3Com Switch 4200G Family
Quick Reference Guide

Overview

This Command Reference applies to the following Switch 4200G models:

Switch 4200G 12-Port (3CR17660-91)
Switch 4200G 24-Port (3CR17661-91)
Switch 4200G 48-Port FX (3CR17662-91)
Switch 4200G 1-Port 10Gigabit Module (XFP) (3C17666)

About the Command Line Interface

To use and navigate the command line interface of your unit, please refer to the following points for assistance:

- When initially accessing the command line interface, press Enter when prompted. The User View menu for the unit displays. This is indicated by the chevron brackets around the name of the unit at the prompt, for example, `<sw4200G>`.
- When in the System View menu, square brackets appear around the name of the unit at the prompt, for example, `[sw4200G]`.
- You must be in the System View menu to access the configurable CLI commands.
- Some commands can be entered directly at any prompt from anywhere in the interface.
- If you enter part of a command followed by a **?** (with no space between), the CLI will show you all the commands that begin in that way.
- The term 'view' may be used interchangeably with the term 'menu'.
- The **undo** command is placed before the command you wish to undo, for example, **undo setauthentication** password.
- <CTRL-A> places the cursor back to the start of the command line.
- Enter the first few characters of a command and press TAB to enter the full command without having to input the entire command (where there is only one command that starts with the entered characters).
- Use the Up Arrow key at the prompt to repeat the previous command string.
- Use the Delete key to delete the character after the cursor; the Backspace key deletes the character before the cursor.
- When entering physical port numbers, Enter the port number as **x/0/z**, where x is the unit number and z is the physical port number.

www.3Com.com
Part Number: 10014917 Rev. AA
Published: July 2006

Displaying Command Parameters

At the prompt, enter the name of the command followed by a space and `?`. For example:

```
<sw4200G>boot ?
```

The following parameters are displayed:

attribute-switch	Exchange the file main-attribute and backup-attribute.
boot-loader	Select a file to boot at the next time
bootrom	Update Bootrom
web-package	Set web resource package

To specify boot loader, enter the command as follows:

```
<sw4200G>boot boot-loader ?
```

You only need to enter **?** if parameters exist for the command.

Displaying Parent Menus

At the prompt, enter **quit**.

Displaying the User View Menu

Press <CTRL-Z>.

Obtaining Help

At the prompt, enter `?`.

Further Information

For further information about how to use the command line interface, refer to the Command Reference Guide and the Configuration Guide, which are both available as PDF documents on the CD that accompanied the unit.

Commands

`access-limit`

Use the **access-limit** command to set the maximum number of access users that can be contained in current ISP domain.

ISP Domain view

`accounting`

Use the **accounting** command to configure an accounting scheme for the current ISP domain.

ISP Domain view

`accounting domain`

Use the **accounting domain** command to enable the DHCP accounting function.

DHCP Address Pool view

`accounting-on enable`

Use the **accounting-on enable** command to enable user re-authentication upon device restart function.

RADIUS Scheme view

`accounting optional`

Use the **accounting optional** command to open the accounting-optional switch.

ISP Domain view
RADIUS Scheme view

`acl`

Use the **acl** command to reference ACL and implement the ACL control to the TELNET users.

User Interface view
Web command: Security -> Authorized IP

acl

Use the **acl** command to define an ACL identified by a number, and enter the corresponding ACL View.

System view
Web command: Device -> ACL Security -> IP

active region-configuration

Use the **active region-configuration** command to activate the settings of an MST (multiple spanning tree) region.

MST Region view

add-member

Use the **add-member** command to add a candidate device to a cluster.

Cluster view

address-check

Use the **address-check** command to enable or disable DHCP relay security on a VLAN interface, so as to start or stop the validity check on user addresses under the VLAN interface.

VLAN Interface view

administrator-address

Use the **administrator-address** command to store the MAC address of the management device on a member device.

Cluster view
Web command: Port -> Statistics

am user-bind

Use the **am user-bind** command to bind the MAC and IP addresses of a legal user to a specified port.

System view
Ethernet Port view

apply qos-profile

Use the **apply qos-profile** command to manually apply the QoS profile to the current port.

Ethernet Port view
Web command: Device -> ACL/QoS -> Profile

apply qos-profile interface

Use the **apply qos-profile interface** command to manually apply a QoS profile to one or more consecutive ports.

System view

arp check enable

Use the **arp check enable** command to enable the ARP entry checking function, that is, to disable a switch from creating multicast MAC address ARP entries for MAC addresses learned.

System view

arp static

Use the **arp static** command to configure the static ARP mapping entries in the ARP mapping table.

System view

arp timer aging

Use the **arp timer aging** command to configure the aging time for dynamic ARP mapping entries.

System view

ascii

Use the **ascii** command to configure data transmission mode as ASCII mode.

FTP Client view

attribute

Use the **attribute** command to configure attributes of a user whose service type is lan-access.

Local User view
Web command: Administration -> System

authentication

Use the **authentication** command to configure an authentication scheme for the current ISP domain.

ISP Domain view

authentication-mode

Use the command **authentication-mode** to specify the authentication mode.

User Interface view

authorization

Use the **authorization none** command to allow users in the current ISP domain to use network services without being authorized.

ISP Domain view

`auto-build`

Use the **auto-build** command to create a cluster automatically.

Cluster view

`auto-execute command`

Use the **auto-execute command** command to set the command that is executed automatically after a user logs in.

User Interface view

`binary`

Use the **binary** command to specify that files be transferred in binary mode. That is, data is transferred in binary streams.

FTP Client view

`black-list add-mac`

Use the **black-list add-mac** command to add a device into the blacklist.

Cluster view

`black-list delete-mac`

Use the **black-list delete-mac** command to delete a device from the blacklist.

Cluster view

`boot attribute-switch`

Use the **boot attribute-switch** command to switch between the main and backup attribute for all the files or a specified type of files. This changes a file with the main attribute to one with the backup attribute, or vice versa.

User view

`boot boot-loader`

Use the **boot boot-loader** command to configure an app file to be of the main attribute. The app file specified by this command becomes the main startup file when the device starts the next time.

User view

`boot boot-loader`

Use the **boot boot-loader** command to specify the host software that will be adopted when the current switch or a specified switch in the fabric reboots next time.

User view

`boot boot-loader backup-attribute`

Use the **boot boot-loader backup-attribute** command to configure an app file to be of the backup attribute.

User view

`boot bootrom`

Use the **boot bootrom** command to update the BootROM.

User view

`boot web-package`

Use the **boot web-package** command to configure a Web file to be of the main or backup attribute.

User view

`broadcast-suppression`

Use the **broadcast-suppression** command to define the broadcast traffic ratio allowed on one port or each of the ports.

System view
Web command: Port -> Administration

`build`

Use the **build** command to configure a cluster with the current switch as the management device. Argument name specifies the name of the cluster.

Cluster view

`bye`

Use the **bye** command to terminate the connection to the remote SFTP server and return to system view.

SFTP Client view

`bye`

Use the **bye** command to terminate the control connection and data connection with the remote FTP server and quit to user view.

FTP Client view

`cd`

Use the **cd** command to change the current path on the remote SFTP server.

SFTP Client view

cd

Use the **cd** command to enter a specified directory on the Ethernet switch.

User view

cd

Use the **cd** command to change the work path on the remote FTP server.

FTP Client view

cdup

Use the **cdup** command to return to the upper directory.

SFTP Client view

cdup

Use the **cdup** command to enter the parent directory.

FTP Client view

check region-configuration

Use the **check region-configuration** command to display the configurations of the MST regions that are not activated.

MST Region view

clock datetime

Use the **clock datetime** command to set the current system time and date.

User view

clock summer-time

Use the **clock summer-time** command to set the name, time range, and offset of the daylight saving time.

User view

clock timezone

Use the **clock timezone** command to set local time zone information.

User view

close

Use the **close** command to terminate an FTP connection without quitting FTP client view.

FTP Client view

cluster

Use the **cluster** command to enter cluster view.

System view

cluster enable

Use the **cluster enable** command to enable the cluster function on a switch.

System view

cluster-local-user

Use the **cluster-local-user** command to configure a Web username and password for all cluster members.

Cluster view

cluster-mac

Use the **cluster-mac** command to configure a multicast MAC address for cluster management. Run this command only on the management device only.

Cluster view

cluster-mac syn-interval

Use the **cluster-mac syn-interval** command to set the interval for the management device to send multicast packets. This command can be executed on the management device only.

Cluster view

cluster-snmp-agent community

Use the **cluster-snmp-agent community** command to configure a SNMP community for a cluster to enable SNMP access.

Cluster view

cluster-snmp-agent group v3

Use the **cluster-snmp-agent group** command to configure a SNMP group for a cluster to map SNMP users to the SNMP view.

Cluster view

cluster-snmp-agent mib-view included

Use the **cluster-snmp-agent mib-view** command to create or update the information about the MIB view configured for a cluster.

Cluster view

`cluster-snmp-agent usm-user v3`

Use the **cluster-snmp-agent usm-user v3** command to add an account to the SNMPV3 group configured for a cluster.

Cluster view

`cluster switch-to`

Use the **cluster switch-to** command to switch between the management device and member devices for configuration and management.

User view

`cluster switch-to sysname`

Use the **cluster switch-to sysname** command to switch between the master device and a member device.

User view

`command-privilege level`

Use the **command-privilege level** command to set the level of the specified command in a specified view.

System view

`copy`

Use the **copy** command to copy a file.

User view

`copy configuration`

Use the **copy configuration** command to copy the configuration of a specific port to other ports, to ensure consistent configuration.

System view

`cut connection`

Use the **cut connection** command to cut the connection a user or a category of users by force.

System view

`data-flow-format`

Use the **data-flow-format** command to set the units of measure for the data flow sent to the RADIUS Server.

RADIUS Scheme view

`databits`

Use the **databits** command to set the databits for the user interface.

User Interface view

`debugging`

Use the **debugging** command to enable the system debugging.

User view

`debugging`

Use the **debugging** command to enable the system debugging.

User view

`debugging arp packet`

Use the **debugging arp packet** command to enable ARP debugging.

User view

`debugging dhcp client`

Use the **debugging dhcp client** command to enable debugging for the DHCP client/BOOTP client.

User view

`debugging dhcp-relay`

Use the **debugging dhcp-relay** command to enable DHCP relay debugging.

User view

`debugging DLDP`

Use the **debugging dldp** command to enable specific debugging for DLDP on all ports with DLDP enabled.

