Configuring Virtual Ethernet Interfaces

This chapter describes how to configure virtual Ethernet (vEthernet or vEth) interfaces.

This chapter includes the following sections:

- Information About vEthernet Interfaces, page 4-1
- Guidelines and Limitations, page 4-2
- Default Settings, page 4-2
- Configuring vEthernet Interfaces, page 4-2
- Verifying the vEthernet Interface Configuration, page 4-9
- Monitoring the vEthernet Interface Configuration, page 4-10
- Configuration Examples for vEthernet Interfaces, page 4-11
- Additional References, page 4-12
- Feature History for vEthernet Interfaces, page 4-12

Information About vEthernet Interfaces

Virtual Ethernet (vEthernet or vEth) interfaces are logical interfaces. Each vEthernet interface corresponds to a switch interface that is connected to a virtual port. The interface types are as follows:

- VM (interfaces connected to VM NICs)
- Service console
- vmkernel

vEthernet interfaces are created on the Cisco Nexus 1000V to represent virtual ports in use on the distributed virtual switch.

vEthernet interfaces are mapped to connected ports by MAC address as well as DVPort number. When a server administrator changes the port profile assignment on a vNIC or hypervisor port, the same vEthernet interface is reused. This is a change in Release 4.2(1)SV1(4). In previous releases, the VSM assigned a new vEthernet interface.

When bringing up a vEthernet interface where a change in the port profile assignment is detected, the VSM automatically purges any manual configuration present on the interface. You can use the following command to prevent purging of the manual configuration:

```
no svs veth auto-config-purge
```
Guidelines and Limitations

vEthernet interface configuration has the following guideline and limitation:

- MTU cannot be configured on a vEthernet interface.

Default Settings

The following table lists the default settings for vEthernet interface configuration.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switchport mode</td>
<td>Access</td>
</tr>
<tr>
<td>Allowed VLANs</td>
<td>1 to 4094</td>
</tr>
<tr>
<td>Access VLAN ID</td>
<td>VLAN1</td>
</tr>
<tr>
<td>Native VLAN ID</td>
<td>VLAN1</td>
</tr>
<tr>
<td>Native VLAN ID tagging</td>
<td>Disabled</td>
</tr>
<tr>
<td>Administrative state</td>
<td>Shut</td>
</tr>
<tr>
<td>Automatic deletion of vEthernet interfaces</td>
<td>Enabled</td>
</tr>
<tr>
<td>Automatic purge of manual configuration on vEthernet interfaces</td>
<td>Enabled</td>
</tr>
<tr>
<td>Automatic creation of vEthernet interfaces</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Configuring vEthernet Interfaces

This section includes the following topics:

- Configuring Global vEthernet Properties, page 4-2
- Configuring a vEthernet Access Interface, page 4-4
- Configuring a Private VLAN on a vEthernet Interface, page 4-5
- Enabling or Disabling a vEthernet Interface, page 4-7

Configuring Global vEthernet Properties

You can use this procedure to enable or disable the following automatic controls for vEthernet interfaces:

- Deleting unused vEthernet interfaces
- Purging of manual vEthernet configurations
- Creating vEthernet interfaces

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged in to the CLI in EXEC mode.
**SUMMARY STEPS**

1. `config t`
2. (Optional) `[no] svs veth auto-delete`
3. (Optional) `[no] svs veth auto-config-purge`
4. (Optional) `[no] svs veth auto-setup`
5. `show running-config all | grep “svs-veth”`
6. `copy running-config startup-config`

**DETAILED STEPS**

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>config t</td>
</tr>
</tbody>
</table>
| **Example:** | n1000v# config t
n1000v(config)# | Enters the global configuration mode. |
| **Step 2** | `[no] svs veth auto-delete` |
| **Example:** | n1000v(config)# svs veth auto-delete
n1000v(config)# | (Optional) Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port. The default setting = enabled
The no form of this command prevents the VSM from deleting unused DVPorts. |
| **Step 3** | `[no] svs veth auto-config-purge` |
| **Example:** | n1000v(config)# svs veth auto-config-purge
n1000v(config)# | (Optional) Enables the VSM to remove all manual configuration on a vEthernet interface when the system administrator changes a port profile on the interface. The default setting = enabled
The no form of this command prevents the manual configuration from being deleted in this situation. Note Port profiles with ephemeral bindings are purged regardless of this setting. |
| **Step 4** | `[no] svs veth auto-setup` |
| **Example:** | n1000v(config)# svs veth auto-setup
n1000v(config)# | (Optional) Enables the VSM to automatically create a vEthernet interface when a new port is activated on a host. The no form of this command disables the automatic creation of vEthernet interfaces in this situation. Note You can use no form of the command to temporary block automatic creation of vEthernet interfaces. |
Configuring a vEthernet Access Interface

