Ports

This chapter describes how to identify and resolve problems with ports and includes the following sections:

Information About Ports

This section includes the following topics:

Information About Interface Characteristics

Before a switch can relay frames from one data link to another, you must define the characteristics of the interfaces through which the frames are received and sent. The configured interfaces can be Ethernet (physical) interfaces, virtual Ethernet interfaces, and the management interface.

Each interface has the following:

- Administrative Configuration

  The administrative configuration does not change unless you modify it. This configuration has attributes that you can configure in administrative mode.

- Operational state

  The operational state of a specified attribute, such as the interface speed. This state cannot be changed and is read-only. Some values might not be valid when the interface is down (such as the operation speed).

For a complete description of port modes, administrative states, and operational states, see the *Cisco Nexus 1000V Interface Configuration Guide*.

Information About Interface Counters

Port counters are used to identify synchronization problems. Counters can show a significant disparity between received and transmitted frames. To display interface counters, use the following command:

show interface *interface-name* **counters**

See Example 8-8 on page 8-14.

Values stored in counters can be meaningless for a port that has been active for an extended period. Clearing the counters provides a better idea of the actual link behavior at the present time. Create a baseline first by clearing the counters.

clear counters interface *interface-name*

Information About Link Flapping

When a port continually goes up and down, it is said to be flapping, or link flapping. When a port is flapping, it cycles through the following states, in this order, and then starts over again:

1. Initializing—The link is initializing.
2. Offline—The port is offline.
3. Link failure or not connected—The physical layer is not operational and there is no active device connection.

To troubleshoot link flapping, see the "Information About Link Flapping" section on page 8-2.

Port Diagnostic Checklist

Use the following checklist to diagnose port interface activity.

For more information about port states, see the *Cisco Nexus 1000V Interface Configuration Guide*.

Table 8-1 Port Diagnostic Checklist

Checklist	Example	√
Verify that the module is active. **show module**	See Example 8-1 on page 8-9.	
Verify that the VSM is connected to vCenter Server. **show svs connections**	See Example 8-3 on page 8-9.	
Verify if the internal port-group information is created on VC. **show ipg-info**		
Verify if the VSE IP to Host IP mapping is done **show dc hosts vse**		
Verify if the module is online or not. **show module**		

Table 8-1 Port Diagnostic Checklist (continued)

Checklist (continued)	Example	√
Verify that the ports have been created. **show interface brief**	See Example 8-6 on page 8-13.	
Verify the state of the interface. **show interface interface-name**	See Example 8-7 on page 8-13.	
Verify if the host and cluster MOB and the uuid info is fetched from the VC. **show vms internal info host-table**		
Verify if there are any error in the vms event-history error during the port creation. **show vms internal event-history errors**		
Verify if the VC port(s) are moved to the internal port-group from Nexus 1000VE pro-profile(s). **show vms internal info host-view**		
Verify if the VSM IPG moves event(s) received from the VC on particular port(s) on VM. **show vms internal info host-view**		
Verify if the IPG to port-profile mapping is done. **show vms internal info ipg-profile-mapping**		

Problems with Ports

This section includes possible causes and solutions for the following symptoms:

- Cannot Enable an Interface, page 8-4
- Port Link Failure or Port Not Connected, page 8-4
- Link Flapping, page 8-4
- Port ErrDisabled, page 8-5
- Port State is Blocked on a VSE, page 8-7

Cannot Enable an Interface

Possible Cause	Solution
A Layer 2 port is not associated with an access VLAN or the VLAN is suspended.	1. Verify that the interface is configured in a VLAN. **show interface brief** 2. If not already, associate the interface with an access VLAN. 3. Determine the VLAN status. **show vlan brief** 4. If not already active, configure the VLAN as active. **config t** **vlan** *vlan-id* **state active**

Port Link Failure or Port Not Connected

Possible Cause	Solution
The port connection is bad.	1. Verify the port state. **show system internal ethpm info** 2. Disable and then enable the port. **shut** **no shut** 3. Move the connection to a different port on the same module or a different module.
The link is stuck in initialization state or the link is in a point-to-point state.	1. Check for a link failure system message. `Link Failure, Not Connected` **show logging** 2. Disable and then enable the port. **shut** **no shut** 3. Move the connection to a different port on the same module or a different module.

