Content

Chapter 1 Commands for Show

1.1 clear history all-users

Command: clear history all-users
Function: Clear the command history of all users saved by the switch.
Command Mode: Admin mode
Usage Guide: Using this command can clear the command history of all users.
Example:
Switch#clear history all-users

1.2 history all-users max-length

Command: history all-users max-length <count>
Function: Set the max command history of all users saved by the switch.
Parameter: <count>: the command history number can be saved, ranging from 100 to 1000
Command Mode: Global mode
Usage Guide: The system can save 100 recent command history of all users at best by default, using this command can set the max command history number.
Example:
Switch(config)#history all-users max-length 500

1.3 logging executed-commands

Command: logging executed-commands {enable | disable}
Function: Enable or disable the logging executed-commands.
Parameter: None.
Command Mode: Global mode.
Default: Disable state.
Usage Guide: After enable this command, the commands executed by user at the console, telnet or ssh terminal will record the log, so it should be used with the logging LOGHOST command.
Example: Enable the command and send the commands executed by user into log host (10.1.1.1)
Switch(Config)#logging 10.1.1.1
Switch(Config)#logging executed-commands enable

1.4 ping

Command: ping [[src *<source-address>*] { *<destination-address>* | host *<hostname>* }]

Function: Issue ICMP request to remote devices, check whether the remote device can be reached by the switch.

Parameters: *<source-address>* is the source IP address where the ping command is issued, with IP address in dotted decimal format. ***<destination-address>*** is the target IP address of the ping command, with IP address in dotted decimal format. ***<hostname>*** is the target host name of the ping command, which should not exceed 64 characters.

Default: 5 ICMP echo requests will be sent. The default packet size and time out is 56 bytes and 2 seconds.

Command Mode: Admin mode

Usage Guide: When the ping command is entered without any parameters, interactive configuration mode will be invoked. And ping parameters can be entered interactively.

Example:

Example 1: To ping with default parameters.

Switch#ping 10.1.128.160

Type ^c to abort.

Sending 5 56-byte ICMP Echos to 10.1.128.160, timeout is 2 seconds.

...!!

Success rate is 40 percent (2/5), round-trip min/avg/max = 0/0/0 ms

In the example above, the switch is made to ping the device at 10.1.128.160. The command did not receive ICMP reply packets for the first three ICMP echo requests within default 2 seconds timeout. The ping failed for the first three tries. However, the last two ping succeeded. So the success rate is 40%. It is denoted on the switch "." for ping failure which means unreachable link, while "!" for ping success, which means reachable link.

Example 2: Use ping command with source address configuration, and leave other fields to default.

Switch#ping src 10.1.128.161 10.1.128.160

Type ^c to abort.

Sending 5 56-byte ICMP Echos to 10.1.128.160, using source address 10.1.128.161, timeout is 2 seconds.

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

In the example above, 10.1.128.161 is configured as the source address of the ICMP echo requests, while the destination device is configured to be at 10.1.128.160. The command receives all the ICMP reply packets for all of the five ICMP echo requests. The success rate is 100%. It is denoted on the switch "." for ping failure which means unreachable link, while "!" for ping success, which means reachable link.

Example 3: Ping with parameters entered interactively.

Switch#ping

VRF name：

Target IP address：10.1.128.160

Use source address option[n]: y

Source IP address: 10.1.128.161

Repeat count [5]: 100

Datagram size in byte [56]：1000

Timeout in milli-seconds [2000]: 500

Extended commands [n]: n

Display Information	Explanation
VRF name	VRM name. If MPLS is not enabled, this field will be left empty.
Target IP address：	The IP address of the target device.
Use source address option[n]	Whether or not to use ping with source address.
Source IP address	To specify the source IP address for ping.
Repeat count [5]	Number of ping requests to be sent. The default value is 5.
Datagram size in byte [56]	The size of the ICMP echo requests, with default as 56 bytes.
Timeout in milli-seconds [2000]:	Timeout in milli-seconds, with default as 2 seconds.
Extended commands [n]:	Whether or to use other extended options.

1.5 ping6

**Command: ping6 [<dst-ipv6-address> | host *<hostname>* | src *<src-ipv6-address>*
{*<dst-ipv6-address >* | host *<hostname>*}]**

Function: To check whether the destination network can be reached.

Parameters: *<dst-ipv6-address>* is the target IPv6 address of the ping command. ***<src-ipv6-address>*** is the source IPv6 address where the ping command is issued. ***<hostname>*** is the target host name of the ping command, which should not exceed 64 characters.

Default: Five ICMP6 echo request will be sent by default, with default size as 56 bytes, and default timeout to be 2 seconds.

Command Mode: Normal user mode

Usage Guide: When the ping6 command is issued with only one IPv6 address, other parameters will be default. And when the ipv6 address is a local data link address, the name of VLAN interface should be specified. When the source IPv6 address is specified,

the command will fill the icmp6 echo requests with the specified source address for ping.

Example:

(1) To issue ping6 command with default parameters.

Switch>ping6 2001:1:2::4

Type ^c to abort.

Sending 5 56-byte ICMP Echos to 2001:1:2::4, timeout is 2 seconds.

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/320/1600 ms

(2) To issue the ping6 command with source IPv6 address specified.

switch>ping6 src 2001:1:2::3 2001:1:2::4

Type ^c to abort.

Sending 5 56-byte ICMP Echos to 2001:1:2::4, using src address 2001:1:2::3, timeout is 2 seconds.

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms

(3) To issue the ping6 command with parameters input interactively.

switch>ping6

Target IPv6 address:fe80::2d0:59ff:feb8:3b27

Output Interface: vlan1

Use source address option[n]:y

Source IPv6 address: fe80::203:fff:fe0b:16e3

Repeat count [5]:

Datagram size in byte [56]:

Timeout in milli-seconds [2000]:

Extended commands [n]:

Type ^c to abort.

Sending 5 56-byte ICMP Echos to fe80::2d0:59ff:feb8:3b27, using src address fe80::203:fff:fe0b:16e3, timeout is 2 seconds.

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/4/16 ms

Display Information	Explanation
ping6	The ping6 command
Target IPv6 address	The target IPv6 address of the command.
Output Interface	The name of he VLAN interface, which should be specified when the target address is a local data link address.
Use source IPv6 address [n]:	Whether or not use source IPv6 address. Disabled by default.
Source IPv6 address	Source IPv6 address.
Repeat count[5]	Number of the ping packets.
Datagram size in byte[56]	Packet size of the ping command. 56 byte by default.

Timeout in milli-seconds[2000]	Timeout for ping command. 2 seconds by default.
Extended commands[n]	Extended configuration. Disabled by default.
!	The network is reachable.
.	The network is unreachable.
Success rate is 100 percent(8/8), round-trip min/avg/max = 1/1/1ms	Statistic information, success rate is 100 percent of ping packet.

1.6 show boot-files

Command: show boot-files
Function: Display the first and second IMG files and the CFG file enabled by switch.
Command Mode: Admin and Configuration Mode.
Usage Guide: After implementing this command, the booting sequence of IMG files in the corresponding storage device, which IMG file is currently used in booting, the configuration information of the CFG file in the storage device and the CFG file currently booted.
Example: Display the first and second IMG files and the CFG file enabled by switch.
Switch#show boot-files
Booted files on switch
The primary img file at the next boot time: flash:/nos.img
The backup img file at the next boot time: flash:/nos.img
Current booted img file: flash:/nos.img

The startup-config file at the next boot time: flash:/startup.cfg
Current booted startup-config file: flash:/startup.cfg

If the CFG file of the next booting is set as NULL, the CFG part mentioned above will be displayed as follows:
The startup-config file at the next boot time: NULL
Current booted startup-config file: flash:/startup.cfg

1.7 show debugging

Command: show debugging {l4 | l4drv | lldp | nsm | other | spanning-tree}
Function: Display the debug switch status.
Usage Guide: If the user needs to check what debug switches have been enabled, **show debugging** command can be executed.
Command mode: Admin Mode

Example: Check for currently nsm debug switch state.

Switch#show debugging nsm

NSM debugging status

Relative command: debug

1.8 show fan

This command is not supported by switch.

1.9 show flash

Command: show flash

Function: Show the size of the files which are reserved in the system flash memory.

Command Mode: Admin Mode and Configuration Mode.

Example: To list the files and their size in the flash.