User view

`debugging ntp-service`

Use the **debugging ntp-service** command to debug different NTP (network time protocol) services.

User view

`debugging radius`

Use the **debugging radius** command to enable the debugging for RADIUS protocol.

User view

`debugging snmp-agent`

Use the **debugging snmp-agent** command to enable SNMP Agent debugging.

User view

`debugging udp-helper`

Use the **debugging udp-helper** command to enable UDP Helper debugging.

User view

`delete`

Use the **delete** command to delete a specified file stored on a switch.

User view

`delete`

Use the **delete** command to delete the specified file from the server.

SFTP Client view

`delete`

Use the **delete** command to delete the specified remote file.

FTP Client view

`delete-member`

Use the **delete-member** command to remove a member device from the cluster.

Cluster view

`delete static-routes all`

Use the **delete static-routes all** command to delete all the static routes.

System view
Web command: Device -> IP Route

`description`

Use the **description** command to enter a description of an Ethernet port.

Ethernet Port view

`description`

Use the **description** command to assign a description string for the VLAN.

Use the **undo description** command to restore the default description string.

VLAN view
Web command: Security -> RADIUS Client

`description`

Use the **description** command to assign a description string to a VLAN or a VLAN interface.

VLAN view
VLAN Interface view
Web command: Device -> VLAN

`description`

Use the **description** command to define the description information of an ACL to describe the specific purpose of the ACL.

Basic ACL view
Advanced ACL view
Layer 2 ACL view

`dhcp relay information enable`

Use the **dhcp relay information enable** command to enable option 82 supporting on a DHCP relay, through which you can enable the DHCP relay to insert option 82 into DHCP request packets sent to a DHCP server.

System view

`dhcp relay information strategy`

Use the **dhcp relay information strategy** command to instruct a DHCP relay to perform specified operations to DHCP request packets that carry option 82.

System view

`dhcp-security static`

Use the **dhcp-security static** command to configure a static user address entry.

System view

`dhcp-server`

Use the **dhcp-server** command to map the current VLAN interface to a DHCP server group.

VLAN Interface view

`dhcp-server ip`

Use the **dhcp-server ip** command to configure the DHCP server IP address(es) in a specified DHCP server group.

System view

`dir`

Use the **dir** command to display the information about the specified files or directories on a switch.

User view

dir

Use the **dir** command to query specified files.

FTP Client view

dir

Use the **dir** command to display the files in the specified directory.

SFTP Client view

disconnect

Use the **disconnect** command to terminate a FTP connection without quitting FTP client view.

FTP Client view

display acl

Use the **display acl** command to view the detailed configuration information of an ACL, including each rule and its number as well as the number and size in bytes of the data packets that match the statement.

Any view

display am user-bind

Use the **display am** command to view whether address management is enabled and to display IP address pool configuration.

Any view

display arp

Use the **display arp** command to display the ARP mapping table entries by entry type, or by a specified IP address.

Any view

display arp count

Use the **display arp count** command to display the number of the specified type of ARP mapping entries.

Any view

display arp timer aging

Use the **display arp timer aging** command to view the current setting of the dynamic ARP aging timer.

Any view

display boot-loader

Use the **display boot-loader** command to display the information about the app startup files of a switch, including the current app startup file name, the main and backup app startup files to be used when the switch starts the next time.

Any view

display boot-loader

Use the **display boot-loader** command to display the host software (.bin file) that will be adopted when the switch reboots.

Any view

display bootp client

Use the **display bootp client** command to display BOOTP client-related information, including the MAC address of the BOOTP client and the IP address obtained.

Any view

display brief interface

Use the **display brief interface** command to display the configuration information about one specific or all ports in brief, including the port type, connection state, connection rate, duplex attribute, link type and default VLAN ID.

Any view

display channel

Use the **display channel** command to display the details about the information channel.

Any view

display clock

Use the **display clock** command to display the current date and time of the system, so that you can adjust them if they are wrong.

Any view

display cluster

Use the **display cluster** command to display the state and basic configuration information of the cluster that contains the current switch.

Any view

display cluster base-topology

Use the **display cluster topology** command to display the standard topology view of the cluster.

Any view

`display cluster black-list`

Use the **display cluster black-list** command to display the current blacklist of the cluster.

Any view

`display cluster candidates`

Use the **display cluster candidates** command to display candidate devices of a cluster.

Any view

`display cluster current-topology`

Use the **display cluster current topology** command to display the current topology view or the topology path between two points.

Any view

`display cluster members`

Use the **display cluster members** command to display the information about cluster members.

Any view

`display connection`

Use the **display connection** command to view the information for a specified connection type.

Any view

`display cpu`

Use the **display cpu** command to display CPU usage of a specified switch.

Any view

`display current-configuration`

Use the **display current-configuration** command to display the current configuration of a switch.

Any view

`display debugging`

Use the **display debugging** command to display the enabled debugging on a specified device.

Any view

`display debugging habp`

Use the **display debugging habp** command to display the state of HABP debugging.

Any view

`display device`

Use the **display device** command to display the information, such as the module type and operating status, about each board (main board and sub-board) of a specified switch.

Any view

`display dhcp client`

Use the **display dhcp client** command to display the DHCP client-related information.

Any view

`display dhcp-security`

Use the **display dhcp-security** command to display one or all user address entries, or a specified type of user address entries in the valid user address table of a DHCP server group.

Any view

`display dhcp-server`

Use the **display dhcp-server** command to display information about a specified DHCP server group.

Any view

`display dhcp-server interface vlan-interface`

Use the **display dhcp-server interface vlan-interface** command to display information about the DHCP server group to which a VLAN interface is mapped.

Any view

`display dhcp-snooping`

Use the **display dhcp-snooping** command to display the user IP-MAC address mapping entries recorded by the DHCP snooping function.

Any view

`display dhcp-snooping`

Use the **display dhcp-snooping** command to display the correspondence between user IP addresses and MAC addresses recorded by the DHCP snooping function.

Any view

`display dhcp-snooping trust`

Use the **display dhcp-snooping trust** command to display the (enabled/disabled) state of the DHCP snooping function and the trusted ports.

Any view

`display dhcp-snooping trust`

Use the **display dhcp-snooping trust** command to display the DHCP-Snooping state and information on trusted ports.

Any view

`display diagnostic-information`

Use the **display diagnostic-information** command to display the system diagnostic information, or save the system diagnostic information to a file (with a suffix of "diag") in the flash memory.

Any view

`display domain`

Use the **display domain** command to view the configuration information of a specified ISP domain or display the summary information of all ISP domains.

Any view

`display dot1x`

Use the **display dot1x** command to view the relevant information of 802.1x.

Any view

`display fib`

Use the **display fib** command to view the summary of the forwarding information base.

Any view

`display ftp-server`

Use the **display ftp-server** command to display the FTP server-related settings of a switch when it operates as an FTP server.

You can use this command to verify FTP server-related configurations.

Any view

`display ftp-user`

Use the **display ftp-user** command to display the settings of the current FTP user, including the user name, host IP address, port number, connection idle time, and authorized directory.

Any view

`display garp statistics`

Use the **display garp statistics** command to display the GARP statistics on specified (or all) ports.

Any view

`display garp timer`

Use the **display garp timer** command to display the values of the GARP timers on specified or all ports.

Any view

`display gvrp statistics`

Use the **display gvrp statistics** command to display the GVRP statistics about specified (or all) Trunk ports.

Any view

`display gvrp status`

Use the **display gvrp status** command to display the enable/disable status of global GVRP.

Any view

`display habp`

Use the **display habp** command to display HABP configuration and status information.

Any view

`display habp table`

Use the **display habp table** command to display the MAC address table maintained by HABP.

Any view

`display habp traffic`

Use the **display habp traffic** command to display statistics on HABP packets.

Any view

`display history-command`

Use the **display history-command** command to display history commands.

Any view

`display icmp statistics`

Use the **display icmp statistics** command to view the statistics information about ICMP packets.

Any view

`display igmp-snooping configuration`

Use the **display igmp-snooping configuration** command to display the configuration information about IGMP Snooping.

Any view

`display igmp-snooping group`

Use the **display igmp-snooping group** command to display information about the IP and MAC multicast groups under one VLAN (with ***vlan vlan-id***) or all VLANs (without ***vlan vlan-id***).

Any view

`display igmp-snooping statistics`

Use the **display igmp-snooping statistics** command to display the message statistics about IGMP Snooping.

Any view

`display info-center`

Use the **display info-center** command to display system log settings and memory buffer record statistics.

Any view

`display interface`

Use the **display interface** command to view the configuration information on the selected interface.

Any view

`display interface VLAN-interface`

Use the **display interface vlan-interface** command to display the information about the management VLAN interface, including the physical and link status, the format of the sent frames, the MAC address, IP address (and subnet mask), description string and MTU (maximum transmit unit) of the management VLAN.

Any view

`display ip host`

Use the **display ip host** command to display all host names and their corresponding IP addresses.

Any view

`display ip interface vlan-interface`

Use the **display ip interface** vlan-interface command to view information on the specified interface.

Any view

`display ip routing-table`

Use the **display ip routing-table** command to display the summary information about the routing table.

Any view

`display ip routing-table acl`

Use the **display ip routing-table acl** command to display the routes permitted by the specified basic ACL.

Any view.

`display ip routing-table ip-address`

Use the **display ip routing-table ip-address** command to display the information about the routes leading to the destination.

Any view

`display ip routing-table ip-address1 ip-address2`

Use the **display ip routing-table *ip-address1 ip-address2*** command to display the information about the routes with their destinations within the specified destination IP address range.

Any view

`display ip routing-table ip-prefix`

Use the **display ip routing-table ip-prefix** command to display the information about the routes matching a specified IP prefix list.

Any view

`display ip routing-table protocol`

Use the **display ip routing-table protocol** command to display the information about specific routes.

Any view

`display ip routing-table radix`

Use the **display ip routing-table radix** command to view the route information in a hierarchical (tree) structure.

Any view

`display ip routing-table statistics`

Use the **display ip routing-table statistics** command to display the statistics of a routing table.

Any view

`display ip routing-table verbose`

Use the **display ip routing-table verbose** command to display the detailed information about a routing table.

Any view

`display ip socket`

Use the **`display ip socket`** command to display the information about the sockets in the current system.

Any view

`display ip statistics`

Use the **`display ip statistics`** command to view the statistics information about IP packets.

Any view

`display isolate port`

Use the **`display isolate port`** command to display the information about the Ethernet ports added to an isolation group.

Any view

`display lacp system-id`

Use the **`display lacp system-id`** command to view actor system ID, including system priority and system MAC address.

