# Cisco Nexus 1000VE Manager vCenter Plug-in

This chapter describes how to identify and resolve problems that relate to the Cisco Nexus 1000VE Manager vCenter Plug-in functionality.

This chapter includes the following topics:

## About Cisco Nexus 1000VE Manager vCenter Plug-in

The Cisco Nexus 1000VE is a software-based Layer 2 switch for the virtualized server environments that are running VMware ESXi. The Cisco Nexus 1000VE provides a consistent networking experience across the physical and the virtual environments. It consists of two components: the Virtual Service Engine (VSE) that is running as a Virtual Machine Form Factor and a Virtual Supervisor Module (VSM) that manages the networking and policies for the virtual machines.

Cisco Nexus 1000VE NX-OS Release 5.2(1)SV5(1.1) is bundled with the Cisco N1KVE Manager vCenter Plug-in supported on the vSphere Web Clients.

For more information on installing the N1000VE vCenter plug-in, see Cisco Nexus 1000VE Installation, Migration, and Upgrade Guide.

The VMware vSphere Web Client enables you to connect to a VMware vCenter Server system to install a Cisco Nexus 1000VE through a browser. After the vCenter plug-in installation, the Cisco Nexus 1000VE Manager appears as a icon in the home page of vSphere web client, which displays a new tab that assists you to install the virtual service engine, uninstall and migrate from Cisco Nexus 1000V to Cisco Nexus 1000VE.

With the Cisco Nexus 1000VE Manager vCenter Plug-in, the server administrators can deploy new Virtual Service Engine (VSE) on vmware ESXi hosts or uninstall previously deployed VSEs. It also helps administrators to migrate existing Nexus 1000V networks to Cisco Nexus 1000VE.

# Prerequisites for VMware vSphere Web Client

These are the prerequisites to install and configure the vCenter Plug-in functionality on the Cisco Nexus 1000VE:

- VMware vCenter Server 6.0 and/or later release.
- VMware vCenter Web Client 6.0 and/or later. The Cisco Nexus 1000VE Manager vCenter Plug-in is not supported with web client below 6.0.
- vSphere Web Client requires the Adobe Flash Player version 11.1.0 or later to be installed.
- Make sure that Cisco Nexus 1000VE Release 5.2(1)SV5(1.1) is installed and configured to a vCenter.

# Troubleshooting

## Problems with Cisco Nexus 1000VE vCenter Plugin Icon Display in vSphere web client

After the Cisco Nexus 1000VE vCenter plug-in is registered with vCenter, the Cisco Nexus 1000VE Manager icon should be displayed in the home screen under **Operations and Policies**.

If the Cisco Nexus 1000VE Manager icon is not displayed, do the following:

**Step 1**   Log out and login to the Vmware vsphere client.

**Step 2**   Verify if the Plugin extension has successfully registered with vCenter. To verify, navigate to **vCenter mob > content > Extension Manager > Properties**.

Under the **Properties** tab, find the plugin extension with the value **com.cisco.plugin.n1kveui and com.cisco.n1kve**. If it does not exist, then it indicates that the extension did not register with vCenter.

**Step 3**   Check if the http server is reachable. If it is reachable, then check for the zip file (n1kve-vcenter-plugin-1.0.1.zip) in the Http server (as specified in the server url in the N1kve plugin extension).

To check the URL, do the following:

  **a.**   Navigate to **vCenter mob > content > Extension Manager >Methods > Find Extenstio**n and search for value com.cisco.plugin.n1kveui).

✎

**Note**   If the web server is Https then the serverThumbprint value in the N1kve plugin extension is must and matches with web sever.

**Step 4**   Check whether the plugin folder is downloaded to the vCenter from the Http/Https server.

To verify go to the following path in vCenter Server.

**For Windows vCenter**

C:\ProgramData\VMware\vCenterServer\cfg\vsphere-client\vc-packages\vsphere-client-serenity

**For VMware vCenter Server Appliance (vCSA):**

/etc/vmware/vsphere-client/vc-packages/vsphere-client-serenity

In this path a folder with name com.cisco.plugin.n1kveui- 1.0.1 (<extensionKey-extensionVersion>) should exists, if not present, follow these steps:

**a.** Download the plugin zip file. In a Web browser enter the VSM IP address in the address bar and download n1kve-vcenter-plugin-1.0.2.zip to a local location.

