15-Commands for PoE

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1.Commands for PoE Configuration

power inline enable (Port)

Command	**power inline enable** **power inline enable auto** **no power inline enable**
parameter	-
default	Default auto mode.
Mode	Port Mode.
Usage Guide	This command is used to enable/disable the specified port PoE, when the port disables the POE, there will be no power output regardless of the power state of the specified port.
Example	Disable power supply on ports1/0/1. Switch(config)#interface ethernet 1/0/1 Switch(config-if-ethernet1/0/1)#no power inline enable

power inline enable static (Port)

Command	**power inline enable static**
parameter	-
default	Default auto mode.
Mode	Port Mode.
Usage Guide	This command is used to enable forced power supply. When the port is in the forced power supply mode, the PSE will not detect whether the PD is standard, and the port will supply power directly. Note that the forced power supply port cannot supply power to electrical devices such as PCs, and serious consequences may lead to device damage!
Example	Enable the forced POE function on port 1/0/1.. Switch(config)#interface ethernet 1/0/1 Switch(config-if-ethernet1/0/1)#power inline enable static

power inline high-inrush

Command	**power inline high-inrush enable** **no power inline high-inrush enable**
parameter	-
default	The allowed high-inrush current is not enabled
Mode	Global mode
Usage Guide	Power for non-standard PD instantaneously, this command is used to enable allowed high inrush output, no the command disables high inrush output.

	High-inrush current will be brought when nonstandard PD is powered instantaneously, it will result PSE self-protection to make PD power failure. Here, if this nonstandard PD must be powered, it needs to allow the high-inrush current.
Example	Enable the allowed high-inrush current when nonstandard PD is powered instantaneously. Switch(config)#power inline high-inrush enable

power inline legacy

Command	**power inline legacy enable** **no power inline legacy enable**
parameter	-
default	Do not provide power supply for non-standard IEEE PD
Mode	Global Mode
Usage Guide	This command is used to enable non-standard IEEE PD detection functionality. No command disables non-standard IEEE PD detection function.
Example	Set the switch to provide power supply for non-standard IEEE PD. Switch(config)#power inline legacy enable

power inline max (Global)

Command	**power inline max <*max-wattage*>** **no power inline max**

parameter		
	max-wattage	value of the max output power, in W. Any integer from 37 to 130 is valid

default	Default maximum output power 370W (Take the actual machine POE output power)
Mode	Global Mode
Usage Guide	This command is used to set the global maximum output power of the POE no restore the default configuration.
Example	Set the global max output power to 50W. Switch(Config)#power inline max 50

power inline max (Port)

Command	**power inline max <*max-wattage*>** **no power inline max**

parameter	***max-wattage***	the value of the max output power, in mW, ranging from 1 to 15400mW, with a granularity of 100mW. Any value less than 100mW will be taken as 100mW, that is, 1~100 equals 100, 15301~15400 equals 15400. But the value set by users will be maintained without being rounded up.

default	Default port maximum output power 32000mW
Mode	Port Mode
Usage Guide	This command can be used to set the maximum output power of the specified port.
Example	Set the max output power of Port 1 to 0.8W. Switch(config)#interface ethernet 1/0/1 Switch(config-if-ethernet1/0/1)#power inline max 800

power inline police

Command	**power inline police enable** **no power inline police enable**
parameter	-
default	The power priority management policy mode is disabled
Mode	Global Mode
Usage Guide	This command is used to enable or disable priority management policy mode. In priority mode, when not enough PSE power is available, ports with low priority will be closed to satisfy the power supply for ports with high priority, no matter how long the access time of a PD is. If two ports have same priority, the one with smaller sequence number is higher privileged. In first-come-first-served mode, new PDs will not get power supply if available PSE power is not enough.
Example	Enable the power priority policy mode. Switch(Config)#power inline police enable

power inline priority

Command	**power inline priority {critical | high | low}**	
parameter	**critical**	the highest-level priority
	high	high-level priority
	low	low-level priority

default	Port priority is low
Mode	Port Mode
Usage Guide	This command is used to set the priority level of the port.This command will take effect in the mode of "power inline police enable". Without enough available power for newly connected PD, ports with higher priority will get power supply first.
Example	Set the priority of Port 1 to high and that of Port 2 to critical. Switch(Config)#interface ethernet 1/0/1 Switch(Config-Ethernet1/0/1)#power inline priority high Switch(Config)#interface ethernet 1/0/2 Switch(Config-Ethernet1/0/2)#power inline priority critical