You can use this procedure to configure a vEthernet interface for use as an access interface.

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged into the CLI in EXEC mode.
- If you do not add a description to the vEthernet interface, then one of the following descriptions is added at attach time. If you add a description and then remove it using the no description command, then one of the following descriptions is added to the interface:
  - For a VM—VM-Name, Network Adapter number
  - For a VMK—VMware VMkernel, vmk number
  - For a VSWIF—VMware Service Console, vswif number

SUMMARY STEPS

1. `config t`  
2. `interface vethernet interface-number`  
3. (Optional) `description string`  
4. `switchport access vlan vlan-id`  
5. `switchport mode access`  
6. `show interface interface-number`  
7. `copy running-config startup-config`
## Configuring a Private VLAN on a vEthernet Interface

You can use this procedure to configure a private VLAN (PVLAN) on a vEthernet interface.

### BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged into the CLI in EXEC mode.

### DETAILED STEPS

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td><strong>config t</strong>  &lt;br&gt; Example:  &lt;br&gt; n1000v# config t  &lt;br&gt; n1000v(config)#</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td><strong>interface vethernet interface-number</strong>  &lt;br&gt; Example:  &lt;br&gt; n1000v(config)# interface vethernet 100  &lt;br&gt; n1000v(config-if)#</td>
</tr>
</tbody>
</table>
| **Step 3** | **description string**  <br> Example:  <br> n1000v(config-if)# description accessvlan | (Optional) Adds a description of up to 80 alphanumeric characters to the interface in the running configuration.  
**Note**  
If you do not add a description, the default description is added.  
**Note**  
You do not need to use quotations around descriptions that include spaces. |
| **Step 4** | **switchport access vlan vlanid**  <br> Example:  <br> n1000v(config-if)# switchport access vlan 5 | Configures the vEthernet interface as an access interface and specifies the VLAN ID (1 to 4094) in the running configuration. |
| **Step 5** | **switchport mode access**  <br> Example:  <br> n1000v(config-if)# switchport mode access  <br> n1000v(config-if)# | Configures the vEthernet interface for use as an access interface in the running configuration. |
| **Step 6** | **show interface vethernet interface-number**  <br> Example:  <br> n1000v(config-if)# show interface vethernet1 | (Optional) Displays the specified interface for verification. |
| **Step 7** | **copy running-config startup-config**  <br> Example:  <br> n1000v(config)# copy running-config startup-config | (Optional) Saves the running configuration persistently through reboots and restarts by copying it to the startup configuration. |
### Configuring vEthernet Interfaces

*Send document comments to nexus1k-docfeedback@cisco.com.*

#### SUMMARY STEPS

1. `config t`  
2. `interface vethernet interface-number`  
3. (Optional) `description string`  
4. `switchport access vlan vlan-id`  
5. `switchport mode private-vlan host`  
6. `switchport private-vlan host-association primary-vlan-id`  
7. `show interface`  
8. `copy running-config startup-config`

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> config t</td>
<td>Enters the global configuration mode.</td>
</tr>
<tr>
<td>Example:</td>
<td>n1000v# config t</td>
</tr>
<tr>
<td></td>
<td>n1000v(config)#</td>
</tr>
</tbody>
</table>

| **Step 2** interface vethernet interface-number | Enters the interface configuration mode for the specified vEthernet interface (from 1 to 1048575). |
| Example:                                    | n1000v(config)# # interface vethernet 1                                  |
|                                              | n1000v(config-if)#                                                      |

| **Step 3** description string                | (Optional) Adds a description of up to 80 alphanumeric characters to the interface in the running configuration. |
| Example:                                    | n1000v(config-if)# # description                                       |
|                                              | isp_pvlan1                                                             |