Switch#show flash

boot.rom	329, 828 1900-01-01 00:00:00 --SH	
boot.conf	94 1900-01-01 00:00:00 --SH	
nos.img	2, 449, 496 1980-01-01 00:01:06 ----	
startup-config	2, 064 1980-01-01 00:30:12 ----	

1.10 show history

Command: show history

Function: Display the recent user command history.

Command mode: Admin Mode

Usage Guide: The system holds up to 20 commands the user entered, the user can use the UP/DOWN key or their equivalent (ctrl+p and ctrl+n) to access the command history.

Example:

Switch#show history

enable

config

interface ethernet 1/0/3

enable

dir

show ftp

1.11 show history all-users

Command: show history all-users [detail]
Function: Show the recent command history of all users.
Parameter: [detail] shows user name of the executing command. IP address of the user will be shown when logging in the executing command through Telnet or SSH.
Command Mode: Admin and configuration mode
Usage Guide: This command is used to show the recent command history of all users, including time, logging type, executing command, etc.
Notice: The user can only check the command history of other users whose purview should not be higher than oneself.
Example:
Switch(config)#show history all-users detail
Time   Type   User   Command
0w 0d 0h 2m   Telnet/SSH admin   show history all-users detail 192.168.1.2:1419
0w 0d 0h 1m   Telnet/SSH admin   show history all-users 192.168.1.2:1419
0w 0d 0h 1m   Console   Null   show history all-users
0w 0d 0h 1m   Console   Null   end
0w 0d 0h 1m   Console   Null   ip address 192.168.1.1 255.255.255.0
0w 0d 0h 0m   Console   Null   in v 1
0w 0d 0h 0m   Console   Null   telnet-server enable

1.12 show logging executed-commands state

Command: show logging executed-commands state
Function: Show the state of logging executed-commands.
Parameter: None.
Command Mode: Admin mode.
Default: None.
Usage Guide: Use this command to display the state (enable or disable).
Example:
Switch#show logging executed-commands state
Logging executed command state is enable

1.13 show memory

Command: show memory [usage]
Function: Display the contents in the memory.
Parameter: usage means memory use information.
Command mode: Admin Mode

Usage Guide: This command is used for switch debug purposes. The command will interactively prompt the user to enter start address of the desired information in the memory and output word number. The displayed information consists of three parts: address, Hex view of the information and character view.

Example:

Switch#show memory

start address : 0x2100

number of words[64]:

002100: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002110: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002120: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002130: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002140: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002150: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002160: 0000 0000 0000 0000 0000 0000 0000 0000 *................*
002170: 0000 0000 0000 0000 0000 0000 0000 0000 *................*

1.14 show running-config

Command: show running-config
Function: Display the current active configuration parameters for the switch.
Default: If the active configuration parameters are the same as the default operating parameters, nothing will be displayed.
Command mode: Admin Mode
Usage Guide: When the user finishes a set of configuration and needs to verify the configuration, show running-config command can be used to display the current active parameters.
Example:
Switch#show running-config

1.15 show running-config current-mode

Command: show running-config current-mode
Function: Show the configuration under the current mode.
Command mode: All configuration modes.
Default: None.
Usage Guide: Enter into any configuration mode and input this command under this mode, it can show all the configurations under the current mode.
Example:
Switch(config-if-ethernet1/0/1)#show run c

!

Interface Ethernet1/0/1

switchport access vlan 2

!

1.16 show startup-config

Command: show startup-config

Function: Display the switch parameter configurations written into the Flash memory at the current operation; those are usually also the configuration files used for the next power-up.

Default: If the configuration parameters read from the Flash are the same as the default operating parameter, nothing will be displayed.

Command mode: Admin Mode

Usage Guide: The **show running-config** command differs from **show startup**-**config** in that when the user finishes a set of configurations, **show running-config** displays the added-on configurations whilst **show startup**-**config** won't display any configurations. However, if **write** command is executed to save the active configuration to the Flash memory, the displays of **show running-config** and **show startup**-**config** will be the same.

1.17 show switchport interface

Command: show switchport interface [ethernet <IFNAME>]

Function: Show the VLAN port mode, VLAN number and Trunk port messages of the VLAN port mode on the switch.

Parameter: <IFNAME> is the port number.

Command mode: Admin mode

Example: Show VLAN messages of port ethernet 1/0/1.

Switch#show switchport interface ethernet 1/0/1

Ethernet1/0/1

Type :Universal

Mac addr num : No limit

Mode :Trunk

Port VID :1

Trunk allowed Vlan :ALL

Displayed Information	Description
Ethernet1/0/1	Corresponding interface number of the Ethernet.
Type	Current interface type.

Mac addr num	Numbers of interfaces with MAC address learning ability.
Mode: Trunk	Current interface VLAN mode.
Port VID :1	Current VLAN number the interface belongs.
Trunk allowed Vlan :ALL	VLAN permitted by Trunk.

1.18 show tcp

Command: show tcp
Function: Display the current TCP connection status established to the switch.
Command mode: Admin Mode
Example:
Switch#show tcp
LocalAddress   LocalPort ForeignAddress   ForeignPort   State
0.0.0.0   23   0.0.0.0   0   LISTEN
0.0.0.0   80   0.0.0.0   0   LISTEN

Displayed information	Description
LocalAddress	Local address of the TCP connection.
LocalPort	Local pot number of the TCP connection.
ForeignAddress	Remote address of the TCP connection.
ForeignPort	Remote port number of the TCP connection.
State	Current status of the TCP connection.

1.19 show tcp ipv6

Command: show tcp ipv6
Function: Show the current TCP connection.
Command mode: Admin and configuration mode.
Example:
Switch#show tcp ipv6
LocalAddress   LocalPort RemoteAddress   RemotePort State   IF VRF
::   80   ::   0   LISTEN   0 0
::   23   ::   0   LISTEN   0 0

Displayed Information	Explanation
LocalAddress	Local IPv6 address of TCP connection
LocalPort	Local port of TCP connection
RemoteAddress	Remote IPv6 address of TCP connection
RemotePort	Remote Port of TCP connection

State	The current state of TCP connection
IF	Local port index of TCP connection
VRF	Virtual route forward instance

1.20 show telnet login

Command: show telnet login
Function: List information of currently available telnet clients which are connected to the switch.
Command Mode: Admin Mode and Configuration Mode.
Usage Guide: This command used to list the information of currently available telnet clients which are connected to the switch.
Example:
Switch#show telnet login
Authenticate login by local.
Login user:
aa

1.21 show temperature

This command is not supported by the switch.

1.22 show tech-support

Command: show tech-support
Function: Display various information about the switch and the running tasks. This command is used to diagnose the switch by the technical support specialist.
Command Mode: Admin mode and configuration mode
Usage Guide: When failure occurred on the switch, this command can be used to get related information, in order to diagnose the problems.
Example:
Switch#show tech-support

1.23 show udp

Command: show udp
Function: Display the current UDP connection status established to the switch.
Command mode: Admin Mode

Example:

Switch#show udp

LocalAddress	LocalPort	ForeignAddress	ForeignPort	State
0.0.0.0	161	0.0.0.0	0	CLOSED
0.0.0.0	123	0.0.0.0	0	CLOSED
0.0.0.0	1985	0.0.0.0	0	CLOSED

Displayed information	Description
LocalAddress	Local address of the UDP connection.
LocalPort	Local pot number of the UDP connection.
ForeignAddress	Remote address of the UDP connection.
ForeignPort	Remote port number of the UDP connection.
State	Current status of the UDP connection.

1.24 show udp ipv6

Command: show udp ipv6

Function: Show the current UDP connection.

Command mode: Admin and configuration mode.

Example:

LocalAddress	LocalPort	RemoteAddress	RemotePort	State
::	69	::	0	CLOSED
::	1208	::	0	CLOSED

Displayed Information	Explanation
LocalAddress	Local IPv6 address of UDP connection
LocalPort	Local port of UDP connection
RemoteAddress	Remote IPv6 address of UDP connection
RemotePort	Remote Port of UDP connection
State	The current state of UDP connection

1.25 show version

Command: show version

Function: Display the switch version.

Command mode: Admin Mode

Usage Guide: Use this command to view the version information for the switch, including hardware version and software version.

