



# P Commands

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This chapter describes the system management commands that begin with P.

# poweroff module

To power off a module, use the **poweroff module** command. To return power to the module, use the **no** form of this command.

**poweroff module** *module*

**no poweroff module** *module*

Syntax Description	<i>module</i>	Module number. The range is from 1 to 18.
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Defaults	None
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Command Default	Global configuration (config)
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SupportedUserRoles	network-admin vdc-admin
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Command History	Release	Modification
	5.2(1)N1(1)	The command was introduced.

Usage Guidelines	This command does not require a license.
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Examples	This example shows how to power off module 2:  switch# <b>poweroff module 2</b>
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Related Commands	Command	Description
	<b>show module</b>	Displays information about modules.

# ptp announce

To configure the interval between PTP announcement messages on an interface or the number of PTP intervals before a timeout occurs on an interface, use the **ptp announce** command. To disable this feature, use the **no** form of this command.

**ptp announce** {**interval** *log-seconds* | **timeout** *count*}

**no ptp announce**

## Syntax Description

<b>interval</b> <i>log-seconds</i>	The number of log seconds between PTP announcement messages. The range is from 0 to 4 seconds.
<b>timeout</b> <i>count</i>	The number of PTP intervals before a timeout occurs on the interface. The range is from 2 to 10.

## Command Default

The default interval is 1 log second.  
The default timeout is 3 announce intervals.

## Command Modes

Interfaces configuration mode

## Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to set the announcement interval on interface 5/1 to 1:

```
switch# configure terminal
switch(config) # interface ethernet 5/1
switch(config-if) # ptp announce interval 1
switch(config-if)
```

## Related Commands

Command	Description
<b>feature ptp</b>	Enables or disables PTP on the device.
<b>ptp delay request minimum interval</b>	Configures the minimum interval allowed between PTP delay-request messages when the port is in the master state.
<b>ptp sync interval</b>	Configures the interval between PTP synchronization messages on an interface.
<b>ptp vlan</b>	Configures the VLAN for the interface where PTP is being enabled.
<b>show ptp brief</b>	Displays the PTP status.
<b>show ptp port interface ethernet</b>	Displays the status of the PTP port on the switch.

# ptp delay request minimum interval

To configure the minimum interval allowed between PTP delay request messages when the port is in the master state, use the **ptp delay request minimum interval** command. To disable this feature, use the **no** form of this command.

**ptp delay request minimum interval** *log-seconds*

**no ptp delay request minimum interval**

<b>Syntax Description</b>	<i>log-seconds</i>	The number of log seconds between PTP delay request messages. The range is from -1 to 6 seconds.
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<b>Command Default</b>	0 log seconds
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<b>Command Modes</b>	Interface configuration mode
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<b>Command History</b>	Release	Modification
	5.2(1)N1(1)	This command was introduced.

**Examples** This example shows how to set the minimum delay request interval to 3:

```
switch# configure terminal
switch(config) # interface ethernet 5/1
switch(config-if) # ptp delay request minimum interval 3
```

<b>Related Commands</b>	Command	Description
	<b>feature ptp</b>	Enables or disables PTP on the device.
	<b>ptp announce</b>	Configures the interval between PTP announce messages on an interface or the number of PTP intervals before a timeout occurs on an interface.
	<b>ptp sync interval</b>	Configures the interval between PTP synchronization messages on an interface.
	<b>ptp vlan</b>	Configures the VLAN for the interface where PTP is being enabled.
	<b>show ptp brief</b>	Displays the PTP status.
	<b>show ptp port interface ethernet</b>	Displays the status of the PTP port on the switch.

# ptp domain

To configure the domain number to use for this clock, use the **ptp domain** command. PTP domains allow you to use multiple independent PTP clocking subdomains on a single network.

**ptp domain** *number*

**no ptp domain** *number*

## Syntax Description

<i>number</i>	Configures the domain number to use for this clock. The range is from 0 to 128.
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## Command Default

0

## Command Modes

Global configuration mode

## Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to configure the domain number for use with a clock:

```
switch(config)# ptp domain 1
```

## Related Commands

Command	Description
<b>feature ptp</b>	Enables or disables PTP on the device.
<b>ptp source</b>	Configures the source IP address for all PTP packets.
<b>ptp priority1</b>	Configures the priority 1 value to use when advertising this clock.
<b>ptp priority2</b>	Configures the priority 1 value to use when advertising this clock.
<b>show ptp brief</b>	Displays the PTP status.
<b>show ptp clock</b>	Displays the properties of the local clock.

# ptp priority1

To configure the priority1 value to use when advertising this clock, use the **ptp priority1** command.

**ptp priority1** *value*

**no ptp priority1** *value*

## Syntax Description

<i>value</i>	The configured value overrides the default criteria (clock quality, clock class, etc.) for best master clock selection. Lower values take precedence. The range is from 0 to 255.
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## Command Default

255 when advertising the clock

## Command Modes

Global configuration mode

## Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to set the priority1 value used to advertise this clock:

```
switch(config)# ptp priority1 10
```

## Related Commands

Command	Description
<b>feature ptp</b>	Enables or disables PTP on the device.
<b>ptp source</b>	Configures the source IP address for all PTP packets.
<b>ptp domain</b>	Configures the domain number to use for this clock.
<b>ptp priority2</b>	Configures the priority2 value to use when advertising this clock.
<b>show ptp brief</b>	Displays the PTP status.
<b>show ptp clock</b>	Displays the properties of the local clock.

