

## Interface Configuration Commands

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## Chapter 1 Interface Configuration Commands

### 1.1 Interface Configuration Commands

The following are interface configuration commands:

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

#### 1.1.1 interface

##### Syntax

**[no] interface** *port*

To enter the interface configuration mode, run the above-mentioned 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.

The **no interface physical-port** command is used to resume the default settings of the physical port.

The **no interface logical-port** command is used to delete the logical port.

##### Parameter

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

##### Default value

The default mode is not the port mode.

## Remarks

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

**[no] description** *line*

To set the description information of a port, run the above-mentioned command.

## Parameter

Parameter	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.

## Remarks

This command is configured in port configuration mode.

## Example

The following example shows how to set the description information of port g0/1 to **up link**.

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

### 1.1.3 bandwidth

#### Syntax

**[no] bandwidth** *kilobps*

To set the bandwidth of an interface, ran the above-mentioned command.

#### Parameter

Parameter	Description
<i>kilobps</i>	Means the bandwidth of port, which ranges from 1 to 10000000 kbps.

#### Default value

The default bandwidths of the 100M port, gigabit port and 10G port are 100000kbps, 1000000kbps and 10000000kbps respectively.

#### Remarks

This command is 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

**[no] delay** *tensofmicroseconds*

To set the delay of an interface, run the above-mentioned command.

#### Parameter

Parameter	Description
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<i>tensofmicroseconds</i>	port delay, range 1-10000000 (tensofmicroseconds)
---------------------------	---

#### Default value

The default value of the delay is 1.

#### Remarks

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

**[no] shutdown**

To close a port, run **shutdown**; to restart a port, run **no shutdown**.

#### Parameter

N/A

#### Default value

The physical port is in **enabled** status by default.

#### Remarks

This command can be used in port mode to open or close a 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

**show interface** *<port>*

To browse the state of an interface, run the above-mentioned command.

#### Parameter

Parameter	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

N/A

#### Remarks

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 sqettest, 0 deferred  
0 single, 0 multiple, 0 excessive, 0 late  
0 L3 forwards

### 1.1.7 show running-config interface

#### Syntax

**show running-config interface** *port*

To display the settings of a port, run the above-mentioned command.

#### Parameter

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

#### Default value

N/A

#### Remarks

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 g1/1:

```
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.

```
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#