Power over Ethernet Commands

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power inline

To configure the inline power administrative mode on a Gigabit Ethernet interface, use the `power inline` command in interface switch configuration mode. To disable the inline power administrative mode, use the `no` form of the command.

```plaintext
power inline { auto | never }
no power inline
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>auto</th>
<th>Turns on the device discovery protocol and supplies power to the device.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>never</td>
<td>Turns off the device discovery protocol and stops supplying power to the device.</td>
</tr>
</tbody>
</table>

**Command Default**
The device discovery protocol is turned on and power is supplies to the device.

**Command Modes**
Interface switch configuration (config-switch-if)

**Command History**
```
Release  Modification
3.5.1     This command was introduced.
```

**Usage Guidelines**
None

**Example**
The following example shows how to configure the inline power administrative mode on a Gigabit Ethernet interface:

```plaintext
nfvis(config-switch)# interface gigabitEthernet 1/0
nfvis(config-switch-if)# power inline auto
nfvis(config-switch-if)# commit
nfvis(config-switch-if)# end
```
**power inline four-pair**

To enable the spare pair to supply power, use the `power inline four-pair` command in interface switch configuration mode. To cancel the configuration, use the `no` form of the command.

```
power inline four-pair forced
no power inline four-pair
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>forced</th>
<th>Forces the spare pair to supply power. It uses 60W PoE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command Default</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Command Modes</td>
<td>Interface (Gigabit Ethernet) switch configuration (config-switch-if)</td>
<td></td>
</tr>
<tr>
<td>Command History</td>
<td>Release</td>
<td>Modification</td>
</tr>
<tr>
<td></td>
<td>3.5.1</td>
<td>This command was introduced.</td>
</tr>
</tbody>
</table>

**Usage Guidelines**

This command should only be used for ports that are connected to devices that do not support the LLDP protocol or the new 4-wire power through MDI TLV (like UPOE splitter). This command overrides any port mode or port limit configuration.

**Example**

The following example shows how to enable the forced power supply with the spare pair:

```
nfvis(config-switch)# interface gigabitEthernet 1/0
nfvis(config-switch-if)# power inline four-pair forced
nfvis(config-switch-if)# commit
nfvis(config-switch-if)# end
```
power inline limit-mode

To configure the inline power administrative mode, use the `power inline limit-mode` command in switch configuration mode. To restore the default configuration, use the `no` form of this command.

```
power inline limit-mode { class | port }
no power inline limit-mode
```

**Syntax Description**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><code>class</code></td>
<td>Specifies the class power limit.</td>
</tr>
<tr>
<td><code>port</code></td>
<td>Specifies the port power limit.</td>
</tr>
</tbody>
</table>

**Command Default**
The default mode is `class`.

**Command Modes**
Switch configuration (config-switch)

**Command History**

<table>
<thead>
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</table>

**Usage Guidelines**
All PoE commands are supported only on Cisco ENCS 5408 and Cisco ENCS 5412 devices.

**Example**
The following example shows how to configure inline power on the Cisco ENCS:

```
nfvis(config-switch)# power inline limit-mode class
nfvis(config-switch)# commit
nfvis(config-switch)# end
```
power inline limit

To configure the power limit per port, use the `power inline limit` command in interface switch configuration mode. To cancel the power limit configuration, use the `no` form of the command.

```
power inline limit  value
no power inline limit
```

**Syntax Description**

- `value` Specifies the power limit for the port in milliwatt. Valid range is from 0 to 60000. The default value is 30W.

**Command Default**

None

**Command Modes**

Interface (Gigabit Ethernet) switch configuration (config-switch-if)

**Command History**

<table>
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**Usage Guidelines**

The operational power limit is the minimum of the configured power limit value and the maximum power capability on port. For example, if the configured value is higher than 15.4W on a PoE port, the operational power limit is 15.4W.

**Example**

The following example shows how to configure power limit on the Gigabit Ethernet interface 1/0:

```
nfvvis(config-switch)# interface gigabitEthernet 1/0
nfvvis(config-switch-if)# power inline limit 30000
nfvvis(config-switch-if)# commit
nfvvis(config-switch-if)# end
```
power inline powered-device

To add a description of the device type, use the `power inline powered-device` command in interface switch configuration mode. To remove the description, use the `no` form of the command.

```
power inline powered-device word
no power inline powered-device
```

**Syntax Description**
- `word` Describes the device type.

**Command Default**
None

**Command Modes**
Interface (Gigabit Ethernet) switch configuration (config-switch-if)

**Command History**

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**Example**

The following example shows how to add a description for the device:

```
nfvis(config-switch)# interface gigabitEthernet 1/0
nfvis(config-switch-if)# power inline powered-device ip-phone
nfvis(config-switch-if)# commit
nfvis(config-switch-if)# end
```
To configure the interface inline power management priority, use the `power inline priority` command in interface switch configuration mode. To restore the default configuration, use the `no` form of the command.

```
power inline priority { critical | high | low }
no power inline priority
```

**Syntax Description**

- `critical`: Specifies that the device operation is critical.
- `high`: Specifies that the device operation is high priority.
- `low`: Specifies that the device operation is low priority.

**Command Default**
The inline power management priority is set to low priority.

**Command Modes**
Interface (Gigabit Ethernet) switch configuration (config-switch-if)

**Command History**

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</table>

**Example**
The following example shows how to configure the interface inline power management priority:

```
nfvis(config-switch)# interface gigabitEthernet 1/0
nfvis(config-switch-if)# power inline priority high
nfvis(config-switch-if)# commit
nfvis(config-switch-if)# end
```
show switch power inline

To display information about the inline power for all interfaces, use the `show switch power inline` command in privileged EXEC mode.

```
show switch power inline [{ consumed-power | nominal-power | power-limit-mode }]
```

**Syntax Description**

- **consumed-power**: Displays total consumed power.
- **nominal-power**: Displays total nominal power.
- **power-limit-mode**: Displays inline power administrative mode.

**Command Default**

Inline power information for all interfaces is displayed.

**Command Modes**

Privileged EXEC (#)

**Command History**

<table>
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**Example**

The following is a sample output of the `show switch power inline` command in privileged EXEC mode:

```
nfvis# show switch power inline
power inline power-limit-mode "Class based"
power inline nominal-power 200
power inline consumed-power 10
```
show switch interface inline-status

To display the inline power status of all interfaces or a specific interface, use the `show switch interface inline-status` command in privileged EXEC mode.

```
show switch interface inline-status [{ gigabitEthernet interface-id }]
```

**Syntax Description**

- `gigabitEthernet interface-id`: Specifies the Gigabit Ethernet interface ID.

**Command Default**
Displays the inline power status of all interfaces.

**Command Modes**
Privileged EXEC (#)

**Command History**

<table>
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</table>

**Usage Guidelines**

For verification and the command output display, use the `show switch interface inline-status` command. For debugging, use the `switch show interface inline-status` command.

**Example**

The following command output displays the inline power status of all interfaces:

```
nfvis# show switch interface inline-status
PORT ADMIN OPER POWER CLASS DEVICE PRIORITY
--------------------------------------------------------
1/0 auto Searching 0.0 0 None low
1/1 auto Searching 0.0 0 None low
1/2 auto Searching 0.0 0 None low
1/3 auto Searching 0.0 0 None low
1/4 auto Searching 0.0 0 None low
1/5 auto On 6.5 4 None low
1/6 auto Searching 0.0 0 None low
1/7 auto Searching 0.0 0 None low
```
show switch interface inline-status