# ptp priority2

To configure the priority2 value to use when advertising this clock, use the **ptp priority2** command.

**ptp priority2** *value*

**no ptp priority2** *value*

## Syntax Description

<i>value</i>	The configured value is used to decide between two devices that are otherwise equally matched in the default criteria. For example, you can use the priority2 value to give a specific switch priority over other identical switches. The range is from 0 to 255.
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## Command Default

255 when advertising the clock

## Command Modes

Global configuration mode

## Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

## Examples

This example shows how to set the priority2 value used to advertise this clock:

```
switch(config)# ptp priority2 20
```

## Related Commands

Command	Description
<b>feature ptp</b>	Enables or disables PTP on the device.
<b>ptp source</b>	Configures the source IP address for all PTP packets.
<b>ptp domain</b>	Configures the domain number to use for this clock.
<b>ptp priority1</b>	Configures the priority1 value to use when advertising this clock.
<b>show ptp brief</b>	Displays the PTP status.
<b>show ptp clock</b>	Displays the properties of the local clock.

# ptp source

To configure the source IP address for all PTP packets, use the **ptp source** command. To unconfigure the source IP address for all PTP packets, use the **no** form of this command.

**ptp source** *ip-address* [**vrf** *vrf*]

**no ptp source** *ip-address* [**vrf** *vrf*]

<b>Syntax Description</b>	<i>ip-address</i>	Specifies the source IP address for all PTP packets. The IP address can be in IPv4 or IPv6 format.
	<b>vrf</b> <i>vrf</i>	Specifies the VRF.

<b>Command Default</b>	None
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<b>Command Modes</b>	Global configuration mode
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)N1(1)	This command was introduced.

<b>Examples</b>	This example shows how to configure the source IP address for all PTP packets:
	<code>switch(config)# ptp source 192.0.2.1</code>

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>feature ptp</b>	Enables or disables PTP on the device.
	<b>ptp domain</b>	Configures the domain number to use for this clock.
	<b>ptp priority1</b>	Configures the priority 1 value to use when advertising this clock.
	<b>ptp priority2</b>	Configures the priority 1 value to use when advertising this clock.
	<b>show ptp brief</b>	Displays the PTP status.
	<b>show ptp clock</b>	Displays the properties of the local clock.



# ptp sync interval

To configure the interval between PTP synchronization messages, use the **ptp sync interval** command. To disable this feature, use the **no** form of this command.

**ptp sync interval** *log-seconds*

**no ptp sync interval**

<b>Syntax Description</b>	<i>log-seconds</i>	The number of log seconds between PTP synchronization messages on an interface. The range is from -3 seconds to 1 second.
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<b>Command Default</b>	None
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<b>Command Modes</b>	Interface configuration mode
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)N1(1)	This command was introduced.

**Examples** This example shows how to set the PTP synchronization interval to -3:

```
switch# configure terminal
switch(config) # interface ethernet 5/1
switch(config-if) # ptp sync interval -3
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>feature ptp</b>	Enables or disables PTP on the device.
	<b>ptp announce</b>	Configures the interval between PTP announce messages on an interface or the number of PTP intervals before a timeout occurs on an interface.
	<b>ptp delay request minimum interval</b>	Configures the minimum interval allowed between PTP delay-request messages when the port is in the master state.
	<b>ptp vlan</b>	Configures the VLAN for the interface where PTP is being enabled.
	<b>show ptp brief</b>	Displays the PTP status.
	<b>show ptp port interface ethernet</b>	Displays the status of the PTP port on the switch.

# ptp vlan

To specify the VLAN for the interface where PTP is being enabled, use the **ptp vlan** command. To disable this feature, use the **no** form of this command.

**ptp vlan** *vlan-id*

**no ptp vlan**

<b>Syntax Description</b>	<i>vlan-id</i> The VLAN ID for the interface where PTP is being enabled. The range is from 1 to 4094.	
<b>Command Default</b>	1	
<b>Command Modes</b>	Interface configuration mode	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)N1(1)	This command was introduced.
<b>Usage Guidelines</b>	PTP can only be enabled on one VLAN on an interface.	
<b>Examples</b>	This example shows how to specify VLAN 10 as the interface where PTP is being enabled:	
	<pre>switch# <b>configure terminal</b> switch(config) # <b>interface ethernet 5/1</b> switch(config-if) # <b>ptp vlan 10</b></pre>	
<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>feature ptp</b>	Enables or disables PTP on the device.
	<b>ptp announce</b>	Configures the interval between PTP announce messages on an interface or the number of PTP intervals before a timeout occurs on an interface.
	<b>ptp delay request minimum interval</b>	Configures the minimum interval allowed between PTP delay-request messages when the port is in the master state.
	<b>ptp sync interval</b>	Configures the interval between PTP synchronization messages on an interface.
	<b>show ptp brief</b>	Displays the PTP status.
	<b>show ptp port interface ethernet</b>	Displays the status of the PTP port on the switch.