Example:

Switch#show version

1.26 traceroute

**Command: traceroute [source <ipv4-addr>] { <ip-addr> | host <hostname> } [hops
<*hops*>] [timeout <*timeout*>]**
Function: This command is tests the gateway passed in the route of a packet from the
source device to the target device. This can be used to test connectivity and locate a
failed sector.
Parameter: <*ipv4-addr*> is the assigned source host IPv4 address in dot decimal format.
<*ip-addr*> is the target host IP address in dot decimal format. **<*hostname*>** is the
hostname for the remote host. **<*hops*>** is the maximum gateway number allowed by
Traceroute command. **<*timeout*>** Is the timeout value for test packets in milliseconds,
between 100 -10000.
Default: The default maximum gateway number is 30, timeout in 2000 ms.
Command mode: Admin Mode
Usage Guide: Traceroute is usually used to locate the problem for unreachable network
nodes.

1.27 traceroute6

**Command: traceroute6 [source <addr>] {<ipv6-addr> | host <hostname>} [hops
<hops>] [timeout <timeout>]**
Function: This command is for testing the gateways passed by the data packets from
the source device to the destination device, so to check the accessibility of the network
and further locating the network failure.
Parameter*: <addr>* is the assigned source host IPv6 address in colonned hex notation.
<*ipv6-addr*> is the IPv6 address of the destination host, shown in colonned hex notation;
<*hostname*> is the name of the remote host; **<*hops*>** is the max number of the
gateways the traceroute6 passed through, ranging between 1-255; **<*timeout*>** is the
timeout period of the data packets, shown in millisecond and ranging between
100~10000.
Default: Default number of the gateways passes by the data packets is 30, and timeout
period is defaulted at 2000ms.
Command Mode: Admin Mode
Usage Guide: Traceroute6 is normally used to locate destination network inaccessible
failures.
Example:
Switch# traceroute6 2004:1:2:3::4
Relevant Command: ipv6 host

Chapter 2 Commands for Reload Switch after Specified Time

2.1 reload after

Command: reload after {[*<HH:MM:SS>*] [days *<days>*]}
Function: Reload the switch after a specified period of time.
Parameters: *<HH:MM:SS>* the specified time, HH (hours) ranges from 0 to 23, MM (minutes) and SS (seconds) range from 0 to 59.

        <days> the specified days, unit is day, range from 1 to 30.

        time and day may be configured at the same time or configured solely.
Command Mode: Admin mode
Usage Guide: With this command, users can reboot the switch without shutdown its power after a specified period of time, usually when updating the switch version. The switch can be rebooted after a period of time instead of immediately after its version being updated successfully. This command will not be reserved, which means that it only has one-time effect. After this command is configured, it will prompt the reboot information when user logging in the switch by telnet.
Example: Set the switch to automatically reload after 2 days, 10 hours and 1 second.
Switch#reload after 10:00:01 days 2
Process with reboot after? [Y/N] y
Related Commands: reload, reload cancel, show reload

2.2 reload cancel

Command: reload cancel
Function: Cancel the specified time period to reload the switch.
Parameters: None
Command Mode: Admin mode.
Usage Guide: With this command, users can cancel the specified time period to reload the switch, that is, to cancel the configuration of command "reload after". This command will not be reserved.
Example: Prevent the switch to automatically reboot after the specified time.
Switch#reload cancel
Reload cancel successful.
Related Commands: reload, reload after, show reload

2.3 show reload

Command: show reload

Function: Display the user's configuration of command "reload after".

Parameters: None.

Command Mode: Admin and configuration mode

Usage Guide: With this command, users can view the configuration of command "reload after" and check how long a time is left before rebooting the switch.

Example: View the configuration of command "reload after". In the following case, the user set the switch to be rebooted in 10 hours and 1 second, and there are still 9 hours 59 minutes and 48 seconds left before rebooting it.

Switch#show reload

 The original reload after configuration is 10:00:01.

 System will be rebooted after 09:59:48 from now.

Related Commands: reload, reload after, reload cancel

Chapter 3 Commands for Debugging and Diagnosis for Packets Received and Sent by CPU

3.1 clear cpu-rx-stat protocol

Command: clear cpu-rx-stat protocol[<protocol-type>]

Function: Clear the statistics of the CPU received packets of the protocol type.

Parameter: ***<protocol-type>*** is the type of the protocol of the packet**,** including dot1x, stp, snmp, arp, telnet, http, dhcp, igmp, ssh

Command Mode: Global Mode

Usage Guide: This command clear the statistics of the CPU received packets of the protocol type, it is supposed to be used with the help of the technical support.

Example: Clear the statistics of the CPU receives ARP packets.

Switch(config)#clear cpu-rx-stat protocol arp

3.2 cpu-rx-ratelimit channel

This command is not supported by the switch.

3.3 cpu-rx-ratelimit enhanced

This command is not supported by the switch.

3.4 cpu-rx-ratelimit protocol

Command: cpu-rx-ratelimit protocol *<protocol-type> <packets>*

             no cpu-rx-ratelimit protocol *<protocol-type>*

Function: Set the max rate of the CPU receiving packets of the protocol type, the no command set the max rate to default.

Parameter: <protocol-type> is the type of the protocol, including dot1x, stp, snmp, arp, telnet, http, dhcp, igmp, ssh; <packets> is the max rate of CPU receiving packets of the protocol type, ***its range*** is 1-2000 pps.

Command Mode: Global Mode

Default: A different default rate is set for the different type of protocol.

Usage Guide: The rate limit set by this command have an effect on CPU receiving packets, so it is supposed to be used with the help of the technical support.

Example: Set the rate of the ARP packets to 500pps.

Switch(config)#cpu-rx-ratelimit protocol arp 500

3.5 cpu-rx-ratelimit queue-length

This command is not supported by the switch.

3.6 cpu-rx-ratelimit total

Command: cpu-rx-ratelimit total *<packets>*

　　　　　no cpu-rx-ratelimit total

Function: Set the total rate of the CPU receiving packets, the no command sets the total rate of the CPU receiving packets to default.

Parameter: <packets> is the max number of CPU receiving packets per second.

Command Mode: Global Mode

Default: 1200pps.

Usage Guide: The total rate set by the command have an effect on CPU receiving packets, so it is supposed to be used with the help of the technical support.

Example: Set the total rate of the CPU receive packets to 1500pps.

Switch(config)#cpu-rx-ratelimit total 1500

3.7 debug driver

Command: debug driver {receive | send} [interface {*<interface-name>* | all}] [protocol {*<protocol-type>* | discard | all}] [detail]

　　　　no debug driver {receive | send}

Function: Turn on the on-off of showing the information of the CPU receiving or sending packets, the "**no debug driver {receive | send}**" command turns off the on-off.

Parameter: receive | send show the information of receiving or sending packets;

interface {*<interface-list>*| all}: interface-list is the Ethernet port number, **all** indicate all the Ethernet ports.

protocol {*<protocol-type>* | discard | all}: protocol-type is the type of the protocol of the packet, including snmp, telnet, http, dhcp, igmp, arp, ssh, icmpv6, dot1x, gvrp, stp, lacp, cluster, eapou **all** means all of the protocol types, **discard** means all the discarded packets.

Detail show detail information.

Command Mode: Admin Mode

Usage Guide: This command is used to debug, it is supposed to be used with the help of the technical support.

Example: Turn on the on-off for showing the receiving packets.

Switch#debug driver receive

3.8 protocol filter

This command is not supported by the switch.

3.9 show cpu-rx protocol

Command: show cpu-rx protocol [*<protocol-type>*]

Function: Show the statistics of the CPU received packets of the specified protocol type.

Parameter: *<protocol- type>* is the protocol type of the packets, if do not input parameters, show all statistic packets.

Command Mode: Admin and configuration mode

Default: None.

Usage Guide: This command is used to debug, it is supposed to be used with the help of the technical support.

Example: Show the statistics of CPU receiving ARP packets.

Switch#show cpu-rx protocol arp

Type	Rate-limit	TotPkts	CurState
arp	500	3	allowed

3.10 cpu-rx-limitnotify enable interval

Command: cpu-rx-limitnotify enable interval <180-86400>

Function: Enable cpu-rxlimitnotify function and specified the time interval of trigger.

Parameters: *interval* interval time, the default time is 86400s.

Command Mode: Configuration mode.

Usage Guide: This command used for diagnosing protocol information that switch received. Please using under the guidance of manufacturer technical staff

Example:

Switch(config)#cpu-rx-limitnotify enable interval 180

3.11 no cpu-rx-limitnotify enable

Command: no cpu-rx-limitnotify enable

Function: Close cpu-rxlimitnotify function.

Command Mode: Configuration mode.

