

# HPE Network Node Manager i Software 10.30

Step-by-Step Guide to Custom Poller

White Paper

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# **Custom Poller**

This document steps through an example of setting up the Custom Poller to monitor a MIB that NNMi does not monitor by default.

## Note the following:

- This example uses a Unix NNMi server, but can be followed on a Windows server.
- Some screen captures might slightly be different than those that appear in the NNMi graphical user interface.

# **Setting Up Your MIB**

## Step 1: Identify the MIB Variable You Want to Poll

To begin, identify a MIB variable that you want to poll.

This example monitors the disk usage on Microsoft PCs using the rfc2790-HOST-RESOURCES-MIB. This MIB is shipped with NNMi under the following directory:

%NnmInstallDir%¥misc¥nnm¥snmp-mibs¥Standard The %NnmInstallDir% location depends on your operating system:

Windows 2008

%NnmInstalIDir% = <drive>\Program Files(x86)\HP\HP BTO Software\

• Linux

NnmInstallDir = /opt/0V/

This example uses rfc2790-H0ST-RESOURCES-MIB for the following reasons:

- · The availability of Microsoft PCs makes this example easy to test
- · You can easily increase disk space usage to change the resultant query and trigger a State change

## Step 2: Ensure the MIB Includes Supported Types

Make sure you are familiar with the MIB you will be using. This is especially important because the variables used must have a type that NNMi supports. See *Troubleshooting Tips* for a list of supported MIB variables.

- Check whether the MIB is loaded by selecting Configuration > MIBs > Loaded MIBs. If the MIB is loaded in NNMi, you can study the MIB using the Loaded MIBs view:
  - a. Select the row that represents the MIB you want to view.
  - b. Select Actions > Display MIB File.
- 2. To check the MIBs that are available to load use the Tools > Load/Unload MIB menu:
  - a. Select Tools > Load/Unload MIB.
  - b. Look for the MIB in the MIBs Available to Load (NNMi Provided) table.
  - c. If the MIB is listed, click Display in the Actions column that appears next to the MIB name.

### Note

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To study the MIB, you can also use the HP tool nnmsnmpwalk.ovpl or read through the MIB with a text editor.

An excerpt from the rfc2790-H0ST-RESOURCES-MIB is shown below:

HrStorageEntry:: = SEQUENCE

hrStorageIndex Integer32,

hrStorageType AutonomousType, hrStorageDescr DisplayString, hrStorageAllocationUnits Integer32, hrStorageSize Integer32, hrStorageUsed Integer32, hrStorageAllocationFailures Counter32 }

As shown in the example excerpt, hrStorageDescr is of type DisplayString. hrStorageUsed is of type Integer32 and hrStorageAllocationUnits is of type Integer32. The NNMi Custom Poller supports both of these types.

According to the MIB definition, hrStorageSize is the size of the storage measured in hrStorageAllocationUnits. To show the amount of storage in kilobytes (KB) on the C drive, this example uses the following MIB expression:

((hrStorageSize / 1000) \* hrStorageAllocationUnits)

## Step 3: Load the Required MIB

NNMi's Custom Poller requires that the MIB be loaded onto the NNMi management server.

Use the Actions > MIBs > Loaded MIBs view to determine whether the rfc2790-H0ST-RESOURCES-MIB is loaded in NNMi as shown in the following example:

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		HOST	RESOU	JRCES	-TYPES	tile:///opt/OV/n	nisc/nnm/snn	np-mibs/Standai	d/rtc2/90-HC	DST-RESOURCES-TYPES.mib	
~		HP-ICI	F-OID		_	file:///opt/OV/n	nisc/nnm/snn	np-mibs/Vendor	/Hewlett-Pack	ard/ProCurve/hpicfOid.mib	
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	III MIB Variables										
	HIB NOTIFICATIONS										

**TIP**: To check whether the MIB is already loaded, you can also run the nnmloadmib. ovpl -list command. Look for the desired MIB in the results.

If the MIB had not been loaded, you can load it with the Tools > Load/Unload MIB or the nnmloadmib.ovpl -load command.

## Step 4: Use the MIB Browser to View Current MIB Variable Values

Use the MIB Browser to perform an SNMP query and become familiar with the MIB variable values returned from the node. In this example, the node is a Linux server.

- 1. Select a node that has a Device Category of Server () or Computer ().
- 2. Select Actions > MIB Information > Browse MIB.

In the Node attribute you should see the name of the node you selected.

Page	5
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A Topology Maps Status Device ( A Name Configuration Details ) nant Security Group System Location Device Profile SNN Status Last Modified 1	Notes
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III Chassis Updated: 8/22/16 10:57:05 AM Total: 36 Selected: 1 Filter: OFF	
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🖽 Node Sensors 🖉 Node Sensor Gauges (24) 🕫 MiB Values 🕫 Status History 🕫 Scheduled Outages	🕫 🕴 Outage H

- 3. In the OID attribute, enter hrStorageTable.
- 4. Click the SNMP Walk icon.
- 5. Expand the following folders:
- hrStorageDescr
- hrStorageAllocationUnits
- hrStorageUsed

The following example shows a root partition:

To check the storage used on the root partition, look for the string from the hard disk that begins with /.

As shown in the example above, the Value column that begins with / is the third item. The value for hrStorageAllocationUnits is 4096 on this drive. The hrStorageUsed value is 2904519.

Next, enable Custom Poller so that you can use it to specify the MIB Expression you want NNMi to poll.

# Setting Up a Custom Poll

## Step 1: Enable Custom Poller

Custom Poller is not enabled by default.

To enable Custom Poller:

- 1. Navigate to the Configuration workspace.
- 2. Expand the Monitoring folder.
- 3. Select Custom Poller Configuration.

Network Node Manager i						
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🖵 Monitoring						
A Troubleshooting						
🖺 Inventory						
👷 Management Mode						
₽ Incident Browsing						
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Monitoring Configuration						
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Incidents						
🛅 Status Configuration						
🛅 Global Network Management						

- 4. Check Enable Custom Poller.
- 5. Click Save and Close.



