# Configuring Perpetual PoE and Fast POE



## 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 PSE 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.

## 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.

**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.

# 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 |
|---|---|---|
| **Step 1** | **enable**<br>**Example:**<br>`Device> enable` | Enables privileged EXEC mode.<br>Enter your password, if prompted. |
| **Step 2** | **configure terminal**<br>**Example:**<br>`Device# configure terminal` | Enters global configuration mode. |
| **Step 3** | **interface** *interface-id*<br>**Example:**<br>`Device(config)# interface gigabitethernet 1/1` | Specifies the physical port to be configured, and enters interface configuration mode. |
| **Step 4** | **power inline port perpetual-poe-ha**<br>**Example:**<br>`Device(config-if)# power inline port perpetual-poe-ha` | Configures perpetual PoE. When you configure perpetual PoE on a port connected to a powered device, the powered device remains powered on during reload. |
| **Step 5** | **power inline port poe-ha**<br>**Example:**<br>`Device(config-if)# power inline port poe-ha` | 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. |
| **Step 6** | **end**<br>**Example:**<br>`Device(config-if)# end` | 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 gigabitethernet1/1
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 gigabitethernet1/1
Device(config-if)# power inline port poe-ha
Device(config-if)# end
```