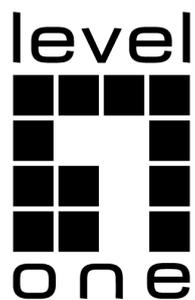


# Basic Configuration Commands



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## Chapter 1 System Management Commands

### 1.1 File Management Configuration Commands

The file management configuration commands include:

- copy
- delete
- dir
- format
- more
- write
- rename

#### 1.1.1 copy

In this section, the bold and black type are keywords, the optional parts in [], and the required Parameter in <>.

##### 1.1.1.1 tftp download

Download files from the tftp server to the switch.

1. Change the version

#### Syntax

```
copy tftp filename <src_filename> host <server_ip> kernel
```

#### Parameter

Parameter	Description
<src_filename>	file name on the server
<server_ip>	server ip address

#### Command Mode

EXEC

#### Example

```
copy tftp filename switch.bin host 10.0.0.100 kernel
```

2. Change bootrom

#### Syntax

```
copy tftp filename <src_filename> host <server_ip> rom
```

**Parameter**

Parameter	Description
<src_filename>	file name on the server
<server_ip>	server ip address

**Command Mode**

EXEC

**Example**

```
copy tftp filename eprom.bin host 10.0.0.100 rom
```

3. Download the file to flash

**Syntax**

```
copy tftp filename <src_filename> host <server_ip> flash [filename
<des_filename>]
```

**Parameter**

Parameter	Description
<src_filename>	file name on the server
<server_ip>	server ip address
[filename <des_filename>]	Specifies the file name stored in the flash drive letter, if not specified, the file name is the same as src_filename

**Command Mode**

EXEC

**Example**

```
copy tftp filename config.levelone host 10.0.0.100 flash filename config_levelone
```

```
copy tftp filename Makefile host 10.0.0.100 flash
```

1.1.1.2 tftp upload

**Syntax**

To upload the file in the flash drive letter to the tftp server, run the following command.

```
copy flash filename <src_filename> tftp [filename <dest_filename>] host
<server_ip>
```

**Parameter**

Parameter	Description
<src_filename>	filename on flash
<server_ip>	ip address of the tftp server
[filename <des_filename>]	Specifies the file name stored on the server, if not specified, the file name is the same as src_filename

**Command Mode**

EXEC

**Example**

```
copy flash filename cmdsync_log tftp host 10.0.0.100
copy flash filename cmdsync_log tftp filename aaa host 10.0.0.100
```

## 1.1.1.3 ftp download

Download files from the ftp server to the switch.

## 1. Change the version

**Syntax**

```
copy ftp filename <src_filename> host <server_ip> username <username>
password <password> kernel
```

**Parameter**

Parameter	Description
<src_filename>	The file name on the server
<server_ip>	The server ip address
<username>	The ftp server username
<password>	Password corresponding to the ftp server username

**Command Mode**

EXEC

**Example**

```
copy ftp filename switch.bin host 10.0.0.100 username admin password
adminadmin kernel
```

## 2. Change bootrom

**Syntax**

```
copy ftp filename <src_filename> host <server_ip> username <username>
password <password> rom
```

**Parameter**

Parameter	Description
<src_filename>	The file name on the server
<server_ip>	The server ip address
<username>	The ftp server username
<password>	Password corresponding to the ftp server username

**Command Mode**

EXEC

**Example**

```
copy ftp filename eprom.bin host 10.0.0.100 username admin password
adminadmin rom
```

## 3. Download the file to flash

**Syntax**

```
copy ftp filename <src_filename> host <server_ip> username <username>
password <password> flash [filename <des_filename>]
```

**Parameter**

Parameter	Description
<src_filename>	The filename of server
<server_ip>	The server ip address
<username>	The server username
<password>	The password corresponding to the server username
[filename <des_filename>]	Specifies the file name stored on the flash, if not specified, the file name is the same as src_filename.

**Command Mode**

EXEC

**Example**

```
copy ftp filename bbb host 10.0.0.100 username admin password adminadmin
flash filename aaaa
```

4. ftp upload

**Syntax**

To upload the file in the flash drive letter to the ftp server, run the following command.