## Step 2: Create a Custom Poller Collection

After you enable Custom Poller, you are ready to create a Custom Poller Collection. A Custom Poller Collection defines the information you want to gather (poll) as well as how NNMi reacts to the gathered data.

In addition to a Custom Poller Collection, you should define at least one Custom Poller Policy. Each policy specifies the Node Group on which you apply the Custom Poller Collection.

A diagram of the hierarchy of Custom Poller Collections is depicted below:



In our example, we are required to provide a MIB Filter value to select the disks we want NNMi to monitor. If we do not specify a MIB Filter Variable and MIB Filter, NNMi assumes the MIB variable does not have multiple instances.

To create our Custom Poller Collection:

- 1. Open the Custom Poller Configuration form:
  - a. Navigate to the Configuration workspace.
  - b. Expand the Monitoring folder.
  - c. Select Custom Poller Configuration.
- 2. Navigate to the Custom Poller Collections tab.
- 3. Click the \* New icon.
- 4. In the Name attribute of the Custom Poller Collections form, name the Collection DiskStorageUsed.
- 5. Check Affect Node Status and Generate Incident.
- 6. Specify a MIB variable the variable or expression on which collection needs to be done.

#### Note

With 10.00 version, a single custom collection can have multiple MIB variable or expressions within it. For more details, please look at the *Create Custom Poller Configurations* section in *NNMi Online Help for Administrators*.

7. In the **MIB Variables** tab, click on the **\*** New icon to define a new variable or expression.

Custom Poller Configuration * <b>*</b> Custom Poller Collection * <b>*</b>	
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#### Note

Starting version 10.00, NNMi custom poller support a new collection type called *Bulk* collection. For more on this, refer to the *Release Notes* and *Online Help* of NNMi. For this example, select the Collection Type as *Instance*.

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Custom Poller Configura	ation * X Custom Poller Collection * X				
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When modifying an exis Policies will be suspend	sting Custom Poller Collection, all associated ed when the modifications are saved.				
* Name	DiskStorageUsed				
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Affect Node Status	Choose One				
Export Custom Poller Collection	Instance Bulk				
Compress Export File					
Generate Incident					
<ul> <li>Incident Source</li> <li>Object</li> </ul>	Custom Polled Instance $\bigtriangledown$				
Required for multiple instance (repeating) MIB Variables only. The MIB Filter Variable is the MIB variable whose value you want to use as a filter to determine which instances of the MIB Expression to Custom Poll. You must also specify a MIB Filter value when creating the associated Policy.					
MIB Filter Variable	₹~20 : : : : : : *-:::::::::::::::::::::::::::::::::::				

8. In the MIB Expression attribute, click \* New to open a New MIB Expression form. At this time, give a name to this MIB Variable (in a single collection with multiple MIB variables, it is required to use unique names for each variable) and also select the "Report Data Type" based on the type of the MIB variables for which collection needs to be configured.

<u>File V</u> iew <u>T</u> o MIB Variable <b>X</b>	ols A <u>c</u> tions	<u>H</u> elp					
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* Report Data Type	Unset $\bigtriangledown$		SI	iow Analysis	m value fo	r the MIBExpre	ssion. You
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				must fall ou	ifside the ra	inge over a slid	ling duratio
				Threshold	Setting	Choose On	e 🔻

#### 9. Enter in a Unique Key, Name and Author.

This example uses the author Customer, which is the default.

<u>Eile V</u> iew	Tools Actions <u>H</u> elp	
MIB Expression *	×	
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<ul> <li>Basics</li> </ul>		Expression
When modifying a	n existing MIB Expression, all Custom Poller	<ul> <li>Expression</li> </ul>
suspended when t	he modifications are saved.	To view an example of creating a MIB Expression, click here.
To test your MIB E Actions → Graph	expression definition, select File $\rightarrow$ Save, then MIB Expression. You will be asked to select a Node.	Expression
* Name	DiskStorage lsed	
Author	Customer V	MIB Variable
		OK Clear Cancel

10.Create the MIB expression.

11. Write out the expression before working with the user interface. In this example, the MIB expression is:

((hrStorageSize / 1000) \* hrStorageAllocationUnits)

12. When specifying the expression, begin by inserting all of the operands. The operands in this expression include / and \*.

<u>F</u> ile <u>V</u> iew	Tools Actions <u>H</u> elp	
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<ul> <li>Unique Key</li> </ul>	com.mycompany.mibexpr.DiskStorageUsed	
* Name	DiskStorageUsed	MIB Variable
Author	Customer 🗸 🕼 🔹	Constant Value Enter + - + / -> Delete OK Clear Cancel

- 13. After you select each operand, place the cursor in the location where you want to insert a MIB variable.
- 14. Navigate the MIB Variable tree to select the hrStorageUsed and hrStorageAllocationUnits variables.

## 15.Add the constant 1000.

<u>F</u> ile <u>V</u> iew	Tools Actions <u>H</u> elp	
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<ul> <li>Unique Key</li> <li>Name</li> </ul>	com.mycompany.mibexpr.DiskStorageUsed	
Author	Customer 🗸 🕼 🔹	MiB Variable hrStoraoeAllocationUnits.

#### 16.Click Save and Close.

Specify a MIB Filter Variable. This example uses hrStorageDescr.

17. From the MIB Filter Variable entry, navigate to the hrStorageDescr value.



Finally, set a threshold to trigger an alarm. This example uses 11800000 as the threshold value with a rearm value of 11700000. The alarm triggers with just one sample above the threshold.

18. Navigate to the Thresholds tab.

19. In the High Value attribute, enter 11800000.

20.In the High Value Rearm attribute, enter 11700000.

21. In the High Trigger Count attribute, enter 1.

<u>E</u> ile <u>V</u> iew <u>T</u> oo	ls A <u>c</u> tions <u>H</u> elp					
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			Low Window Duration	0.00	Seconds $\bigtriangledown$	

#### 22.Click Save and Close;

You now have a Custom Poller Collection.

