE EEPROM verify,
*Jan 27 06:47:49.714: %IOSXE-3-PLATFORM: F0: cmand: ADM1066 SE EEPROM verify done,
*Jan 27 06:47:49.714: %IOSXE-3-PLATFORM: F0: cmand: ADM Upgrade Completed System Going for Power
Cycle
Router#
System Bootstrap, Version 15.6(43r)S, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 2020 by cisco Systems, Inc.
Compiled Mon 18-May-20 03:16 by pallavik
Starting Initialization of FMAN0
Loading ucode for FMAN0, size: 31424, ver: 106.04.14
Silicon Rev Major:Minor [1:1]
Initializing the pci..
IOFPGA version[2008241e]
Boot ROM1
Last reset cause: PowerOn
UEA platform with 1048576 Kbytes of main memory

```

**Step 3** Execute the **show upgrade hw-programmable** command to verify the upgrade.

**Example:**

```

Router#show upgrade hw-programmable adm 0 firmware-version
Hw-programmable ADM Firmware Versions

```

version[0]	version[1]	version[2]
0	1	1

- Note**
- For Cisco ASR-920-12SZ-IM and ASR-920-12SZ-IM-CC, the current firmware version is 0.1.0 and the upgraded version is 0.1.1.
  - For Cisco ASR-920-12CZ-D and ASR-920-4SZ-D, the current firmware version is 0.0.7 and the upgraded version is 0.1.0.

