

Interface Configuration Commands

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Chapter 1 Interface Configuration Commands

1.1 Interface Configuration Commands

The interface configuration commands include:

- interface
- description
- bandwidth
- delay
- shutdown
- show interface
- show running-config interface

1.1.1 interface

Syntax

To enter the interface configuration mode, run this command. If the logical port is inexistent, you have to create this port first and then enter the port mode. If the physical port is inexistent, the command will fail to be executed. The negative form of this command has different functions for the physical port and the logical port.

[no] interface *port*

To return to the default settings of the physical port, run this command.

no interface *physical-port*

To delete the logic interface, run this command.

no interface *logical-port*

Parameters

Parameters	Description
<i>Port</i>	Stands for the existent physical or logical port.

Default Value

The default mode is not the port mode.

Usage Guidelines

When you execute this command in configuration mode, you have to enable this command to be in port configuration mode first. When the port command is configured, you shall use the exit command to exit from the port mode.

Example

The following example shows how to enter the port mode of port g0/1.

```
Switch_config#
Switch_config#interface gigaEthernet0/1
Switch_config_g0/1#exit
Switch_config#
```

1.1.2 Description

Syntax

To set the description information of a port, run the following command.

[no] description *line*

Parameters

Parameters	Description
<i>line</i>	Stands for the character string of the description information, among which space may exist.

Default Value

There is no description information by default.

Usage Guidelines

The command must be configured in port configuration mode.

Example

The following example shows how to set the description information of port g01/1 to up link.

```
Switch_config# interface gigaEthernet0/1
Switch_config_g0/1# description uplink
```

1.1.3 bandwidth

Syntax

To set the bandwidth of an interface, run the following command.

[no] bandwidth *kilobps*

Parameters

Parameters	Description
<i>kilobps</i>	port bandwidth, the value ranges from 1 to 10000000(kbps).

Default Value

The default value of the 100M port is 100000 and the default value of gigabit port is 1000000.

Usage Guidelines

The command must be configured in port configuration mode.

Note:

The configured bandwidth does not mean the actual bandwidth of a port, but is used by some protocol to calculate the port cost.

Example

The following example shows how to set port g0/1 to 10000000.

```
Switch_config # interface gigaEthernet0/1
Switch_config_g0/1# bandwidth 10000000
```

1.1.4 delay

Syntax

To set the delay of an interface, run the following command.

[no] delay *tensofmicroseconds*

Parameters

Parameters	Description
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<i>tensofmicroseconds</i>	port delay, the value ranges from 1 to 10000000 (10 microseconds)
---------------------------	---

Default Value

The default value of the delay is 1.

Usage Guidelines

This command is configured in port configuration mode.

Example

The following example shows how to set the delay of an interface to 10.

```
Switch_config_g0/1# delay 10
```

1.1.5 shutdown

Syntax

To enable the port, run this command.

[no] shutdown

Parameters

None

Default Value

The physical port is in enabled shutdown status by default.

Usage Guidelines

This command can be used in port mode to enable or disable port.

Example

The following example shows how to enable port g0/1.

```
Switch_config_g0/1#  
Switch_config_g0/1# no shutdown  
Switch_config_g0/1#
```

1.1.6 show interface

Syntax

To browse the state of an interface, run the following command.

show interface <port>

Parameters

Parameters	Description
<i>Port</i>	Name of an interface. If a specific port is not in the command, the system will show the statuses of all ports.

Default Value

None

Usage Guidelines

This command can be used in EXEC and configuration modes to show the physical status and packet reception statistics of a port.

Example

The following example shows the information about port g0/1:

```
Switch_config# show interface gigaEthernet 0/1
GigaEthernet0/1 is administratively down, line protocol is down
  Hardware is Giga-Combo-FX, address is 00e0.0fe4.d083 (bia 00e0.0fe4.d083)
  MTU 1500 bytes, BW 1000000 kbit, DLY 10 usec
  Encapsulation ARPA
  Auto-duplex, Auto-speed
  flow-control off
  5 minutes input rate 0 bits/sec, 0 packets/sec
  5 minutes output rate 0 bits/sec, 0 packets/sec
    Received 0 packets, 0 bytes
      0 broadcasts, 0 multicasts
    0 discard, 0 error, 0 PAUSE
    0 align, 0 FCS, 0 symbol
    0 jabber, 0 oversize, 0 undersize
    0 carriersense, 0 collision, 0 fragment
    0 L3 packets, 0 discards, 0 Header errors
  Transmitted 0 packets, 0 bytes
    0 broadcasts, 0 multicasts
    0 discard, 0 error, 0 PAUSE
    0 sqetest, 0 deferred
```

0 single, 0 multiple, 0 excessive, 0 late

0 L3 forwards

1.1.7 show running-config interface

Syntax

To display the settings of a port, run the following command.

show running-config interface *port*

Parameters

Parameters	Description
<i>Port</i>	Stands for the existent port.

Default Value

None

Usage Guidelines

This command can be executed in EXEC or configuration mode to browse the settings of a port.

Example

The following example shows the settings of port g0/1:

```
Switch_config#show running-config interface g0/1
Building configuration...
```

Current configuration:

```
!
interface GigaEthernet0/1
 shutdown
 description uplink
 bandwidth 10000000
 delay 10
Switch_config#
```

1.2 Configuration Example

The following example shows how to create a VLAN port, set its description information and IP address and browse the status and settings of this port. To browse the port status and configuration, run show command.

```
Switch_config#  
Switch_config# interface vlan1  
Switch_config_v1# description uplink  
Switch_config_v1#  
Switch_config_v1# ip address 192.168.1.1 255.255.255.0  
Switch_config_v1# exit  
Switch_config#  
Switch_config# show running-config interface vlan1  
Building configuration...  
Current configuration:  
!  
interface VLAN1  
description uplink  
ip address 192.168.1.1 255.255.255.0  
Switch_config# show interface vlan1  
VLAN1 is up, line protocol is down  
Description: uplink  
Hardware is EtherSVI, Address is 00e0.0fe4.d06a(00e0.0fe4.d06a)  
Interface address is 192.168.1.1/24  
MTU 1500 bytes, BW 1000000 kbit, DLY 2000 usec  
Encapsulation ARPA  
ARP type: ARPA, ARP timeout 04:00:00  
Peak input rate 0 pps, output 0 pps  
0 packets input, 0 bytes  
Received 0 broadcasts, 0 multicasts  
0 mpls unicasts, 0 mpls multicasts, 0 mpls input discards  
0 input errors, 0 input discards
```

0 packets output, 0 bytes

Transmitted 0 broadcasts, 0 multicasts

0 mpls unicasts, 0 mpls multicasts, 0 mpls output discards

0 output errors, 0 discards

Switch_config#