23. Create a policy for the Custom Poller Collection that looks for / ('root' partition) at the start of the value.

## Step 3: Create a Policy for a Custom Poller Collection

A Policy defines which Node Groups are participating in this Custom Poller Collection and how often the variable is polled. It is also used to define the MIB filter to select specific instances. You can create more than one Policy associated with a Custom Poller Collection.

1. To begin, navigate to the **Policies** tab and select the **\* New** icon.

<u>Eile View Tools Actions H</u> elp	
Custom Poller Configuration * 🕷	
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•	Custom Poller Collections Policies Report Groups
Note: When you save a Custom Poller Collection configuration, each	•
Policy active, access the Custom Polic Configuration: Policies tab, open each associated Policy, and change the Active State to Active	Policies define the Node Group and polling interval you want NNMi Collection.
<ul> <li>Global Control</li> </ul>	C (*) 🗃   C   🔨 76   🗂 🛛 K
Enable Custom Poller 🔽	▲ Or Name Active State Collection MIB Filter

2. In the Name attribute, enter ServerUsedDiskSpace.

NNMi displays this name in the incident browser, whenever an associated incident is generated for the Custom Poll.

3. Specify the Ordering.

Because you can create more than one Policy associated with a Custom Poller Collection, you need to specify an order to remove ambiguity when a node is matched to more than one policy.

For example, you might want a Custom Poller Collection to run against a Node Group for Routers and a Node Group for Switches. You also might want to poll the routers every 5 minutes and the Switches every 8 minutes.

If a node is both a switch and a router, then it is not allowed to be polled twice by the same collection. You might decide that if a node is both a switch and a router, it is important that it be polled more quickly (using the Router policy). Therefore, you use a higher priority order number for the Router Policy. When you specify an order, the node is matched against the highest priority policy (lowest Ordering number).

Because we have only one Policy for a Collection, we do not need to be concerned about this order.

- 4. In the Ordering attribute, accept the default value of 1.
- 5. Use the Quick Find pull down menu to select the Collection that we previously defined (DiskStorageUsed).
- 6. Change the Active State to Active.
- 7. Use the Quick Find pull down menu to select the HostResourceNodes Node Group.
- 8. Specify the MIB Filter.
- Recall that the values from our SNMP walk, the *root* partition always started with /. Therefore, in the MIB Filter attribute, enter '/' as the filter. Avoid matching all instances by entering the asterisk (\*) as the filter. This could lead to a large number of matches and adversely affect NNMi Custom Poller performance.
- 10. Specify the Polling Interval.

In NNMi, you cannot force a Custom Poll. (The Status Poll or Configuration Poll options from the Actions menu do not include the Custom Poller.) Therefore, while initially setting up your Custom Polls, you might want to set the Polling Interval fairly short, so you do not have to wait a long time for each poll cycle.

11. For the purposes of this example, set the Polling Interval attribute to 1 minute. As a best practice, after you have set up your Custom Polls as desired, select a longer Polling Interval. Using short Polling Intervals can adversely affect NNMi Custom Poller performance.

12. Click Save and Close to save your Policy.

**TIP:** If you make a change to a Custom Poller Collection configuration after you save it (for example, change the **High Value**), NNMi automatically changes the Active State of the associated Custom Poller Policies to Suspended. If this occurs, open the Policy configuration and change the Active State back to Active.

Custom Poller Configuration * **       Custom Poller Policy * x         Image: Configuration * **       Custom Poller Policy * x         Image: Configuration * **       Custom Poller Policy * x         Image: Configuration * **       Custom Poller Policy * x         Image: Configuration * **       ServerUsedDiskSpace         Image: Configuration **       ServerUsedDiskSpace         Image: Configuration **       ServerUsedDiskSpace         Image: Configuration **       DiskStorageUsed         Image: Configuration **       Image: Configuration **         Image: Configuration **       Custom Policy **         Valid values include:       *         *       alpha-numeric string (for exact match)         *       range of numbers (example, 1-6)         *       Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*)         *       exclude declaration (!) to exclude items (examples !1-3, !*vian, !vian)	<u>F</u> ile <u>V</u> iew <u>T</u>	ools Actions <u>H</u> elp
Image: ServerUsedDiskSpace         • Name         • Ordering         • Ordering         • Collection         DiskStorageUsed         • Active State         • Active State         • HostResourceNodes         * Wild values include:         • alpha-numeric string (for exact match)         • range of numbers (example, 1-6)         • Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*)         • exclude declaration (!) to exclude items (examples 11-3, !*vian, !vian)	Custom Poller Config	uration * 3% Custom Poller Policy • 3%
Basics     Name     ServerUsedDiskSpace     Ordering     I     Collection     DiskStorageUsed     ✓      Active State     Node Group     HostResourceNodes     X      ✓      HostResourceNodes     X      ✓      ✓     Valid values include:     alpha-numeric string (for exact match)     range of numbers (example, 1-6)     Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*)     exclude declaration (!) to exclude items (examples 11-3, !*vian, Ivian)	¢   🖿 🖼 🖪	a) 🛛 💼
Basics     Name     ServerUsedDiskSpace     Ordering     I     Collection     DiskStorageUsed     Active      Active      HostResourceNodes     X      X      I     I     Valid values include:     alpha-numeric string (for exact match)     range of numbers (example, 1-6)     Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*)     exclude declaration (!) to exclude items (examples 11-3, !*vian, !vian)		<b>.</b>
Name     ServerUsedDiskSpace     Ordering     I     Collection     DiskStorageUsed     Active      Active      HostResourceNodes     X      X      I     I     Valid values include:         alpha-numeric string (for exact match)         range of numbers (example, 1-6)     Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*)     exclude declaration (!) to exclude items (examples 11-3, !*vian, !vian)	<ul> <li>Basics</li> </ul>	
Ordering     I     Collection     DiskStorageUsed     Active State     Node Group     HostResourceNodes     X	* Name	ServerUsedDiskSpace
Collection     DiskStorageUsed     T     Active State     Node Group     HostResourceNodes     X     W     HostResourceNodes     X     W     W     HostResourceNodes     X     W     W     O	<ul> <li>Ordering</li> </ul>	1
<ul> <li>Active State <ul> <li>Active </li> <li>Node Group <ul> <li>HostResourceNodes</li> <li>X </li> <li>IIB Filter</li> </ul> </li> <li>Valid values include: <ul> <li>alpha-numeric string (for exact match)</li> <li>range of numbers (example, 1-6)</li> <li>Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vlan, vlan*, *vlan*)</li> <li>exclude declaration (!) to exclude items (examples 11-3, !*vlan, !vlan)</li> </ul> </li> </ul></li></ul>	Collection	DiskStorageUsed
Node Group HostResourceNodes  X  Wild Filter  Valid values include: alpha-numeric string (for exact match) ange of numbers (example, 1-6) Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vian, vian*, *vian*) exclude declaration (!) to exclude items (examples 11-3, !*vian, !vian)	Active State	Active 🗢
MIB Filter 7 Valid values include: • alpha-numeric string (for exact match) • range of numbers (example, 1-6) • Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vlan, vlan*, *vlan*) • exclude declaration (!) to exclude items (examples !1-3, !*vlan, !vlan)	Node Group	HostResourceNodes X 🗸 🗃 🗸
Valid values include: • alpha-numeric string (for exact match) • range of numbers (example, 1-6) • Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vlan, vlan*, *vlan*) • exclude declaration (!) to exclude items (examples !1-3, !*vlan, !vlan)	MIB Filter	
Valid values include: • alpha-numeric string (for exact match) • range of numbers (example, 1-6) • Wildcard (*) representing any combination of zero or more characters, numbers, or both. (examples *vlan, vlan*, *vlan*) • exclude declaration (!) to exclude items (examples !1-3, !*vlan, !vlan)	1	
	Valid values include: • alpha-numer • range of num • Wildcard (*) : vlan*, *vlan*) • exclude decla	ic string (for exact match) Ibers (example, 1-6) representing any combination of zero or more characters, numbers, or both. (examples *vlan, aration (1) to exclude items (examples !1-3, !*vlan, !vlan)
Indicate multiple entries by separating each with a comma (.). See Help $ ightarrow$ Using the Custom Poller Policy Form.	Indicate multiple ent	ries by separating each with a comma (.). See Help $ ightarrow$ Using the Custom Poller Policy Form.
Polling Interval 60.00 Seconds V	Polling Interval	60.00 Seconds 🗸