**copy flash filename** <src\_filename> **ftp** [**filename** <dest\_filename>] **username** <username> **password** <password>

**Parameter**

Parameter	Description
<src_filename>	The filename on flash
<server_ip>	The server ip address
[filename <des_filename>]	Specifies the file name stored on the server, if not specified, the file name is the same as src_filename
<username>	The server username
<password>	The password corresponding to the server username

**Command Mode**

EXEC

**Example**

```
copy flash filename cmdsync_log ftp filename ssss host 10.0.0.100 username
admin password adminadmin
```

**Syntax**

To read a file from the tftp server to a switch, use the **copy** command.

**copy tftp**<:filename> {**flash**<:filename>|**rom**} [*ip\_addr*]

**Parameter**

Parameter	Description
tftp<:filename>	Read a file from the tftp server. Filename indicates the relevant filename. If not specified the filename, the system will prompt user to input the filename after executing the copy command.
flash <:filename>	Write a file to the flash memory of the switch. Filename indicates the relevant filename. If not specified the filename, the system will prompt user to input the filename after executing the copy command.
rom	Updates bootrom for the switch.
ip_addr	Specifies the IP address of tftp server. If not specified, the system will prompt user to input the IP address after executing the copy command.

**Default**

None

**Command Mode**

EXEC

**Usage Guidelines**

None

**Example**

```
monitor#copy tftp:switch.bin flash:switch.bin 192.2.2.1
```

The example shows how to read the switch.bin from the tftp server to the flash memory of the switch:

**Related Command**

None

1.1.2 delete

**Syntax**

To delete a file, use the **delete** command.

**delete** *file-name*

**Parameter**

Parameter	Description
-----------	-------------

---

[file-name]	Specifies the filename
-------------	------------------------

**Default**

If not specified the file-name, the system will delete startup-config by default.

**Command Mode**

EXEC

**Usage Guidelines**

None

**Related Command**

None

**1.1.3 dir****Syntax**

To display filename, use the **dir** command.

**dir** *file-name*

**Parameter**

None

**Default**

None

**Command Mode**

EXEC

**Usage Guidelines**

None

**Related Command**

None

### 1.1.4 format

#### Syntax

To format file system, use the **format** command.

**format**

#### Parameter

None

#### Default

None

#### Command Mode

EXEC

#### Usage Guidelines

All files in the file system will de deleted after executing the **format** command.

#### Related Command

None

### 1.1.5 more

#### Syntax

To display the contents of a file, use the **more** command.

**more** *file-name*

#### Parameter

Parameter	Description
<i>file-name</i>	Specifies the name of a file

#### Default

None

#### Command Mode

EXEC

**Usage Guidelines**

If all files are displayable characters, they will be displayed in ASCII format, or they will be displayed binary format.

**Related Command**

None

## 1.1.6 rename

**Syntax**

To change the file name, run the following command.

```
rename old_file_name new_file_name
```

**Parameter**

Parameter	Description
<i>old_file_name</i>	Original file name
<i>new_file_name</i>	New file name

**Default**

None

**Command Mode**

EXEC

**Usage Guidelines**

None

**Related Command**

None

## 1.2 Basic System Management Commands

Basic System Management Commands includes:

- reboot
- show
- show configuration
- show running-config

- write

### 1.2.1 reboot

#### Syntax

To restart the current device, run the following command:

**reboot** [**noconfirm**]

#### Parameter

Parameter	Description
<b>noconfirm</b>	Reboot without verification

#### Default

None

#### Command Mode

EXEC, Global configuration mode, interface configuration mode

#### Usage Guidelines

To reboot a switch, use the **reboot** command.

#### Example

For example, rebooting the device with a prompt.

```
Switch#reboot
```

```
Do you want to reboot the switch(y/n)?y
```

#### Related Command

None

### 1.2.2 show

#### Syntax

To display the relevant information of the system, which or specific ones of which can be filtered through the filter, run the following command:

**show** <sub-command> [ | {more [*more\_option*] | grep *grep\_option*}] | > *path* | >> *path*]

#### Parameter

Parameter	Description
-----------	-------------

<b>sub-command</b>	Stands for a child command.
	Uses the output filter.
<b>more</b>	<p>The results of <b>show</b> are paginated, which can be followed by different options</p> <p>-d: Provide prompt information for users;</p> <p>-l: Cancel the function that will pause when encountering the special character ^L (feed character);</p> <p>-f: When calculating the number of lines, use the actual number of lines, not the number of lines after automatic line wrapping;</p> <p>-p: select unmatched lines;</p> <p>-c: Do not display each page in a scrolling manner, display the content first and then clear other old data;</p> <p>-s: When encountering a blank line with more than two consecutive lines, replace it with a blank line of one line;</p> <p>-u: supports underscore and error;</p> <p>-n &lt;num&gt;: the number of lines displayed per screen;</p> <p>-&lt;num&gt;: same as -n &lt;num&gt;;</p> <p>+&lt;num&gt;: display from line num;</p> <p>+/pattern: search for the string (pattern) before each document is displayed, and then start displaying after the string;</p>
<b>grep</b>	<p>The result of <b>show</b> only shows lines containing a specific word, which can be followed by different options:</p> <p>WORD: find and filter keywords;</p> <p>-A &lt;num&gt;: In addition to displaying the line that conforms to the template style, and displaying the content of num lines after this line;</p> <p>-B &lt;num&gt;: In addition to the line that conforms to the template style, display the content of num lines before the line;</p>

	<p>-c: count the number of lines conforming to the template style;</p> <p>-C &lt;num&gt;: In addition to displaying the line that conforms to the template style, and displaying the content before and after the line, that is, '-A &lt;num&gt; -B &lt;num&gt;';</p> <p>-e &lt;string&gt;: Specify a string as a template style for finding file content;</p> <p>-E: Use the template style as extended normal notation, which means that extended regular expressions can be used;</p> <p>-f &lt;pattern&gt;: Specify a template file, whose content has one or more template styles; run <b>grep</b> to find the file content that meets the template conditions, and the format is the template style of each line;</p> <p>-F: treat template styles as a list of fixed strings (not regular expressions);</p> <p>-i: ignore the difference in character case;</p> <p>-n: Before the line that conforms to the template style, mark the number of the line;</p> <p>-v: reverse the lookup, show unmatched lines;</p> <p>-w: Only display lines that match the whole word;</p> <p>-x: Only display the lines that match the whole line;</p> <p>-o: Only output the matched part of the file;</p> <p>-m: Stop searching after finding <b>num</b> lines of results, which is used to limit the number of matching lines;</p>
>	Write the result of <b>show</b> to a fixed path file.
>>	Append the results of <b>show</b> to a fixed path file.
<i>patch</i>	Redirect result path

**Default**

None

---

## Command Mode

EXEC mode or configuration mode

## Usage Guidelines

This command can be used to filter the useless information in the result of the **show** command, especially when the result is too much to read. For example, if you want to browse a designated MAC address in an MAC address table, which contains a lot of MAC addresses, this command will give you convenience for you.

## Example

The following example shows how to display the lines, in which the word “interface” is contained, in the result of **show running-config**.

```
Switch#show running-config | grep interface
```

```
interface g0/0/0  
interface g0/0/1  
interface g0/0/2  
interface g0/0/3  
interface g0/0/4  
interface tg0/0/1  
interface tg0/0/2  
interface tg0/0/3  
interface tg0/0/4  
interface tg0/0/5  
interface tg0/0/6  
interface tg0/0/7  
interface tg0/0/8
```

## Related Command

None

### 1.2.3 show configuration

#### Syntax

To display the running configuration file, use the **show configuration** command.

```
show configuration
```

#### Parameter

None



**Related Command**

None

**1.2.4 show running-config****Syntax**

To display the current configuration information of the system, run the following command:

```
show running-config [chassis chassis_num [slot slot_num] | global | interface port | pending {chassis chassis_num [slot slot_num] | global}]
```

**Parameter**

Parameter	Description
<i>chassis_num</i>	Chassis number, only 0 is valid for a standalone device, and a stacking device is used according to the actual situation.
<i>slot_num</i>	Slot number, only 0 is valid for stand-alone devices, and stack devices are used according to actual conditions.
<i>port</i>	port name

**Default**

None

**Command Mode**

EXEC mode or global configuration mode

**Usage Guidelines**

This command can be used to display the configuration of the current application. You can view configuration information of the slot, globally, or view the configuration information that has not been delivered.