Link Flapping

When you are troubleshooting unexpected link flapping, it is important to have the following information:

- Who initiated the link flap.
- The actual reason for the link being down.

- For a definition of link flapping, see the "Link Flapping" section on page 8-4.

Possible Cause	Solution
The bit rate exceeds the threshold and puts the port into an error-disabled state.	Disable and then enable the port. **shut** **no shut** The port should return to the normal state.
A hardware failure or intermittent hardware error causes a packet drop in the switch. A software error causes a packet drop. A control frame is erroneously sent to the device.	An external device might choose to initialize the link again when encountering the error. If so, the exact method of link initialization varies by device. 1. Determine the reason for the link flap as indicated by the MAC driver. 2. Use the debug facilities on the end device to troubleshoot the problem.
ESX errors, or link flapping, occurs on the upstream switch.	Use the troubleshooting guidelines in the documentation for your ESX or upstream switch.

Port ErrDisabled

Possible Cause	Solution
The cable is defective or damaged.	1. Verify the physical cabling. 2. Replace or repair defective cables. 3. Reenable the port. **shut** **no shut**

Possible Cause	Solution
You attempted to add a port to a port channel that was not configured identically, and the port is then errdisabled.	1. Display the switch log file and identify the exact configuration error in the list of port state changes. **show logging logfile** 2. Correct the error in the configuration and add the port to the port channel. 3. Re-enable the port. **shut** **no shut**
A VSM application error has occurred.	1. Identify the component that had an error while you were bringing up the port. **show logging logfile | grep** *interface_number* See Example 8-5 on page 8-13. 2. Identify the error transition. **show system internal ethpm event-history interface** *interface_number* 3. Open a support case and submit the output of the above commands. For more information see the "Contacting Cisco Customer Support" section on page 1-7.

Port State is Blocked on a VSE

Possible Cause	Solution
The VLAN is not created on the VSM.	1. Verify the status and of the vEthernet interface. It should be up and not inactive. **show interface vethernet** *number* 2. Verify that the VLAN on the VSM is created. **show vlan** *vlan-id* On the VSE module, do the following: 1. Verify that the VLAN is programmed. **vemcmd show vlan** *vlan-id* 2. Verify that the VLAN is allowed on the ports. **vemcmd show port vlan** 3. Create the VLAN on the VSM. **vlan** *vlan-id*
The VSE modules are unlicensed.	1. Verify that all the modules are in licensed state. **show module** 2. Verify the status of the vEthernet interface. It should be up and not "VSE Unlicensed." **show interface vethernet** *number* 3. Verify the license status of VSE modules. **show module vse license-info** On the VSE module, do the following: 1. Verify that card details show Licensed: Yes. **vemcmd show card** 2. Install the necessary licenses or move the switch to essential mode. **svs switch edition essential**

Port Troubleshooting Commands

You can use the commands in this section to troubleshoot problems related to ports.

Command	Purpose
show module *module-number*	Displays the state of a module. See Example 8-1 on page 8-9.
show svs domain	Displays the domain configuration. See Example 8-2 on page 8-9.
show svs connections	Displays the Cisco Nexus 1000V connections. See Example 8-3 on page 8-9.
show logging logfile	Displays logged system messages. See Example 8-4 on page 8-10.
show logging logfile | grep *interface_number*	Displays logged system messages for a specified interface. See Example 8-5 on page 8-13.
show interface brief	Displays a table of interface states. See Example 8-6 on page 8-13.
show interface *interface-name*	Displays the configuration for a named Ethernet interface, including the following: • Administrative state • Speed • Trunk VLAN status • Number of frames sent and received • Transmission errors, including discards, errors, CRCs, and invalid frames See Example 8-7 on page 8-13.
show interface *interface-name* **counters**	Displays port counters for identifying synchronization problems. For information about counters, see the "Information About Interface Counters" section on page 8-2. See Example 8-8 on page 8-14.
show interface vethernet	Displays the vEthernet interface configuration. See Example 8-9 on page 8-14.
show interface status	Displays the status of the named interface.

Command	Purpose
show interface capabilities	Displays a tabular view of all configured port profiles. See Example 8-10 on page 8-14.
show interface virtual port mapping	Displays the virtual port mapping for all vEthernet interfaces. See Example 8-11 on page 8-16.