## Step 4: Create a Report Group for Custom Collection(s)

Report Groups are used to defined which custom poller collections are reported to the NNM iSPI Performance for Metrics. Once the Report Group is created, the same is seen (dynamically) as a new report Extension Pack on the NPS and appears in the Reporting tree on the iSPI Performance for Metrics Reports Home Page.

1. To begin, navigate to the Report Groups tab and select the 🎽 New icon.

Eile <u>V</u> iew <u>Tools</u> Actions <u>H</u> elp Custom Poller Configuration • <b>×</b>	
Image: Contract of the second sec	Custom Poller Collections Policies Report Groups
make a Policy active, access the Custom Polier Configuration: Policies tab, open each associated Policy, and change the Active State to Active.	Performance for Metrics.  Caution: Deleting a Report Group will remove all historical iSPI Performance for Metrics data associated with the Report Group.
Enable Custom Poller 🖌	_ ♂  <b>*</b> ■   ♂   ┑ ҧ   會 K ← ⊙-⊙or⊙ → N   團 ▲Nam

2. Give the Report Group a name (this name appears as an extension pack name in NPS) and add a "New" collection to the Report Group.

Eile <u>V</u> iew <u>T</u> ools A <u>c</u> tions <u>H</u> elp	
Custom Poller Configuration * <b>*</b> Report Group * <b>*</b>	
C 🖺 🖪 🕄 🗧 🍵	
▼ Basics	Report Collections
Name DiskStorageUsed	•
	Caution: Deleting a Report Collection will remove all historical ISPI Performance for Metrics data associated with the Report Collection.
	* ≝   ♡   ┶   ≝ H ← 0-000 → H   扇
	Custom Poller Collections

3. Select the required Custom Collection(s) and click Save and Close.

Eile	<u>V</u> iew	Tools	Actions	<u>H</u> elp			
Report	Collectio	n ×					
6	•	30	Î				
() (	hanges ar	re not comm	itted until t	ne top-level form is	saved!		
• 1	Basics						
Custo Colle	om Poller ction	Disk	StorageUse	d ×⊽	<b>a</b> •		

#### NOTE:

A single report group can have multiple relevant Custom Collections added within it. That is, for relevant MIB variables/expressions data, a single Report Extension Pack can show all data.

Also, note that it is NOT mandatory to export a custom collection to send the collection data into NPS reports.

# View the Results of Your Custom Poll

## Step 1: View the Node Collections Associated with Custom Poller Policies

After you configure your Custom Poller Collections, you can view the Custom Poller objects. NNMi identifies these objects as Custom Node Collections.

To view Custom Node Collections:

- 1. Navigate to the Monitoring workspace.
- 2. Select Custom Node Collections.

NNMi displays a table view of all Custom Node Collections that includes:

- The Custom Node Collection status.
- The topology node associated with the Custom Node Collection.
- The Active State for the associated policy.
- · The date and time the Status was last modified.
- The name of each policy associated with each Custom Node Collection.
- Discovery information regarding the MIB Poll Variable on each topology node, such as Discovery State, the time stamp when the Discovery State was last modified, and Discovery State Information.

## Step 2: View the Details of a Custom Node Collection

To view the details for a specific Custom Node Collection, double-click the Node Collection of interest.

As shown in the example below, you can see any incidents that have been generated, the Status history, Conclusions, and Polled Instances.