**Note** If you do not add a description, the default description is added.

**Note** You do not need to use quotations around descriptions that include spaces.

| **Step 4** switchport access vlan vlan-id    | Configures the vEthernet interface as an access interface and specifies the VLAN ID (from 1 to 4094) in the running configuration. |
| Example:                                    | n1000v(config-if)# # switchport access vlan 5                         |

| **Step 5** switchport mode private-vlan host | Configures the vEthernet interface for a PVLAN host in the running configuration. |
| Example:                                    | n1000v(config-if)# # switchport mode private-vlan host                |

| **Step 6** switchport private-vlan host-association primary-vlanid | Configures the vEthernet interface for a host association with a specific primary VLAN ID (from 1 to 4094) in the running configuration. |
| Example:                                    | n1000v(config-if)# # switchport private-vlan host-association 5       |
Configuring vEthernet Interfaces

EXAMPLES

The following example shows how to configure a vEthernet interface to use in a private vlan:

```
n1000v# config t
n1000v(config)# interface vethernet 1
n1000v(config-if)# switchport access vlan 5
n1000v(config-if)# switchport mode private-vlan host
n1000v(config-if)# switchport private-vlan host-association 5
n1000v(config-if)# show interface vethernet 1
```

```
Vethernet1 is up
Port description is gentoo, Network Adapter 1
Hardware is Virtual, address is 0050.5687.3bac
Owner is VM "gentoo", adapter is Network Adapter 1
Active on module 4
VMware DVS port 1
Port-Profile is vm
Port mode is access
5 minute input rate 1 bytes/second, 0 packets/second
5 minute output rate 94 bytes/second, 1 packets/second
Rx
655 Input Packets 594 Unicast Packets
0 Multicast Packets 61 Broadcast Packets
114988 Bytes
Tx
98875 Output Packets 1759 Unicast Packets
80410 Multicast Packets 16706 Broadcast Packets 0 Flood Packets
6368452 Bytes
0 Input Packet Drops 0 Output Packet Drops
```

Enabling or Disabling a vEthernet Interface

You can use this procedure to enable or disable a vEthernet interface.

SUMMARY STEPS

1. config t
2. interface vethernet interface-number
3. [no] shutdown
4. show interface
5. copy running-config startup-config
Configuring vEthernet Interfaces

Send document comments to nexus1k-docfeedback@cisco.com.

BEFORE YOU BEGIN

Before beginning this procedure, you must know or do the following:

- You are logged into the CLI in EXEC mode.

DETAILED STEPS

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>config t</td>
<td>Enters the global configuration mode.</td>
</tr>
</tbody>
</table>

**Example:**
```
n1000v# config t
n1000v(config)#
```

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>interface vethernet interface-number</td>
<td>Enters the interface configuration mode for the specified vEthernet interface (from 1 to 1048575).</td>
</tr>
</tbody>
</table>

**Example:**
```
n1000v(config)# interface vethernet 100
n1000v(config-if)#
```

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>no shutdown</td>
<td>Enables or disables the vEthernet interface in the running configuration:</td>
</tr>
<tr>
<td>shutdown</td>
<td>Disables the vEthernet interface.</td>
</tr>
<tr>
<td>no shutdown</td>
<td>Enables the vEthernet interface.</td>
</tr>
</tbody>
</table>

**Example:**
```
n1000v(config-if)# no shutdown
n1000v(config-if)#
```

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>show interface</td>
<td>(Optional) Displays the interface status and information.</td>
</tr>
</tbody>
</table>

**Example:**
```
n1000v# show interface
```

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>copy running-config startup-config</td>
<td>(Optional) Saves the running configuration persistently through reboots and restarts by copying it to the startup configuration.</td>
</tr>
</tbody>
</table>