In addition, if the frame and slot information is specified, the standalone setting is only valid when the frame and slot numbers are both 0, and the information can be displayed. If it is a stacking device, it needs to be filled in according to the actual stacking information, otherwise it is invalid.

**Example**

The following example shows how to display current global configuration information:

```
Switch(config)#show running-config global
```

```
Current configuration:
```

```
!
```

```
logging command
```

```
!
```

```
!
```

```
!
```

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```
spanning-tree mode rstp
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!
```

```
aaa authentication ssh default local
```

#### Related Command

None

### 1.2.5 write

It is used to save system configuration information.

#### Parameter

None

#### Default

None

Command Mode

Global configuration mode

Usage Guidelines

This command is used to save the current configuration.

Example

None

Related Command

**show configuration**

## Chapter 2 Terminal Service Configuration Commands

### 2.1 Telnet Configuration Commands

The chapter describes telnet and related commands. The **telnet** command is used to establish a session with the remote server. The **telnet** command is always working at the UNIX operating systems. Option negotiation is required. Telnet does not provide itself the login authentication. Telnet is different from Rlogin because telnet does not provide itself password check.

#### 2.1.1 ip telnetd enable

##### Syntax

```
ip telnetd enable  
no ip telnetd enable
```

##### Parameter

None

##### Default

Enabled

##### Usage Guidelines

This command is used to enable the telnetd service and monitor telnet connections.

##### Command Mode

Global configuration mode

##### Example

The following example shows how to disable the telnetd service:  
Switch(config)#no ip telnetd enable

#### 2.1.2 ip telnetd connections

##### Syntax

```
ip telnetd connections maxConnections  
no ip telnetd connections
```

## Parameter

Parameter	Description
maxConnections	The maximum number of telnet connections accepted locally, ranging from 1 to 64.

## Default

64

## Usage Guidelines

To prevent too many users from occupying connection resources, you can configure to limit the connection upper limit.

## Command Mode

Global configuration mode

## Example

The following example shows how to set the maximum number of connections to 10:

```
Switch(config)# ip telnetd connections 10
```

**2.1.3 ip telnetd port**

## Syntax

**ip telnetd port** *listen-port*  
**no ip telnetd port**

## Parameter

Parameter	Description
listen-port	User-specified listening port number.

## Default

23

## Usage Guidelines

This command is used to modify the listening port number of the telnetd service.

**Command Mode**

Global configuration mode

**Example**

The following example shows how to change the listening port number to 3030:

```
Switch(config)# ip telnetd port 3030
```

**2.2 Terminal Configuration Commands**

The terminal configuration commands include:

- exec-timeout
- terminal monitor

**2.2.1 exec-timeout****Syntax**

To set the maximum spare time for the terminal, use the following command:

```
[no] exec-timeout time
```

**Parameter**

Parameter	Description
<i>time</i>	Spare time whose unit is second. Range: 0-4294967295.

**Default**

900 (15min)

**Command Mode**

Line configuration mode

**Example**

Set the spare time of the line to one hour.

```
Switch(config)#exec-timeout 3600
```

**2.2.2 terminal monitor****Syntax**

It is used to display the debugging output information and system faulty information at the current terminal. The no form of the command is used to

disable the monitoring:

**terminal monitor**

**no terminal monitor**

### **Parameter**

None

### **Default**

The system monitoring port (console) is open by default. Other terminals are closed by default.

### **Command Mode**

Global configuration

### **Usage Guidelines**

The command is effective only to the current terminal. When the session is complete, the terminal attribute is invalid.

### **Example**

```
switch#terminal monitor
```

### **Related Command**

**line**

**debug**

## Chapter 3 SSH Configuration Commands

### 3.1.1 ip sshd enable

#### Syntax

```
ip sshd enable
no ip sshd enable
```

#### Parameter

None

#### Default

Disable

#### Usage Guidelines

It is used to monitor the connection to the ssh server.

#### Command Mode

Global configuration mode

#### Example

In the following example, the SSH service is generated.