<u>File V</u> iew <u>T</u> o	ols A <u>c</u> tions	<u>H</u> elp							User Name: system	NNMi Role: Ac	Imini
Custom Node Collectio	ons × Custom N	ode Collection 🗴									
6 6 6											
<ul> <li>Basics</li> </ul>				Incidents	s Status Co	nclusions Custo	m Polled Instances				
Node	mimcisco3		<b>a</b>	-							
Active State	Active			C I	🖬   🕫   🖴					K € 1-1	l of 1
Sidius				MIB	Expression	▼ № Filter Value	Display Attribute	Node	Custom Poller Collection	Active State	State
Custom Poller Policy	DiskStorageUsed		🚮 🛨	lfinO	utPackets	.1 1	sc0	mimcisco3	DiskStorageUsed	Active	Aug
Discovery State	Completed								geosed		
Discovery State Last Modified	August 23, 2016	11:50:51 AM MDT									

## Step 3: View Details of a Polled Instance

Another useful view is the **Custom Polled Instances** view. The first time the specified MIB variable is discovered, the results appear in a Polled Instance object. The Polled Instance object is updated whenever a change in the MIB Poll Variable's State is detected and includes the most recent polled value that caused the State to change.

#### Note

The Custom Polled Instance value does not necessarily reflect the most recent polled value. It is the value that caused the State change, which might not be subsequent value.

To view Custom Polled Instances:

- 1. Navigate to the Monitoring workspace.
- 2. Select Custom Polled Instances.

This view allows you to easily see all the Polled Instances that are polled by a specific Custom Poller Collection. For example, you can sort the view based on the MIB variable to see all the Polled Instances for a particular Custom Poller Collection.

The following table does not include the Custom Poller Collection Name. However, it lists the names of the MIB Variable being polled. Each collection has only one MIB Poll Variable. Therefore, if you use a unique name for your Custom Poller Collection variables, it is easy to associate the Custom Poller Collection with the MIB Poll Variable

As shown in the example below, another server has the / drive mapped to MIB Suffix (or instance) .1.

Custom	Polled Instances	×										
2	C 🕱	<b>*) %</b>									М	<b>+</b> [
Status	State	Last State Chang	MIB Variable	MIB Expression	мів	Filter Value	Display Attribute	Node	Custom Poller Collection	Active State	▼ State Last Modified	
۸	۸	195.33333333333	DiskStorageUsed	IfInOutPackets	.1	1	sc0	mimcisco3	mahesh-test	Suspended	Aug 23, 2016 11:59:14 PM	
۸	۸	161.33333333333	DiskStorageUsed	IfInOutPackets	.1	1	sc0	mimcisco2	mahesh-test	Suspended	Aug 23, 2016 11:58:23 PM	
<u>^</u>	۸	113.61	DiskStorageUsed	IfInOutPackets	.1	1	Fa0/0	sp-unnum8	mahesh-test	Suspended	Aug 23, 2016 12:00:48 PM	
۸	<u>^</u>	120.18	DiskStorageUsed	IfInOutPackets	.1	1	sc0	mimcisco4	mahesh-test	Suspended	Aug 23, 2016 12:00:32 PM	
1	<u>^</u>	1,047.81666666	DiskStorageUsed	IfInOutPackets	.1	1	Fa0/0/0	mimcisco854	mahesh-test	Suspended	Aug 23, 2016 12:00:31 PM	
۸	<u>*</u>	9,191.93666666	DiskStorageUsed	IfInOutPackets	.1	1	Gi1/1	sp-cisco-basic	mahesh-test	Suspended	Aug 23, 2016 12:00:19 PM	
<u>A</u>	<u>A</u>	994.02	DiskStorageLIsed	IfInOutPackets	1	1	Ea0	mimcisco4k1-	mahesh-test	Suspended	Aug 23, 2016 12:00:14 PM	
<u>A</u>	<u>د</u>	1,184.633333333	DiskStorageUsed	IfInOutPackets	.1	1	Fa0/0	sp-unnum3	DiskStorageUsed	Suspended	Aug 23, 2016 12:00:13 PM	J
<u>*</u>	1	1,197.13666666	DiskStorageUsed	IfInOutPackets	.1	1	VIO	mimcisco550	mahesh-test	Suspended	Aug 23, 2016 11:59:52 AM	
۸	<u>*</u>	122.35	DiskStorageUsed	IfInOutPackets	.1	1	sc0	sp-cp-cisco55	mahesh-test	Suspended	Aug 23, 2016 11:59:50 AM	
<u>^</u>	۸	968.676666666	DiskStorageUsed	IfInOutPackets	.1	1	et.1.1	NDISTRIB	mahesh-test	Suspended	Aug 23, 2016 11:59:40 AM	
۸	٨	1,131.84666666	DiskStorageUsed	IfInOutPackets	.1	1	FaO	mimcisco4k2-	mahesh-test	Suspended	Aug 23, 2016 11:59:40 AM	
۸	۸	115.1133333333	DiskStorageUsed	<b>IfInOutPackets</b>	.1	1	0	mimtst25	mahesh-test	Suspended	Aug 23, 2016 11:58:43 AM	

## Step 4: Evaluate the Results of the Custom Poll

To evaluate the results of our example Custom Poll, trigger the threshold to see the changed State and the generated incident.

1. Copy a few large files onto the disk of the Server to increase the disk usage.

As shown in the following example, copying a few large files onto the disk of the Server causes the Status of the Custom Node Collection to change to Major.