Any view

`display link-aggregation interface`

Use the **`display link-aggregation interface`** command to display the link aggregation details about a specified port or port range.

Any view

Use the **`display link-aggregation interface`** command to display the link aggregation details about a specified port or port range, including:

`display link-aggregation summary`

Use the **`display link-aggregation summary`** command to display summary information of all aggregation groups, including device ID of the local end, aggregation group ID, aggregation group type, device ID of the remote end, number of the selected ports, number of the unselected ports, load sharing type and master port number.

Any view

`display link-aggregation verbose`

Use the **`display link-aggregation verbose`** command to display the details about a specified aggregation group.

Any view

`display local-server statistics`

Use the **`display local-server statistics`** command to view the statistics of all local RADIUS authentication server.

Any view

`display local-user`

Use the **`display local-user`** command to view information about all the local users or the specified one(s).

Any view

`display logbuffer`

Use the **`display logbuffer`** command to display the status of the log buffer and the records in the log buffer.

Any view

`display logbuffer summary`

Use the **`display logbuffer summary`** command to display the summary of the log buffer.

Any view

`display-loopback-detection`

Use the **`display loopback-detection`** command to display the loopback detection status on the port.

Any view

`display mac-address`

Use the **`display mac-address`** command to display MAC address table information.

Any view

`display mac-address aging-time`

Use the **`display mac-address aging-time`** command to display the aging time of the dynamic entry in the MAC address table.

Any view

`display mac-address multicast static`

Use the **`display mac-address multicast static`** command to display the multicast MAC address entries manually configured on the switch, with each entry containing the following information: multicast MAC address, VLAN ID, MAC address state, port number(s), and aging time of each port.

Any view

`display mac-address security`

Use the **display mac-address security** command to display the information about Security MAC address.

Any view

`display mac-authentication`

Use the **display mac-authentication** command to display global information about centralized MAC address authentication

Any view

`display memory`

Use the **display memory** command to display the memory usage of a specified switch.

Any view

`display mirroring-group`

Use the **display mirroring-group** command to display the parameter settings of a port mirroring group.

Any view

`display ndp`

Use the **display ndp** command to display global NDP configuration information, including the interval to send NDP packets, the holdtime of NDP information, and the information about the neighbors of all the ports.

Any view

`display ntdp`

Use the **display ntdp** command to display the global NTDP information. The information includes the range (in hop count) within which topology information is collected, the interval to collect topology information (the NTDP timer), the delay time for a device to forward topology-collection requests, the delay time for a topology-collection request to be forwarded through a port, and the time cost during the last topology collection.

Any view

`display ntdp device-list`

Use the **display ntdp device-list** command to display the device information collected through NTDP.

Any view

`display ntdp single-device mac-address`

Use the **display ntdp single-device mac-address** h-h-h command to display the information about a specific device in detail.

Cluster view

`display ntp-service sessions`

Use the **display ntp-service sessions** command to display the status of all the sessions maintained by NTP (Network Time Protocol) service provided by the local equipment.

Any view

`display ntp-service status`

Use the command **display ntp-service status** to display the NTP service status.

Any view.

`display ntp-service trace`

Use the **display ntp-service trace** command to display the brief information of each NTP time server along the time synchronization chain from the local device to the reference clock source.

Any view

`display packet-filter`

Use the **display packet-filter** command to view the application information of packet filtering, including the ACL name, rule names, and application status.

Any view

`display port`

Use the **display port** command to display all current ports with their type indicated.

Any view

`display port-security`

Use the **display port-security** command to display the information about port security configuration (including global configuration and all or specific port configuration).

Any view

`display port vlan-vpn`

Use the **display port vlan-vpn** command to display the information about the VLAN VPN configuration of the current system, including current TPID value, VLAN-VPN ports, and VLAN-VPN uplink ports.

Any view

`display protocol-priority`

Use the **display protocol-priority** command to display the priority of protocol packets.

Any view

`display protocol-vlan interface`

Use the **display protocol-vlan interface** command to display the protocol information and protocol indexes configured for specified ports.

Any view‘

`display protocol-vlan vlan`

Use the **display protocol-vlan vlan** command to display the protocol information and protocol indexes configured for specified VLANs.

Any view

`display qos cos-drop-precedence-map`

Use the **display qos cos-drop-precedence-map** command to display the "COS->Drop-precedence" mapping relationship.

Any view

`display qos cos-dscp-map`

Use the **display qos cos-dscp-map** command to display the "COS->DSCP" mapping relationship.

Any view

`display qos cos-local-precedence-map`

Use the **display qos cos-local-precedence-map** command to view the COS–>Local-precedence map.

Any view

`display qos dscp-cos-map`

Use the **display qos dscp-cos-map** command to display the "DSCP->802.1 priority" mapping relationship.

Any view

`display qos dscp-drop-precedence-map`

Use the **display qos dscp-drop-precedence-map** command to display the "DSCP->Drop-precedence" mapping relationship.

Any view

`display qos dscp-dscp-map`

Use the **display qos dscp-cos-map** command to display the "DSCP->DSCP" mapping relationship.

Any view

`display qos dscp-local-precedence-map`

Use the **display qos dscp-local-precedence-map** command to display the "DSCP->Local-precedence" mapping relationship.

Any view

`display qos-interface all`

Use the **display qos-interface all** command to display all the QoS settings of the port.

Any view

`display qos-interface priority-trust`

Use the **display qos-interface priority-trust** command to display the precedence mapping mode of the switch.

Any view

`display qos-interface traffic-limit`

Use the **display qos-interface traffic-limit** command to view the traffic limit settings.

Any view

`display qos-interface traffic-priority`

Use the **display qos-interface traffic-priority** command to view the traffic priority settings.

Any view

`display qos-interface traffic-redirect`

Use the **display qos-interface traffic-redirect** command to view the settings of the traffic redirect.

Any view

`display qos-interface traffic-remark-vlanid`

Use the **display qos-interface traffic-remark-vlanid** command to display the parameter configurations of VLAN tag remark.

Any view

`display qos-interface traffic-shape`

Use the **display qos-interface traffic-shape** command to view the parameter configurations of traffic shaping on the port.

Any view

`display qos-interface traffic-statistic`

Use the **display qos-interface traffic-statistic** command to view the traffic statistics.

Any view

`display qos-profile`

Use the **display qos-profile** command to view the configurations of the QoS profile.

Any view

`display queue-scheduler`

Use the **display queue-scheduler** command to view queue scheduling mode and corresponding parameters.

Any view

`display radius`

Use the **display radius** command to view the configuration information about all RADIUS schemes or a specified scheme.

Any view

`display radius statistics`

Use the **display radius statistics** command to view the statistics information about RADIUS packet.

Any view

`display rmon alarm`

Use the **display rmon alarm** command to display the configuration of a specified alarm entry or all the alarm entries.

Any view

`display rmon event`

Use the **display rmon event** command to display the configuration of a specified event entry or all the event entries.

Any view

`display rmon eventlog`

Use the **display rmon eventlog** command to display the log of a specified event entry or all the event entries.

Any view

`display rmon history`

Use the **display rmon history** command to display the RMON history information about a specified port. The information about the latest sample, including utilization, the number of errors, the total number of packets and so on, is also displayed.

Any view

`display rmon prialarm`

Use the **display rmon prialarm** command to display the configuration of a specified extended alarm entry or all the extended alarm entries.

Any view

`display rmon statistics`

Use the **display rmon statistics** command to display the RMON statistics of a specified port.

Any view

`display rsa local-key-pair public`

Use the **display rsa local-key-pair public** command to display the public key of the server host key pair. If no key pair is generated, the system prompts “%RSA keys not found”.

Any view

`display rsa peer-public-key`

Use the **display rsa peer-public-key** command to display the client public key of the specified RSA key pair. If no key name is specified, the command displays all public keys of the client

Any view

`display saved-configuration`

Use the **display saved-configuration** command to display the content of the main configuration file in the flash memory of a switch.

Any view

`display schedule reboot`

Use the **display schedule reboot** command to display information about scheduled reboot.

Any view

`display snmp-agent`

Use the **display snmp-agent** command to view engine ID of the local or remote SNMP entity.

Any view

`display snmp-agent community`

Use the **display snmp-agent community** command to view the information about the currently configured community names for SNMPv1 or SNMPv2c.

Any view

`display snmp-agent group`

Use the **display snmp-agent group** command to view group name, security model, state of various views and storage models.

Any view

`display snmp-agent mib-view`

The **display snmp-agent mib-view** command is used to view the MIB view configuration information of the current Ethernet switch.

Any view

`display snmp-agent statistics`

Use the **display snmp-agent statistics** command to view the statistics information about SNMP packets.

Any view

`display snmp-agent sys-info`

Use the **display snmp-agent sys-info** command to view the system information of SNMP configuration.

Any view

`display snmp-agent trap-list`

Use the **display snmp-agent trap-list** command to display trap list information.

Any view

`display snmp-agent usm-user`

Use the **display snmp-agent usm-user** command to view SNMP user information.

Any view

`display ssh server`

Use the **display ssh server** command to display the status or session information about the SSH server

Any view

`display ssh server-info`

Use the **display ssh server-info** command to display the association between the server public keys configured on the client and the servers.

Any view

`display ssh user-information`

Use the **display ssh user-information** command to display information about the current SSH users, including user name, authentication mode, key name and authorized service types. If the ***username*** is specified, the command displays information about the specified user.

Any view

`display startup`

Use the **display startup** command to display the startup configuration of a switch, including the name of the current startup configuration file, the names of the main startup configuration file, and backup startup configuration file to be used when the switch starts the next time, and so on.

Any view

`display stop-accounting-buffer`

Use the **display stop-accounting-buffer** command to view the no-response stop-accounting request packets buffered in the device.

Any views

`display stp`

Use the **display stp** command to display the state and statistical information about one or all spanning trees.

Any view

`display stp region-configuration`

Use the **display stp region-configuration** command to display the MST region configuration.

Any view

`display tcp statistics`

Use the **display tcp statistics** command to view the statistics information about TCP packets.

Any view

`display tcp status`

Use the **display tcp status** command to view the TCP connection state.

Any view

`display this`

Use the **`display this`** command to display the current configuration performed in the current view of the system.

Any view

`display time-range`

Use the **`display time-range`** command to view the configuration and status of the current time range. You will see the active or inactive state outputs respectively.

Any view

`display trapbuffer`

Use the **`display trapbuffer`** command to display the status of the trap buffer and the records in the trap buffer.

