



Junos[®] OS for EX Series Ethernet Switches

Power over Ethernet (PoE) Feature Guide for EX Series Switches

Release

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Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, California 94089
USA
408-745-2000
www.juniper.net

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Junos[®] OS for EX Series Ethernet Switches Power over Ethernet (PoE) Feature Guide for EX Series Switches
Release 14.1x53 (THIS IS A !5.1 page, with BAD release: saving into 13.2X51)
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Documentation and Release Notes

To obtain the most current version of all Juniper Networks® technical documentation, see the product documentation page on the Juniper Networks website at <http://www.juniper.net/techpubs/>.

If the information in the latest release notes differs from the information in the documentation, follow the product Release Notes.

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Supported Platforms

For the features described in this document, the following platforms are supported:

- EX Series

Using the Examples in This Manual

If you want to use the examples in this manual, you can use the **load merge** or the **load merge relative** command. These commands cause the software to merge the incoming configuration into the current candidate configuration. The example does not become active until you commit the candidate configuration.

If the example configuration contains the top level of the hierarchy (or multiple hierarchies), the example is a *full example*. In this case, use the **load merge** command.

- Download the latest versions of software and review release notes:
<http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications:
<http://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum:
<http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://tools.juniper.net/SerialNumberEntitlementSearch/>

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <http://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <http://www.juniper.net/support/requesting-support.html>.

PART 1

Overview

- [Power over Ethernet Overview on page 3](#)

PART 2

Configuration

- [Configuration Examples on page 17](#)
- [Configuration Tasks on page 33](#)
- [Configuration Statements on page 45](#)

**Related
Documentation**

- [Example: Configuring PoE Interfaces on an EX Series Switch on page 17](#)
- [Example: Configuring PoE Interfaces with Different Priorities on an EX Series Switch on page 19](#)
- [Configuring PoE on EX Series Switches \(CLI Procedure\) on page 33](#)
- [Troubleshooting PoE Interfaces on page 97](#)

Table 22: FPC PoE Settings (*continued*)

Field	Description	Your Action
Maximum Power	Specifies the maximum PoE wattage available to provision active PoE ports on the FPC. For example, if you specify 1000 W, the PoE controller is limited to a power budget of 1000 W to distribute to the PoE ports.	Select a value in watts.

**Related
Documentation**

- [Configuring PoE on EX Series Switches \(CLI Procedure\) on page 33](#)
- [Example: Configuring PoE Interfaces on an EX Series Switch on page 17](#)
- [Example: Configuring PoE Interfaces with Different Priorities on an EX Series Switch on page 19](#)
- [Example: Configuring PoE on an EX6200 or EX8200 Switch on page 24](#)
- [Monitoring PoE on page 69](#)
- [Understanding PoE on EX Series Switches on page 3](#)

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| Related Documentation | <ul style="list-style-type: none"> • Example: Configuring PoE Interfaces with Different Priorities on an EX Series Switch on page 19 • Example: Configuring PoE on an EX6200 or EX8200 Switch on page 24 • Configuring PoE on EX Series Switches (CLI Procedure) on page 33 • Understanding PoE on EX Series Switches on page 3 |
|------------------------------|---|

af-mode

Syntax	af-mode;
Hierarchy Level	[edit po e interface (Power over Ethernet) (all <i>interface-name</i>)]
Release Information	Statement introduced in Junos OS Release 11.3 for EX Series switches.
Description	Configure a PoE port on an EX6200 switch to support IEEE 802.3af only. The maximum power the port can deliver in either class or static mode is 15.4 W.
Default	PoE ports on an EX6200 switch support IEEE 802.3at (PoE+) by default.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.
Related Documentation	<ul style="list-style-type: none"> • Configuring PoE on EX Series Switches (CLI Procedure) on page 33

duration

Syntax	<code>duration <i>hours</i>;</code>
Hierarchy Level	[edit poe interface (all <i>interface-name</i>) telemetries]
Release Information	Statement introduced in Junos OS Release 9.0 for EX Series switches.
Description	Modify the duration over which data is collected when you are monitoring the power consumption of a PoE interface.
Options	<i>hours</i> —Number of hours over which the data is to be collected. Range: 1 through 24 Default: 1
Required Privilege Level	system —To view this statement in the configuration. system-control —To add this statement to the configuration.
Related Documentation	<ul style="list-style-type: none">• Example: Configuring PoE Interfaces with Different Priorities on an EX Series Switch on page 19• Configuring PoE on EX Series Switches (CLI Procedure) on page 33

notification-control

Syntax notification-control {
 fpc slot-number {
 disable;
 }
 }

Hierarchy Level [edit poe]

Release Information Statement introduced in Junos OS Release 9.0 for EX Series switches.

Description Enable or disable the generation of PoE SNMP traps. If PoE SNMP traps are enabled, an SNMP trap is sent whenever a PoE interface is enabled or disabled.

The remaining statements are explained separately.

Required Privilege Level system—To view this statement in the configuration.
 system-control—To add this statement to the configuration.

Related Documentation

- [Example: Configuring PoE Interfaces with Different Priorities on an EX Series Switch on page 19](#)
- [Configuring PoE on EX Series Switches \(CLI Procedure\) on page 33](#)

CHAPTER 7

Operational Commands

- `clear poe telemetries interface`
- `request system firmware upgrade poe`
- `show poe controller`
- `show poe interface`
- `show poe notification-control`
- `show poe telemetries`

show poe interface (Specific Interface on ACX2000 Universal Access Routers)

```
user@host> show poe interface ge-0/1/7
PoE interface status:
PoE interface           : ge-0/1/7
Administrative status   : Enabled
Operational status     : Powered-up
Power limit on the interface : 9.0 W
Priority                : Low
Power consumed          : 14.2 W
Class of power device   : 4
```


Sample Output

show poe notification-control

```
user@switch> show poe notification-control
FPC slot      Notification-control-status
  0              OFF
```


PART 4

Troubleshooting

- [Troubleshooting Procedures on page 97](#)

- [Configuring PoE on EX Series Switches \(CLI Procedure\) on page 33](#)