Custom	Node Collections 🗶						
6	1 8 8 h 5						
Status	Node	Active Stat	€ ▼Status Last Modified	Custom Poller Policy	Discovery Stat	Discovery State Last M	Discovery State Information
1	mimtst24	Suspended	Aug 23, 2016 11:57:17	DiskStorageUsed	Completed	Aug 23, 2016 11:50:49	
۸	SKINNER	Suspended	Aug 23, 2016 11:56:56	DiskStorageUsed	Completed	Aug 23, 2016 11:50:54	
۸	mimcisco4k1-fr	Suspended	Aug 23, 2016 11:56:39	DiskStorageUsed	Completed	Aug 23, 2016 11:50:52	
۸	mimcisco4-noconn	Suspended	Aug 23, 2016 11:56:39	DiskStorageUsed	Completed	Aug 23, 2016 11:50:51	
1	mimcisrt1	Suspended	Aug 23, 2016 11:56:39	DiskStorageUsed	Completed	Aug 23, 2016 11:50:50	
۸	mimcisco4	Suspended	Aug 23, 2016 11:32:37	DiskStorageUsed	Completed	Aug 23, 2016 11:50:50	
0	sp-vceftw27240038-floa	ting Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:52	
0	sp-vcefxtw2038000n-flo	atir Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:51	
0	sp-vcextw2820000a-floa	tine Active	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:52	
0	sp-vcextw28220023-floa	tin: Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:51	
$\oslash$	sp-cp-c5500-ls1010	Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:49	No MIB instances found on node with filter value: 1
Ø	sp-vceftw27330009-floa	ting Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:51	
$\oslash$	sp-cp-hpov2k1	Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:50	No MIB instances found on node with filter value: 1
0	sp-vcefxtw201300h9-flo	atir Suspended	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 23, 2016 11:50:52	
$\oslash$	sp-virt-fcmovm4	Suspended	Aug 23, 2016 1:17:26	DiskStorageUsed	Completed	Aug 23, 2016 11:50:50	No MIB instances found on node with filter value: 1
0	sp-esxi4	Suspended	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Failed	Aug 24, 2016 12:23:37	MIB Variable requested .1.3.6.1.2.1.2.2.1.17 does not exist on node
0	sp-cisco-basic-card-rhino	Suspended	Aug 23, 2016 1:17:25	DiskStorageUsed	Completed	Aug 23, 2016 11:50:52	No MIB instances found on node with filter value: 1
0	sp-virt-no-snmp	Suspended	Aug 23, 2016 1:17:25	DiskStorageUsed	Failed	Aug 23, 2016 11:50:47	Node does not support SNMP
0	sp-unnum4	Active	Aug 23, 2016 12:56:42	DiskStorageUsed	Completed	Aug 23, 2016 11:31:08	
0	mimcisco4k1-fr	Active	Aug 23, 2016 12:56:42	DiskStorageUsed	Completed	Aug 23, 2016 11:31:06	
<b>~</b>	en-vceftw27330000-floa	tine Active	Aug 23, 2016 12-56-65	DiskStorageUsed	Completed	Aug 23 2014 11-30-55	

#### Note

The Custom Node Collection Status is not necessarily equivalent to the Status of the Source Node.

2. Open one of Custom Collection nodes to see that the value of hrStorageUsed is above the High Value threshold. (This is the value that triggered the State change.)

	Nodes 36 Node 36													
	6 6 8	0												
	<ul> <li>Basics</li> </ul>		< Custo	om Attril	butes	Node Groups	Node Sensors	Custom Polled Instan	ces	Diagnostics	Incidents	Status	Conclusic	> ~
	Name	iptom9	-											
	Hostname	iptom9.ind.hp.com	C.	<b>a</b>   1	0   <b>h</b>						М	€ 1 · 2 0	2 <b>→</b> H	F
	Address		Status	Stat	Last Sta	te Chang Mil	Variable	MIB Expression	٧V	Filter Value	Display At	tribute	Custom Poll	er Colle
	Status	Major	V	V	115.113	3333331 Dis	kStorageUsed	DiskStorageUsed	.1	1	0		DiskStorage	Jsed
ŀ	Node Management Mode	Managed 🗢												
	Device Profile	hpSunSolaris 🞲 🔻												
	Management Server	nmccloudvm178												
	Discovery													
	Discovery State	Discovery Completed												
	Last Completed	August 23, 2016 11:30:16 AM MDT												
	Notes													

3. Navigate to the Incidents tab to see that an incident was generated.

The Incident message presents the various names used in creating the Custom Poller Collection. You can change this message by editing the Incident Configuration.

	ns Agrions Help							l.	Jser Name: system	NNMi Role: Admi	nistrator	Log Out
Nodes X Node X	Node 🕷											
	C 🔒											
<ul> <li>Basics</li> <li>Name</li> </ul>	iptom9			^	< Node Senso	Custom Polled I	nstances Diagnostics	Incidents Status	Conclusions Sci	heduled Outages	Outag	> ~
Hostname Management Address	iptom9.ind.hp.com			l	I III III III IIII IIII IIIIIIIIIIIII	Last Occurrenc Correl	lati Message		I	€ 1-1 of	. → M	
Status Node Management Mode	Major Managed ⊽			l	A 🖏 8/	23/16 11:58:4{ 🔀	CustomPolledInstance of	out of range in Custom	NodeCollection DiskS	torageUsed		
Device Profile	hpSunSolaris		i - 1	L								
Planagement Server	iniccioud vin 270											
Discovery	Discovery Completed											
Last Completed	August 23, 2016 11:30-16 AM MDT											
Notos	August 19, 1010 11:00:10 Arthon											
				1								
				~	Updated: 8/24/1	.6 02:22:05 AM	Total: :	1 Selected: 0	Filter: OFF		Auto refres	sh: OFF
				~	Updated: 8/24/1	.6 02:22:05 AM	Total: 1	1 Selected: 0	Filter: OFF		Auto refree	sh: OFF
<ul> <li>Analysis</li> </ul>				~	Updated: 8/24/1	.6 02:22:05 AM	Total: :	1 Selected: 0	Filter: OFF		Auto refre	sh: OFF
➤ Analysis Node Summary : mim	115125 <b>3</b>	^	< Deta	↓ ails Ø	Updated: 8/24/3 MIB Values Ç	6 02:22:05 AM	Total: : Scheduled Outages 🗸	1 Selected: 0 Outage History <i>3</i>	Filter: OFF	Security 🕽	Auto refree	sh: OFF

4. To view the listing of possible Custom Attributes, open a Custom Poller incident and select the Custom Attributes tab.

