



## Configuring Perpetual PoE and Fast POE

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## Restrictions for Perpetual and Fast PoE

The following restrictions apply to perpetual and fast PoE:

- Configuration of Fast PoE or Perpetual PoE has to be done before physically connecting any endpoint. Alternatively do a manual shut/no-shut of the ports drawing power.
- Power to the ports will be interrupted in case of MCU firmware upgrade and ports will be back up immediately after the upgrade.
- The CREE light powered device (PD) may flap at regular intervals if not configured with IP assigned from the DHCP server.
- If the PD does not support LLDP user can configure with either static or 2-event to receive required power as per the PD specification.

## Information About Perpetual PoE

Perpetual PoE provides uninterrupted power to connected powered device even when a power sourcing equipment (PSE) switch is starting after a reload from executing the Cisco IOS software **reload** command.



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**Caution**

Power to the ports will be interrupted in case of M3 or PSE firmware upgrade, and power to the ports will be backed up after Cisco IOS software starts.

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# Fast POE

This feature switches on power without waiting for IOS to boot up. When **poE-ha** is enabled on a particular port, the switch on a recovery after power failure, provides power to the connected endpoint devices within short duration before even the IOS forwarding starts up.

## Configuring Perpetual and Fast PoE

To configure perpetual and Fast PoE, perform the following steps.

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<b>enable</b> <b>Example:</b> Device> <b>enable</b>	Enables privileged EXEC mode. Enter your password, if prompted.
<b>Step 2</b>	<b>configure terminal</b> <b>Example:</b> Device# <b>configure terminal</b>	Enters global configuration mode.
<b>Step 3</b>	<b>interface <i>interface-id</i></b> <b>Example:</b> Device (config)# <b>interface gigabitethernet 2/0/1</b>	Specifies the physical port to be configured, and enters interface configuration mode.
<b>Step 4</b>	<b>power inline port perpetual-poe-ha</b> <b>Example:</b> Device (config-if)# <b>power inline port perpetual-poe-ha</b>	Configures perpetual PoE. When you configure perpetual PoE on a port connected to a powered device, the powered device remains powered on during reload.
<b>Step 5</b>	<b>power inline port poe-ha</b> <b>Example:</b> Device (config-if)# <b>power inline port poe-ha</b>	Configures Fast PoE. When you configure Fast PoE, if the switch is power cycled, PD device powers on within 50-60 seconds of plugging into a power source without waiting for IOS to boot up.
<b>Step 6</b>	<b>end</b> <b>Example:</b> Device (config-if)# <b>end</b>	Returns to privileged EXEC mode.

## Example: Configuring Perpetual and Fast PoE

This example shows how you can configure perpetual PoE on a switch:

```
Device> enable
Device# configure terminal
Device(config)# interface gigabitethernet2/0/1
Device(config-if)# power inline port perpetual-poe-ha
Device(config-if)# end
```

This example shows how you can configure fast PoE on the switch:

```
Device> enable
Device# configure terminal
Device(config)# interface gigabitethernet2/0/1
Device(config-if)# power inline port poe-ha
Device(config-if)# end
```

## Feature History for Perpetual PoE and Fast PoE

This table provides release and related information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

**Table 1: Feature History for Perpetual PoE and Fast PoE**

Releases	Feature	Feature Information
Cisco IOS XE Fuji 16.9.2	Perpetual and Fast PoE	Perpetual PoE provides uninterrupted power to a connected powered device even when the PSE switch is booting.  Fast PoE switches on power without waiting for IOS to boot up.
Cisco IOS XE Cupertino 17.9.1	Perpetual PoE	This feature was implemented on C9200CX-12P-2X2G, C9200CX-8P-2X2G, and C9200CX-12T-2X2G models of the Cisco Catalyst 9200CX Series Switches, which were introduced in this release.

Use the Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to [Cisco Feature Navigator](#).

