



**NORTEL**

Nortel Visualization Performance and Fault Manager

# VPFM SCOM Connector

## Fundamentals

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## In this release

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This is the initial release of the Visualization Performance and Fault Manager (VPFM) System Center Operations Manager (SCOM) Connector. It is a part of the Nortel Unified Branch Office Solution (UBS).

### Features

For this release, VPFM SCOM Connector supports Communication Server (CS) 1000 and Nortel Secure Router (SR) 4134 devices and propagates their information from Nortel VPFM to SCOM 2007 console. This document contains information about launching configuration User Interface (UI) and viewing events, status, and performance of the supported devices.

Following are VPFM SCOM Connector features:

- Propagates information about the selected VPFM discovery domain to SCOM 2007 console.
- Displays events and health status of the supported devices
- Allows you to launch configuration User Interface (UI) of the device selected.



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# Fundamentals

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The following information is an overview of Nortel Visualization Performance and Fault Manager (VPFM) System Center Operations Manager (SCOM) Connector.

## Navigation

- ["VPFM SCOM Connector" \(page 7\)](#)
- ["Supported devices" \(page 8\)](#)
- ["System Center Operations Manager 2007 console" \(page 8\)](#)
- ["Logs" \(page 12\)](#)

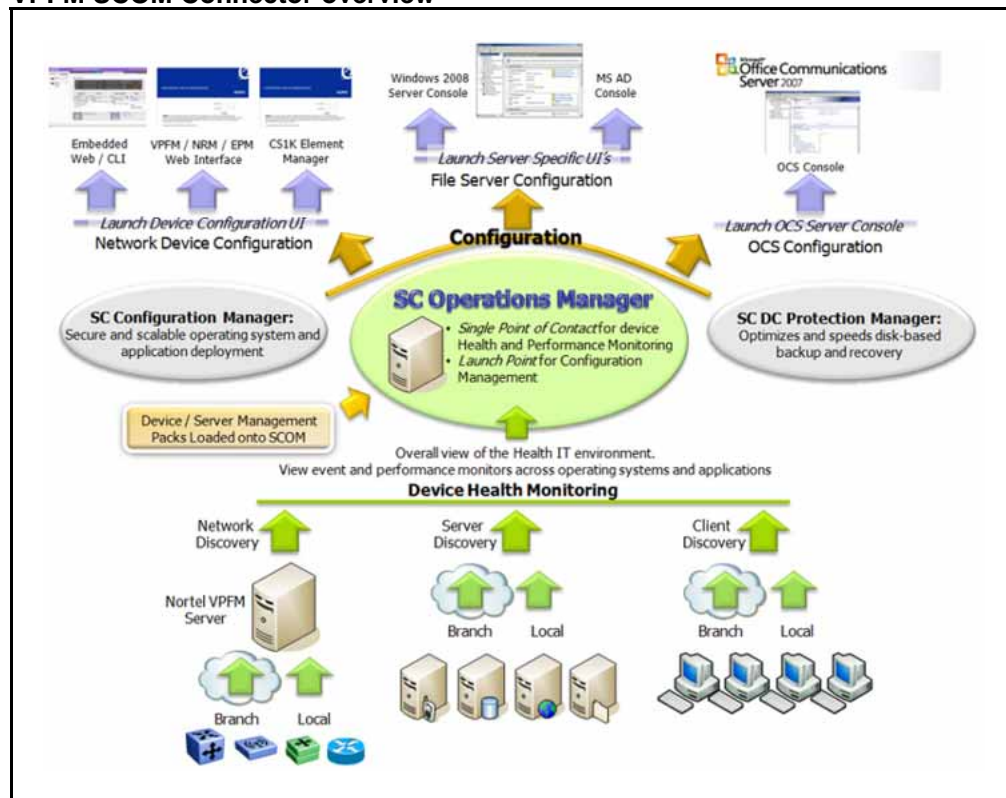
## VPFM SCOM Connector

VPFM SCOM Connector propagates device information of the selected VPFM discovery domain to SCOM 2007. At a time, only one VPFM discovery domain can be selected.

The VPFM discovery domain name and the other details provided during the VPFM SCOM Connector installation are stored in *settings.txt* file. These details can be modified. By default, the files are stored in location **C:\Program Files\Nortel\UCM\VPFM Connector\services**. For more information, see ["Modifying VPFM SCOM Connector configuration values" \(page 27\)](#).

The following [Figure 1 "VPFM SCOM Connector overview" \(page 8\)](#) is a snapshot of the VPFM SCOM Connector activities.

**Figure 1**  
**VPFM SCOM Connector overview**



## Supported devices

For this release, Nortel VPFM SCOM Connector supports the following devices:

- Communication Server (CS) 1000
- Secure Router (SR) 4134

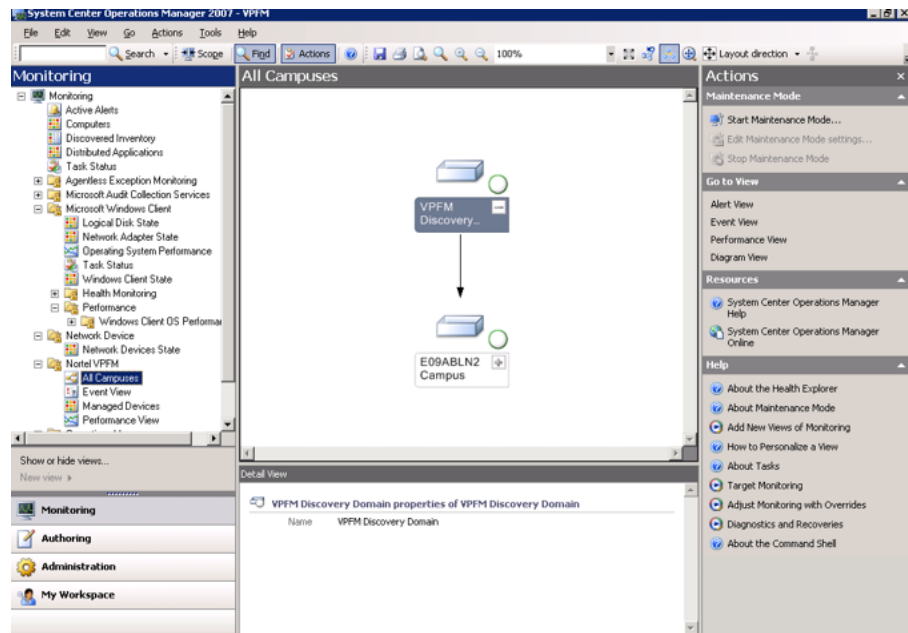
## System Center Operations Manager 2007 console

After VPFM SCOM Connector software installation process, Nortel VPFM folder appears in Monitoring pane.

For more information about installation, see *Nortel Visualization Performance and Fault Manager VPFM SCOM Connector Installation* (NN48014-301).



**Figure 2**  
**System Center Operations Manager 2007 console**



The following options are available under Nortel VPFM in monitoring pane:

- "All Campuses" (page 10)
- "Events View" (page 11)
- "Managed devices" (page 12)
- "Performance view" (page 12)

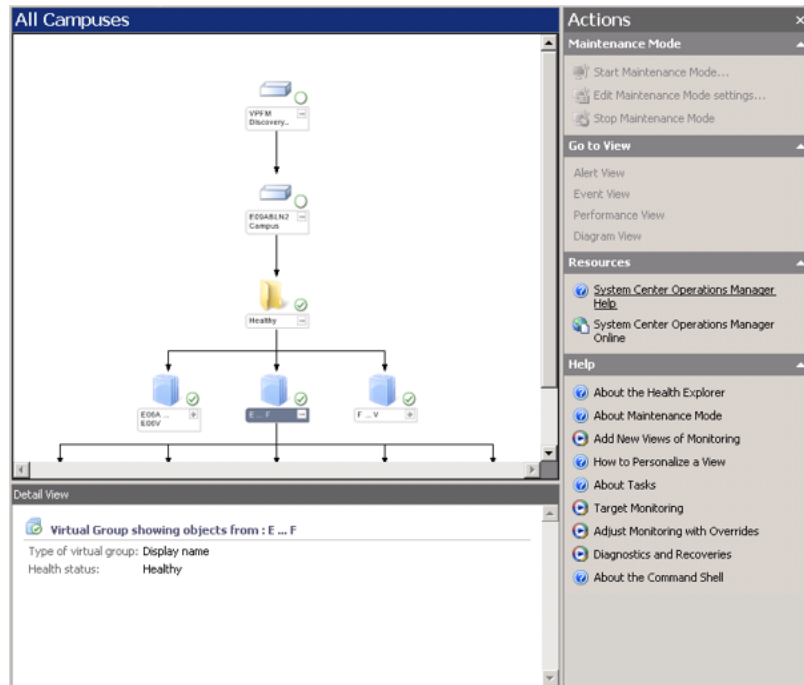
### Basic components of SCOM 2007 console

For the devices in results view, following options are available. These options are enabled according the Nortel VPFM option selected in Monitoring pane and device selected in results view:

- **Details View** displays details of the device selected.
- **Actions** appear on the right pane of the SCOM 2007 console. For all the devices in results view, you can select **Event Actions**, **System Tasks**, **Resources**, **Go to view**, **Maintenance Mode** or **Help**.
- To view SCOM 2007 console help, select **Actions > Resources > System Center Operations Manager Help**.

The following [Figure 3 "Actions and Details View"](#) (page 10) is an example for Details View and Actions for a device selected from results view.

**Figure 3**  
**Actions and Details View**



Following applications can be launched for a device selected from **Actions** > **System Tasks**:

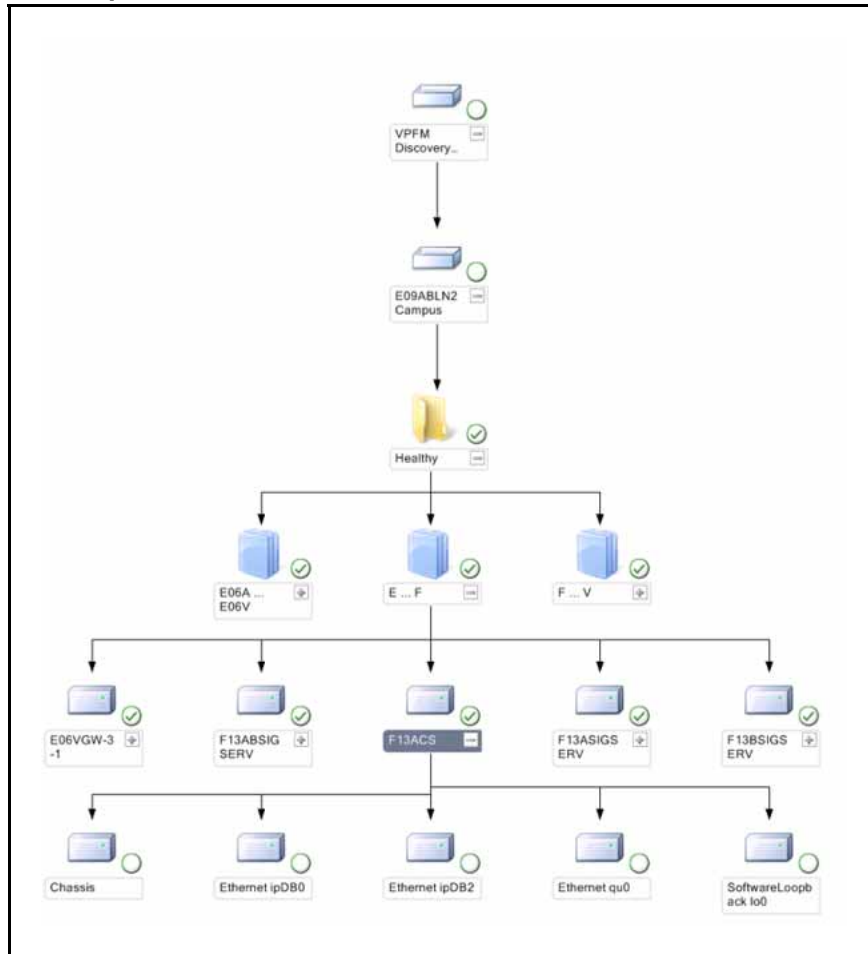
- Command Line Interface (CLI)
- Microsoft Communications Manager (MCM) for an SR 4134
- Office Communications Server (OCS) 2007 Manager
- VPFM web interface
- CS1000 web interface

### All Campuses

Displays Nortel VPFM discovery domain on the results pane. The status of the VPFM discovery domain changes from healthy to critical if any device in the domain is not working. The components are arranged in virtual groups and they contain devices. You can click on node to expand or collapse devices. The Nortel VPFM discovery domain name does not appear. The campus and devices appear with names provided during machine configuration. The campus devices can be viewed as icons or box.

The following [Figure 4 "All Campuses"](#) (page 11) is Nortel VPFM discovery domain in icon view.

**Figure 4**  
**All Campuses**



For more information, see ["Viewing Campus"](#) (page 16).

## Events View

Events provide audit trail to diagnose problems. VPPM SCOM Connector propagates Nortel VPPM device events to SCOM 2007 console. These events can be filtered according to the device, but cannot be cleared.

Following are the event severities:

- Information - general information
- Error - severe error conditions
- Warn - warning conditions
- Fatal - needs immediate attention

For more information, see ["Viewing Events"](#) (page 18).

### Managed devices

Displays health status of the devices. For more information, see ["Viewing Managed Devices" \(page 20\)](#).

### Performance view

Displays device performance in a graph according to the variables selected. For more information, see ["Viewing Performance" \(page 22\)](#).

## Logs

Log file contains record of all successful and unsuccessful events. These log files provide audit trail to diagnose problems. The logs contain date, time, and severity of the event. Following are the severities:

- INFO - general information
- ERROR - severe error conditions
- WARN - warning conditions
- Fatal - needs immediate attention

For more information, see ["Viewing logs" \(page 26\)](#).

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## View Nortel VPFM devices

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This chapter provides information about viewing Visualization Performance and Fault Manager (VPFM) devices on SCOM 2007.

### Prerequisites

- You must have Nortel VPFM and Microsoft SCOM 2007 operational familiarity.
- You must have write permissions for SCOM 2007 to monitor VPFM SCOM Connector activities.
- Ensure VPFM SCOM Connector is installed on SCOM server and Nortel VPFM Management Pack (MP) is imported on SCOM 2007 console.
- Ensure to start Nortel VPFM Connector in Services after importing Nortel VPFM Management Pack to SCOM 2007 console.

For more information about VPFM SCOM Connector installation, see *Nortel Enterprise Visualization Performance and Fault Manager VPFM SCOM Connector Installation* (NN48014-301).

### Navigation

- ["Discovering domain on Nortel VPFM" \(page 13\)](#)
- ["Starting VPFM SCOM Connector" \(page 14\)](#)
- ["View Nortel VPFM discovery domain on SCOM 2007 console" \(page 15\)](#)
- ["Common procedures" \(page 25\)](#)

### Discovering domain on Nortel VPFM

Use the following procedure to discover Nortel VPFM discovery domain.

#### Prerequisites

- Ensure to install VPFM 1.0 license.
- Log on to Nortel VPFM.

## Procedure Steps

Step	Action
1	From the VPFM Welcome page, click the <b>Network Discovery</b> link. The Network Discovery page appears.
2	Select the domain to be discovered.
3	Select <b>Discover Selected Domain</b> , to discover the domain. The domain discovery starts. For more information about Nortel VPFM, see <i>Nortel Visualization Performance and Fault Manager Configuration</i> (NN48014-500).
--End--	

## Starting VPFM SCOM Connector

Use the following procedure to start SCOM 2007 console after installing VPFM SCOM Connector.