Example:

Switch(config)# no cpu-rx-limitnotify enable

3.12 cpu-rx-limitnotify protocol (all|WORD)(enable| disable)

Command: cpu-rx-limitnotify protocol (all|WORD)(enable|disable)

Function: Open or close all protocols or specified protocols. After open, cpu-rx-limitnotify detected cpu-rx happened deny in interval period, sending the deny amount in the time to users by snmp trap.

Command Mode: Configuration mode.

Example:

Close all protocols

Switch(config)# cpu-rx-limitnotify protocol all disable

Open all protocols

Switch(config)# cpu-rx-limitnotify protocol all enable

Open specified protocols

Switch(config)# cpu-rx-limitnotify protocol snmp enable

Close specified protocols

Switch(config)# cpu-rx-limitnotify protocol snmp disable

Chapter 4 Commands for DCP

4.1 dcp enable

Command: dcp enable

Function: This command is used to enable the dcp function.

Parameters: None.

Default: Disable.

Command Mode: Global Configuration Mode.

Usage Guide: dcp enable is used to enable the dcp function. After enabled this command, the rate that IP packets going on CPU will be counted and limited. The device can stop the other-ipuc packets whose flow is too large dynamically and protect the CPU. The type of other-ipuc packet is that the destination mac is the one of CPU, the destination ip is the one which cannot achieved and is in the same network segment with the ip that it is not this interface. For example, the mac address of the CPU of switch is 00-03-0f-ff-3e-1e, there is interface vlan 1 on the switch and the address is 10.1.1.1, the address of interface vlan 10 is 20.1.1.1. So, the destination mac from interface vlan 1 is 00-03-0f-ff-3e-1e, the destination ip is 20.1.1.x and the packets that the ip cannot achieve will be distinguished as other-ipuc packets.

Example: Enable the dcp function.

Switch(Config)# dcp enable

4.2 dcp disable

Command: dcp disable

Function: Disable the dcp function.

Parameters: None.

Default: Disable.

Command Mode: Global Configuration Mode.

Usage Guide: The command of dcp disable is used to disable the dcp function. After the command is effective, the dcp function of the device will be disabled. All the configurations of dcp will be cleared.

Example: Disable the dcp function.

Switch(Config)#dcp disable

4.3 dcp limit-rate <20-50>

Command: dcp limit-rate <20-50>

      no dcp limit-rate

Function: Configure the limit-rate value of dcp. The no command cancels it and recovers it to be the default value.

Parameters: <20-50> is the limit-rate value.

Default: 20.

Command Mode: Global Configuration Mode.

Usage Guide: After configured the limit-rate value, if the rate of ip going on CUP is larger than this value, conduct the rate limiting. The limit-rate is 20-50. When the number of packets is smaller than the half of the configured limit-rate in 5s, the rate limiting will be canceled.

Example: Configure the global limit-rate as 50.

Switch(Config)# dcp limit-rate 50

Cancel the configuration of the limit-rate and recover it to be the default value of 20.

Switch(Config)# no dcp limit-rate

4.4 dcp no-limit-ip <ip_addr>

Command: dcp no-limit-ip <ip_addr>

      no dcp no-limit-ip <ip_addr>

Function: Configure the IP that the dcp does not limit its rate. The no command cancels it.

Parameters: <ip_addr> is the appointed IP address.

Default: Limit rate for all IP after enabled dcp.

Command Mode: Global Configuration Mode.

Usage Guide: After configured not to limit the rate for the specific IP, dcp will not limit rate for this IP, but for other IP, the rate limiting is still effective. The no command cancels this configuration and recovers to be rate limiting. This command can configure the maximum value as 1024, it cannot be issued when exceeds this value.

Example: dcp does not limit rate for 1.1.1.1.

Switch(Config)# dcp no-limit-ip 1.1.1.1

Cancel the above configuration and recover to be rate limiting.

Switch(Config)# no dcp no-limit-ip 1.1.1.1

4.5 show dcp limit-rate

Command: show dcp limit-rate

Function: Show the limit-rate configured by user.

Parameters: None.

Command Mode: Global and Admin Mode.

Usage Guide: Show the limit-rate configured by user.

Example:

Switch(config)#show dcp limit-rate

DCP limit rate is 50.

4.6 show cpu ip rate top10

Command: show cpu ip rate top10 [slot <1-9>|member <1-16>]

Function: Show the first 10 IP with the maximum rate of going on cpu in 5s and show the limit-rate value.

Parameters: slot<1-9> is the slot id, member<1-16> is the member number.

Command Mode: Global and Admin Mode.

Usage Guide: Show the first 10 IP with the maximum rate of going on cpu in 5s and show the limit-rate value.

Example:

Switch(config)#show cpu ip rate top10

------------------member:16-----------------

No.   IP   Rate(pkts/s)

----

1   11.11.11.21   5s   96

2   11.11.11.12   5s   52

3   11.11.11.13   5s   50

4   11.11.11.11   5s   39

5   11.11.11.14   5s   24

6   11.11.11.15   5s   21

7   11.11.11.20   5s   12

8   11.11.11.17   5s   8

9   11.11.11.16   5s   8

10   11.11.11.19   5s   7

------------------member:10-----------------

No.   IP   Rate(pkts/s)

4.7 show dcp limited ip

Command: show dcp limited ip [slot <1-9>|member <1-16>]

Function: Show the node information of the ip which is limited the rate.

Parameters: slot<1-9> is the slot id, member<1-16> is the member number.

Command Mode: Global and Admin Mode.

Usage Guide: Show the node information of the ip which is limited the rate.

Example:

Switch(config)#show dcp limited ip

-------------------member:16-----------------

No.   Limited-IP   Rate(pkts/s)

----

1   11.11.11.16   1s   64

2   11.11.11.13   1s   61

3   11.11.11.19   1s   3

4   11.11.11.17   1s   3

5   11.11.11.14   1s   6

6   11.11.11.12   1s   26

7   11.11.11.11   1s   34

8   11.11.11.21   1s   51

-------------------member:10-----------------

No.   Limited-IP   Rate(pkts/s)

4.8 clear dcp speed limit rules

Command: clear dcp speed limit rules {member <1-16>}

Function: Clear the rate limiting rule that the DCP sent to the drive.

Parameters: member<1-16> is the member number.

Command Mode: Admin Mode.

Usage Guide: Clear the rate limiting rule that the DCP sent to the drive. User can appoint the slot id or ip.

Example:

Clear all the rate limiting rules that the DCP sent including all the slots and ip.

Switch#clear dcp speed limit rules

Clear all of the speed limit rules successfully!

Clear the rate limiting ruls that the DCP sent of member 16.

Switch#clear dcp speed limit rules member 16

Clear all of the speed limit rules successfully!

Clear the rate limiting rule that the DCP sent to the IP of 1.1.1.1.

Switch#clear dcp speed limit rules ip 11.11.11.14

Clear the speed limit rules of [11.11.11.14] successfully!

4.9 debug dcp packet

Command: debug dcp packet

      no debug dcp packet

Function: Show the process that the DCP deals with and monitor the packet going up the CPU, the no command cancels printing.

Parameters: None.

Command Mode: Admin Mode.

Usage Guide: When user wants to known the situation of each packet received by dcp, please use this command to view the detailed information including source IP, destination IP, source port, destination port, protocol number, etc.

Example:

Switch#debug dcp packet

Switch#packet DCP_PKT debug is on

Switch#%Jan 01 08:12:05 2006 %DCP-PKT:Receive a packet:

source ip	dest ip	source mac	dest mac	source port	dest port
protocol					
11.11.11.21	20.1.1.21	00-00-0b-00-02-0b	00-03-0f-29-28-3e	0	0
84					

%Jan 01 08:12:05 2006 %DCP-PKT:Receive a packet:

source ip	dest ip	source mac	dest mac	source port	dest port
protocol					
11.11.11.20	20.1.1.20	00-00-0b-00-02-0a	00-03-0f-29-28-3e	0	0
86					

4.10 debug dcp event

Command: debug dcp event

   no debug dcp event

Function: Show the process that the DCP deals with the events. The no command cancels printing.

Parameters: None.

Command Mode: Admin Mode.

Usage Guide: When user wants to know the detailed information of the IP rate limiting, please use this command to view.

Example:

Switch#debug dcp event

Switch#event DCP_EVENT debug is on

Switch#%Jan 01 08:17:21 2006 %DCP-EVENT:Current ip info node num is: [11].

%Jan 01 08:17:27 2006 %DCP-EVENT:The current rate of [11.11.11.19] is 57pkts/s, out of the limited value(50)!

%Jan 01 08:17:27 2006 %DCP-EVENT:[11.11.11.19] is denied successful by drv!