For detailed information about **show** command output, see the *Cisco Nexus 1000V Command Reference*.

EXAMPLES

Example 8-1 show module Command

```
switch# show module 3
Mod Ports Module-Type Model Status
--- ----- -------------------------------- ------------------ ------------
3 1022 Virtual Service Engine NA ok

Mod Sw Hw
--- ------------------ ------------------------------------------------
3 5.2(1)SV5(1.1) NA

Mod Server-IP Server-UUID Server-Name
--- --------------- ------------------------------------ --------------------
3 172.23.231.209 4212E360-F498-594E-219C-9040BDB93408 sfish-231-209.cisco.com

Mod VSE-IP Host-IP
--- --------------- ----------------------------------
3 172.23.231.209 172.23.233.17
switch#
```

Example 8-2 show svs domain Command

```
switch# show svs domain
SVS domain config:
  Domain id:    559
  Control vlan: 3002
  Packet vlan:  3003
  L2/L3 Aipc mode: L2
  L2/L3 Aipc interface: management interface0
  Status: Config push to VC successful.
switch#
```

Example 8-3 show svs connections Command

```
switch# show svs connections
connection VC:
    ip address: 192.168.0.1
    protocol: vmware-vim https
    certificate: default
    datacenter name: Hamilton-DC
    DVS uuid: ac 36 07 50 42 88 e9 ab-03 fe 4f dd d1 30 cc 5c
    config status: Enabled
```

```
    operational status: Connected
switch#
```