Any view

`display udp-helper server`

Use the **`display udp-helper server`** command to view the information of destination Helper server corresponding to the VLAN interface.

Any view

`display user-interface`

Use the **`display user-interface`** command to view information on a user interface.

Any view

`display users`

Use the **`display users`** command to display the information about user interfaces. If you do not specify the all keyword, only the information about the current user interface is displayed.

Any view

`display users`

Use the **`display users`** command to display the status and configuration information about user terminal interfaces. Use the **`display users all`** command to view the information on all user terminal interfaces.

Any view

`display version`

Use the **`display version`** command to view the software version, issue date and the basic hardware configuration information.

Any view

`display vlan`

Use the **`display vlan`** command to display the ports operating in the manual/automatic mode in the current voice VLAN.

Any view

`display vlan`

Use the **`display vlan`** command to view related information about specified VLANs or all VLANs.

Any view

`display voice vlan oui`

Use the **`display voice vlan oui`** command to display the currently supported OUI addresses and the related information.

Any view

`display voice vlan status`

Use the **`display voice vlan status`** command to display voice VLAN-related information, including voice VLAN operation mode, port mode (manual mode or automatic mode), and so on.

Any view

`domain`

Use the **`domain`** command to create an ISP domain and enter its view, or enter the view of an existing ISP domain, or configure the default ISP domain.

System view

`dot1x`

Use the **`dot1x`** command to enable 802.1x on the specified port or globally, (that is on the current device).

System view
Ethernet Port view

`dot1x authentication-method`

Use the **`dot1x authentication-method`** command to set 802.1x authentication mode.

System view

`dot1x dhcp-launch`

Use the **dot1x dhcp-launch** command to specify an 802.1x-enabled switch to launch the process to authenticate a supplicant system when the supplicant system applies for a dynamic IP address through DHCP.

System view

`dot1x guest-vlan`

Use the **dot1x guest-vlan** command to enable the Guest VLAN function for specified ports.

System view
Ethernet Port view

`dot1x max-user`

Use the **dot1x max-user** command to set the maximum number of systems an Ethernet port can accommodate.

System view
Ethernet Port view

`dot1x port-control`

Use the **dot1x port-control** command to specify the access control method for specified Ethernet ports.

System view
Ethernet Port view

`dot1x port-method`

Use the **dot1x port-method** command to specify the access control method for specified Ethernet ports.

Ethernet Port view

`dot1x quiet-period`

Use the **dot1x quiet-period** command to enable the quiet-period timer.

System view

`dot1x retry`

Use the **dot1x retry** command to specify the maximum number of times a switch can transmit the authentication request frame to supplicant systems.

System view

`dot1x retry-version-max`

Use the **dot1x retry-version-max** command to set the maximum number of retries for a switch to send version request packets to an online supplicant system.

System view

`dot1x timer`

Use the **dot1x timer** command to set the 802.1x timers.

System view

`dot1x version-check`

Use the **dot1x version-check** command to enable 802.1x client version checking for specified Ethernet ports.

System view
Ethernet Port view

`duplex`

Use the **duplex** command to set the port duplex attribute.

Ethernet Port view
Web command: Port -> Administration

`enable snmp trap updown`

Use the **enable snmp trap updown** command to enable the port to send LINK UP and LINK DOWN Trap information.

System view

`end-station polling ip-address`

Use the **end-station polling ip-address** command to configure the IP address requiring periodic testing.

System view

`execute`

Use the **execute** command to execute the specified batch file.

System view

`exit`

Use the **exit** command to terminate the connection to the remote SFTP server and return to system view.

This command has the same function as the **bye** and **quit** commands.

SFTP Client view

`file prompt`

Use the **file prompt** command to modify the prompt mode of file operations on the Switch.

System view

`flow-control`

Use the **flow-control** command to enable port flow control, to avoid packet loss in the event of network congestion.

Ethernet Port view
Web command: Port -> Administration

`format`

Use the **format** command to format a storage device.

User view

`free user-interface`

Use the **free user-interface** command to reset a specified user interface to its default settings. The user interface will be disconnected after the reset.

User view

`free web-users`

Use the **free web-users** command to disconnect a specified Web user or all Web users by force.

User view

`ftp`

Use the **ftp** command to establish a control connection with an FTP server and enter FTP client view.

User view

`ftp cluster`

Use the **ftp cluster** command to establish a control connection with a cluster FTP server. This command also leads you to FTP client view.

User view

`ftp server`

Use the **ftp server** command to configure an FTP server on the management device for the member devices in the cluster.

Use the **undo ftp server** command to remove the FTP server configured for the member devices in the cluster.

System view

`ftp server enable`

Use the **ftp server enable** command to enable FTP server and allow FTP users to log in.

System view

`ftp timeout`

Use the **ftp timeout** command to configure connection timeout interval.

System view

`garp timer`

Use the **garp timer** command to set the GARP Hold, Join or Leaver timer value on the current port.

Ethernet Port view

`garp timer leaveall`

Use the **garp timer leaveall** command to set the GARP LeaveAll timer to a specified value.

System view

`get`

Use the **get** command to download a remote file and save the file to the local device.

SFTP Client view

`get`

Use the **get** command to download a remote file and save it as a local file.

FTP Client view

`gratuitous-arp learning enable`

Use the **gratuitous-arp-learning enable** command to enable the gratuitous ARP packet learning function.

System view

`gvrp`

Use the **gvrp** command to enable GVRP globally (in system view) or on a port (in Ethernet port view).

System view
Ethernet Port view

`gvrp registration`

Use the **gvrp registration** command to configure the GVRP registration type on a port.

Ethernet Port view

`habp enable`

Use the **habp enable** command to enable HABP for a switch.

System view

`habp server vlan`

Use the **habp server vlan** command to configure a switch to operate as an HABP server and HABP packets to be broadcast in specified VLAN.

System view

`habp timer`

Use the **habp timer** command to set the interval for a switch to send HABP request packets.

System view

`header`

Use the **header** command to set the banners that are displayed when a user logs into a switch. The login banner is displayed on the terminal when the connection is established. And the session banner is displayed on the terminal if a user successfully logs in.

System view

`help`

Use the **help** command to get the help information about the specified or all SFTP client commands.

SFTP Client view

`history-command max-size`

Use the **history-command max-size** command to set the size of the history command buffer.

User Interface view

`holdtime`

Use the **holdtime** command to configure the holdtime of a switch.

Cluster view

`idle-cut`

Use the **idle-cut** command to set the user idle-cut function in current ISP domain.

ISP Domain view

`idle-timeout`

Use the **idle-timeout** command to configure the amount of time you want to allow a user interface to remain idle before it is disconnected.

User Interface view

`igmp host-join vlan`

Use the **igmp host-join vlan** command to configure a routing port to join to a multicast group.

Ethernet Port view

`igmp-snooping`

Use the **igmp-snooping** command to enable or disable the IGMP Snooping.

System view
VLAN view
Web command: Device -> IGMP Snooping

`igmp-snooping fast-leave`

Use the **igmp-snooping fast-leave** command to enable IGMP fast leave processing.

Ethernet Port view

`igmp-snooping group-limit`

Use the **igmp-snooping group-limit** command to set the maximum number of multicast groups the port can join.

Ethernet Port view

`igmp-snooping group-policy`

Use the **igmp-snooping group-policy** command to configure an IGMP Snooping filter ACL.

System view
Ethernet Port view

`igmp-snooping host-aging-time`

Use the **igmp-snooping host-aging-time** command to set the aging time of multicast member ports.

System view

`igmp-snooping max-response-time`

Use the **igmp-snooping max-response-time** command to configure the maximum query response time.

System view

`igmp-snooping router-aging-time`

Use the **igmp-snooping router-aging-time** command to configure the aging time of the router port.

System view

`info-center channel name`

Use the **info-center channel name** command to name the channel of the specified number.

System view

`info-center console channel`

Use the **info-center console channel** command to enable information output to the console through a specified channel.

System view

`info-center enable`

Use the **info-center enable** command to enable the information center.

System view

`info-center logbuffer`

Use the **info-center logbuffer** command to enable information output to the log buffer through the specified channel (you can also set the size of the log buffer in this command).

System view

`info-center loghost`

Use the **info-center loghost** command to enable information output to a log host through the specified channel.

System view

`info-center loghost source`

Use the **info-center loghost source** command to configure the source interface through which log information is sent to the log host.

System view

`info-center monitor channel`

Use the **info-center monitor channel** command to enable information output to terminals through a specified channel.

System view

`info-center snmp channel`

Use the **info-center snmp channel** command to enable information output to the SNMP through a specified channel.

System view

`info-center source`

Use the **info-center source** command to add a record (that is, an information source) to an information channel.

System view

`info-center synchronous`

Use the **info-center synchronous** command to enable synchronous terminal output.

System view

Use the **info-center synchronous** command to enable synchronous terminal output, so that if system information (such as log information) is output when the user is inputting, the command prompt and input information are echoed after the output (note that, the command prompt is echoed in command edit state but is not echoed in interactive state).

`info-center timestamp`

Use the **info-center timestamp** command to set the format of time stamp included in the log/trap/debug information or specify not to include time stamp in the information.

System view

`info-center timestamp loghost`

Use the **info-center timestamp loghost** command to set the format of time stamp to be sent to log host.

System view

`info-center trapbuffer`

Use the **info-center trapbuffer** command to enable information output to the trap buffer.

System view

`instance`

Use the **instance** command to map specified VLANs to a specified spanning tree instance.

MST Region view

`interface`

Use the command **`interface`** command to enter Ethernet port view. To configure parameters for a port, you must enter the port view first.

System view

`interface VLAN-interface`

Use the **`interface vlan-interface`** command to create a management VLAN interface and enter management VLAN interface view.

System view
Web command: Device -> VLAN Interface
Administration -> IP Setup

`ip address`

Use the **`ip address`** command to assign an IP address (and mask) to a management VLAN interface.

VLAN Interface view
Web command: Administration -> IP Setup -> Device -> VLAN

`ip address bootp-alloc`

Use the **`ip address bootp-alloc`** command to configure VLAN interface to obtain IP address using BOOTP.

VLAN Interface view

`ip address dhcp-alloc`

Use the **`ip address dhcp-alloc`** command to configure VLAN interface to obtain an IP address using DHCP.

VLAN Interface view

`ip host`

Use the **`ip host`** command to configure a host name and the corresponding IP address for a switch.

System view

`ip http acl`

Use the **`ip http acl`** command to apply an ACL to filter Web users.

System view
User Interface view

`ip-pool`

Use the **`ip-pool`** command to configure a private IP address range for cluster members on the switch to be set as the management device.