### Prerequisite

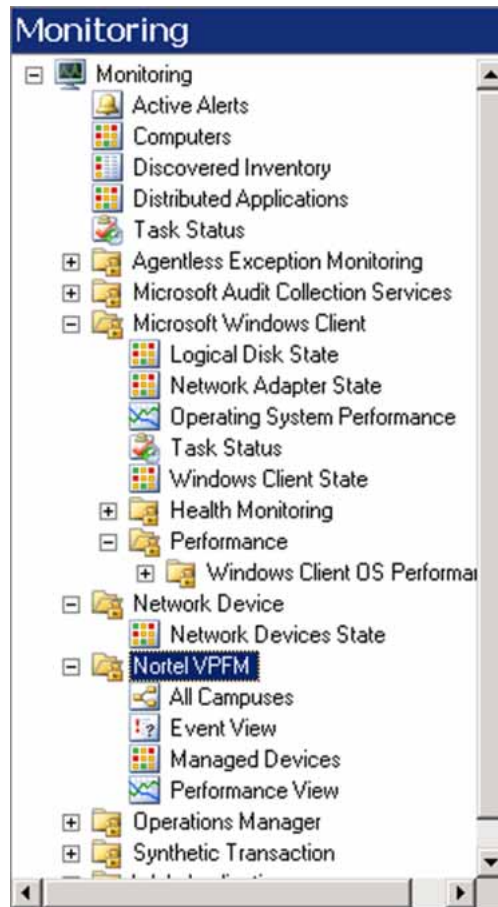
- Ensure you have write permissions for SCOM 2007 console.
- Ensure VPFM SCOM Connector is installed on SCOM server and Nortel VPFM Management Pack (MP) is imported on SCOM 2007 console.
- Ensure to start Nortel VPFM Connector in Services after importing VPFM SCOM Connector to SCOM 2007 console.
- Ensure to discover domain on Nortel VPFM.

For more information about installation, see *Nortel Visualization Performance and Fault Manager VPFM SCOM Connector Installation* (NN48014-301).

## Procedure Steps

Step	Action
1	Launch the SCOM Operations Console. Select <b>Start &gt; All Programs &gt; System Center Operations Manager 2007 &gt; Operations Console</b> .
2	In Operations Console, click <b>Monitoring</b> .
3	In Monitoring pane, expand <b>Monitoring</b> .

- 4 Select **Nortel VPFM**.  
Options for Nortel VPFM appear.



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--End--

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## View Nortel VPFM discovery domain on SCOM 2007 console

The Nortel VPFM folder appears in Monitoring pane on SCOM 2007 console. You can view campus, events, and performance. The following sections provide procedures to:

- ["Viewing Campus" \(page 16\)](#)
- ["Viewing Events" \(page 18\)](#)
- ["Viewing Managed Devices" \(page 20\)](#)
- ["Viewing Performance" \(page 22\)](#)

## Viewing Campus

Use the following procedure to view the selected Nortel VPFM discovery domain.

### Prerequisite

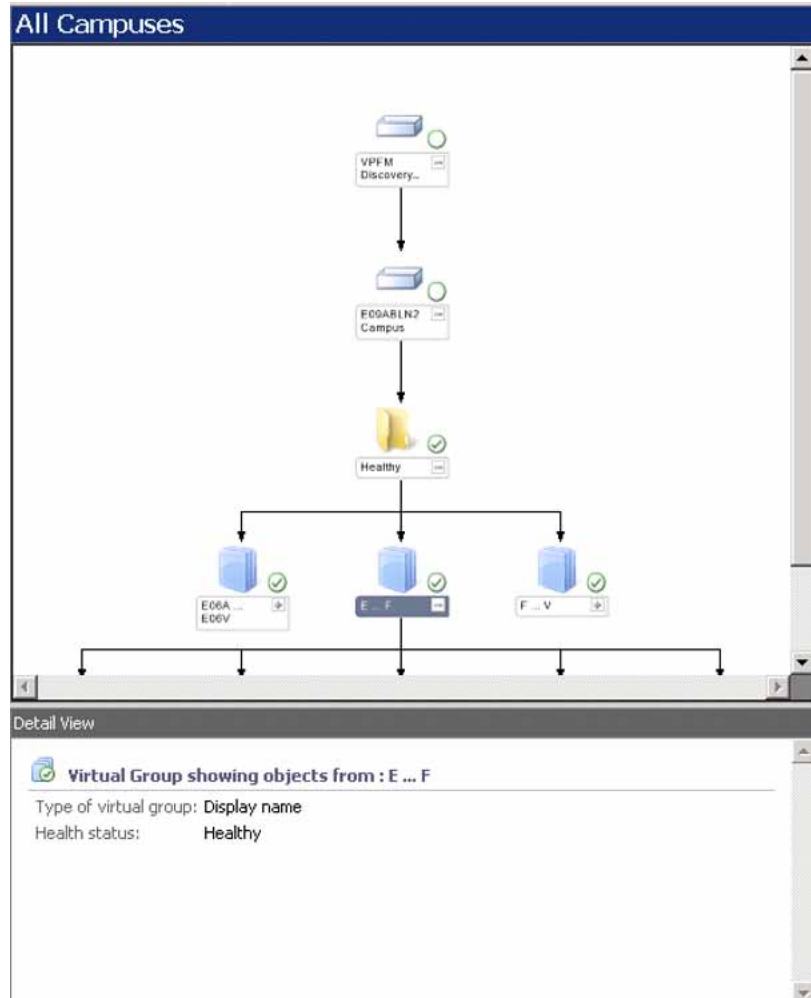
- Ensure to discover domain on Nortel VPFM.

### Procedure Steps

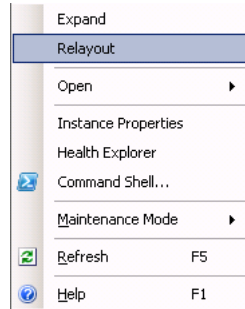
---

Step	Action
1	In Monitoring pane, expand <b>Nortel VPFM</b> .
2	Select <b>All Campuses</b> . The VPFM discovery domain appears in results view.
3	Right-click on <b>Campus</b> and select <b>Display as box/Display as icon</b> to change the campus display. If campus is in icon view, after the selection, box view appears.
4	Click on device node or right-click on the device and select <b>Expand</b> to expand the domain. The devices under the domain appear.