**b.** Unzip the plugin file.

**c.** Log into VMware vCenter and navigate to the folder /etc/vmware/vsphere-client/vc-packages/vsphere-client-serenity.

**d.** Copy the unzipped folder and rename it to the following naming convention com.cisco.plugin.n1kveui-1.0.2

**e.** Restart the Web client services.

**f.** Log into the vCenter, the plugin should be visible.

*then log out and login from web client and confirm once again. If it continues to be unseen, then uninstall the extension keys > com.cisco.plugin.n1kveui and com.cisco.n1kve from vCenter MOB, and  re-register the Cisco Nexus 1000VE manager as per the Cisco Nexus 1000VE Installation, Migration, and Upgrade Guide.*

**Step 5** Verify whether the version of vCenter where the plug-in is registered and the supported versions are 6.0 and later.

# Problems with VSE Installation

**Error: The operation is not supported on the object:**

This error is displayed in the recent task list whenever the user selects the invalid VDS for the VSE installation.

# Problems with Removal of VSE

**Error: An internal error has occurred - Error # 1009**

Tis error is displayed when you select outside VDS and try to remove the VSEs from the hosts

Reason: The outside VDS will be removed from the VCenter during the removal process if it doesn't contains any hosts. Therefore, after the VSE VMs are removed from the hosts, it tries to get the vCenter information based on the outside VDS.

# Monitoring vCenter Tasks and Events

Cisco Nexus 1000VE Manager vCenter Plugin tool operations are tracked using 4 different vCenter tasks.

*Table 4-1        vCenter Tasks and Events*

| vCenter Parent Task Name | Action |
|---|---|
| Install Cisco N1KVE VSE | VSE installation |
| Uninstall Cisco N1KVE VSE | VSE removal |
| Configuration Migration from NKV to N1KVE | Migrate supported configurations from Cisco Nexus 1000V to Cisco Nexus 1000VE. |
| Migration from N1KV to N1KVE | Migrate Hosts from Cisco Nexus 1000V to Cisco Nexus 1000VE. This includes all Veth ports, pnics, and vmknic migration. |

For any internal errors as part of the Installation, uninstallation, or Migration process, the corresponding parent task in the vCenter will fail. This can be seen in the recent task bar with appropriate status. To get more information on the event that failed as part of the parent task go to

**Vsphere webclient > Networking > N1KVE vDS name > Monitor > Tasks & Events > Tasks.**

Select the Parent task name in the Task lists pane and check the related events listed below to know the exact reason for failure.

# Gathering Information for Technical Support

## Collecting the vsphere client virgo logs

To collect the vSphere client, do the following.

**Step 1**    Logon to the VCenter Server

**Step 2**    Find the log file named "vsphere_client_virgo.log" in the below path.

**For Windows vCenter:**
C:\ProgramData\VMware\vCenterServer\logs\vsphere-client\logs

**For VMware vCenter Server Appliance (vCSA):**
/var/log/vmware/vsphere-client/logs

## Collecting Tasks and events for Plug-in operations

To collect logs, please refer section 4.3 above and capture the failed logs under Tasks & Events corresponding to the Nexus 1000VE vDS.

# Generating a Log Bundle

You can collect the diagnostic information for VMware vCenter Server by collecting vSphere log files into a single location.

**Step 1**     Log in to the Windows server where the VMware vCenter Server is installed.

**Step 2**     Choose **Start** > **All Programs** > **VMware** > **Generate vSphere Web Client Log Bundle**.

You can use this step to generate the vSphere Web Client log bundles even when you are not able to connect to the vCenter Server using the vSphere Client. The log bundle is generated as a .zip file. See VMware documentation *Collect vSphere Log Files* for more information about collecting the log files.

> **Note**     Currently the login to the vCenter Plug-in is available through the administrator account only.

**4-6**