All Incidents 🕷 Inci	ident * X Node 36								
	C 📋								
<ul> <li>Basics</li> </ul>		~	General Correlated Par	ents C	orrelated Children	Custom Attribute	s Diagnostics	Registration	
Message			•						
CustomPolledInstanc	e out of range in CustomNodeCollection DiskStorageUsed		NNMi lists the Custom Attn table, click the Restore Def	ibutes fo ault Setti	r incidents in the ord ngs icon to restore t	ler in which they are he Custom Attribute	received from the order for the sele	SNMP trap. If you cted incident.	sort or filter the Custom Attribute
<ul> <li>Severity</li> </ul>	Major 🗢		ଟା 🖬 । ଟା 🖴					м	← 1-13 of 21 → ▶
<ul> <li>Priority</li> </ul>	None 🗸		Name	Туре	Value				
<ul> <li>Lifecycle State</li> </ul>	Registered $\bigtriangledown$		com.hp.ov.nms.apa.sympt	o String	PolledInstanceMi	nor			~
			cia.thresholdLowerBound	String	20				
Source Node	mimcisco3		cia.thresholdUpperBound	String	11800000				
Source Object	sc0 🗊 🔻		cia.thresholdCurrentValu	e String	Major				
			cia.thresholdMeasuredVa	lı String	11800000				
Assigned To	▽ 🗊 -		cia.custompoller.policy	String	DiskStorageUsed				
			cia.custompoller.collectio	n String	DiskStorageUsed				
<ul> <li>Notes</li> </ul>			cia.custompoller.variable.	e String	[[hrStorageUsed	[ 1000] hr Storage	AllocationUnits;		
Notes			cia.custompoller.variable.	di String	Total number of	packets received and	d transmitted on a	n interface, using 3	2 bit counters. Computed by: (ifl
			cia.custompoller.variable.	hi String	DiskStorageUsed				
			cia.custompoller.state	String	Major				
			cia.custompoller.lastValu	String	11800000				~
			cia.custompoller.miblnsta	n String	.1				
		$\sim$	Updated: 8/24/16 03:55	27 AM		I ofal: 21	Selected: 0	Filter: OFF	Auto refresh: OFF

- 5. For example, to display the most recent value that caused the Custom Node Collection Status to change, you might want to include the Custom Attribute **cia.custompoller.lastValue** in your message.
- 6. To verify that the Status of the Source Node has changed to Major, open the Source Node or select a Node View or Map.

Custom Node Collections 🕷 🕲   🚰   🖉 🔏   🎌 🖽	Custom Node Collection ≍ <b>Q Q</b>   ≅	Node ≍ Layer 2 Map C			iptcm9.ind.hp.com	*
		iptor	n10 ipton	n12		
		deci	L2			
		ipts1		iptcm11		
			iptcm9			
₽¥.						

After you verify that the Custom Poll is successful and NNMi properly indicates that the disk space is Major, return the disk to its previous State.

7. Delete the large file from the Server.

Verify the Custom Polled Collection's Status has returned to Normal, by opening the Custom Polled Collection form and navigating to the **Status** tab.

Custom Polled Instanc	es × Custom Polled Instance ×				
0   0   0					
▼ Basics			Status Conclusions Incidents		
Node	iptcm9	<b>ii</b> -	<ul> <li>Overall Status</li> </ul>		
MIB Instance	.3		Status Normal		
Filter Value	1		Status Last Modified April 26, 2016 1:43:25 AM PDT		
Display Attribute	iptcm9-3				
Active State	Active		Status History		
Custom Node Collection	iptcm9	🐨 👻		M	M 📑
MIB Variable	DiskStorageUsed	<b>*</b>	Sta: ▼ Time Stamp		
Custom Poller Policy	ServerUsedDiskSpace	<b>*</b>	Ø 4/26/16 1:43 AM		
Collection	DiskStorageUsed	<b>*</b>			
Custom Polled Insta	ince State				
Status	Normal				
State	Normal				
Last State Change Value					
State Last Modified	Never				

8. Verify that the incident has been closed by returning to the Incident form for the generated incident.

All Incidents # Incident * Node # Incident *	
C' C E E C 📋	
<ul> <li>Basics</li> </ul>	General Correlated Parents Correlated Children Custom Attributes Diagnostics Registration
Message	Details
Interface Down	Name InterfaceDown
Severity Critical      Critical      Priority None      Closed      Clos	Category Fault ↓ Family Interface Origin NNMi Correlation Nature Root Cause
Source Node mplsp04	Duplicate Count 0 RCA Active  Correlation Notes
Assigned To 🛛 🔍 🗃 🗸	Incident duration: 39 minutes, 3 seconds, 211 ms Time incident detected: Tuesday, August 23, 2016 10:45:05 Tuesday, August 23, 2016 11:24:08 PM MDT. Incident cancelled by: InterfaceUp.
Notes	First Occurrence Time         August 23, 2016 10.45.05 PM MDT           Last Occurrence Time         August 23, 2016 10.45.05 PM MDT           Origin Occurrence Time         August 23, 2016 10.45.05 PM MDT

9. Return to the Custom Polled Instances view to verify the value of the MIB Poll Variable is below the High State threshold.

