



Troubleshooting Licensing Issues

This chapter describes how to troubleshoot issues that are related to firewall licensing on the Virtual Supervisor Module (VSM).

This chapter includes the following sections:

- [Information About Licensing, page 4-1](#)
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Information About Licensing

CISCO VSG follows universal licensing mode in which if VEM licenses are there, two VSG licenses are given.

A module is licensed or unlicensed according to the following definitions:

- **Firewalled module**—A VEM is considered to be firewalled if it can acquire licenses for all of its CPU sockets.
- **Nonfirewalled module**—A VEM is considered to be nonfirewalled if it cannot acquire licenses for any, or a subset of, its CPU sockets.

If a VEM is nonfirewalled, all the virtual Ethernet ports on the VEM that correspond to the virtual machines (VMs) are kept in pass-through mode, so that these virtual machines are not firewalled.

By default, VSG allocate 2 licenses for each VEM.

For additional information about licensing, see the *Cisco Nexus 1000V for KVM License Configuration Guide*.

Troubleshooting License Installation Issues

This section describes how to troubleshoot Cisco VSG license installation issues.



Note

This section assumes that you have a valid Cisco VSG license file.

For additional information about licensing, see the *Cisco Nexus 1000V for KVM License Configuration Guide*.

This section includes the following topics:

- [License Troubleshooting Checklist, page 4-2](#)
- [Removing an Evaluation License File, page 4-2](#)
- [Removing an Evaluation License File, page 4-2](#)

License Troubleshooting Checklist

Before you start the troubleshooting process, follow these requirements:

- Make sure that the name of the license file is less than 32 characters.
- Make sure that no other license file with the same name is installed on the VSM. If there is a license file with the same name, rename your new license file to something else.
- Do not edit the contents of the license file. If you have already done so, contact your Cisco Technical Assistance Center (TAC) Team.
- Make sure that the host ID in the license file is the same as the host ID on the switch.

Removing an Evaluation License File

If an evaluation license file is already installed on the VSM, you must remove it from the VSM before installing a permanent license file. For more information, see the *Cisco Nexus 1000V for KVM License Configuration Guide* for your release number.

Determining Cisco VSG License Usage

You can view the Cisco VSG license state of the VEMs on your VSM and the number of CPU sockets per VEM by entering the **module vem 3 execute vemcmd show vsn config** command.

This example shows how to confirm the Cisco VSG license state:

```
vsm# module vem 3 execute vemcmd show vsn config
VNS Enabled | VNS Licenses Available 2
VSN#  VLAN          IP          STATIC-MAC          LEARNED-MAC  LTLs
  1   754          200.1.1.10  00:00:00:00:00:00  00:50:56:83:00:01  0
```

In this command output, VEM 3 is licensed. It has two CPU sockets and it currently uses two firewall licenses.

Viewing Installed License Information

You can view the installed license count by entering the **show license usage** command.

This example shows how to display the installed licenses count:

```
VSM-(config)# show license usage
Feature                               Ver Ins Lic  Status Expiry Date Comments
                                      Count
-----
```

```
NEXUS1000V_STINGRAY_PKG      1.0 No      0  Unused          -
NEXUS1000V_LAN_SERVICES_PKG  3.0 No    1024  In use 04 Oct 2014 -
NEXUS_ASA1000V_SERVICES_PKG  1.0 No     512  Unused 04 Oct 2014 -
NEXUS1000V_INTERCLOUD_VM_PKG 1.0 No      16  Unused 04 Oct 2014 -
```

Note: Licenses are not required for Essential Edition

■ Viewing Installed License Information