Cluster view

`ip route-static`

Use the **`ip route-static`** command to configure a static route.

Use the **`ip route-static`** command to configure a static route, whose validity depends on detecting results as follows: valid when the detecting result is reachable or invalid when the detecting result is unreachable.

System view
Web command: Device -> IP Route

`ip route-static`

Use the **`ip route-static`** command to configure a static route, whose validity depends on detecting results as follows: valid when the detecting result is reachable or invalid when the detecting result is unreachable.

System view

`key`

Use the **`key`** command to specify a shared key for the RADIUS authentication/authorization packets or accounting packets.

RADIUS Scheme view
Web command: Security -> RADIUS Client

`lacp enable`

Use the **`lacp enable`** command to enable the LACP protocol on the current port.

Ethernet Port view
Web command: Port -> LACP

`lacp port-priority`

Use the **`lacp port priority`** command to configure port priority value.

Ethernet Port view

`lacp system-priority`

Use the **`lacp system-priority`** command to configure system priority value.

System view
Web command: Port -> LACP

`language-mode`

Use the **`language-mode`** command to toggle between the language modes (that is, language environments) of the command line interface (CLI) to meet your requirement.

User view

`lcd`

Use the **`lcd`** command to display the local work directory on the FTP client.

FTP Client view

`level`

Use the **`level`** command to set the priority level of the user.

Local User view
Web command: Administration -> System

`link-aggregation group description`

Use the **`link-aggregation group description`** command to set a description for an aggregation group.

System view
Web command: Port -> Link Aggregation

`link-aggregation group mode`

Use the **`link-aggregation group mode`** command to create a manual or static aggregation group.

System view
Web command: Port -> Link Aggregation

`local-server`

Use the **`local-server`** command to configure the parameters of local RADIUS server.

System view

`local-user`

Use the **`local-user`** command to add a local user and enter local user view.

System view
Web command: Administraion -> System Access

`local-user password-display mode`

Use the **`local-user password-display-mode`** command to set the password display mode of all users.

System view

`lock`

Use the **`lock`** command to lock the current user interface and prevent unauthorized users from accessing it.

User view

`logging-host`

Use the **`logging-host`** command to configure a public logging host on the management device for member devices.

Cluster view

`loopback-detection control enable`

Use the **`loopback-detection control enable`** command to enable loopback detection and control function for Trunk ports and Hybrid ports.

Ethernet Port view
Web command: Tools -> Loopback

`loopback-detection enable`

Use the **`loopback-detection enable`** command to enable the loopback detection function globally or for a specific port.

System view
Ethernet Port view

`loopback-detection interval-time`

Use the **`loopback-detection interval-time`** command to set the time interval for detecting the external loopback for a port.

System view

`loopback-detection per-vlan enable`

Use the **`loopback-detection per-vlan enable`** command to configure the system to run loopback detection on all VLANs for the Trunk and Hybrid ports.

Ethernet Port view

`ls`

Use the **`ls`** command to display the files in the specified directory.

SFTP Client view

`ls`

Use the **`ls`** command to display the information about a specified remote file.

FTP Client view

mac-address

Use the **mac-address** command to add/modify the MAC address table entry.

System view
Port view
Web command: Port -> Administration

mac-address max-mac-count

Use the **mac-address max-mac-count** command to configure the maximum number of MAC addresses an Ethernet port can learn.

Ethernet Port view

mac-address max-mac-count 0

Use the **mac-address max-mac-count0** command to disable a switch from learning MAC address in a VLAN.

VLAN view

mac-address multicast interface vlan

Use the **mac-address multicast** command to add a multicast MAC address entry.

System view

mac-address multicast vlan

Use the **mac-address multicast vlan** command to add a multicast MAC address entry.

Ethernet Port view

mac-address security

Use the **mac-address security** command to add Security MAC address manually.

Ethernet Port view
System view

mac-address timer

Use the **mac-address timer** command to set the aging time for dynamic MAC address entries.

System view

mac-authentication

Use the **mac-authentication** command to enable centralized MAC address authentication globally (current device) or on specified ports.

System view
Ethernet Port view

mac-authentication authmode

Use the **mac-authentication authmode** command to set MAC address authentication mode.

System view

mac-authentication authpassword

Use the **mac-authentication authpassword** command to set a password for MAC address authentication when the fixed mode is adopted.

System view

mac-authentication authusername

Use the **mac-authentication authusername** command to set a user name when a switch authenticates users in fixed mode.

System view

mac-authentication domain

Use the **mac-authentication domain** command to configure an ISP domain for centralized MAC address authentication users.

System view

mac-authentication timer

Use the **mac-authentication timer** command to configure the timers used in centralized MAC address authentication.

System view

management-vlan

Use the **management-vlan** command to specify the management VLAN on the switch.

System view

management-vlan synchronization enable

Use the **management-vlan synchronization enable** command to enable the management VLANs of the member devices of a cluster to be synchronized.

Cluster view

mdi

Use the **mdi** command to set port MDI attribute.

Ethernet Port view

messenger

Use the **messenger time** command to enable or disable the messenger alert and configure the related parameters.

ISP Domain view

mirroring group

Use the **mirroring-group** command to configure the port mirroring group.

System view

mirroring-group mirroring-port

Use the **mirroring-group mirroring-port** command to configure the monitored port.

System view

mirroring-group reflector-port

Use the **mirroring-group reflector-port** command to configure a reflector port.

System view

mirroring-group remote-probe vlan

Use the **mirroring-group remote-probe vlan** command to specify the remote-probe VLAN for a given mirroring group.

System view

mirroring-port

Use the **mirroring-port** command to configure a mirroring port.

Ethernet Port view
Web command: Port -> Mirroring

mkdir

Use the **mkdir** command to create a directory on the remote SFTP server.

SFTP Client view

mkdir

Use the **mkdir** command to create a directory in a specified directory of a specified storage device.

User view

mkdir

Use the **mkdir** command to create a directory on the remote SFTP server.

FTP Client view

monitor-port

Use the **monitor-port** command to configure the destination monitor port.

Ethernet Port view

more

Use the **more** command to display the content of a specified file.

User view

move

Use the **move** command to move a file to a specified directory. You can also assign a new name for the file.

User view

name

Use the **name** command to set a name for the assigned VLAN.

VLAN view

name

Use the **name** command to set a name for the assigned VLAN.

VLAN view

nas-ip

Use the **nas-ip** command to set the source IP address used by the switch to send RADIUS packets.

RADIUS Scheme view

ndp enable

Use the **ndp enable** command in system view to enable NDP globally on the switch. When being executed in Ethernet port view, this command enables NDP for an Ethernet port.

System view
Ethernet Port view

ndp timer aging

Use the **ndp timer aging** command to set how long a device will hold the NDP packets received from the local device. After the aging timer expires, the device will discard the received NDP neighbor node information.

System view

ndp timer hello

Use the **ndp timer hello** command to define how often to transmit the NDP packets.

System view

nm-interface vlan-interface

Use the **nm-interface vlan-interface** command to configure an NMS interface of the management device.

Cluster view

ntdp enable

Use the **ntdp enable** command in system view to enable NTDP globally. When being executed in Ethernet port view, this command enables NTDP for an Ethernet port.

System view
Ethernet Port view

ntdp explore

Use the **ntdp explore** command to start topology information collection manually.

User view

ntdp hop

Use the **ntdp hop** command to set a range (in terms of hop count) for topology information collection.

System view

ntdp timer

Use the **ntdp timer** command to configure the interval to collect topology information.

System view

ntdp timer hop-delay

Use the **ntdp timer hop-delay** command to set the delay time for a switch to forward topology-collection request packets.

System view

ntdp timer port-delay

Use the **ntdp timer port-delay** command to set the delay time for a switch to forward a received topology-collection request packet through its successive ports.

System view

Use the **ntdp timer port-delay** command to set the delay time for a switch to forward a received topology-collection request packet through its successive ports. A switch forwards received topology request packets to all its ports in turn. After forwarding a received topology-collection request packet through one port, the switch delays for specific period before it forwards the packet through the next port.

ntp-service access

Use the **ntp-service access** command to set the authority to access the local equipment.

System view

ntp-service authentication enable

Use the **ntp-service authentication enable** command to enable the NTP-service authentication function.

System view

ntp-service authentication-keyid

Use the **ntp-service authentication-keyid** command to configure an NTP authentication key.

System view

ntp-service broadcast-client

Use the **ntp-service broadcast-client** command to configure an Ethernet switch to operate in NTP broadcast client mode.

VLAN Interface view

ntp-service broadcast-server

Use the **ntp-service broadcast-server** command to configure NTP broadcast server mode.

VLAN Interface view

ntp-service in-interface disable

Use the **ntp-service in-interface disable** command to disable an interface to receive NTP message.

VLAN Interface view

ntp-service max-dynamic sessions

Use the **ntp-service max-dynamic-sessions** command to set how many sessions can be created locally.

System view

ntp-service multicast-client

Use the **ntp-service multicast-client** command to configure an Ethernet switch to operate in NTP multicast client mode.

VLAN Interface view

`ntp-service multicast-server`

Use the **ntp-service multicast-server** command to configure an Ethernet switch to operate in NTP multicast server mode.

VLAN Interface view

`ntp-service reliable authentication-keyid`

Use the **ntp-service reliable authentication-keyid** command to specify an authentication key to be a trusted key.

System view

`ntp-service source-interface`

Use the **ntp-service source-interface** command to designate an interface to transmit NTP message.

System view

`ntp-service unicast-peer`

Use the **ntp-service unicast-peer** command to be an active NTP peer.

System view

`ntp-service unicast-server`

Use the **ntp-service unicast-server** command to configure an Ethernet switch to operate in NTP server mode.

System view

`open`

Use the **open** command to establish a control connection with an FTP server.

FTP Client view

`packet-filter`

Use the **packet-filter** command to define the packet filter function in the QoS profile.

QoS Profile view
Web command: Device -> ACL/QoS -> QoS

`packet-filter`

Use the **packet-filter** command to apply ACL rules on the port to filter packets.

Ethernet Port view

`parity`

Use the **parity** command to set the check mode of the user interface.

User Interface view

`passive`

Use the **passive** command to set the data transmission mode to be passive mode.

FTP Client view

`password`

Use the **password** command to configure or change the system login password for a user.

Local User view

`password`

Use the **password** command to set a password for the local users.

Local User View
Web command: Administration -> System

`peer-public-key end`

Use the **peer-public-key end** command to return to system view from public key view.