- 5 To view device details, click on the device.  
The details appear in Details View.
- 6 In results view, right-click on any device.  
Options for the device appear. For more information, see variable definitions table.



--End--

### Variable definitions

Variable	Definitions
Expand	The selected domain is expanded and the child devices appear.
Relayout	The VPFM discovery domain layout is refreshed.
Open	<ul style="list-style-type: none"> <li>Alert View - Displays alerts for the device selected on a new window.</li> <li>Event View - Displays events for the device selected on a new window.</li> <li>Performance View - Displays performance graph for the device selected on a new window.</li> <li>Diagram View - Displays domain diagram for the device selected on a new window.</li> </ul>
Instance Properties	Displays details of the device selected.
Health Explorer	Defines and diagnoses failures on your network. Allows you to view and then take action on alerts, state changes, and other significant issues generated by monitoring objects on your network.
Command Shell	Provides administrators with the ability to automate Operations Manager administration.
Maintenance Mode	Start, stop, or edit maintenance mode for the selected device.
Refresh	Refreshes VPFM discovery domain.
Help	Displays help topics.

### Viewing Events

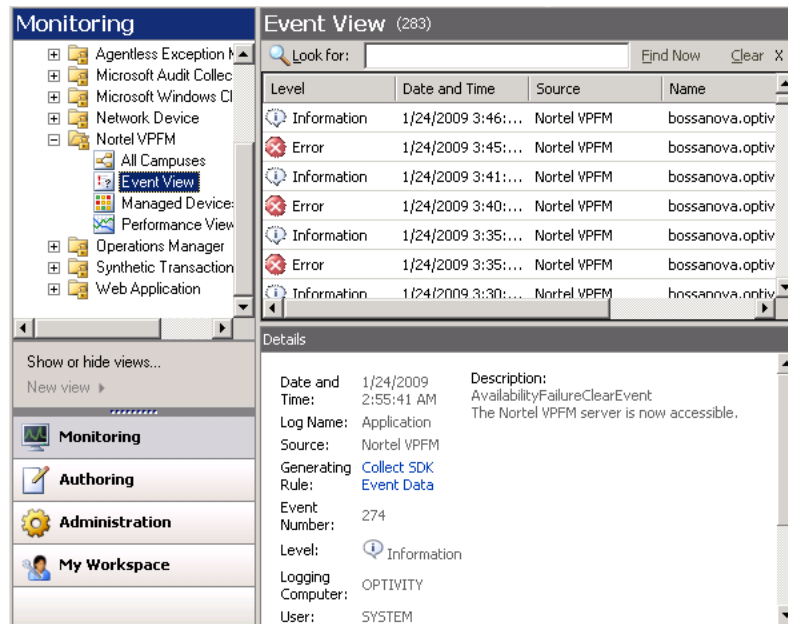
Use the following procedure to view events of the selected VPFM discovery domain devices.

## Prerequisite

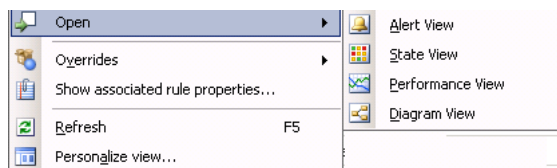
- Ensure to discover domain on Nortel VPFM.

## Procedure Steps

- | Step | Action  |
|------|---|
| 1    | In Monitoring pane, expand <b>Nortel VPFM</b> .                             |
| 2    | Select <b>Events</b> .<br>Nortel VPFM device events appear in results view. |



- 3 In results view, right-click on any device.  
Options for the device appears.



- 4 Select any option to view information about the device.  
For more information, see the following variable definitions table.

--End--

**Variable definitions**

Variable	Definition
Open	<ul style="list-style-type: none"> <li>Alert View - Displays alerts for the device selected on a new window.</li> <li>Event View - Displays events for the device selected on a new window.</li> <li>Performance View - Displays performance graph for the device selected on a new window.</li> <li>Diagram View - Displays domain diagram for the device selected on a new window.</li> </ul>
Overrides	<p>Allows you to override the rules.</p> <ul style="list-style-type: none"> <li>Disable the Rule - Displays options to disable rule for an object, all objects of type, group, objects of type, or for all objects of another type.</li> <li>Override the Rule - Displays options to override rule for an object, all objects of type, group, objects of type, or for all objects of another type.</li> <li>Summary - Displays summary rules for an object, group of objects or object type.</li> </ul>
Show associated rule properties	Displays rule name, configuration, and overrides information.
Refresh	Refreshes the screen.
Personalize view	<p>Allows you to choose the columns to display in results view.</p> <p>For more information, see <a href="#">"Personalizing view"</a> (page 25).</p>

**Viewing Managed Devices**

Use the following procedure to view the VPFM discovery domain devices health status.

**Prerequisite**

- Ensure to discover domain on Nortel VPFM.

**Procedure Steps**

Step	Action
1	In Monitoring pane, expand <b>Nortel VPFM</b> .
2	Select <b>Managed Devices</b> . Nortel VPFM device status appear in results view.