```
Switch(config)#ip sshd enable
```

### 3.1.2 ip sshd connections

#### Syntax

```
ip sshd connections maxConnections
no ip sshd connections
```

#### Parameter

Parameter	Description
maxConnections	The maximum number of ssh connections accepted locally, ranging from 1 to 64.

**Default**

64

**Usage Guidelines**

To prevent too many users from occupying connection resources, you can configure to limit the connection upper limit.

**Command Mode**

Global configuration mode

**Example**

The following example shows how to set the maximum number of connections to 10:

```
Switch(config)# ip sshd connections 10
```

**3.1.3 ip sshd port****Syntax**

**ip sshd port** *listen-port*

**no ip sshd port**

**Parameter**

Parameter	Description
listen-port	User-specified listening port number.

**Default**

22

**Usage Guidelines**

This command is used to modify the listening port number of the sshd service.

**Command Mode**

Global configuration mode

**Example**

The following example shows how to change the listening port number to 3040:

```
Switch(config)# ip sshd port 3040
```

### 3.1.4 ssh

#### Syntax

**ssh** *destIP* **user** *userid* [**port** *port*]

#### Parameter

Parameter	Description
destIP	Destination IP address in the dotted decimal system
<b>user</b> <i>userid</i>	User account on the server
<b>port</b> <i>port</i>	Port number that the server monitors. Its default value is 22.

#### Default

None

#### Usage Guidelines

The command is used to create a connection with the remote ssh server.

#### Command Mode

Privileged mode

#### Example

In the following example, a connection with the ssh server whose IP address is 192.168.20.41 is created. The account is **zmz**:

```
Switch#ssh 192.168.20.41 user zmz
```

### 3.1.5 show ip sshd

#### Syntax

**show ip sshd**

#### Parameter

None

#### Default

None

## Usage Guidelines

It is used to display the current state of the ssh server.

## Command Mode

Privileged mode

## Example

In the following example, the current state of the ssh server is displayed:

```
Switch#show ip sshd
```

```
state: enable
```

```
connections: 64
```

```
port: 22
```

```
PasswordAuthentication: enable
```

```
PubkeyAuthentication: enable
```

## Chapter 4 Maintenance and Debugging Tool Commands

### 4.1 Network Testing Tool Commands

#### 4.1.1 ping

##### Syntax

It is used to test host accessibility and network connectivity. After the **ping** command is run, an ICMP request message is sent to the destination host, and then the destination host returns an ICMP response message.

**ping host** [-l length] [-n number] [-t ttl] [-w waittime] [-b interval] [-s tos] [-a]

##### Parameter

Parameter	Description
-l length	Sets the length of ICMP data in the message. Default: 56 bytes
-n number	Sets the total number of messages. Default: 5 messages
-s tos	Sets IP TOS of the message to <b>tos</b> . Default: 0
-t ttl	Sets IP TTL of the message to <b>ttl</b> . Default: 255
-w waittime	Time for each message to wait for response Default: 2 seconds
-b interval	Sets the time interval of sending ping packet. Unit: 10ms; Value range: 0-65535; Default Value: 0.
-a	Destination host

##### Command Mode

EXEC mode, global configuration mode

##### Usage Guidelines

The command supports that the destination address is the broadcast address or the multicast address. If the destination address is the broadcast address (255.255.255.255) or the multicast address, the ICMP request message is sent on all interfaces that support broadcast or multicast. The routing switch is to export the addresses of all response hosts. By pinging multicast address 224.0.0.1, you can obtain the information about all hosts in directly-connected network segment that support multicast transmission.

Press the **ctrl+c** to stop the **ping** command.

Simple output is adopted by default.

The z statistics information is exported:

Parameter	Description
packets transmitted	Number of transmitted messages
packets received	Number of received response messages, excluding other ICMP messages
packet loss	Rate of messages that are not responded to
round-trip min/avg/max/stddev	Minimum/average/maximum time of a round trip (ms). The fourth value is the degree to which the RTT of the icmp packet deviates from the average value, reflecting the degree of network jitter. The larger the value, the more unstable the link. Smaller values the value, the more stable.

### Example