Example 8-4 show logging logfile Command

```
switch# show logging logfile
2018 Jul 10 08:57:54 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: CDM main SAP(423)
registered
2018 Jul 10 08:57:55 switch %USER-2-SYSTEM_MSG: CLIS: loading cmd files begin  - clis
2018 Jul 10 08:57:55 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Vem_mgr SAP(744)
registered
2018 Jul 10 08:57:56 switch vdc_mgr[2427]: %VDC_MGR-5-VDC_STATE_CHANGE: vdc 1 state
changed to create pending
2018 Jul 10 08:57:56 switch platform[2301]: %PLATFORM-5-MOD_STATUS: Module 1
current-status is MOD_STATUS_ONLINE/OK
2018 Jul 10 08:57:56 switch module[2437]: %MODULE-5-ACTIVE_SUP_OK: Supervisor 1 is active
(serial: T505692DFA1)
2018 Jul 10 08:57:56 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Fwm SAP(602) registered
2018 Jul 10 08:57:56 switch fwm[2438]: %FWM-3-L3VM_SDB_OPEN: Error opening
volatile:/dev/shm/l3vm_global_sdb, errno: 0x411a000f (no such sdb exists or is destroyed)
in l3vm_open_one_sdb()
2018 Jul 10 08:57:56 switch fwm[2438]: %FWM-0-SYSLOG_SL_MSG_EMERG: l3vm_open_one_sdb
Backtrace: 0xb79accea 0x8073315 0x806c44c 0x414735c5
2018 Jul 10 08:57:56 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Aclmgr SAP(351) registered
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-3-SYSTEM_MSG: sd 0:0:0:0: [sda] Assuming
drive cache: write through - kernel
2018 Jul 10 08:57:57 switch last message repeated 1 time
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-3-SYSTEM_MSG: CMOS: Module initialized -
kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG: calling
register_stun_set_domain_id() - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG:
register_stun_set_domain_id() - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG:
stun_init_peer_mac_info_from_cmos:ha0_mac from cmos:(00:50:56:92:dd:2c) - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG:
stun_init_peer_mac_info_from_cmos: ha1_mac from cmos:(00:50:56:92:13:01) - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG: Successfully registered
SNAP client for SNAP=0x00000c0132  0xeda8b0e0 - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-1-SYSTEM_MSG: STUN : Successfully
created Socket - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-3-SYSTEM_MSG: redun_platform_ioctl :
Heartbeat interval is set to 15 - kernel
2018 Jul 10 08:57:57 switch Jul 10 08:57:56 %KERN-3-SYSTEM_MSG: redun_platform_ioctl :
Host name is set switch - kernel
2018 Jul 10 08:58:00 switch %USER-2-SYSTEM_MSG: CLIS: loading cmd files end  - clis
2018 Jul 10 08:58:00 switch %USER-2-SYSTEM_MSG: CLIS: init begin  - clis
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Acllog SAP(425) registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Pltfm_config SAP(424)
registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Qosmgr SAP(377) registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Eth PCM SAP(378)
registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: ETh SPAN SAP(174)
registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Vlan_mgr SAP(167)
registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: IGMP process MTS
queue(312) registered
2018 Jul 10 08:58:15 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Ethpm SAP(175) registered
2018 Jul 10 08:58:18 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Eth_port_sec SAP(191)
registered
```

```
2018 Jul 10 08:58:19 switch Jul 10 08:58:19 %KERN-3-SYSTEM_MSG: isec_ioctl: Aegis context
initialized - kernel
2018 Jul 10 08:58:19 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Msp SAP(444) registered
2018 Jul 10 08:58:22 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: Vns_agent SAP(753)
registered
2018 Jul 10 08:58:22 switch cdm[2340]: %CDM-5-CDM_APP_REGISTER: VIM main SAP(403)
registered
2018 Jul 10 08:58:23 switch vdc_mgr[2427]: %VDC_MGR-5-VDC_STATE_CHANGE: vdc 1 state
changed to create in progress
2018 Jul 10 08:58:23 switch ifmgr[2455]: %IM-5-IM_INTF_STATE: mgmt0 is DOWN in vdc 1
2018 Jul 10 08:58:23 switch ifmgr[2455]: %IM-5-IM_INTF_STATE: mgmt0 is UP in vdc 1
2018 Jul 10 08:58:23 switch ifmgr[2455]: %IM-5-IM_INTF_STATE: control0 is DOWN in vdc 1
2018 Jul 10 08:58:23 switch ifmgr[2455]: %IM-5-IM_INTF_STATE: control0 is UP in vdc 1
2018 Jul 10 08:58:23 switch vdc_mgr[2427]: %VDC_MGR-5-VDC_STATE_CHANGE: vdc 1 state
changed to active
2018 Jul 10 08:58:23 switch vdc_mgr[2427]: %VDC_MGR-2-VDC_ONLINE: vdc 1 has come online
2018 Jul 10 08:58:23 switch vdc_mgr[2427]: %VDC_MGR-5-VDC_HOSTNAME_CHANGE: vdc 1 hostname
changed to switch
2018 Jul 10 08:58:28 switch last message repeated 1 time
2018 Jul 10 08:58:28 switch vms[2885]: %VMS-5-CONN_CONNECT: Connection 'vc' connected to
the vCenter Server.
2018 Jul 10 08:58:31 switch bootvar[2442]: %BOOTVAR-5-NEIGHBOR_UPDATE_AUTOCOPY: auto-copy
supported by neighbor supervisor, starting...
2018 Jul 10 08:58:33 switch msp[2882]: %MSP-5-DOMAIN_CFG_SYNC_DONE: Domain config
successfully pushed to the management server.
2018 Jul 10 08:58:33 switch vshd[3564]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3564
2018 Jul 10 08:58:33 switch last message repeated 1 time
2018 Jul 10 08:58:33 switch vshd[3576]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3576
2018 Jul 10 08:58:33 switch vshd[3564]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3564
2018 Jul 10 08:58:33 switch vshd[3576]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3576
2018 Jul 10 08:58:34 switch vshd[3550]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3550
2018 Jul 10 08:58:34 switch vshd[3576]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3576