Public Key view

`ping`

Use the **ping** command to check the IP network connection and the reachability of the host.

Any view

`port`

Using the **port** command, you can add one port or one group of ports to a VLAN.

VLAN view
Web command: Device -> VLAN

`port access vlan`

Use the **port access vlan** command to assign the access port to a specified VLAN.

Ethernet Port view
Web command: Port -> Administration

`port hybrid protocol-vlan vlan`

Use the **port hybrid protocol-vlan vlan** command to deliver specified protocol-based VLANs to a port.

Ethernet Port view

`port hybrid pvid vlan`

Use the **port hybrid pvid vlan** command to configure the default VLAN ID of the hybrid port.

Ethernet Port view

`port hybrid vlan`

Use the **port hybrid vlan** command to add the port to the specified VLAN(s). The port needs to have been made a hybrid port before you can do this. See the related command below.

Ethernet Port view

`port isolate`

Use the **port isolate** command to add an Ethernet port to the isolation group.

Ethernet Port view

`port link-aggregation group`

Use the **port link-aggregation group** ***agg_id*** command to add an Ethernet port to a manual or static aggregation group.

Ethernet Port view

`port link-type`

Use the **port link-type** command to configure the link type of the Ethernet port.

Ethernet Port view

`port-security enable`

Use the **port-security enable** command to enable port security.

System view

`port-security intrusion-mode`

Use the **port-security intrusion-mode** command to set the action mode of the Intrusion Protection feature.

Ethernet Port view

`port-security max-mac-count`

Use the **port-security max-mac-count** command to set the maximum number of MAC addresses allowed to access the port.

Ethernet Port view

`port-security ntk-mode`

Use the **port-security ntk-mode** command to set the packet transmission mode of the Need to Know (NTK) feature.

Ethernet Port view

`port-security OUI`

Use the **port-security OUI command** to set an OUI value for authentication.

System view

`port-security port-mode`

Use the **port-security port-mode** command to set the security mode of the port.

Ethernet Port view

`port-security timer disableport`

Use the **port-security timer disableport** command to set the time during which the system temporarily disables a port.

System view

`port-security trap`

Use the **port-security trap** command to enable the sending of the specified type(s) of trap messages.

System view

`port trunk pvid vlan`

Use the **port trunk pvid vlan** command to configure the default VLAN ID for a trunk port.

Ethernet Port view

`port trunk permit vlan`

Use the **port trunk permit vlan** command to add a trunk port to one VLAN, a selection of VLANs, or all VLANs.

Ethernet Port view

`primary accounting`

Use the **primary accounting** command to set the IP address and port number for the primary accounting server.

RADIUS Scheme view

primary authentication

Use the **primary authentication** command to configure the IP address and port number for the primary RADIUS authentication/authorization server.

RADIUS Server Group view

priority

Use the **priority** command to set the priority of Ethernet port.

Ethernet Port view

priority trust

Use the **priority trust** command to configure the precedence mapping mode on the port of the switch.

Ethernet Port view

protocol inbound

Use the **protocol inbound** command to configure the protocols supported in the current user interface.

VTY User Interface view

protocol inbound

Use the **protocol inbound** command to specify the protocols supported by the user interface.

User Interface view

protocol-priority protocol-type

Use the **protocol-priority** command to set the global traffic priority that applies to a given protocol.

System view

protocol-vlan

Use the **protocol-vlan** command to specify a VLAN is a specified type of protocol-based VLAN.

VLAN view

public-key-code begin

Use the **public-key-code begin** command to enter public key edit view and input the client public key.

Public Key view

public-key-code begin

Use the **public-key-code begin** command to enter public key edit view and set server public keys.

Public Key view

public-key-code end

Use the **public-key-code end** command to return from public key edit view to public key view and save the public keys you set.

Public Key Edit view

public-key-code end

Use the **public-key-code end** command to return from public key edit view to public key view and save the public keys you set.

Public Key Edit view

put

Use the **put** command to upload a local file to the remote SFTP server.

SFTP Client view

put

Use the **put** command to upload a local file to the remote FTP server.

FTP Client view

pwd

Use the **pwd** command to display the current directory on the SFTP server.

SFTP Client view

pwd

Use the **pwd** command to display the current path. If the current path is not configured, an error occurs when you execute this command.

User view

pwd

Use the **pwd** command to display the current directory on the remote FTP Server.

FTP Client view

qos cos-drop-precedence-map

Use the **qos cos-drop-precedence-map** command to configure the "COS->Drop-precedence" mapping relationship.

System view

qos cos-dscp-map

Use the **qos cos-dscp-map** command to configure the "COS->DSCP" mapping relationship.

System view

qos cos-local-precedence-map

Use the **qos cos-local-precedence-map** command to configure the "COS->Local-precedence" mapping relationship.

System view

qos dscp-cos-map

Use the **qos dscp-cos-map** command to configure the "COS->802.1p priority" mapping relationship.

System view

qos dscp-drop-precedence-map

Use the **qos dscp-drop-precedence-map** command to configure the "DSCP->Drop-precedence" mapping relationship.

System view

qos dscp-dscp-map

Use the **qos dscp-dscp-map** command to configure the "DSCP->DSCP" mapping relationship.

System view

qos dscp-local-precedence-map

Use the **qos dscp-local-precedence-map** command to configure the "DSCP->Local-precedence" mapping relationship.

System view

qos-profile

Use the **qos-profile** command to create a QoS profile and enter the corresponding view.

System view

qos-profile port-based

Use the **qos-profile port-based** command to configure the port-based application mode of QoS profiles on ports.

Ethernet Port view

queue-scheduler

Use the **queue-scheduler** command to set the queue-scheduling algorithm and parameters.

System view

quit

Use the **quit** command to terminate the connection to the remote SSH server.

User view

quit

Use the **quit** command to terminate the connection to the remote SFTP server and exit to system view.

SFTP Client view

quit

Use the **quit** command to terminate FTP control connection and FTP data connection and quit to user view. This command has the same effect as that of the bye command.

FTP Client view

quit

Use the **quit** command to return from current view to lower level view, or exit the system if current view is user view.

Any view

radius nas-ip

Use the **radius nas-ip** command to set the source IP address used by the switch to send RADIUS packets.

System view

radius-scheme

Use the **radius-scheme** command to specify the RADIUS scheme to be used by the current ISP domain.

ISP Domain view

radius scheme

Use the **radius scheme** command to create a RADIUS scheme and enter its view.

System view

radius trap

Use the **radius trap** command to enable the switch to send trap messages when its RADIUS authentication or accounting server turns down.

System view

reboot

Use the **reboot** command to restart an Ethernet switch.

User view
Web command: Administration -> Reboot

`reboot member`

Use the **reboot member** command to reboot a specified member device on the management device.

Cluster view

`region-name`

Use the **region-name** command to set an MST region name to a switch.

MST Region view

`remote-probe vlan`

Use the **remote-probe vlan enable** command to enable the remote-probe port mirror port feature on the VLAN of the switch.

VLAN view

`remotehelp`

Use the **remotehelp** command to display help information about the FTP protocol command.

FTP Client view

`remove`

Use the **remove** command to delete the specified file from the server.

SFTP Client view

`rename`

Use the **rename** command to change the name of the specified file on the SFTP server.

SFTP Client view

`rename`

Use the **rename** command to rename a file or a directory. If the target file name or directory name is the same with any existing file name or directory name, you will fail to rename a file.

User view

`rename`

Use the **rename** command to rename a file on a remote host.

FTP Client view

`reset arp`

Use the **reset arp** command to remove information that is no longer required from the ARP mapping table.

User view

`reset counters interface`

Use the **reset counters interface** command to clear the statistics of the port, preparing for a new statistics collection.

User view

`reset dot1x statistics`

Use the **reset dot1x statistics** command to clear the statistics of 802.1x.

User view

`reset garp statistics`

Use the **reset garp statistics** command to clear the GARP statistics (such as the information about the packets received/sent/discarded by GVRP/GMRP) on specified (or all) ports.

User view

`reset igmp-snooping statistics`

Use the **reset igmp-snooping statistics** command to clear the IGMP Snooping statistics.

User view

`reset ip statistics`

Use the **reset ip statistics** command to clear the IP statistics information.

User view

`reset logbuffer`

Use the **reset logbuffer** command to clear information in the log buffer.

User view

`reset ndp statistics`

Use the **reset ndp statistics** command to reset the NDP counters to clear the NDP statistics.

User view

`reset radius statistics`

Use the **reset radius statistics command** to clear the statistics information about the RADIUS protocol.

User view

`reset recycle-bin`

Use the **reset recycle-bin** command to completely delete file(s) in the recycle bin in the Flash.

User view

`reset saved-configuration`

Use the **reset saved-configuration** command to delete the configuration file that is of the specified attribute from the Flash, including the main and backup configuration files to be used when the switch starts the next startup.

User view
Web command: Administration -> Initialize

`reset stop-accounting-buffer`

Use the **reset stop-accounting-buffer** command to delete the buffered no-response stop-accounting request packets.

User view

`reset stp`

Use the **reset stp** command to clear the STP statistics of specified Ethernet ports.

User view

`reset tcp statistics`

Use the **reset tcp statistics** command to clear the TCP statistics information.

User view

`reset traffic-limit`

Use the **reset traffic-limit** command to clear the statistics of the traffic policing matching with the specified ACL rules.

Ethernet Port view

`reset traffic-statistic`

Use the **reset traffic-statistic** command to clear the traffic statistics of the packets matching with the specified ACL rules.

Ethernet Port view

`reset trapbuffer`

Use the **reset trapbuffer** command to clear information in the trap buffer.

User view

`retry`

Use the **retry command** to set the maximum number of transmission attempts of RADIUS requests.

Detecting Group view

`retry realtime-accounting`

Use the **retry realtime-accounting** command to set the maximum allowed number of continuous no-response real-time accounting requests.

RADIUS Scheme view

`retry stop-accounting`

Use the **retry stop-accounting** command to set the maximum number of transmission attempts of the stop-accounting requests buffered due to no response.

RADIUS Scheme view

`return`

Use the **return** command to return to user view from any other view.

System view or higher level views

`revision-level`

Use the **revision-level** command to set the MSTP revision level for a switch.

MST Region view

`rmdir`

Use the **rmdir** command to delete the specified directory from the remote SFTP server.

SFTP Client view

`rmdir`

Use the **rmdir** command to delete a directory.

User view

Because only empty directories can be deleted, you need to delete the files in a directory before deleting it.

`rmdir`

Use the **rmdir** command to delete the specified directory from the remote FTP server.