Managed Devices (15)

Look for:  Find Now Clear X

State	Maintenanc...	Display Name	IP Address	Device Type	Na
Healthy		E06ACSE1KSS	10.127.48.3	CS 1000 Signalin...	E06
Healthy		F13ASIGSERV	10.127.242.3	CS 1000 Signalin...	F13
Healthy		F13BSIGSERV	10.127.244.3	CS 1000 Signalin...	F13
Healthy		vxTarget	10.127.133.2	Secure Router 4...	vx
Healthy		E06VGW-1-4	10.127.48.24	Unrecognized E...	E06
Healthy		F13ABSIGSERV	10.127.242.13	CS 1000 Signalin...	F13
Healthy		bossanova.opti...	bossanova.opti...	Nortel VPFM Ser...	bo
Healthy		E06BCSE1KSS	10.127.48.13	CS 1000 Signalin...	E06
Healthy		System Name	10.127.243.2	CS 1000 Call Ser...	Sy
Healthy		F13CSIGSERV	10.127.246.3	Succession 1000...	F13
Healthy		F13ACS	10.127.241.2	CS 1000 Call Ser...	F13
Healthy		E06VGW-3-1	10.127.48.31	Unrecognized E...	E06
Healthy		E06VGW-1-3	10.127.48.23	Unrecognized E...	E06
Healthy		F13CCS	10.127.245.2	CS 1000 Call Ser...	F13
Healthy		E06CSE1KCS	10.127.48.2	CS 1000 Call Ser...	E06

Detail View

System properties of E06ACSE1KSS

Name	E06ACSE1KSS
Path name	<b>E06ACSE1KSS</b>
System ID	5170188984185257986
IP Address	10.127.48.3
Device Type	CS 1000 Signaling Server
Location	SC100-03 Rack-E06
Manufacturer	nortel
Health State	

- 3 In results view, right-click on any device.  
Options for the device appears.

- 4 Select any option to view information about the device.
- 5 Select **Personalize View**, to select columns in results view.

For more information, see "[Personalizing view](#)" (page 25).

--End--

## Viewing Performance

Use the following procedure to view device performance graph.

### Prerequisite

- Ensure to discover domain on Nortel VPFM.
- Ensure supported devices are monitored on Nortel VPFM.

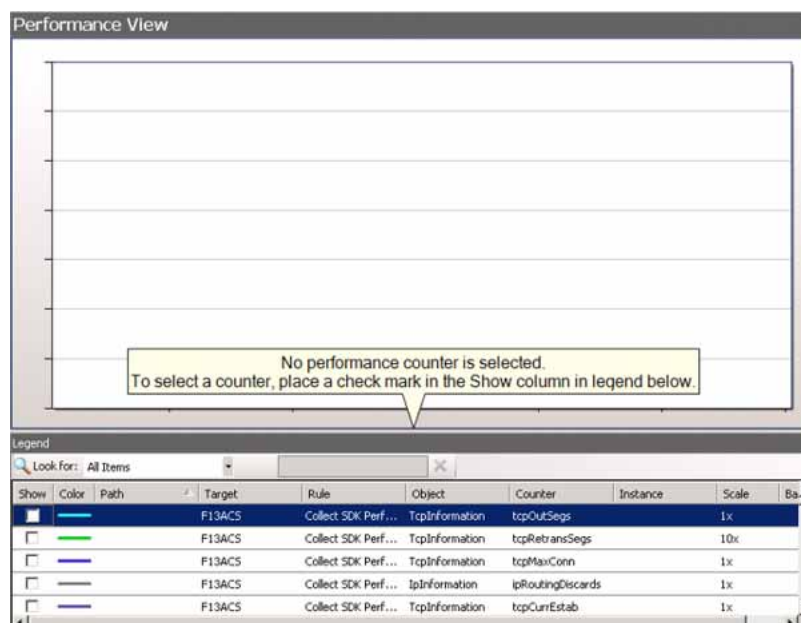
### Procedure Steps

Step	Action
------	--------

1	In Monitoring pane, expand <b>Nortel VPFM</b> .
---	---

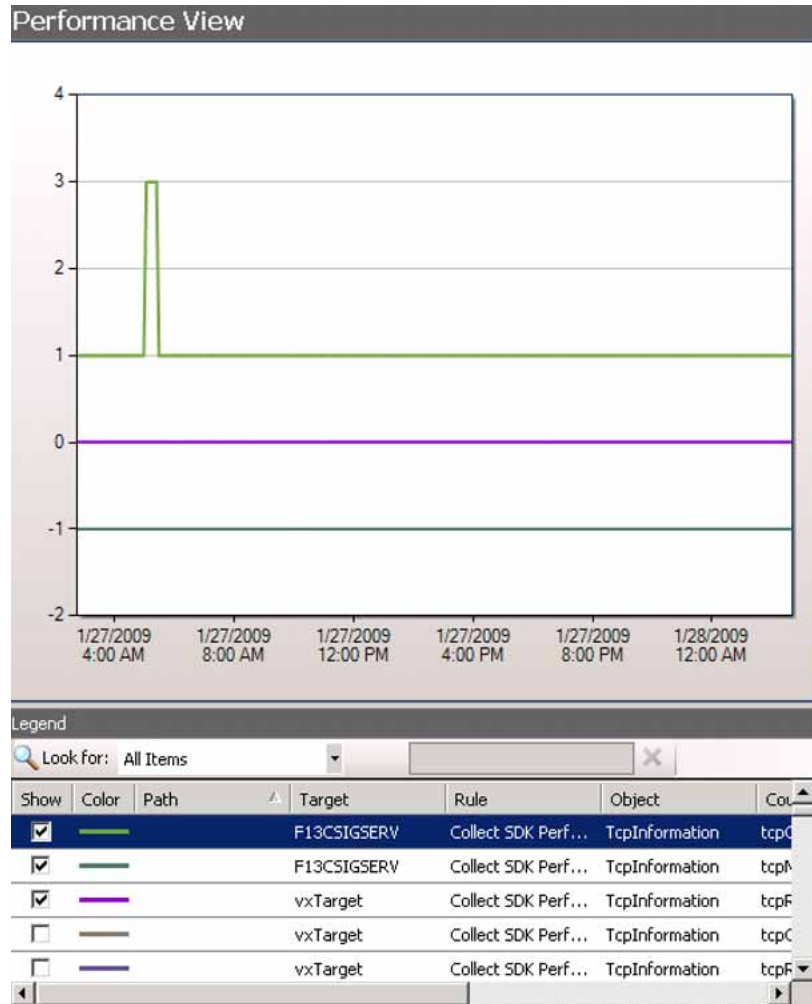
2	Select <b>Performance</b> .
---	-----------------------------