2018 Jul 10 08:58:35 switch vem_mgr[2420]: %VEM_MGR-2-VEM_MGR_DETECTED: Host
sfish-231-209.cisco.com detected as module 3
2018 Jul 10 08:58:35 switch vns_agent[2889]: %VNS_AGENT-2-VNSA_LIC_NO_ADVANCED_LIC: VSM
does not have Advanced licenses. May not be able to use VSG services. Please install
Advanced licenses.
2018 Jul 10 08:58:35 switch vem_mgr[2420]: %VEM_MGR-2-MOD_ONLINE: Module 3 is online
2018 Jul 10 08:58:30 switch %VEM_MGR-SLOT3-5-VEM_SYSLOG_NOTICE: VETH_IPG_MAPPING :
Vethernet2 is mapped to ipg1
2018 Jul 10 08:58:35 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Vethernet2 is
attached to Net Adapter 2 (test-vm1) on port 1 of module 3 with dvport id 0
2018 Jul 10 08:58:30 switch %VEM_MGR-SLOT3-5-VEM_SYSLOG_NOTICE: VETH_IPG_MAPPING :
Vethernet1 is mapped to ipg2047
2018 Jul 10 08:58:35 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Vethernet1 is
attached to Net Adapter 2 (test-vm2) on port 2 of module 3 with dvport id 0
2018 Jul 10 08:58:35 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Vethernet2 is up in
mode access
2018 Jul 10 08:58:35 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Vethernet1 is up in
mode access
2018 Jul 10 08:58:35 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Ethernet3/1 is
attached to eth1 on module 3
2018 Jul 10 08:58:35 switch ethpm[2833]: %ETHPORT-5-SPEED: Interface Ethernet3/1,
operational speed changed to 10 Gbps
2018 Jul 10 08:58:35 switch ethpm[2833]: %ETHPORT-5-IF_DUPLEX: Interface Ethernet3/1,
operational duplex mode changed to Full
2018 Jul 10 08:58:35 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Ethernet3/1 is up in
mode trunk
```

```
2018 Jul 10 08:58:36 switch vem_mgr[2420]: %VEM_MGR-2-VEM_MGR_DETECTED: Host
sfish-231-161.cisco.com detected as module 4
2018 Jul 10 08:58:36 switch vns_agent[2889]: %VNS_AGENT-2-VNSA_LIC_NO_ADVANCED_LIC: VSM
does not have Advanced licenses. May not be able to use VSG services. Please install
Advanced licenses.
2018 Jul 10 08:58:36 switch vem_mgr[2420]: %VEM_MGR-2-MOD_ONLINE: Module 4 is online
2018 Jul 10 09:11:49 switch %VEM_MGR-SLOT4-5-VEM_SYSLOG_NOTICE: VETH_IPG_MAPPING :
Vethernet3 is mapped to ipg2
2018 Jul 10 08:58:36 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Vethernet3 is
attached to Net Adapter 2 (test-vm3) on port 1 of module 4 with dvport id 0
2018 Jul 10 08:58:36 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Vethernet3 is up in
mode access
2018 Jul 10 09:11:49 switch %VEM_MGR-SLOT4-5-VEM_SYSLOG_NOTICE: VETH_IPG_MAPPING :
Vethernet4 is mapped to ipg2048
2018 Jul 10 08:58:36 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Vethernet4 is
attached to Net Adapter 2 (test-vm4) on port 2 of module 4 with dvport id 0
2018 Jul 10 08:58:36 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Vethernet4 is up in
mode access
2018 Jul 10 08:58:36 switch vim[2890]: %VIM-5-IF_ATTACHED: Interface Ethernet4/1 is
attached to eth1 on module 4
2018 Jul 10 08:58:36 switch ethpm[2833]: %ETHPORT-5-SPEED: Interface Ethernet4/1,
operational speed changed to 10 Gbps
2018 Jul 10 08:58:36 switch ethpm[2833]: %ETHPORT-5-IF_DUPLEX: Interface Ethernet4/1,
operational duplex mode changed to Full
2018 Jul 10 08:58:36 switch ethpm[2833]: %ETHPORT-5-IF_UP: Interface Ethernet4/1 is up in
mode trunk
2018 Jul 10 08:58:41 switch vms[2885]: %VMS-5-DVS_NAME_CHANGE: Changed dvswitch name to
'switch' on the vCenter Server.
2018 Jul 10 08:58:45 switch msp[2882]: %MSP-5-DOMAIN_CFG_SYNC_DONE: Domain config
successfully pushed to the management server.
2018 Jul 10 08:58:45 switch vshd[3748]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3748
2018 Jul 10 08:58:45 switch last message repeated 1 time
2018 Jul 10 08:58:45 switch vshd[3759]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3759
2018 Jul 10 08:58:45 switch vshd[3748]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3748
2018 Jul 10 08:58:46 switch vshd[3759]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3759
2018 Jul 10 08:58:46 switch vshd[3732]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3732
2018 Jul 10 08:58:46 switch vshd[3759]: %VSHD-5-VSHD_SYSLOG_CONFIG_I: Configured from vty
by root on vsh.3759
2018 Jul 10 08:58:48 switch %SYSMGR-STANDBY-4-READCONF_STARTED: Configuration update
started (PID 3266).
2018 Jul 10 08:58:48 switch vms[2885]: %VMS-5-DVS_NAME_CHANGE: Changed dvswitch name to
'switch' on the vCenter Server.
2018 Jul 10 08:58:52 switch %SYSMGR-STANDBY-4-READCONF_STARTED: Configuration update
started (PID 3415).
2018 Jul 10 08:58:54 switch %SYSMGR-STANDBY-4-READCONF_STARTED: Configuration update
started (PID 3489).
2018 Jul 10 08:58:55 switch platform[2301]: %PLATFORM-2-MOD_DETECT: Module 2 detected
(Serial number T5056921301) Module-Type Virtual Supervisor Module Model Nexus1000V
2018 Jul 10 08:58:55 switch module[2437]: %MODULE-5-STANDBY_SUP_OK: Supervisor 2 is
standby
2018 Jul 10 08:58:55 switch %SYSMGR-STANDBY-5-MODULE_ONLINE: System Manager has received
notification of local module becoming online.
2018 Jul 10 08:58:57 switch vms[2885]: %VMS-5-DVPG_CREATE: created port-group
'inside-trunk1' on the vCenter Server.
2018 Jul 10 08:58:57 switch vms[2885]: %VMS-5-DVPG_CREATE: created port-group
'inside-trunk2' on the vCenter Server.
2018 Jul 10 08:58:59 switch vms[2885]: %VMS-5-VMS_PPM_SYNC_COMPLETE: Sync between
Port-Profile Manager and local vCenter Server cache complete
```

```
2018 Jul 10 08:59:03 switch %AUTHPRIV-3-SYSTEM_MSG: pam_aaa:Authentication failed for user
admin from 10.155.81.147 - dcos_sshd[4052]
switch#
```

