



## Configuring 2-event Classification

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### Restrictions for 2-event classification

The following restrictions apply to 2-event classification:

- Configuration of 2-event classification has to be done before physically connecting any endpoint. Alternatively do a manual shut and 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.

### Information about 2-event Classification

When a class 4 device gets detected, IOS allocates 15.4W without any CDP or LLDP negotiation.

Once 2-event config is enabled on a port, you need to manually shut or un-shut the port or connect the PD again to start the IEEE detection again. Power budget allocation for a class-4 device will be 30W if 2-event classification is enabled on the port, else it will be 15.4W. This implies that even before the link comes up the class 4 PD will get 30W.

When 2-event is enabled on a port, at the hardware level the PSE does a 2-event classification which allows a class 4 PD to detect PSE capability of providing 30W through the hardware register. The PD can then move up to PoE+ level without waiting for any CDP or LLDP packet exchange.

### Configuring 2-event Classification

To configure the switch for a 2-event Classification, perform the steps given below:

**Procedure**

	<b>Command or Action</b>	<b>Purpose</b>
<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</b> <b>gigabitethernet2/0/1</b>	Specifies the physical port to be configured, and enters interface configuration mode.
<b>Step 4</b>	<b>power inline port 2-event</b> <b>Example:</b> Device(config-if)# <b>power inline port</b> <b>2-event</b>	Configures 2-event classification on the switch.
<b>Step 5</b>	<b>end</b> <b>Example:</b> Device(config-if)# <b>end</b>	Returns to privileged EXEC mode.

## Example: Configuring 2-Event Classification

This example shows how you can configure 2-event classification.

```
Device> enable
Device# configure terminal
Device(config)# interface gigabitethernet2/0/1
Device(config-if)# power inline port 2-event
Device(config-if)# end
```

## Feature History for 2-event Classification

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.

Release	Feature	Feature Information
Cisco IOS XE Everest 16.6.1	2-event classification	When a class 4 device gets detected, IOS allocates 30W without any CDP or LLDP negotiation. This means that even before the link comes up the class 4 power device gets 30W.
Cisco IOS XE Gibraltar 16.12.1	Change in allocated power	When a class 4 device gets detected, IOS allocates 15.4W without any CDP or LLDP negotiation.
Cisco IOS XE Cupertino 17.7.1	2-event classification	This feature was implemented on supervisor modules C9400X-SUP-2 and C9400X-SUP-2XL, which were introduced in this release.
Cisco IOS XE Cupertino 17.8.1	Global 2-event classification	2-event configuration can be enabled globally by using the <b>power inline 2-event</b> global configuration command.

Use the Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>.