**Example:**
```
n1000v(config)# copy running-config startup-config
```

EXAMPLES

The following example shows how to enable a vEthernet interface:
```
n1000v# config t
n1000v(config)# interface vethernet 100
n1000v(config)# no shutdown
n1000v(config-if)# show interface veth100 status
```

```
<table>
<thead>
<tr>
<th>Port</th>
<th>Name</th>
<th>Status</th>
<th>Vlan</th>
<th>Duplex</th>
<th>Speed</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veth100</td>
<td>--</td>
<td>up</td>
<td>1</td>
<td>auto</td>
<td>auto</td>
<td>--</td>
</tr>
</tbody>
</table>
```

n1000v(config-if)#
Verifying the vEthernet Interface Configuration

You can use the following commands to display the vEthernet interface configuration:

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>show interface vethernet interface-number [brief</td>
<td>counters [detailed [all]</td>
</tr>
<tr>
<td>show interface [vethernet interface-number]</td>
<td>Displays the complete interface configuration.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] brief</td>
<td>Displays abbreviated interface configuration.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] description</td>
<td>Displays the interface description.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] mac-address</td>
<td>Displays the interface MAC address. Note For vEth interfaces this shows the MAC address of the connected device.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] switchport</td>
<td>Displays interface switchport information.</td>
</tr>
<tr>
<td>show interface virtual [vm [vm_name]</td>
<td>vmk</td>
</tr>
<tr>
<td>show interface virtual port-mapping [ vm [name]</td>
<td>vmk</td>
</tr>
</tbody>
</table>

The following example shows how to display vEthernet 1:

```
n1000v# show interface veth1
Vethernet1 is up
    Port description is gentool, Network Adapter 1
    Hardware is Virtual, address is 0050.56bd.42f6
    Owner is VM "gentool", adapter is Network Adapter 1
    Active on module 33
    VMware DVS port 100
    Port-Profile is vlan48
    Port mode is access
    Rx
    491242 Input Packets 491180 Unicast Packets
    7 Multicast Packets 55 Broadcast Packets
    29488527 Bytes
    Tx
    504958 Output Packets 491181 Unicast Packets
    1 Multicast Packets 13776 Broadcast Packets
    941 Flood Packets
    714925076 Bytes
    11 Input Packet Drops 0 Output Packet Drops
n1000v# 
```

The following example shows how to display information for all vEthernet interfaces:

```
n1000v# show interface virtual

Command Purpose
show interface vethernet interface-number [brief | counters [detailed [all] | description | mac-address | status [ down | err-disabled | inactive | module num | up ] | switchport] Displays the vEthernet interface configuration. 
show interface [vethernet interface-number] Displays the complete interface configuration. 
show interface [vethernet interface-number] brief Displays abbreviated interface configuration. 
show interface [vethernet interface-number] description Displays the interface description. 
show interface [vethernet interface-number] mac-address Displays the interface MAC address. Note For vEth interfaces this shows the MAC address of the connected device. 
show interface [vethernet interface-number] switchport Displays interface switchport information. 
show interface virtual [vm [vm_name] | vmk | vswif] [module mod_no] Displays virtual interfaces only. 
show interface virtual port-mapping [ vm [name] | vmk | vswif | description] [ module_num] Displays mappings between veth and VMware DVPort. 

The following example shows how to display vEthernet 1:

```
n1000v# show interface veth1
Vethernet1 is up
    Port description is gentool, Network Adapter 1
    Hardware is Virtual, address is 0050.56bd.42f6
    Owner is VM "gentool", adapter is Network Adapter 1
    Active on module 33
    VMware DVS port 100
    Port-Profile is vlan48
    Port mode is access
    Rx
    491242 Input Packets 491180 Unicast Packets
    7 Multicast Packets 55 Broadcast Packets
    29488527 Bytes
    Tx
    504958 Output Packets 491181 Unicast Packets
    1 Multicast Packets 13776 Broadcast Packets
    941 Flood Packets
    714925076 Bytes
    11 Input Packet Drops 0 Output Packet Drops
n1000v# 
```

The following example shows how to display information for all vEthernet interfaces:

```
n1000v# show interface virtual

Command Purpose
show interface vethernet interface-number [brief | counters [detailed [all] | description | mac-address | status [ down | err-disabled | inactive | module num | up ] | switchport] Displays the vEthernet interface configuration. 
show interface [vethernet interface-number] Displays the complete interface configuration. 
show interface [vethernet interface-number] brief Displays abbreviated interface configuration. 
show interface [vethernet interface-number] description Displays the interface description. 
show interface [vethernet interface-number] mac-address Displays the interface MAC address. Note For vEth interfaces this shows the MAC address of the connected device. 
show interface [vethernet interface-number] switchport Displays interface switchport information. 
show interface virtual [vm [vm_name] | vmk | vswif] [module mod_no] Displays virtual interfaces only. 
show interface virtual port-mapping [ vm [name] | vmk | vswif | description] [ module_num] Displays mappings between veth and VMware DVPort. 