Example 8-5 show logging logfile | grep Command

```
switch# show logging logfile | grep Vethernet3626
2011 Mar 25 10:56:03 n1k-bl %VIM-5-IF_ATTACHED: Interface Vethernet3626
is attached to Network Adapter 8 of gentoo-pxe-520 on port 193 of module
13 with dvport id 6899
2011 Mar 25 11:10:06 n1k-bl %ETHPORT-2-IF_SEQ_ERROR: Error ("Client data
inconsistency") while communicating with component MTS_SAP_ACLMGR for
opcode MTS_OPC_ETHPM_PORT_PRE_CFG (RID_PORT: Vethernet3626)
2011 Mar 25 11:10:06 n1k-bl %ETHPORT-2-IF_DOWN_ERROR_DISABLED: Interface
Vethernet3626 is down (Error disabled. Reason:Client data inconsistency)
```

Example 8-6 show interface brief Command

```
switch# show int brief
--------------------------------------------------------------------------------
Port VRF Status IP Address Speed MTU
--------------------------------------------------------------------------------
mgmt0 -- up 172.23.232.163 1000 1500

--------------------------------------------------------------------------------
Ethernet VLAN Type Mode Status Reason Speed Port
Interface Ch #
--------------------------------------------------------------------------------
Eth3/1 1 eth trunk up none 10G
Eth4/1 1 eth trunk up none 10G

--------------------------------------------------------------------------------
Vethernet VLAN/ Type Mode Status Reason MTU Module
Segment
--------------------------------------------------------------------------------
Veth1 223 virt access up none 1500 3
Veth2 222 virt access up none 1500 3
Veth3 222 virt access up none 1500 4
Veth4 223 virt access up none 1500 4

--------------------------------------------------------------------------------
Port VRF Status IP Address Speed MTU
--------------------------------------------------------------------------------
control0 -- up -- 1000 1500

NOTE : * Denotes ports on modules which are currently offline on VSM
switch#
```