```
Switch#ping 1.1.1.2
PING 1.1.1.2 (1.1.1.2): 56 data bytes

64 bytes from 1.1.1.2: icmp_seq=0 ttl=128 time=1.709 ms
64 bytes from 1.1.1.2: icmp_seq=1 ttl=128 time=1.353 ms
64 bytes from 1.1.1.2: icmp_seq=2 ttl=128 time=1.180 ms
64 bytes from 1.1.1.2: icmp_seq=3 ttl=128 time=1.111 ms
64 bytes from 1.1.1.2: icmp_seq=4 ttl=128 time=1.138 ms
--- 1.1.1.2 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max/stddev = 1.111/1.298/1.709/0.222 ms
```

## 4.1.2 traceroute

### Syntax

It is used to detect which routes have already reached the destination.

You can transmit to the destination the UDP packets (or ICMP ECHO packets) of different TTLs to confirm which routes have come to the destination. Each router on this path has to deduct 1 from the TTL value before forwarding ICMP ECHO packets. Speaking from this aspect, TTL is an effective hop count. When the TTL value of a packet is deducted to zero, the router sends back to the source system the ICMP timeout message.

By checking the ICMP timeout message sent back by intermedial routers, you can confirm the routers. At the arrival of the destination, the traceroute sends a UDP packet whose port ID is larger than 30000; the destination node hence can only transmit back a Port Unreachable ICMP message. This reception of this message means the arrival of destination.

**traceroute host** [-p port-number] [-q probe-count] [-m hops] [-t ttl] [-s tos] [-x

**icmp] [-w waittime]****Parameter**

Parameter	Description
<b>-p</b> <i>port-number</i>	Sets the ID of destination port that transmits UDP packets. Default: 33434
<b>-q</b> <i>probe-count</i>	Sets the number of packets that you detect each time. Default: 3 packets
<b>-w</b> <i>waittime</i>	The time for each message to wait for a response.
<b>-m</b> <i>hops</i>	Records the routes (at most <b>hops</b> routes can be recorded). Default: The routes are not recorded.
<b>-t</b> <i>tll</i>	Sets the IP TTL of packets as TTL. Default: the minimum and maximum TTLs are 1 and 30 respectively.
<b>-s</b> <i>tos</i>	Sets the IP TOS of the packet to <i>tos</i> . Default: 0.
<b>-x</b> <i>icmp</i>	Sets the detection packet to be the ICMP ECHO packet. Default: UDP packet
<i>host</i>	Means the destination host.

**Command Mode**

EXEC or global configuration mode

**Usage Guidelines**

The UDP packet is used for detection by default, but you can run **-x icmp** to replace it with ICMP ECHO for detection.

If you want to stop traceroute, press "ctrl+c".

The exported statistics information is as follows:

Parameter	Description
hops max	Means the maximum detection hops (the threshold of ICMP).
byte packets	Stands for the size of each detection packet.

**Example**

```
switch#traceroute 1.1.1.2
traceroute to 1.1.1.2 (1.1.1.2), 64 hops max
 1  1.1.1.2  0.627ms  1.087ms  0.956ms
```

**4.2 Fault Diagnosis Commands**

The chapter describes the commands used for fault diagnosis. All the following commands are used to detect the reason of the fault. You can use

other commands to remove the fault, such as the **debug** command.

The fault diagnosis commands include:

- logging command
- show debug
- no debug all
- syslog remote

#### 4.2.1 logging command

##### Syntax

To enable the command execution recording, run **logging command**. After this function is opened, a log will be generated for each of all entered commands, in which the line to execute this command, the command line, the execution result, the login line and the login address will be recorded.

You can use **no logging command** to disable this function.

##### Parameter

None

##### Default

no logging command

##### Command Mode

Global configuration mode

##### Example

```
Switch(config)#logging command
Switch(config)#Jul 11 15:26:56 %CMD-6-EXECUTE: `logging command ` return 0, switch(vty 0,
192.168.25.42).
```

##### Related Command

logging

#### 4.2.2 show debug

##### Syntax

It is used to display all the enabled debugging options of the switch.

**show debug**

##### Parameter

None

**Command Mode**

EXEC mode or global configuration mode

**Example**