%Jan 01 08:17:27 2006 %DCP-EVENT:[11.11.11.19] is added to deny list.

%Jan 01 08:17:27 2006 DCP:The current rate of [11.11.11.19] is 57pkts/s, out of the limited value(50). DCP denies it successfully!

%Jan 01 08:17:27 2006 %DCP-EVENT:The current rate of [11.11.11.20] is 60pkts/s, out of the limited value(50)!

%Jan 01 08:17:27 2006 %DCP-EVENT:[11.11.11.20] is denied successful by drv!

%Jan 01 08:17:27 2006 %DCP-EVENT:[11.11.11.20] is added to deny list.

Chapter 5 Commands for COPP

5.1 copp-policy-map

Command: copp-policy-map *<policy-map name>*

             no policy-map *<policy-map-name>*

Function: Create a copp-policy-map and enter the copp-policy-map mode. The no command deletes the appointed copp-policy-map.

Parameters: *<policy-map-name>* is the name of the policy map.

Default: There is no copp-policy-map as default.

Command Mode: Global Configuration Mode.

Usage Guide: Create the copp-policy-map under the global mode and enter the copp-policy-map mode, user can conduct to classify and match.

Example: Create and delete the copp-policy-map whose name is p1.

Switch(config)#copp-policy-map p1

Switch(config-copp-policymap-p1)#exit

Switch(config)#no policy-map p1

5.2 service-policy output

Command: service-policy output *<policy-map name>*

             no service-policy output *<policy-map-name>*

Function: Apply a policy map to the egress of the port. The no command deletes the policy map.

Parameters: output *<policy-map-name>*: Apply the policy map with the appointed name to the egress of the port.

Default: There is no policy map bound.

Command Mode: Port Mode.

Usage Guide: When the copp policy map is bound to the egress of the port, finally it is bound to the cpu port actually and it is effective on the cpu port, it cannot affect the egress of the port. Only one policy map can be applied to each direction of each port, the ingress does not support the policy map.

Example: Bind the p1 to the egress of ethernet1/0/1.

Switch(config)#interface ethernet 1/0/1

Switch(config-if-ethernet1/0/1)# service-policy output p1

5.3 show policy-map

Command: show policy-map *<policy-map-name>*

Function: Show the policy-map information of QoS.

Parameters: *<policy-map-name>* is the name of the policy map.

Default: None.

Command Mode: Admin and Configuration Mode.

Usage Guide: Show the information of all the configured copp-policy-map or the appointed copp-policy-map.

Example:

Switch#show policy-map

COPP Policy Map p1, used by 1 time(s)

  Class Map name: c1

    policy CIR: 10 CBS: 11

    exceed-action:

    drop

COPP Policy Map p2, used by 0 time(s)

  Class Map name: c1

    Drop

    Switch#show policy-map p1

    COPP Policy Map p1, used by 1 time(s)

     Class Map name: c1

      policy CIR: 10 CBS: 11

      exceed-action:

      drop

5.4 policy packets-per-second

This command is not supported by switch.

5.5 policy

Command:

Single Bucket Mode:

Policy   <bits_per_second>   <normal_burst_bytes>   ({action{{policied-cos-to-cos-

transmit{policied-cos-to-dscp-transmit|violate-action}|policied-cos-to-dscp-transmit{policied-cos-to-cos-transmit|violate-action   }| policied-dscp-exp-to-cos-transmit{policied-dscp-exp-to-dscp-transmit|violate-action}|policied-dscp-exp-to-dscp-transmit{policied-dscp-exp-to-cos-transmit| violate-action }}violate-action {drop| transmit}} | exceed-action ACTION })

Dual Bucket Mode:

policy   <bits_per_second>   <normal_burst_bytes>   [pir   <peak_rate_bps>] | <maximum_burst_bytes> [{action{{policied-cos-to-cos-transmit{policied-cos-to-dscp-transmit|violate-action}|policied-cos-to-dscp-transmit{policied-cos-to-cos-transmit| violate-action   }| policied-dscp-exp-to-cos-transmit{policied-dscp-exp-to-dscp-transmit|violate-action}|policied-dscp-exp-to-dscp-transmit{policied-dscp-exp-to-cos-transmit| violate-action }} | exceed-action | violate-action ACTION }]

ACTION definition:

drop | transmit | policied-intp-transmit {drop|transmit| set-internal-priority } | set-internal-priority <inp_value> {drop|transmit| policied-intp-transmit }

no policy

Function: It supports the non-aggregation policy command of three colors, analyze the working mode of the token bucket, whether it is single rate singe bucket, singe rate dual bucket or dual rate dual bucket, and set the corresponding action for different color packets. The no operation will delete the mode configuration.

Parameters:

bits_per_second: The committed information rate – CIR (Committed Information Rate), in Kbps, ranging from 1 to 10000000;

normal_burst_bytes: The committed burst size – CBS (Committed Burst Size), in Kbyte, ranging from 1 to 1000000. When the configured CBS value is smaller than 11 or larger than 100, it is applied to the port, CLI prompts the error information;

maximum_burst_bytes: The peak burst size – PBS (Peak Burst Size), in byte, ranging from 1 to 10000000. When the configured PBS value exceeds the max limit of the chip, configure the hardware with max number supported by the chip without any CLI prompt. Notice: this configuration only exists in dual bucket mode;

pir peak_rate_bps: The peak information rate – PIR (Peak Information Rate), in kbps, ranging from 1 to 10000000. Without configuring PIR, the Police works in the single rate dual bucket mode; otherwise in the dual rate dual bucket mode. Notice: this configuration only exists in dual bucket mode;

violate-action: The actions to take when the PIR is exceeded, which means the messages are red, the default as drop;

action: The actions to take when the CIR is not exceeded, which means the messages are green, the default as transmit;

exceed-action: The actions to take when the CIR is exceeded but PIR isn't, which means the messages are yellow, the default as drop.

ACTION include:

drop/transmit: Drop/transmit the packets;

policied-intp-transmit: sends the packets whose internal priority mapping is changed through qos policy;

set-internal-priority: sets the internal priority of the packets.

Command Mode: Policy class map configuration Mode.

Default: No policy action; the default action of exceed-action and violate-action are both drop.

Usage Guide: The CLI can support both singe bucket and dual bucket configuration, and determine which one to select by checking whether PIR or PBS is configured. When configuring with CLI, after configuring CBS, if the action is directly configured, the mode is single bucket dual color; if only PBS is configured, the mode is single rate dual bucket three color; if PIR and PBS are configured, the mode is dual rate dual bucket three color.

Example: In the policy class table configuration mode, set the CIR as 10kbps, CBS as 20kBps and the action when CIR is not exceeded as transmitting as default, and the action triggered by exceeding CIR as transmitting the messages after changing DSCP to 23.

Switch(config)#class-map c1

Switch(config-classmap-c1)#match access-group 1

Switch(config-classmap-c1)#exit

Switch(config)#copp-policy-map p1

Switch(config-copp-policymap-p1)#class c1

Switch(config-copp-policymap-p1-class-c1)#policy 10 20 exceed-action set-internal-priority 23 transmit

Chapter 6 Commands for Info-center

There are 10 output channels. 0-5 are the default, they are shown in the following table:

Table Commands for Info-center-1

Channel No.	Channel name (default)	Explanation
0	console	Control panel
1	monitor	Monitor terminal
2	loghost	Log host
3	trapbuffer	Warning buffering
4	logbuffer	Log buffering
5	Channel5	Snmp agency (unused)
6~8	Channeln (n is for 6~8)	Non-default channels, they can be configured.
9	logfile	Log file

6.1 Info-center enable

Command: info-center enable
            no info-center enable
Function: This command is used to enable the info-center function. The info-center can be configured normally no matter the output function is enabled or not. So this command is a switch of outputting the information of info-center control. The no command can disable the information which is being output. The original configuration is always effective after enabled this command.
Parameters: None.
Default: Disable.
Command Mode: Globla Mode.
Usage Guide: Enable/disable the outputting of info-center under the global mode.
Example:
Switch(config)#info-center enable
Switch(config)#no info-center enable

6.2 Terminal monitor

Command: terminal monitor
            no terminal monitor
Function: The same part between the function of this command and info-center enable

is that they can both enable or disable the outputting of info-center. The difference is: info-center enable is only a switch, and the three kinds of information source will keep their original status after disabled this command. Terminal monitor can enable or disable all of three kinds of information source at the same time. For example, if only enables the debug information source ourput, no info-center enable can disable it, and then info-center enable can only enable the debug information source output. If uses no terminal monitor to disable it, and then the terminal monitor can enable all of three kinds of information source.