Example 8-7 show interface ethernet Command

```
switch# show interface eth3/1
Ethernet3/1 is up
  Hardware: Ethernet, address: 0050.5653.6345 (bia 0050.5653.6345)
  MTU 1500 bytes, BW -598629368 Kbit, DLY 10 usec,
     reliability 0/255, txload 0/255, rxload 0/255
  Encapsulation ARPA
  Port mode is trunk
  full-duplex, 1000 Mb/s
  Beacon is turned off
  Auto-Negotiation is turned off
```

```
  Input flow-control is off, output flow-control is off
  Auto-mdix is turned on
  Switchport monitor is off
    Rx
    18775 Input Packets 10910 Unicast Packets
    862 Multicast Packets 7003 Broadcast Packets
    2165184 Bytes
    Tx
    6411 Output Packets 6188 Unicast Packets
    216 Multicast Packets 7 Broadcast Packets 58 Flood Packets
    1081277 Bytes
    1000 Input Packet Drops 0 Output Packet Drops
    1 interface resets
switch#
```

Example 8-8 show interface ethernet counters Command

```
switch# show interface eth3/2 counters
--------------------------------------------------------------------------------
Port                InOctets       InUcastPkts      InMcastPkts      InBcastPkts
--------------------------------------------------------------------------------
Eth3/2              2224326         11226           885          7191

--------------------------------------------------------------------------------
Port               OutOctets      OutUcastPkts     OutMcastPkts     OutBcastPkts
--------------------------------------------------------------------------------
Eth3/2              1112171          6368           220             7
```

Example 8-9 show interface vEthernet Command

```
switch# show interface veth1
Vethernet1 is up
    Port description is gentoo1, Network Adapter 1
    Hardware is Virtual, address is 0050.56bd.42f6
    Owner is VM "gentoo1", 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
switch#
```

Example 8-10 show interface capabilities Command

```
switch# show interface capabilities
Ethernet3/1
  Model:                --
  Type (Non SFP):       --
  Speed:                10,100,1000,10000,auto
  Duplex:               half/full/auto
  Trunk encap. type:    802.1Q
  Channel:              yes
  Broadcast suppression: no
  Flowcontrol:          rx-(none),tx-(none)
```

```
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched

Ethernet4/1
  Model:                 --
  Type (Non SFP):        --
  Speed:                 10,100,1000,10000,auto
  Duplex:                half/full/auto
  Trunk encap. type:     802.1Q
  Channel:               yes
  Broadcast suppression: no
  Flowcontrol:           rx-(none),tx-(none)
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched

Vethernet1
  Model:                 --
  Type (Non SFP):        --
  Speed:                 10,100,1000,10000,auto
  Duplex:                half/full/auto
  Trunk encap. type:     802.1Q
  Channel:               yes
  Broadcast suppression: no
  Flowcontrol:           rx-(none),tx-(none)
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched

Vethernet2
  Model:                 --
  Type (Non SFP):        --
  Speed:                 10,100,1000,10000,auto
  Duplex:                half/full/auto
  Trunk encap. type:     802.1Q
  Channel:               yes
```

```
  Broadcast suppression: no
  Flowcontrol:           rx-(none),tx-(none)
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched

Vethernet3
  Model:                 --
  Type (Non SFP):        --
  Speed:                 10,100,1000,10000,auto
  Duplex:                half/full/auto
  Trunk encap. type:     802.1Q
  Channel:               yes
  Broadcast suppression: no
  Flowcontrol:           rx-(none),tx-(none)
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched

Vethernet4
  Model:                 --
  Type (Non SFP):        --
  Speed:                 10,100,1000,10000,auto
  Duplex:                half/full/auto
  Trunk encap. type:     802.1Q
  Channel:               yes
  Broadcast suppression: no
  Flowcontrol:           rx-(none),tx-(none)
  Rate mode:             none
  QOS scheduling:        rx-(none),tx-(none)
  CoS rewrite:           yes
  ToS rewrite:           yes
  SPAN:                  yes
  UDLD:                  no
  Link Debounce:         no
  Link Debounce Time:    no
  MDIX:                  yes
  TDR capable:           no
  FabricPath capable:    no
  Port mode:             Switched
```

Example 8-11 show interface virtual port-mapping Command

```
switch# show interface virtual port-mapping
```

```
--------------------------------------------------------------------------------
Port    Hypervisor Port    Binding Type    Status    Reason
--------------------------------------------------------------------------------
Veth1   DVPort5747         static          up        none
Veth2   DVPort3361         static          up        none
switch#
```