```
Switch#show debug
sys error debugging is on
sys gs debugging is on
sys mblk debugging is on
Crypto Packet debugging is on
```

**Related Command**

Debug

## 4.2.3 no debug all

**Syntax**

This command is used to disable all debug output for the current VTY.

**no debug all**

Parameter

None

Command Mode

EXEC mode or global configuration mode

Example

**switch#no debug all**

## 4.2.4 syslog remote

**Syntax**

Use the **syslog remote** command to configure the log server address. After enabled, all logs will be sent to the specified log server.

**syslog remote** *host port*

Parameter

Parameter	Description
<i>host</i>	Configures the log server address to receive logs.

<i>port</i>	Configures the log server port number for receiving logs.
-------------	---

**Default**

None

**Command Mode**

Global configuration mode

**Example**

Switch(config)#syslog remote 192.169.1.11 514

**Related Command**

None

## 4.3 System Monitoring Commands

### 4.3.1 show temperature

**Syntax**

This command is used to display temperature.

**Parameter**

None

**Command Mode**

EXEC mode and configuration mode

**Usage Guidelines**

None

**Related Command**

None

### 4.3.2 show power

**Syntax**

This command is used to show power status.

Parameter

None

Command Mode

EXEC mode and configuration mode

Usage Guidelines

None

Related Command

None

#### 4.3.3 show fan

##### **Syntax**

This command is used to show fan status.

Parameter

None

Command Mode

EXEC mode and configuration mode

Usage Guidelines

None

Related Command

None

#### 4.3.4 show cpu

##### **Syntax**

This command is used to view CPU usage.

Parameter

None

Command Mode

EXEC mode and configuration mode

Usage Guidelines

None

Related Command

None

### 4.3.5 show mem

This command is used to view the mem occupancy rate.

Parameter

None

Command Mode

EXEC mode and configuration mode

Usage Guidelines

None

Related Command

None

## 4.4 Commands in EXEC

### 4.4.1 ip address

**Syntax**

To configure the IP address, run the following command.  
**ip address** *ip-address mask*

Parameter

Parameter	Description
-----------	-------------

<i>ip-address</i>	IP address.
<i>mask</i>	IP netmask.

Default

None

Command Mode

EXEC

Usage Guidelines

None

Example

monitor#ip address 192.168.1.1 255.255.255.0

Related Command

ping

4.4.2 copy

3.4.2.1 Upgrade bootrom

**Syntax**

**copy tftp[:filename] rom <server\_ip>**

Parameter

Parameter	Description
[:filename]	File name. If not specified, the user will be prompted to add after the copy command is executed.
<server_ip>	ip address of the tftp server

Default

None

Command Mode

EXEC

**Usage Guidelines**

None

**Example**

```
monitor#copy tftp:eprom.bin rom 192.168.1.100
```

**4.4.3 Upgrade version****Syntax**

```
copy tftp[:filename] kernel <server_ip>
```

**Parameter**

Parameter	Description
[:filename]	File name. If not specified, the user will be prompted to add after the copy command is executed.
<server_ip>	ip address of the tftp server

**Default**

None

**Command Mode**

EXEC

**Usage Guidelines**

None

**Example**

```
monitor#copy tftp:switch.bin kernel 192.168.1.100
```

or

```
monitor#copy tftp kernel 192.168.1.100
```

```
Source file name[]?
```

**4.4.4 boot kernel****Syntax**

```
Enable the version.
```

## Parameter

None

## Default

None

## Command Mode

EXEC

## Usage Guidelines

None

## 4.4.5 format

**Syntax**

To format the kernel partition, flash partition, systemd partition, run the following command.

**format** *kernel|flash|system|all*

## Parameter

Parameter	Description
<i>kernel</i>	Formats the kernel partition
<i>flash</i>	Formats the flash partition
<i>system</i>	Formats the system partition
<i>all</i>	Formats all Kernel, flash, system

## Default

Without Parameter, format kernel by default.

## Command Mode

EXEC

## Usage Guidelines

None

## 4.4.6 ping

**Syntax**

To do ping packet test, run the following command.

**ping** *ip-address*

## Parameter

Parameter	Description
<i>ip-address</i>	The IP address to ping.

## Default

None

## Command Mode

EXEC

## Usage Guidelines

None

## 4.4.7 reboot

**Syntax**

To reboot, run the following command.

**reboot** [noconfirm]

## Parameter

Parameter	Description
noconfirm	Run the command with this parameter, restart directly; if not, then the user will be asked whether to restart.

## Default

None

## Command Mode

EXEC

## Usage Guidelines

None

## Example

The following example shows how to reboot directly:

```
monitor#reboot noconfirm
```

The following example shows how to ask the user whether to reboot:

```
monitor#reboot
```

Do you want to reboot the Switch (y/n)