Parameters: None.

Default: Disable.

Command Mode: Globla Mode.

Usage Guide: Enable/disable the outputting of info-center under the global mode.

Example:

Switch(config)# terminal monitor

Switch(config)#no terminal monitor

6.3 Terminal debug

Command: terminal debug

        no terminal debug

Function: The function of this command is similar to terminal monitor. But this command only controls to output the debug information source or not.

Parameters: None.

Default: Disable.

Command Mode: Globla Mode.

Usage Guide: Enable/disable the debug outputting of info-center information source under the global mode.

Example:

Switch(config)# terminal debug

Switch(config)#no terminal debug

6.4 Terminal logging

Command: terminal logging

        no terminal logging

Function: The function of this command is similar to terminal monitor. But this command only controls to output the log information source or not.

Parameters: None.

Default: Disable.

Command Mode: Globla Mode.

Usage Guide: Enable/disable the log outputting of info-center information source under the global mode.

Example:

Switch(config)# terminal logging

Switch(config)#no terminal logging

6.5 Terminal trapping

Command: terminal trapping

no terminal trapping

Function: The function of this command is similar to terminal monitor. But this command only controls to output the trap information source or not.

Parameters: None.

Default: Disable.

Command Mode: Globla Mode.

Usage Guide: Enable/disable the trap outputting of info-center information source under the global mode.

Example:

Switch(config)# terminal trapping

Switch(config)#no terminal trapping

6.6 show info-center

Command:

Cassette device supports:

show info-center

Chassis device supports:

show info-center slot {<slot ID>}

Function: This command is used to show the resources which can be configured in info-center. It includes all the information source, channels and output directions. Notice: the output direction of snmp is shown, but it is not supported and can not be configured.

Default: Disable.

Command Mode: All Modes.

Usage Guide: It shows all the information source, channels and output directions.

Example:

Sysname#show info-center

card name master card

sources

debug log trap

channels

channel 0 name console

channel 1 name monitor

channel 2 name loghost

channel 3 name trapbuffer

channel 4 name logbuffer

channel 5 name channel5

channel 6 name channel6

channel 7 name channel7

channel 8 name channel8

channel 9 name channel9

directions

console monitor loghost trapbuffer logbuffer snmpagent logfile

Explanation of results:

Domain	Explanation
Card name	The card name shown in info-center. It is master card for cassette device. The explanation for chassis device will be added later.
Sources	Names of all the information source
Channels	Names and IDs of all the channels
Directions	Names of all the directions (snmpagent is unused)
Slot ID	Slot ID, including 1, 2, 3...M1, M2

6.7 show info-center source

Command:

Cassette device supports:

show info-center source {debug | log | trap}

Chassis device supports:

show info-center source {debug | log | trap} slot {<slot ID>}

Function: Show the configuration of the appointed information source in info-center.

Default: Disable.

Command Mode: All Modes.

Usage Guide: This command is used to show the configuration of the appointed information source in info-center. It includes information source name, time stamp and the bound channels.

Example:

Sysname#show info-center source debug

card name master card

source debug

time stamp format DATE

channels

channel 0 name console level debugging prefix off

channel 1 name monitor level debugging prefix off

channel 4 name logbuffer level errors prefix on

channel 9 name channel9 level errors prefix on

Explanation of results:

Domain	Explanation
Card name	The card name shown in info-center. It is master card for cassette device. The explanation for chassis device will be added later.
Source	Name of the appointed information source
Time stamp	Time stamp format, its explanation is shown in the chapter of information source format.
Channels	Name and configuration of the channel which is bound to the appointed information source. Level: allows to show the security level of the information. Prefix: whether the output information includes prefix. The prefix includes the other details except the content of information source format. If prefix status is on, the prefix information is included, if it is off, only outputs content.
Slot ID	Slot ID, including 1, 2, 3...M1, M2

6.8 show info-center channel

Command:
Cassette device supports:
show info-center channel {<channel ID>|<channel name>}
Chassis device supports:
show info-center channel {<channel ID>|<channel name>} slot{<slot ID>}
Function: Show the configuration of the appointed channel in info-center.
Default: Disable.
Command Mode: All Modes.
Usage Guide: This command is used to show the configuration of the appointed channel in info-center. It includes information source, security level, prefix switch and the bound output direction.
Example: Show the configuration of the appointed channel 0 in info-center.
Sysname#show info-center channel 0
card name master card
channel 0 name console
sources
source debug level debugging prefix off
source log level debugging prefix on
source trap level debugging prefix on

directions

direction console

console has no special config

Sysname#

Explanation of results:

Domain	Explanation
Card name	The card name shown in info-center. It is master card for cassette device. The explanation for chassis device will be added later.
Channel	ID and name of the appointed channel
Sources	Information source which is bound to the appointed channel. It includes security level and if there is prefix.
Directions	Output direction which is bound to the appointed channel. The configuration of each direction is different.
Slot ID	Slot ID, including 1, 2, 3...M1, M2

6.9 show info-center direction

Command:

Cassette device supports:

show info-center direction {<direction name>} [channel {<channel ID> | <channel name>}]

Chassis device supports:

show info-center direction {<direction name>} [channel {<channel ID> | <channel name>}][slot <slot ID>]

Function: Show the configuration of the appointed output direction in info-center.

Parameters:

Parameter	Explanation
Direction name	The direction name includes console, monitor, logbuffer, trapbuffer, loghost and logfile currently.
Channel	Currently, loghost and logfile support to bind to multiple channels and each bound channel can have different configuration information. When the appointed direction is loghost or logfile, the channel should be appointed for showing the detailed configuration.
Slot ID	Slot ID, including 1, 2, 3...M1, M2. Only loghost and logfile support it.

Default: Disable.

Command Mode: All Modes.

Usage Guide: This command is used to show the configuration of the appointed output direction in info-center. The configuration of each direction is different.
Example: Show the configuration of the appointed output direction in info-center.
Sysname#show info-center direction logfile channel 9
path /mnt/flash/logfile.log
size 1000
Sysname#

Explanation of results:

Domain	Explanation
Path	Path of saving Logfile. /mnt/flash is flash:
Size	In Logfile, unit is KB for size, it can cycle cover if exceeds. In Logbuffer and trapbuffer, unit is number of logs for size.

6.10 show info-center logbuffer

Command:
Cassette device supports:
show info-center logbuffer [<regular mode>{<regular condition>}]
Chassis device supports:
show info-center logbuffer slot {<slot ID>} [<regular mode>{<regular condition>}]
Function: Show the log in logbuffer.
Parameters:

Parameter	Explanation
Slot ID	Slot ID, including 1, 2, 3...M1, M2
Regular mode	Logbuffer can adopt the regular expression for screening and viewing. It includes the following modes: INCLUDE: it only shows the log including regular condition. EXCLUDE: it shows the log without regular condition. BEGIN: it shows all the logs that the first log in them includes regular condition; the following logs can be without regular condition. Shows all the logs if not inputting any regular mode.
Regular condition	It is the string used to screen the logs. Only when the regular mode is include, exclude or begin, this parameter is effective.

Default: Disable.
Command Mode: All Modes.
Usage Guide: This command is used to show the log in logbuffer. The regular expression can be used for screening.
Example: Show the log in logbuffer of info-center.

Sysname#show info-center logbuffer begin 02:19:36
Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 02:19:36:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 02:19:36:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 02:19:36:000 2000 Sysname DEFAULT/8/:source:1 severity:8

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 20:44:00:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 20:44:00:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 20:44:00:000 2000 Sysname DEFAULT/8/:source:1 severity:8

----finish show log buffer----
Sysname#

6.11 show info-center trapbuffer

Command: show info-center trapbuffer [<regular mode>{<regular condition>}]
Function: Show the log in trapbuffer.
Parameters:

Parameter	Explanation
Regular mode	Trapbuffer can adopt the regular expression for screening and viewing. It includes the following modes: INCLUDE: it only shows the log including regular condition. EXCLUDE: it shows the log without regular condition. BEGIN: it shows all the logs that the first log in them includes regular condition; the following logs can be without regular condition. Shows all the logs if not inputting any regular mode.
Regular condition	It is the string used to screen the logs. Only when the regular mode is include, exclude or begin, this parameter is effective.

