



## 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 doesn't support LLDP user can configure with either static or 2-event to receive required power as per the PD specification.

### Perpetual POE

The Perpetual POE provides uninterrupted power to connected powered device (PD) even when the power sourcing equipment (PSE) switch is reloading and booting up.



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**Note** Power to the ports will be interrupted in case of MCU firmware upgrade and ports will be back up immediately after the upgrade.

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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. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
<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 PD device, the PD 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>	Returns to privileged EXEC mode.

	Command or Action	Purpose
	Device(config-if)# <b>end</b>	

## Example: Configuring Perpetual and Fast POE

This example shows how you can configure perpetual PoE on the 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 Information for Persistent and Fast PoE

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

**Table 1: Feature Information for Persistent and Fast PoE**

Feature Name	Releases	Feature Information
Perpetual and Fast PoE	Cisco IOS XE Fuji 16.9.2	The Perpetual POE provides uninterrupted power to connected PD device even when the PSE switch is booting.  Fast PoE switches on power without waiting for IOS to boot up.