The following example shows how to display vEthernet 1:

```
n1000v# show interface veth1
Vethernet1 is up
    Port description is gentool, Network Adapter 1
    Hardware is Virtual, address is 0050.56bd.42f6
    Owner is VM "gentool", adapter is Network Adapter 1
    Active on module 33
    VMware DVS port 100
    Port-Profile is vlan48
    Port mode is access
    Rx
    491242 Input Packets 491180 Unicast Packets
    7 Multicast Packets 55 Broadcast Packets
    29488527 Bytes
    Tx
    504958 Output Packets 491181 Unicast Packets
    1 Multicast Packets 13776 Broadcast Packets
    941 Flood Packets
    714925076 Bytes
    11 Input Packet Drops 0 Output Packet Drops
n1000v# 
```

The following example shows how to display information for all vEthernet interfaces:

```
n1000v# show interface virtual

Command Purpose
show interface vethernet interface-number [brief | counters [detailed [all] | description | mac-address | status [ down | err-disabled | inactive | module num | up ] | switchport] Displays the vEthernet interface configuration. 
show interface [vethernet interface-number] Displays the complete interface configuration. 
show interface [vethernet interface-number] brief Displays abbreviated interface configuration. 
show interface [vethernet interface-number] description Displays the interface description. 
show interface [vethernet interface-number] mac-address Displays the interface MAC address. Note For vEth interfaces this shows the MAC address of the connected device. 
show interface [vethernet interface-number] switchport Displays interface switchport information. 
show interface virtual [vm [vm_name] | vmk | vswif] [module mod_no] Displays virtual interfaces only. 
show interface virtual port-mapping [ vm [name] | vmk | vswif | description] [ module_num] Displays mappings between veth and VMware DVPort. 

The following example shows how to display vEthernet 1:

```
n1000v# show interface veth1
Vethernet1 is up
    Port description is gentool, Network Adapter 1
    Hardware is Virtual, address is 0050.56bd.42f6
    Owner is VM "gentool", adapter is Network Adapter 1
    Active on module 33
    VMware DVS port 100
    Port-Profile is vlan48
    Port mode is access
    Rx
    491242 Input Packets 491180 Unicast Packets
    7 Multicast Packets 55 Broadcast Packets
    29488527 Bytes
    Tx
    504958 Output Packets 491181 Unicast Packets
    1 Multicast Packets 13776 Broadcast Packets
    941 Flood Packets
    714925076 Bytes
    11 Input Packet Drops 0 Output Packet Drops
n1000v# 
```
Monitoring the vEthernet Interface Configuration

You can use the following commands to monitor the vEthernet interface configuration:

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>show interface [vethernet interface-number] counters</td>
<td>Displays the interface incoming and outgoing counters.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] counters detailed [all]</td>
<td>Displays detailed information for all counters.</td>
</tr>
<tr>
<td>show interface [vethernet interface-number] counters errors</td>
<td>Displays the interface error counters.</td>
</tr>
</tbody>
</table>

Note: If 'all' is not specified then only non-zero counters are shown.
The following example shows how to display the counters for all vEthernet interfaces:

```
n1000v# show interface counters
```

<table>
<thead>
<tr>
<th>Port</th>
<th>InOctets</th>
<th>InUcastPkts</th>
<th>InMcastPkts</th>
<th>InBcastPkts</th>
</tr>
</thead>
<tbody>
<tr>
<td>mgmt0</td>
<td>42754</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>Eth2/2</td>
<td>41423421</td>
<td>112708</td>
<td>125997</td>
<td>180167</td>
</tr>
<tr>
<td>Eth5/2</td>
<td>39686276</td>
<td>119152</td>
<td>93284</td>
<td>180100</td>
</tr>
<tr>
<td>Eth5/6</td>
<td>4216279</td>
<td>9530</td>
<td>31268</td>
<td>40</td>
</tr>
<tr>
<td>Veth1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port</th>
<th>OutOctets</th>
<th>OutUcastPkts</th>
<th>OutMcastPkts</th>
<th>OutBcastPkts</th>
</tr>
</thead>
<tbody>
<tr>
<td>mgmt0</td>
<td>3358</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Eth2/2</td>
<td>23964739</td>
<td>111598</td>
<td>571</td>
<td>52420</td>
</tr>
<tr>
<td>Eth5/2</td>
<td>26419473</td>
<td>9548</td>
<td>536</td>
<td>14</td>
</tr>
<tr>
<td>Eth5/6</td>
<td>1042930</td>
<td>6150</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth1</td>
<td>393600</td>
<td>0</td>
<td>6150</td>
<td>0</td>
</tr>
<tr>
<td>Veth2</td>
<td>393600</td>
<td>0</td>
<td>6150</td>
<td>0</td>
</tr>
<tr>
<td>Veth3</td>
<td>393600</td>
<td>0</td>
<td>6150</td>
<td>0</td>
</tr>
<tr>
<td>Veth4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Veth100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

```
n1000v#
```

**Configuration Examples for vEthernet Interfaces**

The following example shows how to configure a vEthernet access interface and assign the access VLAN for that interface:

```
n1000v# configure terminal
n1000v(config)# interface vethernet 100
n1000v(config-if)# switchport
n1000v(config-if)# switchport mode access
n1000v(config-if)# switchport access vlan 5
n1000v(config-if)#
```

The following example shows how to configure a Layer 2 trunk interface, assign the native VLAN and the allowed VLANs, and configure the device to tag the native VLAN traffic on the trunk interface:

```
n1000v# configure terminal
n1000v(config)# interface vethernet 1
n1000v(config-if)# switchport
n1000v(config-if)# switchport mode trunk
n1000v(config-if)# switchport trunk native vlan 10
n1000v(config-if)# switchport trunk allowed vlan 5, 10
n1000v(config-if)#
```
Additional References

For additional information related to implementing access and trunk port modes, see the following sections:
- Related Documents, page 4-12
- Standards, page 4-12

Related Documents

<table>
<thead>
<tr>
<th>Related Topic</th>
<th>Document Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete command syntax, command modes, command history, defaults, usage guidelines, and examples for all Cisco Nexus 1000V commands.</td>
<td>Cisco Nexus 1000V Command Reference, Release 4.2(1)SV1(4)</td>
</tr>
<tr>
<td>Port Profiles</td>
<td>Cisco Nexus 1000V Port Profile Configuration Guide, Release 4.2(1)SV1(4)</td>
</tr>
<tr>
<td>VLANs and private VLANs</td>
<td>Cisco Nexus 1000V Layer 2 Switching Configuration Guide, Release 4.2(1)SV1(4)</td>
</tr>
<tr>
<td>System management</td>
<td>Cisco Nexus 1000V System Management Configuration Guide, Release 4.2(1)SV1(4)</td>
</tr>
<tr>
<td>Release Notes</td>
<td>Cisco Nexus 1000V Release Notes, Release 4.2(1)SV1(4)</td>
</tr>
</tbody>
</table>

Standards

<table>
<thead>
<tr>
<th>Standards</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.</td>
<td>—</td>
</tr>
</tbody>
</table>

Feature History for vEthernet Interfaces

This section provides the feature history for vEthernet interfaces.

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Releases</th>
<th>Feature Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global vEthernet interface controls</td>
<td>4.2(1)SV1(4)</td>
<td>You can enable or disable the following automatic vEthernet interface controls:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deleting unused vEthernet interfaces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Purging of manual vEthernet configurations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Creating vEthernet interfaces</td>
</tr>
<tr>
<td>vEthernet interface parameters</td>
<td>4.0(4)SV1(1)</td>
<td>This feature was introduced.</td>
</tr>
</tbody>
</table>