



System

This chapter describes how to identify and resolve problems related to the Cisco Nexus 1000V system.

Information About the System

The Microsoft System Center Virtual Machine Manager (SCVMM) is designed for the management of a large number of virtual servers that are based on the Microsoft Hyper-V model. The Microsoft SCVMM is a management application that is used to manage the windows server hosts. The Cisco Nexus 1000V is a virtual switch that provides switching for Virtual Machines (VMs) that are deployed on the servers running Microsoft Windows 2012.

VEM Troubleshooting Commands

You can use the commands in this section to troubleshoot problems related to the Virtual Ethernet Module (VEM). Enter these commands in a PowerShell window.

Command	Purpose
vemlog	Displays and controls the VEM kernel logs.
vemcmd	Displays configuration and status information.
vemcmd show version	Displays the version information. See Example 19-1 on page 19-2 .
vemlog show last <i>number-of-entries</i>	Displays the circular buffer. See Example 19-2 on page 19-2 .
vemlog show info	Displays information about entries in the log. See Example 19-3 on page 19-2 .
vemcmd help	Displays the type of information you can display. See Example 19-4 on page 19-2 .
vem-support.ps1	Navigate to the support directory under Nexus1000v and run the vem-support.ps1 script. See Example 19-5 on page 19-2 .

Example 19-1 vemcmd show version command

```
PS C:\Program Files (x86)\Cisco\Nexus1000V> .\VemCmd.exe show version
VEM Version: 5.2.1.SM1.5.0.278-3
VSM Version: 5.2(1)SM1(5.1) [build 5.2(1)SM1(5.0.278)] [gdb]
System Version: Windows Server 2012 - Datacenter (6.2.9200, 6.30
```

Example 19-2 vemlog show last command

```
PS C:\Program Files (x86)\cisco\Nexus1000V> .\vemlog show last 5
Timestamp Entry CPU Mod Lv Message
Mar 17 14:47:30.124446 28768 0 99 4 Warning Could not get LACP Port for LTL 20
Mar 17 14:48:00.123500 28769 0 99 4 Warning Could not get LACP Port for LTL 22
Mar 17 14:48:00.123500 28770 0 99 4 Warning Could not get LACP Port for LTL 21
Mar 17 14:48:00.123500 28771 0 99 4 Warning Could not get LACP Port for LTL 20
Mar 17 14:48:00.248291 28772 6 0 0 Suspending log
```

Example 19-3 vemlog show info command

```
PS C:\Program Files (x86)\cisco\Nexus1000V> .\vemlog show info
Enabled: Yes
Total Entries: 28778
Wrapped Entries: 26886
Lost Entries: 0
Skipped Entries: 0
Available Entries: 26886
Stop After Entry: Not Specified
```

Example 19-4 vemcmd help command

```
PS C:\Program Files (x86)\cisco\Nexus1000V> .\vemcmd help
vemcmd help:

show
show version Show the VEM and VSM versions
show card Show the card's global info
show data Show switch global data
show vsm uptime Show the VSM's uptime
show acl Show ACL ids
```

Example 19-5 vem-support.ps1 command

```
PS C:\Program Files (x86)\cisco\Nexus1000V\Support> .\vem-support.ps1

Directory: C:\Program Files (x86)\Cisco\Nexus1000V\Support

Mode LastWriteTime Length Name
----
d---- 3/17/2013 2:51 PM WIN-35-cisco-vem-2013-0317-1451
```

VEM Log Commands

Use the following commands to control the vemlog:

- **vemlog stop**—Stops the log.
- **vemlog clear**—Clears the log.
- **vemlog start *number-of-entries***—Starts the log and stops it after the specified number of entries.
- **vemlog stop *number-of-entries***—Stops the log after the next specified number of entries.
- **vemlog resume**—Starts the log, but does not clear the stop value.