FTP Client view

You can only use this command to remove directories that are empty.

`rmon alarm`

Use the **rmon alarm** command to add an entry to the alarm table.

System view

rmon event

Use the **rmon event** command to add an entry to the event table.

System view

rmon history

Use the **rmon history** command to add an entry to the history control table.

Ethernet Port view

rmon prialarm

Use the **rmon prialarm** command to add an entry to the extended RMON alarm table.

System view

rmon statistics

Use the **rmon statistics** command to add an entry to the statistic table.

Ethernet Port view

rsa local-key-pair create

Use the **rsa local-key-pair create** command to generate RSA key pairs, whose names are in the format of switch name plus _host, for example, S4200G_host.

System view

rsa local-key-pair destroy

Use the **rsa local-key-pair destroy** command to destroy all existing RSA key pairs at the server end.

System view

rsa peer-public-key

Use the **rsa peer-public-key** command to enter public key view.

System view

rsa peer-public-key

Use the **rsa peer-public-key** command to enter public key view.

System view

rule (Advanced ACL)

Use the **rule** command to define an ACL rule.

Advanced ACL view
Web command: Device -> ACL/ Security -> Authorized

rule (Basic ACL)

Use the **rule** command to define an ACL rule.

Basic ACL view

rule comment

Use the **rule** comment command to define the comment string for an ACL rule.

Advanced ACL view / Layer 2 ACL view

rule (Layer 2 ACL)

Use the **rule** command to define an ACL rule.

Layer 2 ACL view

save

Use the **save** command to save the current configuration to a configuration file in the flash memory.

Any view
Web command: Save Configuration

schedule reboot at

Use the **schedule reboot at** command to schedule a reboot on the current switch and set the reboot date and time.

User view

schedule reboot delay

Use the **schedule reboot delay** command to schedule a reboot on the switch, and set the reboot waiting delay.

User view

scheme

Use the **scheme** command to configure the AAA scheme to used by the current ISP domain.

ISP Domain view

screen-length

Use the **screen-length** command to set the number of lines the terminal screen can contain.

User Interface view

`secondary accounting`

Use the **secondary accounting** command to set the IP address and port number of the secondary RADIUS accounting server.

RADIUS Scheme view

`secondary authentication`

Use the **secondary authentication** command to set the IP address and port number of the secondary RADIUS authentication/authorization server.

RADIUS Scheme view
Web command: Security -> RADIUS Client

`security-policy-server`

Use the **security-policy-server** command to set the IP address of a security policy server.

RADIUS Scheme view

`self-service-url`

Use the **self-service-url** command to either enable or disable the self-service server location function.

ISP Domain view

`send`

Use the **send** command to send messages to a specified user interface or all user interfaces.

User view

`server-type`

Use the **server-type** command to configure the RADIUS server type supported by the Switch.

RADIUS Scheme view

`service-type`

Use the command **service-type** to authorize a user access to the specified services.

Local User view

`service-type`

Use the **service-type** command to specify the login type and the corresponding available command level.

Local User view

`service-type multicast`

Use the **service-type multicast** command to set the current VLAN as a multicast VLAN.

VLAN view

`set authentication password`

Use the **set authentication password** command to set the local password.

User Interface view
Web command: Administration -> System Access

`sftp`

Use the **sftp** command to establish a connection to the SFTP server and enter SFTP client view.

System view

`sftp server enable`

Use the **sftp server enable** command to enable the secure FTP (SFTP) server.

System view

`sftp time-out`

Use the **sftp time-out** command to set the timeout time for the SFTP user connection.

System view

`shell`

Use the **shell** command to make terminal services available for the user interface.

User Interface view

`shutdown`

Use the **shutdown** command to disable an Ethernet port.

Ethernet Port view
Web command: Device -> VLAN Interface
Port -> Administration

`shutdown`

Use the **shutdown** command to disable the VLAN interface.

VLAN Interface view

`smarton`

Use the **smarton** command to enable the SmartOn function for an Ethernet port with supplicant systems attached.

Ethernet Port view

smarton password

Use the **smarton password** command to set the password to be used by the SmartOn function.

System view

smarton switchid

Use the **smarton switchid** command to set the switch ID.

System view

smarton timer

Use the **smarton timer** command to set the supplicant timeout timer for SmartOn-enabled supplicant systems.

System view

snmp-agent

Use the **snmp-agent** command to enable SNMP Agent.

System view
Web command: Administration -> SNMP

snmp-agent community

Use the **snmp-agent community** command to set a community name and to enable users to access the switch through SNMP. You can also optionally use this command to apply an ACL to filter network management users.

System view
Web command: Administration -> SNMP -> String

snmp-agent community

Use the **snmp-agent community** command to set the community access name and enable access to SNMP.

System view

snmp-agent group

Use the **snmp-agent group** command to configure a SNMP group. You can also optionally use this command to apply an ACL to filter network management users.

System view
Web command: Administration -> SNMP -> Group

snmp-agent group

Use the **snmp-agent group** command to configure a new SNMP group, that is, to map SNMP user to SNMP view.

snmp-agent local-engineid

Use the **snmp-agent local-engineid** command to set the engine ID of the local SNMP entity.

System view

snmp-agent log

Use the **snmp-agent log** command to enable the logging function for network management.

System view

snmp-agent mib-view

Use the **snmp-agent mib-view** command to create or update the view information, limiting the MIB objects to be accessed by the NMS.

System view

snmp-agent packet max-size

Use the **snmp-agent packet max-size** command to set the maximum size of SNMP packet that the Agent can send/receive.

System view

snmp-agent sys-info

Use the **snmp-agent sys-info** command to configure system information such as geographical location of the device, contact information for system maintenance and version information of running SNMP.

System view

snmp-agent target-host

Use the **snmp-agent target-host** command to command to configure destination of SNMP Trap packets.

System view
Web command: Administration -> SNMP -> Traps

snmp-agent trap enable

Use the **snmp-agent trap enable** command to enable the device to send Trap packets.

System view
Web command: Administration -> SNMP -> Traps

snmp-agent trap life

Use the **snmp-agent trap life** command to set aging time for Trap packets.

System view

snmp-agent trap queue-size

Use the **snmp-agent trap queue-size** command to configure the information queue length of a Trap packet sent to the destination host.

System view

snmp-agent trap source

Use the **snmp-agent trap source** command to configure the source address for sending Trap messages.

System view

snmp-agent usm-user

Use the **snmp-agent usm-user** command to add a new community name or, if you use the V3 parameter, a new user to an SNMP group.

System view
Web command: Administration -> SNMP -> Users

snmp-agent usm-user

Use the **snmp-agent usm-user** command to add a new user to an SNMP group. You can also optionally use this command to apply an ACL to filter network management users.

System view

snmp-agent usm-user

Use the **snmp-agent usm-user** command to add a new user to an SNMP group.

System view

snmp-agent usm-user

Use the **snmp-agent usm-user** command to add a new community name or, if you use the V3 parameter, a new user to an SNMP group.

System view

snmp-host

Use the **snmp-host** command to configure an SNMP host for the member devices inside a cluster on the management device.

Cluster view

speed

Use the **speed** command to set the transmission speed of the user interface.

User Interface view

speed

Use the **speed** command to configure the port rate.

Ethernet Port view
Web command: Port -> Administration

ssh client assign rsa-key

Use the **ssh client assign rsa-key** command to specify on the client the public key for the server to be connected to guarantee the client can be connected to a reliable server.

System view

ssh client first-time enable

Use the **ssh client first-time enable** command to configure the client to run the initial authentication.

System view

ssh server authentication-retries

Use the **ssh server authentication-retries** command to set authentication retry number for SSH connections.

System view

ssh server timeout

Use the **ssh server timeout** command to set authentication timeout time for SSH connections.

System view

ssh user assign rsa-key

Use the **ssh user assign rsa-key** command to allocate public keys to SSH users.

System view

ssh user authentication-type

Use the **ssh user authentication-type** command to define on the server the available authentication type for an SSH user.

System view

ssh user service-type

Use the **ssh user service-type** command to specify service type for a user.

System view

`ssh2`

Use the **ssh2** command to enable the connection between SSH client and server, define key exchange algorithm preference, encryption algorithm preference and HMAC algorithm preference on the server and client.

System view

`startup bootrom-access enable`

Use the **startup bootrom-access enable** command to specify a switch to prompt for the customized password before entering the BOOT menu.

User view

`startup saved-configuration`

Use the **Startup saved-configuration** command to specify the main or backup configuration file for a switch to start the next time.

User view
Web command: Administration -> Restore Configuration

`state`

Use the **state** command to configure the state of the current ISP domain/current user.

ISP Domain view
Local User view
RADIUS view

`state`

Use the **state** command to configure the state of RADIUS server.

RADIUS Scheme view

`stop-accounting-buffer enable`

Use the **stop-accounting-buffer enable** command to enable the switch to buffer the stop-accounting requests that bring no response.

RADIUS Scheme view

`stopbits`

Use the **stopbits** command to set the stop bits of the user interface.

User Interface view

`stp`

Use the **stp** command to enable or disable MSTP globally or for a port.

System view
Ethernet Port view
Web command: Device -> Spanning Tree
Port -> Spanning Tree Per Port

`stp bpdu-protection`

Use the **stp bpdu-protection** command to enable the BPDU protection function.

System view

`stp bridge-diameter`

Use the **stp bridge-diameter** command to set the network diameter of a switched network, which is represented in terms of the maximum number of switches between any two terminals in a switched network.

System view

`stp config-digest-snooping`

Use the **stp config-digest-snooping** command to enable the digest snooping feature.

Ethernet Port view

`stp cost`

Use the **stp cost** command to set the path cost of a port in a spanning tree instance.

Ethernet Port view

`stp edged-port`

Use the **stp edged-port** command to configure the current Ethernet port as either an edge port or a non-edge port.

Ethernet Port view

`stp interface`

Use the **stp interface** command in system view to enable or disable MSTP for specified ports.

System view

`stp interface config-digest-snooping`

Use the **stp interface config-digest-snooping** command to enable the digest snooping feature.

System view

stp interface cost

Use the **stp interface cost** command to set the path cost of specified ports in a specified spanning tree instance.

System view

stp interface edged-port

Use the **stp interface edged-port** command to configure the specified Ethernet ports to be either edge ports or non-edge ports.

System view

stp interface loop protection

Use the **stp interface loop-protection** command to enable the loop prevention function.

System view

stp interface mcheck

Use the **stp interface mcheck** command to perform the mCheck operation for specified ports.