The monitoring data for the supported devices appear in Legend.

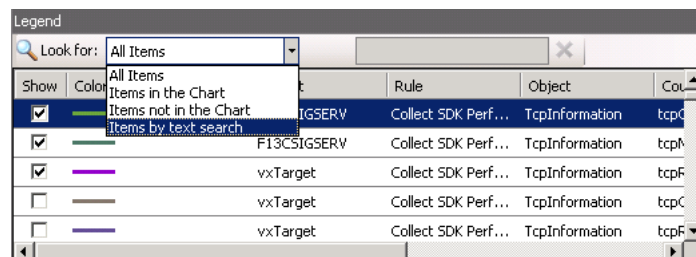


3	From <b>Legends</b> , select devices in <b>Show</b> or right-click on the device and select <b>Show</b> to view the graph.
---	--

The graph for the devices selected appear in results view.

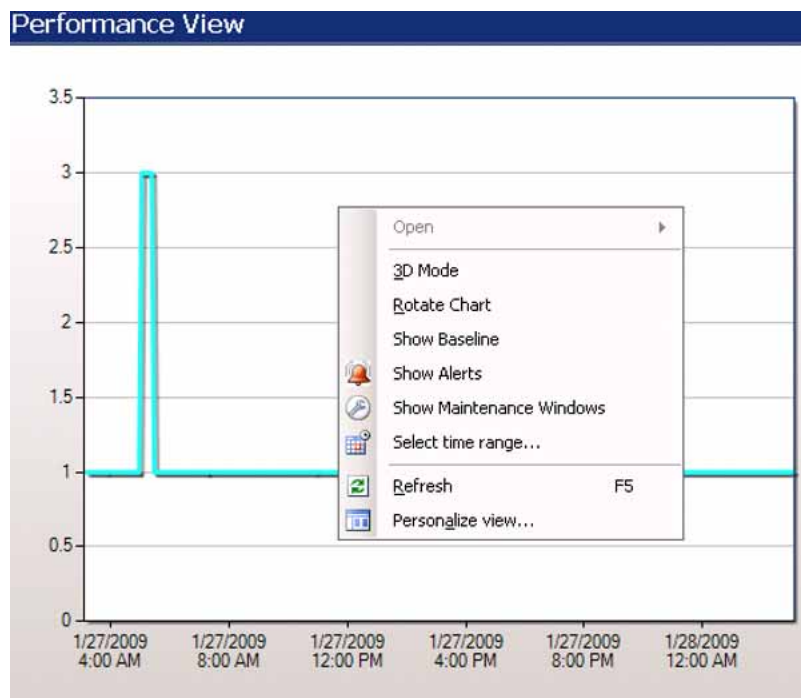


- 4 From Legends, right-click on the device and select **Change Color** to change color of the legend.
- 5 From Legends, right-click on the device and select **Change Scale** to change scale of the graph.
- 6 In Legends, select **Look for** drop-down menu and select an option to view devices in the Legends pane.



- 7 In results view, right-click on the graph.

Options for the graph appears.



For more information about the options, see the following variable definitions table.

--End--

### Variable definitions

Variable	Definition
3D Mode	Displays the graph in three dimensional mode.
Rotate Chart	Allows you to rotate the graph.
Show Baseline	Shows the baseline for device plotted on graph.
Show Alerts	Shows alerts for device selected.
Show Maintenance Windows	Displays maintenance window.
Select time range	Allows you to select time range for the graph.
Refresh	Refreshes the graph.
Personalize View	Allows you to personalize the graph view. You can select the X and Y-axis, chart type, area, and mode



## Common procedures

This section contains common procedures that can be used for all the device operations:

- ["Personalizing view" \(page 25\)](#)
- ["Viewing logs" \(page 26\)](#)
- ["Modifying VPFM SCOM Connector configuration values" \(page 27\)](#)
- ["Starting/restarting VPFM SCOM Connector service" \(page 28\)](#)

### Personalizing view

This option appears for Events View and Managed Devices. It allows you to select the columns variables. Use the following procedure to personalize the Events View and Managed Devices.