Default: Disable.
Command Mode: All Modes.
Usage Guide: This command is used to show the log in trapbuffer. The regular expression can be used for screening.
Example: Show the log in trapbuffer of info-center.
Sysname#show info-center trapbuffer begin 02:19:36
Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 02:19:36:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 02:19:36:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 02:19:36:000 2000 Sysname DEFAULT/8/:source:1 severity:8

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 20:44:00:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 20:44:00:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 20:44:00:000 2000 Sysname DEFAULT/8/:source:1 severity:8

----finish show trap buffer----
Sysname#

6.12 show info-center logfile

Command:

Cassette device supports:

show info-center logfile channel {<channel ID>|<channel name>} [<regular mode>{<regular condition>}]

Chassis device supports:

show info-center logfile channel {<channel ID>|<channel name>} {slot{<slot ID>} [<regular mode>{<regular condition>}]

Function: Show the log in logfile.

Parameters:

Parameter	Explanation
Channel ID	Because logfile can be bound to multiple channels, the channel ID or name must be appointed in the log of logfile.
Channel name	Because logfile can be bound to multiple channels, the channel ID or name must be appointed in the log of logfile.
Slot ID	Slot ID, including 1, 2, 3...M1, M2
Regular mode	Logbuffer can adopt the regular expression for screening and viewing. It includes the following modes: INCLUDE: it only shows the log including regular condition. EXCLUDE: it shows the log without regular condition. BEGIN: it shows all the logs that the first log in them includes regular condition; the following logs can be without regular condition. Shows all the logs if not inputting any regular mode.
Regular condition	It is the string used to screen the logs. Only when the regular mode is include, exclude or begin, this parameter is effective.

Default: Disable.

Command Mode: All Modes.

Usage Guide: This command is used to show the log in logfile. The regular expression can be used for screening.

Example: Show the log in logfile of info-center.

Sysname#show info-center logfile channel 9 begin 02:19:36

Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 02:19:36:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 02:19:36:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 02:19:36:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 02:19:36:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 02:19:36:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 02:19:36:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 02:19:36:000 2000 Sysname DEFAULT/8/:source:1 severity:8

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:0 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:0 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:0 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:0 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/1/:source:1 severity:1

Jan 01 20:44:00:000 2000 Sysname DEFAULT/2/:source:1 severity:2

Jan 01 20:44:00:000 2000 Sysname DEFAULT/3/:source:1 severity:3

Jan 01 20:44:00:000 2000 Sysname DEFAULT/4/:source:1 severity:4

Jan 01 20:44:00:000 2000 Sysname DEFAULT/5/:source:1 severity:5

Jan 01 20:44:00:000 2000 Sysname DEFAULT/6/:source:1 severity:6

Jan 01 20:44:00:000 2000 Sysname DEFAULT/7/:source:1 severity:7

Jan 01 20:44:00:000 2000 Sysname DEFAULT/8/:source:1 severity:8

----finish show log file----
Sysname#

6.13 info-center channel

Command: info-center channel {<channel ID>} name {<channel name>}
         no info-center channel {<channel ID>}
Function: Configure the channel name of info-center.
Parameters:

Parameter	Explanation
Channel ID	The channel ID which needs to be modified.
Channel name	The modified channel name

Default: Disable.
Command Mode: Globla Mode.
Usage Guide: This command is used to modify the channel name. The no command is used to recover the default name which is shown in table 6-1.
Example: Configure the channel name of info-center.
Sysname(config)# info-center channel 0 name console
Sysname(config)#

6.14 info-center source

Command: info-center source {<source name>} level {<severity>} prefix {<on|off>}
channel {<channel ID>|<channel name>}
         no info-center source {<source name>} channel {<channel ID>|
<channel name>}
Function: Configure the binding relationship between information source and channel.
Parameters:

Parameter	Explanation
Source name	Information source name includes debug, log and trap.
Severity	Information security level, range is 1-8.
On|off	Whether there is prefix in the information.
Channel ID|channel name	The ID or name of the channel which is bound to the appointed information source.

Default: Disable.
Command Mode: Globla Mode.
Usage Guide: This command is used to configure the binding relationship between information source and channel. After binding, the information of the appointed source will output the information to the appointed channel. Each binding relationship has different security level and prefix switch. The no command cancels the relationship.
Example: Configure the binding relationship between information source and channel.

Sysname(config)#info-center source debug level 1 prefix on channel 0
Sysname(config)#

6.15 info-center console

Command: info-center console channel {<channel ID>|<channel name>}
             no info-center console channel
Function: Configure the binding relationship between output direction console and channel.
Parameters:

Parameter	Explanation
Channel ID|channel name	The ID or name of the channel which is bound to console.

Default: Disable.
Command Mode: Globla Mode.
Usage Guide: This command is used to configure the binding relationship between output direction console and channel. After binding, the information output to this channel will output the information to console. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The console can be only bound to one channel currently, so the no command does not need to appoint the channel ID, the system can query the binding relationships.
Example: Configure the binding relationship between output direction console and channel.
Sysname(config)# info-center console channel 0
Sysname(config)#

6.16 info-center monitor

Command: info-center monitor channel {<channel ID>|<channel name>}
             no info-center monitor channel
Function: Configure the binding relationship between output direction monitor and channel.
Parameters:

Parameter	Explanation
Channel ID|channel name	The ID or name of the channel which is bound to monitor.

Default: Disable.
Command Mode: Global Mode.

Usage Guide: This command is used to configure the binding relationship between output direction monitor and channel. After binding, the information output to this channel will output the information to monitor. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The monitor can be only bound to one channel currently, so the no command does not need to appoint the channel ID, the system can query the binding relationships.

Example: Configure the binding relationship between output direction monitor and channel.

Sysname(config)# info-center monitor channel 1
Sysname(config)#

6.17 info-center logbuffer

Command: info-center logbuffer channel {<channel ID>|<channel name>}
no info-center logbuffer channel
Function: Configure the binding relationship between output direction logbuffer and channel.
Parameters:

Parameter	Explanation
Channel ID|channel name	The ID or name of the channel which is bound to logbuffer.

Default: Disable.
Command Mode: Global Mode.
Usage Guide: This command is used to configure the binding relationship between output direction logbuffer and channel. After binding, the information output to this channel will output the information to logbuffer. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The logbuffer can be only bound to one channel currently, so the no command does not need to appoint the channel ID, the system can query the binding relationships.

Example: Configure the binding relationship between output direction logbuffer and channel.

Sysname(config)# info-center logbuffer channel 2
Sysname(config)#

6.18 info-center trapbuffer

Command: info-center trapbuffer channel {<channel ID>|<channel name>}

           no info-center trapbuffer channel

Function: Configure the binding relationship between output direction trapbuffer and channel.

Parameters:

Parameter	Explanation
Channel ID|channel name	The ID or name of the channel which is bound to trapbuffer.

Default: Disable.

Command Mode: Global Mode.

Usage Guide: This command is used to configure the binding relationship between output direction trapbuffer and channel. After binding, the information output to this channel will output the information to trapbuffer. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The trapbuffer can be only bound to one channel currently, so the no command does not need to appoint the channel ID, the system can query the binding relationships.

Example: Configure the binding relationship between output direction trapbuffer and channel.

Sysname(config)# info-center trapbuffer channel 3

Sysname(config)#

6.19 info-center loghost

Command:

Cassette device supports:

info-center loghost {<host server address>} facility {<local0-local7>} channel {<channel ID>|<channel name>}

no info-center loghost channel {<channel ID>|<channel name>}

Chassis device supports:

info-center loghost {<host server address>} facility {<local0-local7>} channel {<channel ID>|<channel name>} slot {<slot ID>}

no info-center loghost channel {<channel ID>|<channel name>} slot {<slot ID>}

Function: Configure the binding relationship between output direction loghost and channel.

Parameters:

Parameter	Explanation

Host server address	Syslog server address. Only ipv4 unicast address is supported currently. The command only checks if the address format is correct. For the other types of addresses such as multicast address or broadcast address, it does not check it.
Local0-local7	Message type that the Syslog server requests, range is from 16 to 23.
Channel ID|channel name	The ID or name of the channel which is bound to loghost.
Slot ID	Slot ID, including 1, 2, 3...M1, M2

Default: Disable.

Command Mode: Global Mode.

Usage Guide: This command is used to configure the binding relationship between output direction loghost and channel. After binding, the information output to this channel will output the information to loghost. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The loghost can be bound to multiple channels and each of them can be appointed different log server addresses and facility, so the channel ID must be appointed when using the no command.

Example: Configure the binding relationship between output direction loghost and channel.