System view

stp interface no-agreement-check

Use the **stp interface no-agreement-check** command to enable the rapid transition feature on a specified port.

System view

stp interface point-to-point

Use the **stp interface point-to-point** command to specify whether the specified Ethernet ports are point-to-point links.

System view

stp interface port priority

Use the **stp interface port priority** command to set the port priority of specified ports in a spanning tree instance.

System view

stp interface root-protection

Use the **stp interface root-protection** command to enable the root protection function for specified ports.

System view

stp interface transmit-limit

Use the **stp interface transmit-limit** command to set the maximum number of BPDUs that each specified port can send within a Hello time interval.

System view

stp loop-protection

Use the **stp loop-protection** command to enable the loop prevention function for the current port.

Ethernet Port view

stp max-hops

Use the **stp max-hops** command to set the maximum hop count of the MST region to which the switch belongs.

System view

stp mcheck

Use the **stp mcheck** command to perform the mCheck operation for the current port.

Ethernet Port view
System view

stp mode

Use the **stp mode** command to set the MSTP operation mode of the switch.

System view
Web command: Device -> Spanning Tree

stp no-agreement-check

Use the **stp no-agreement-check** command to enable the rapid transition feature on the current port.

Ethernet Port view

stp pathcost-standard

Use the **stp pathcost-standard** command to set the standard used for calculating the default path costs of ports.

System view

stp point-to-point

Use the **stp point-to-point** command to specify whether the port must connect to point-to-point link.

Ethernet Port view

`stp port priority`

Use the **`stp port priority`** command to set the priority of the current port in a specified spanning tree instance.

Ethernet Port view

`stp priority`

Use the **`stp priority`** command to set the priority of a switch in a spanning tree instance.

System view

`stp region-configuration`

Use the **`stp region-configuration`** command to enter MST region view.

System view

`stp root primary`

Use the **`stp root primary`** command to configure the current switch to be the root bridge of a specified spanning tree instance.

System view

`stp root-protection`

Use the **`stp root-protection`** command to enable the root protection function for the current port.

Ethernet Port view

`stp root secondary`

Use the **`stp root secondary`** command to configure the current switch as a secondary root bridge of a specified spanning tree instance.

System view

`stp tc-protection`

Use the **`stp tc-protection`** command to enable or disable the TC-BPDU attack prevention function for the switch.

System view

`stp timer-factor`

Use the **`stp timer-factor`** command to set the timeout time of a switch in terms of the multiple of the Hello time.

System view

`stp timer forward-delay`

Use the **`stp timer forward-delay`** command to set the Forward delay for a switch.

System view

`stp timer hello`

Use the **`stp timer hello`** command to set the Hello time for a switch.

System view

`stp timer max-age`

Use the **`stp timer max-age`** command to set the maximum age of a switch.

System view

`stp transmit-limit`

Use the **`stp transmit-limit`** command to set the maximum number of configuration BPDUs the current port can transmit within a Hello time.

Ethernet Port view

`super`

Use the **`super`** command to switch the current user level to the one identified by the level argument.

User view

`super password`

Use the **`super password`** command to set the password for users to switch to a higher user level.

System view

`sysname`

Use the **`sysname`** command to set a domain name for the switch.

System view
Web command: Administration -> SNMP -> Setup

`sysname`

Use the **`sysname`** command to set the system name of the Switch.

System view

`system-view`

Enter **`system-view`** to enter the system view from the user view.

User view

`tcp timer fin-timeout`

Use the **tcp timer fin-timeout** command to configure the TCP finwait timer.

System view

`tcp timer syn-timeout`

Use the **tcp timer syn-timeout** command to configure the TCP synwait timer.

System view

`tcp window`

Use the **tcp window** command to configure the size of the transmission and receiving buffers of the connection-oriented socket.

System view

`telnet`

Use the **telnet** command to log in to another Ethernet switch from the current switch via Telnet for remote management.

User view

`terminal debugging`

Use the **terminal debugging** command to configure to display the debugging information on the terminal.

User view

`terminal debugging`

Use the **terminal debugging** command to configure to display the debugging information on the terminal.

User view

`terminal logging`

Use the **terminal logging** command to enable log terminal display.

User view

`terminal monitor`

Use the **terminal monitor** command to enable the debug/log/trap terminal display function.

User view

`terminal trapping`

Use the **terminal trapping** command to enable terminal trap information display.

User view

`tftp`

Use the **tftp** command to set the TFTP data transfer mode.

System view

`tftp cluster get`

Use the **tftp cluster get** command to download a specified file from a cluster TFTP server.

User view

`tftp cluster put`

Use the **tftp put** command to upload a specified file to a specified directory of a cluster TFTP server.

User view

`tftp get`

Use the **tftp get** command to download a file from a TFTP server to this switch.

User view
Web command: Administration -> Restore Configuration

`tftp put`

Use the **tftp put** command to upload a file from the switch to the specified directory on the TFTP server.

User view
Web command: Administration -> Backup Configuration

`tftp-server`

Use the **tftp-server** command to configure a TFTP server for cluster members on the management device.

Cluster view

`tftp-server acl`

Use the **tftp-server acl** command to specify the ACL (Access Control List) adopted for the connection between a TFTP client and a TFTP server.

System view

`time-range`

Use the **time-range** command to define a time range.

System view
Web command: Device -> ACL/QoS -> Time Range

`timer`

Use the **timer** command to set the interval to send handshake packets.

Cluster view

`timer`

Use the **timer** command to set the response timeout time of RADIUS server (that is, the timeout time of the response timeout timer of RADIUS server).

RADIUS Scheme view

`timer quiet`

Use the **timer quiet** command to set the wait time for the primary server to restore the active state.

RADIUS Scheme view

`timer realtime-accounting`

Use the **timer realtime-accounting** command to set the real-time accounting interval.

RADIUS Scheme view

`timer response-timeout`

Use the **timer response-timeout** command to set the response timeout time of RADIUS servers.

RADIUS Scheme view

`topology accept`

Use the **topology accept** command to confirm the current topology information of the cluster and save that as a standard topology.

Cluster view

`topology restore-from`

Use the **topology restore-from** command to obtain and restore the standard topology information from the local flash.

Cluster view

`topology save-to`

Use the **topology save-to** command to save the standard topology information into the local flash.

Cluster view

`tracemac`

Use the **tracemac** command to locate a device by MAC address or IP address.

Any view

`tracert`

Use the **tracert** command to trace the gateways the test packets passes through during its journey from the source to the destination.

Any view

The **tracert** command is primarily used to check the network connectivity. It can also help you locate the trouble spot of the network.

`traffic-limit`

Use the **traffic-limit** command to use ACL rules in traffic identifying and traffic policing for the packet matching with the ACL rules and to set traffic policing parameters and different actions for packets within the traffic limit and packets beyond the traffic limit.

Ethernet Port view
Web command: Device -> ACL/QoS -> QoS

`traffic-priority`

Use the **traffic-priority** command to use ACL rules in traffic identifying and specify a new priority for the packet matching with the ACL rules.

Ethernet Port view

`traffic-redirect`

Use the **traffic-redirect** command to use ACL rules in traffic identifying and redirect the packets matching with the ACL rules to the specified port.

Ethernet Port view

`traffic-remark-vlanid`

Use the **traffic-remark-vlanid** command to use ACL rules in traffic identifying and perform the VLAN tag remark operation on the packets matching with the ACL rules.

Ethernet Port view

`traffic shape`

Use the **traffic-shape** command to enable traffic shaping and send the packets out at an even rate.

Ethernet Port view

`traffic-statistic`

Use the **traffic-statistic** command to use ACL rules in traffic identifying and perform traffic statistics on the packets matching with the ACL rules.

System view

`udp-helper enable`

Use the **udp-helper enable** command to enable the UDP Helper function.

System view

`udp-helper port`

Use the **udp-helper port** command to configure the UDP port with relay function.

System view

`udp-helper server`

Use the **udp-helper server** command to configure the relay destination server for UDP broadcast packets.

VLAN Interface view

`undelete`

Use the **undelete** command to restore a deleted file.

User view

`user`

Use the **user** command to switch to a specified user.

FTP Client view

After logging into an FTP server, you can switch to another user by using the **user** command.

`user-interface`

Using **user-interface** command to enter one or more user interface views to perform configuration.

System view

`user-name-format`

Use the **user-name-format** command to set the format of the user names to be sent to RADIUS server.

RADIUS Scheme view

`user privilege level`

Use the **user privilege level level** command to configure the command level that a user can access from the specified user interface.

User Interface view

`verbose`

Use the **verbose** command to enable the verbose function, which displays execution and response information of other related commands.

FTP Client view

`virtual-cable-test`

Use the **virtual-cable-test** command to enable the system to test the cable connected to a specific port and to display the results.

Ethernet Port view

`vlan`

Use the **vlan** command to enter the VLAN view.

System view
Web command: Device -> VLAN

`vlan-assignment-mode`

Use the **vlan-assignment-mode** command to set the VLAN assignment mode on the switch.

ISP Domain view

`vlan-mapping modulo`

Use the **vlan-mapping modulo** command to map VLANs to specific spanning tree instances.

MST Region view

`vlan-vpn enable`

Use the **vlan-vpn enable command** to enable the VLAN-VPN function for a port.

Ethernet Port view

`vlan-vpn tpid`

Use the **vlan-vpn tpid** command to set a TPID value for a port. The setting takes effect only when the VLAN-VPN or VLAN-VPN uplink function is enabled.

Ethernet Port view

`vlan-vpn tunnel`

Use the **vlan-vpn tunnel** command to enable the BPDU tunnel function.

System view

`vlan-vpn uplink enable`

Use the **`vlan-vpn uplink enable`** command to configure a port to be a VLAN-VPN uplink port.

Ethernet Port view

`voice vlan`

Use the **`voice vlan`** command to enable the voice VLAN function globally.

System view
Web command: Device -> Voice

`voice vlan aging`

Use the **`voice vlan aging`** command to set the aging time for a voice VLAN.

System view

`voice vlan enable`

Use the **`voice vlan enable`** command to enable the voice VLAN function for a port.

Ethernet Port view

`voice vlan mac-address`

Use the **`voice vlan mac-address`** command to set a MAC address used for a voice VLAN to identify voice devices.

System view

`voice vlan mode`

Use the **`voice vlan mode auto`** command to configure an Ethernet port to operate in the automatic voice VLAN mode.

Ethernet Port view

`voice vlan security enable`

Use the **`voice vlan security enable`** command to enable the voice VLAN security mode.

System view