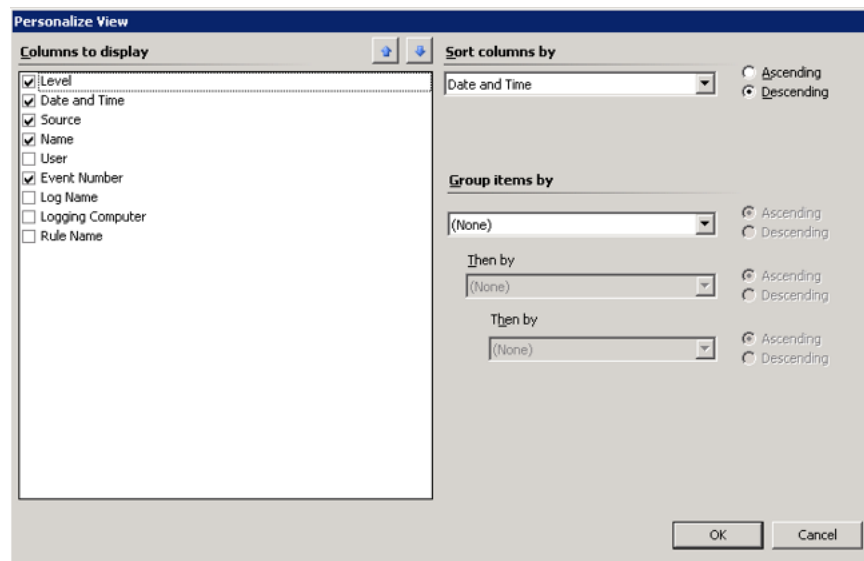
#### Prerequisites

- Ensure to discover domain on Nortel VPFM.
- Ensure to select Events View or Managed Devices from Nortel VPFM, monitoring pane.

#### Procedure Steps

---

Step	Action
1	<p>Do any one of the following to select Personalize View:</p> <ul style="list-style-type: none"><li>• Right-click on the device in results pane and select <b>Personalize View</b></li><li>• Select the device from results pane and select <b>Personalize View</b> from <b>Actions</b></li></ul> <p>Personalize View appears.</p>



- 2 From Columns to display, select the columns.
- 3 From Sort columns by, select **Ascending** or **Descending**.
- 4 From Group items by, select the variable from drop-down menu.
- 5 Choose **Ascending** or **Descending**.
- 6 Select **Ok** to save changes.

---

--End--

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## Viewing logs

Use the following procedure to view log files and diagnose events.

### Procedure Steps

Step	Action
1	Navigate to the location where VPFM SCOM Connector is installed. By default, the location is <b>C:\Program Files\Nortel\UCM</b> .
2	Open folder <b>VPFM Connector</b> .
3	Open sub-folder <b>Services</b> and then open <b>log</b> .
4	Open <i>vpfm_connector.log</i> file on text editor. For example, Notepad. The logs appear.

---

--End--

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## Modifying VPFM SCOM Connector configuration values

The SCOM server and VPFM server and discovery domain values provided during the installation are stored in *settings.txt*. By default, this file is available in location, **C:\Program Files\Nortel\UCM\VPFM connector\Service**.

Use the following procedure to modify the configuration values after installation.

### Prerequisite

- Ensure to close the SCOM Console.
- Ensure to stop Nortel VPFM Connector in Services.

### Procedure Steps

Step	Action
1	<p>Navigate to the folder where VPFM SCOM Connector is installed.</p> <p>By default, VPFM SCOM Connector location is <b>C:\Program Files\Nortel\UCM</b>.</p>
2	Open <b>VPFM Connector</b> folder.
3	Open <b>service</b> folder.
4	<p>Open <i>settings.txt</i>.</p> <p>Initial values in <i>settings.txt</i> file contains the VPFM and SCOM sever details provided during VPFM SCOM Connector installation.</p>
5	<p>Modify the settings.</p> <p>The <i>editing-settings.txt</i> file, in the same location, can be used as reference while modifying <i>settings.txt</i> file.</p>
<hr/> <p><b>Attention:</b> Before making the changes, rename or save <i>settings.txt</i> file for later reference.</p> <hr/>	
6	<p>Prefix user name and password with <b>plaintext:</b>.</p> <p>The entries in <i>settings.txt</i> file prefixed with <b>plaintext:</b> are encrypted after restarting <b>Nortel VPFM Connector</b> in <b>Services</b>.</p>

**Attention:** The `scomManagementPackName` value must not be changed.

- 7 Select **File > Save** to save the changes.
- 8 In **Services**, restart **Nortel VPFM Connector** to apply the changes.  
For more information, see "[Starting/restarting VPFM SCOM Connector service](#)" (page 28).

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--End--

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### Variable definitions

Variable	Definition
VPFMServer	FQDN of the VPFM Server.
VPFMUser	VPFM user name connected with role UCMSysAdmin.
VPFMPassword	VPFM password connected with role UCMSysAdmin.
VPFMWsPort	VPFM Web server port number provided during VPFM installation.
SCOMServer	Domain name of the SCOM server. By default, the domain name is localhost.
SCOMUser	User name with SCOM write permissions.
SCOMPassword	Password for the SCOM user name with write permissions.

### Starting/restarting VPFM SCOM Connector service

Use the following procedure to start or restart VPFM SCOM Connector service.

#### Procedure Steps

Step	Action
1	On the SCOM server where VPFM SCOM Connector is installed, select <b>Start &gt; Control Panel</b> .
2	Double-click <b>Administrative Tools</b> , and then double-click <b>Services</b> . Services window appears.
3	In details panel, do one of the following: <ul style="list-style-type: none"> <li>• Click <b>Nortel VPFM Connector</b>, and then, on <b>Actions</b> menu select <b>Start</b> to start the service after installing Nortel VPFM MP or <b>Restart</b> to restart the VPFM SCOM Connector service.</li> <li>• Right-click <b>Nortel VPFM Connector</b> and then click <b>Start</b> or <b>Restart</b>.</li> </ul>

The Nortel VPFM Connector service is started or restarted according to your selection.

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--End--

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Nortel Visualization Performance and Fault Manager

# VPFM SCOM Connector Fundamentals

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