Sysname(config)# info-center loghost 192.168.1.1 facility local0 channel 4
Sysname(config)#

6.20 info-center logfile

Command:

Cassette device supports:

info-center logfile channel {<channel ID>|<channel name>} size {1-10240} {flash| usb}{<file name>}

no info-center logfile channel {<channel ID>|<channel name>}

Chassis device supports:

info-center logfile channel {<channel ID>|<channel name>} size {1-10240} {flash| usb}{<file name>} slot {<slot ID>}

no info-center logfile channel {<channel ID>|<channel name>} slot {<slot ID>}

Function: Configure the binding relationship between output direction logfile and channel.

Parameters:

Parameter	Explanation
Channel ID|channel	The ID or name of the channel which is bound to

name	logfile.
1-10240	Size for Logfile, unit is KB, it can cycle cover if exceeds.
Flash|usb	Currently, the place that the logfile can be saved is the flash managed by file system and usb device. If there is no usb device, the command will prompt error when configuring. The command of info-center list all disk can be used to view where the logfile can be saved.
File name	After appointed the path for saving file, the file name is the name of logfile. The length of the file name is according to the command prompt.
Slot ID	Slot ID, including 1, 2, 3...M1, M2

Default: Disable.

Command Mode: Global Mode.

Usage Guide: This command is used to configure the binding relationship between output direction loghost and channel. After binding, the information output to this channel will output the information to loghost. After binding the source to channel, there will not be the actual outputting; it only limits the output information and its format. Only after binding the channel to the output direction, there will be the actual outputting. None of these two bindings is dispensable. The loghost can be bound to multiple channels and each of them can be appointed different log files, so the channel ID must be appointed when using the no command.

Example: Configure the binding relationship between output direction logfile and channel.

Sysname(config)# info-center logfile channel 9 size 10 switch-directory flash:logfile.log
Sysname(config)#

6.21 info-center reset

Command:

Cassette device supports:

info-center reset {logbuffer|trapbuffer}

Chassis device supports:

info-center reset {logbuffer|trapbuffer} slot {<slot ID>}

Function: Delete all the logs recorded by logbuffer or trapbuffer in info-center.

Parameters:

Parameter	Explanation
Logbuffer| trapbuffer	Clear the direction name of log, only including logbuffer and trapbuffer.
Slot ID	Slot ID, including 1, 2, 3...M1, M2

Default: Disable.

Command Mode: Global Mode.

Usage Guide: This command is used to appoint the time stamp format of the information source. The no command recovers the default time stamp.

Example: Delete all the logs recorded by logbuffer in info-center.

Sysname(config)# info-center reset logbuffer

Sysname(config)#

6.22 info-center save all

Command: info-center save all [switch-directory {flash|usb} {<file name>}]

Function: This is one key to collect function in info-center.

Parameters:

Parameter	Explanation
Switch-direction	When the file path and name are not input, the collected information will be saved in flash area and the name is the default file name.
Flash|usb	Currently, the place that the logfile can be saved is the flash managed by file system and usb device. If there is no usb device, the command will prompt error when configuring. The command of info-center list all disk can be used to view where the logfile can be saved.
File name	After appointed the path for saving file, the file name is the name of the file with all information. The length of the file name is according to the command prompt.

Default: Disable.

Command Mode: Global Mode.

Usage Guide: This command is used to collect with one key. The collected content is the configuration and the log information recorded by logbuffer, trapbuffer, etc.

Example: This is one key to collect function in info-center.

Sysname(config)# info-center save all switch-directory flash:saveall.log

Now saving infocenter global configuration, please wait..

Now saving infocenter source configuration, please wait..

Now saving infocenter channel configuration, please wait..

Now saving infocenter direction configuration, please wait..

Now saving infocenter logbuffer content, please wait..

Now saving infocenter trapbuffer content, please wait..

Finish saving all!

Sysname(config)#

6.23 info-center list all disk

Command: info-center list all disk
Function: View the area that the file saved in info-center.
Parameters: None.
Default: Disable.
Command Mode: Global Mode.
Usage Guide: This command is used to view the area that the file saved in info-center. It only includes flash managed by file system and the usb device. When there is no usb device, the usb area will no be seen.
Example: View the area that the file saved in info-center.
Sysname(config)# info-center list all disk
flash:
Sysname(config)#

6.24 info-center timestamp

Command: info-center timestamp {debug|log|trap} {boot|date|none}
          no info-center timestamp {debug|log|trap}
Function: Configure the time stamp format of information source.
Parameters:

Parameter	Explanation
debug|log|trap	Name of information source. The time stamp is only related to information source currently.
boot|date|none	Time stamp format. The default time stamp is date.

Default: Disable.
Command Mode: Global Mode.
Usage Guide: This command is used to appoint the time stamp format of information source. The no command recovers to be the default time stamp.
Example: Configure the time stamp format of information source.
Sysname(config)# info-center timestamp log boot
Sysname(config)#

6.25 info-center test

Command: info-center test [toconsole]
Function: It is the debug command in info-center.
Parameters:

Parameter	Explanation
toconsole	If choose toconsole, all the output content of the debug command will be output to console.

Default: Disable.
Command Mode: Global Mode.
Usage Guide: This command is used to produce the test log and check if every output direction is normal. The function of info-center is to provide it to every module to output the log. But the time of log outputting cannot be controlled by info-center. So there will be the test log produced in info-center for checking if the outputting is normal.

There will be three information sources when runs this command, and every information source includes 24 logs of 8 information security levels. According to the info-center configuration, user can check if the information can be output to each direction normally, if outputs and if the output format conforms to expectation.

Because there are lots of output directions, the environment building is too cumbersome, and viewing the log outputting and format from every direction is to troublesome, the toconsoleParameter is added. With this parameter, the logs of every direction will be output to console, and the direction will be marked in the test log. This is convenient to only view if the info-center configuration is effective.
Example: It is the debug command in info-center.
Sysname(config)# info-center test toconsole
source:0 severity:1
direction:console
source:0 severity:1
direction:monitor
Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:0 severity:1
direction:logBuffer
Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:0 severity:1
direction:logFile
source:0 severity:2
direction:console
source:0 severity:2
direction:monitor
Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:0 severity:2
direction:logBuffer
Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:0 severity:2

direction:logFile

source:0 severity:3

direction:console

source:0 severity:3

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:0 severity:3

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:0 severity:3

direction:logFile

source:0 severity:4

direction:console

source:0 severity:4

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:0 severity:4

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:0 severity:4

direction:logFile

source:0 severity:5

direction:console

source:0 severity:5

direction:monitor

source:0 severity:6

direction:console

source:0 severity:6

direction:monitor

source:0 severity:7

direction:console

source:0 severity:7

direction:monitor

source:0 severity:8

direction:console

source:0 severity:8

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:1 severity:1

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:1 severity:1

direction:monitor

<184>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:1 severity:1

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:1 severity:1

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:1 severity:2

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:1 severity:2

direction:monitor

<185>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:1 severity:2

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:1 severity:2

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:1 severity:3

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:1 severity:3

direction:monitor

<186>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:1 severity:3

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:1 severity:3

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:1 severity:4

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:1 severity:4

direction:monitor

<187>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:1 severity:4

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:1 severity:4

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:1 severity:5

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:1 severity:5

direction:monitor

<188>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:1 severity:5

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:1 severity:5

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:1 severity:6

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:1 severity:6

direction:monitor

<189>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:1 severity:6

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:1 severity:6

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:1 severity:7

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:1 severity:7

direction:monitor

<190>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:1 severity:7

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:1 severity:7

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:1 severity:8

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:1 severity:8

direction:monitor

<191>Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:1 severity:8

direction:logHost

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:1 severity:8

direction:logBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:2 severity:1

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:2 severity:1

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/1/:source:2 severity:1

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:2 severity:2

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:2 severity:2

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/2/:source:2 severity:2

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:2 severity:3

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:2 severity:3

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/3/:source:2 severity:3

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:2 severity:4

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:2 severity:4

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/4/:source:2 severity:4

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:2 severity:5

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:2 severity:5

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/5/:source:2 severity:5

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:2 severity:6

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:2 severity:6

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/6/:source:2 severity:6

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:2 severity:7

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:2 severity:7

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/7/:source:2 severity:7

direction:trapBuffer

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:2 severity:8

direction:console

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:2 severity:8

direction:monitor

Jan 02 03:24:21:000 2000 SYSNAME DEFAULT/8/:source:2 severity:8

direction:trapBuffer

Sysname(config)#