Configuring Interface Parameters

This chapter contains the following sections:

Information About the Basic Interface Parameters

Description

For the vEthernet, and management interfaces, you can configure the description parameter to provide a name for the interface. Using a unique name for each interface allows you to quickly identify the interface when you are looking at a listing of multiple interfaces.

By default, the description for vEthernet interfaces is automatically formatted to contain information about the connected device. The description for a virtual Network Interface Card (vNIC), for example, contains the VM name and network adapter number. You keep this default description or you can override it with a description of your choosing.

Administrative Status

The administrative-status parameter determines whether an interface is up or down. When an interface is administratively down, it is disabled and unable to transmit data. When an interface is administratively up, it is enabled and able to transmit data.

Guidelines and Limitations

Interface parameters have the following guidelines and limitations:

- To specify an interface in the CLI, use the following guideline:
  - For a vEthernet port, use **vethernet** *number*, where *number* is a number from 1 to 256.

Specifying an Interface to Configure

You can use this procedure to specify an interface to configure.

Before You Begin

You are logged in to the CLI in EXEC mode.

Procedure

	Command or Action	Purpose
Step 1	switch# **configure terminal**	Enters global configuration mode.
Step 2	switch(config)# **interface** *interface*	Enters interface configuration mode for the specified interface.
Step 3	switch(config-if)# **show interface** *interface*	(Optional) Displays the current configuration of interfaces. The interface argument is defined as follows: • For the management interface, use **mgmt 0** or **mgmt0**. • For a vEthernet port, use **vethernet** *number*, where *number* is a number from 1 to 1048575.

```
switch# configure terminal
switch(config)# interface vethernet 5
switch(config-if)# show interface vethernet 5
switch(config-if)#
```

Configuring a Description

You can use this procedure to add a description to an interface.

Before You Begin

- You are logged in to the CLI in EXEC mode.
- A description is case-sensitive and can be up to 80 alphanumeric characters in length.

Procedure

	Command or Action	Purpose
Step 1	switch# **configure terminal**	Enters global configuration mode.
Step 2	switch(config)# **interface** *interface*	Enters interface configuration mode for the specified interface.
Step 3	switch(config-if)# **description** *string*	Adds a description of up to 80 alphanumeric characters for the interface and saves it in the running configuration.
Step 4	switch(config-if)# **show interface** *interface*	(Optional) Displays the interface status, which includes the description.
Step 5	switch(config-if)# **copy running-config startup-config**	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

The following example shows how to set the interface description:

```
switch# configure terminal
switch(config)# interface vethernet 5
switch(config-if)# description vEthernet on module 5
switch(config-if)#
```

Shutting Down and Activating an Interface

You can use this procedure to shut down and restart interfaces.

Before You Begin

- You are logged in to the CLI in EXEC mode.
- When you shut down an interface, it becomes disabled and the output of monitoring commands show it as being down.
- To activate an interface that has been shut down, you must restart the device.

Procedure

	Command or Action	Purpose
Step 1	switch# **configure terminal**	Enters global configuration mode.
Step 2	switch(config)# **interface** *interface*	Specifies an interface to configure, and enters interface configuration mode.

	Command or Action	Purpose
Step 3	switch(config-if)# **shutdown**	Disables the interface in the running configuration .
Step 4	switch(config-if)# **show interface** *interface*	(Optional) Displays the interface status, which includes the administrative status.
Step 5	switch(config-if)# **no shutdown**	Reenables the interface in the running configuration .
Step 6	switch(config-if)# **show interface** *interface*	(Optional) Displays the interface status, which includes the administrative status. • For the management interface, use **mgmt 0** or **mgmt0**.
Step 7	switch(config-if)# **copy running-config startup-config**	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

The following example shows how to shut down vethernet interafce:

```
switch# configure terminal
switch(config)# interface vethernet 5
switch(config-if)# shutdown
switch(config-if)# no shutdown
switch(config-if)#
```

Clearing the Interface Counters

You can use this procedure to clear the interface counters.

Before You Begin

Log in to the CLI in EXEC mode, configuration mode, or interface configuration mode.

Procedure

	Command or Action	Purpose
Step 1	switch# **clear counters interface** *interface*	• **vethernet** *number***—**Virtual ethernet interface. The range is from 1 to 1048575. • **vethernet** *number***—**Virtual ethernet interface. The range is from 1 to 1048575. • **vethernet** *number***—**Virtual ethernet interface. The range is from 1 to 1048575. • **mgmt 0—**Management interface.

	Command or Action	Purpose
		• **vethernet** *number*—Virtual ethernet interface. The range is from 1 to 1048575. • **vethernet** *number*—Virtual ethernet interface. The range is from 1 to 1048575. Clears the counters for the specified interface:
Step 2	switch# **show interface** *interface*	(Optional) Displays the interface status, which includes the counters, for the specified interface: • **control 0**—Control interface. • **ethernet** *number*—Ethernet IEEE 802.3z. The range is from 1 to 514. • **mgmt 0**—Management interface. • **port-channel** *number*—Port Channel interface. The range is from 1 to 4096. • **vethernet** *number*—Virtual ethernet interface. The range is from 1 to 1048575.

The following example shows how to clear and reset the counters on vethernet 5:

```
switch# clear counters interface vethernet 5
switch#
```

Verifying the Basic Interface Parameters

Use one of the following commands to verify the configuration:

Command	Purpose
show interface *interface*	Displays the configured states of one or all interfaces.
show interface brief	Displays a table of interface states.
show interface switchport	Displays the status of Layer 2 ports.

Feature History for Basic Interface Parameters

Feature Name	Releases	Feature Information
Basic interface parameters	Release 5.2(1)IC1(1.1)	This feature was introduced.