power inline monitor interval

Command	**power inline monitor interval <30-36000>**	
parameter	<30-36000>	Monitoring interval, size range :30-36000, per second
default	The default configuration interval is 150 seconds	
Mode	Global mode	
Usage Guide	this command is used to configure poe monitor interval time.	
Example	The interval between switches is 3600 seconds. Switch(config)#power inline monitor interval 3600	

power inline monitor {on|off }

Command	**power inline monitor {on|off}**
parameter	-
default	Default disable poe monitor function
Mode	Port Configuration Mode
Usage Guide	This command is used to enable or disable poe monitoring function.
Example	enable poe detection function on port 1/0/1. Switch(config-if-ethernet1/0/1)#power inline monitor on

power inline power-off

Command	**power inline power-off time-range <*name*>**	
parameter	***<name>***	Time range name: This name is defined by the user and the character length is 1-64 bits

default	Default not configured
Mode	Port Mode
Usage Guide	this command is used to set poe timing off.
Example	The poe setting switch port 1/0/1 closes at t1. Switch(config-if-ethernet1/0/1)#power inline power-off time-range t1

power inline reset interval

Command	**power inline reset interval <1-600>**
parameter	**<1-600>** Refresh time interval size :1-600 per second
default	Default refresh time is 5 seconds
Mode	Global mode
Usage Guide	this command can be used to set poe refresh interval time.
Example	Sets the refresh interval poe the switch to 20 seconds. Switch(config)#power inline reset interval 20

2.PoE Monitoring and Debugging

show power inline

Command	**show power inline**
parameter	-
default	-
Mode	Admin Mode
Usage Guide	This command is used to view POE global configuration and state。
Example	View global POE configuration and status.Switch#show power inline。 PoE Work Status : online PoE Port Max Number : 24 PoE Support Type : 802.3at/802.3af PoE MCU Software Version : V2.1 PoE Power Available : 370 W PoE Power Used : 0 W PoE Power Remaining : 370 W PoE Main Voltage : 54.8 V PoE Min Voltage : 44 V PoE Max Voltage : 57 V PoE Police : Enable

PoE Legacy : Enable
PoE High-inrush Status : Disable
PoE Monitor Interval : 150 s
PoE Reset Interval : 5 s

Display entries	describe
PoE Work Status	POE working status
PoE Power Available	Global maximum of available power
PoE Power Used	Power currently in use
PoE Power Remaining	Remaining available power
PoE Min Voltage	minimum voltage
PoE Max Voltage	maximum voltage
PoE Police	Power Priority Policy Enable Status
PoE Legacy	Status of non-standard PD detection function
PoE High-inrush Status	Poe high inrush state

show power inline interface ethernet

Command

show power inline interface [ethernet <*interface-number*> | <*interface-name*>]

parameter

interface-number	Ethernet port number

default

-

Mode

Admin Mode

Usage Guide

This command is used to view the configuration and status displayed on POE specified port.

Example

View POE information on port 1/0/1.
Switch#show power inline interface ethernet 1/0/1

Interface Status Oper Power(mW) Max(mW) Current(mA) Volt(V) Priority Class
--- --- --- --- --- --- --- --- ---
Ethernet1/0/1 Disable Off 0 800 0 54 Low N/A

Display entries	describe
Oper	Working status: On：PD normal connection Off：PD no connection Faulty：PD detection failure Deny：Not enough power available or required to exceed the limit

Current(mA)	Current current at port
Volt(V)	Current voltage at port
Class	PD input power used: 0 Default 0.44~12.95 1 Optional 0.44~3.84 2 Optional 3.84~6.49 3 Optional 6.49~12.95 4 Reserved treated as class 0 and reserved for future use It is impossible for a compatible PD to provide a class 4 signal

3. Step-up Voltage Function

power inline static

Command	**power inline static (24|48)**	
Parameter	**24**	PoE voltage 24V
	48	PoE voltage 48V
Default	Default output 24V	
Mode	Port mode	
Usage Guide	This command is used to modify the output voltage of the switch port. Note that this command should be used under the critical priority level.	
Example	Set the POE output voltage on 1/0/1 to 48V. Switch (config-if-ethernet1/0/1)#power inline static 48	