Network Node Manager i	<u>E</u> ile ⊻i	iew	Tools Actions	<u>H</u> elp							User Name: sy	stem NNMI Role: Administra
all Dashboards	Custom Po	olled In	stances #									
₀ <sup>€</sup> Incident Management	2   🖿	C	8 h K									₩ € 1-12 of 65 →
🚠 Topology Maps	Status	Stat	e Last State Change	MIB Variable	MIB Expression	MIB	Filter Value	Display Attribute	Node	Custom Poller Collection	Active State	State Last Modified
Gamma Monitoring	0	0	11,975,884.8	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm7-3	iptcm7	DiskStorageUsed	Active	Aug 23, 2016 11:59:14 PM
Non-Normal Node Sensors	0	٢	11,989,540.864	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm4-3	iptcm4	DiskStorageUsed	Active	Aug 23, 2016 11:58:23 PM
III Non-Normal Physical Sensors	0	0	11,895,009.28	DiskStorageUsed	DiskStorageUsed	.3	1	iptom11-3	iptcm11	DiskStorageUsed	Active	Aug 23, 2016 12:00:48 PM
III Non-Normal Chassis	0	0	11,896,922.112	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm9-3	iptcm9	DiskStorageUsed	Active	Aug 23, 2016 12:00:32 PM
Non-Normal Cards	0	0	11,962,273.792	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm5-3	iptcm5	DiskStorageUsed	Active	Aug 23, 2016 12:00:31 PM
Non-Normal Interfaces	0	0	11,961,458.688	DiskStorageUsed	DiskStorageUsed	.3	1	iptmoh-3	iptmoh	DiskStorageUsed	Active	Aug 23, 2016 12:00:19 PM
Non-Normal Nodes	0	٢	11,895,001.088	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm10-3	iptcm10	DiskStorageUsed	Active	Aug 23, 2016 12:00:14 PM
Non-Normal SNMP Agents	0	0	11,992,043.52	DiskStorageUsed	DiskStorageUsed	.3	1	iptcm6-3	iptcm6	DiskStorageUsed	Active	Aug 23, 2016 12:00:13 PM
Not Responding Addresses												
Interface Performance												
Chassis Redundancy Groups												
E Card Redundancy Groups												
Router Redundancy Groups												
Node Groups												
E Custom Node Collections												
E Custom Polled Instances												

10. After completing your initial testing, set the poll rate back to the desired value; for example, 5 minutes.

## Step 5: View the custom collection(s) as Reports

To ensure that the exported collections are showing up in the iSPI Performance for Metrics Reports, do the following:

- 1. Select one of the Servers from node group HostResourceNodes
- 2. Click Action > HPE NNM iSPI Performance > Reporting Report Menu

Network Node Manager i	Eile	⊻iew <u>T</u> ool	s Actions H	elp							User Na	me system
		_	Naps Maps		•							
ull Dashboards	Nodes	к	Graphs		•							
ه Incident Management		2 2	Node Acce     Rolling	\$\$	2					н	ostResourceNodes	⊽
🔥 Topology Maps	Status	I 🛦 Name	Ho <u>C</u> onfigurat	ion Details	) mt	Security Group	System Location	Device Profile	SN	l Status Last Modified	Notes	
Monitoring	0	hp2626-1	hp MIB Inform	ation	JIt Tenant	Default Security Group		«No SNMP»		Apr 25, 2016 4:04:25		
A Troubleshooting	0	internet-swit	int Custom At	p Membership tributes	ultTenant	Default Security Group	building 6 Annex	ciscoCat3524XL	~	Aug 22, 2016 12:43:40		
	8	internet-swit			ult Tenant	Default Security Group		«No SNMP»		Apr 25, 2016 4:06:36		
E No dec	∧	internet-swit	int M	- 1 M - 1 -	nt2	SecurityGroup2	building 6 Annex	«No SNMP»	~	Apr 25, 2016 3:59:05		
	8	internet swit	16 HP NNM is	nj Mode Pl Performance	Banart	ing Report Manu	ilding 6 Annex	ciscoCat2950t24	~	Apr 27, 2016 11:50:21		
IIII Interfaces	0	intsw-1	int 🖸 Run Baseli	ne Diagnostics	Syncin	terface and Node Groups	ilding 6 Annex	cisco3560G-24P:	•	Apr 25, 2016 3:58:31		
III IP Addresses	0	iptcm9	ips 🔲 Show Attac	ched End Nodes	Perform	mance Troubleshooting		ciscoCa12950124				
SNMP Agents	<u>A</u>	ipv6-vlan5-s	ipy Hypervisor		hnt2	SecurityGroup2	building 6 North	hp3500-24G-PoE	~	Aug 22, 2016 12:37:14		
III Web Agents	0	i <b>635</b> 0	16.78.56.99	16.78.56.99	Default Tenant	Default Security Group	LSPO north lab	juniper J6350	~	Aug 22, 2016 12:40:0		
III IP Subnets	= 😣	lab-a	lab-aftc.hpeswlab.ne	r	Default Tenant	Default Security Group		«No SNMP»		Apr 25, 2016 4:05:47		
I VLANs	0	lan-slc32-2	16.78.56.109	16.78.56.105	Default Tenant	Default Security Group	north LIT lab n-3	lantronixSLC	~	Aug 22, 2016 12:42:5		
Chassis		mpls2950-1	mpls2950-1 ftchnes	16 78 56 59	Default Tenant	Default Security Group	building 6 Annex	discoCat2950t24	~	Aug 25 2016 8 57-01		

3. You can see a new item DiskStorageUsed in the Reporting Tree.

HPE NNM iSPI Performance	
Current Status	
User: system (sign out) Path: Interface_Health Report: Status: Ready Filter: Set	
Preferences	
Reports Cross Domain	A
<ul> <li>Custom Collection</li> <li>DiskStorageUsed</li> <li>DiskStorageUsed -CustomF</li> <li>Reporterts</li> </ul>	bollMetrics
법 Calendar Calendar Chart Detail 라 Heat Chart 라 Managed Inventory 라 Most Changed 라 Peak Period 라 Threshold Sleeve 답 Top N 답 Top N Chart 라 Top N Table Top N Table	ufion
Report History	
Topology Filter	
Time Control	
BI Server	
Cross Launching	

4. Select a desired template (Top N Table in this example) and launch the report by selecting the right dimensions for the report.



# **Export the Custom Poller Collection**

NNMi enables you to store all the Custom Poller samples to a Command Separated Values (CSV) file.

To enable this feature, check to enable Export Custom Poller Collection. This causes NNMi to generate CSV files for each collection. One can compress the exported CSV files by enabling Compress Export File.



#### Note

The exported CSV file contains all samples, not just the samples that trigger a state change.

If the Export Custom Poller Collection attribute is enabled, NNMi exports the Custom Poller Collection to a comma-separated values (CSV) file that is written to the following directory (Periodic clean-up of this directory is recommended once the CSV files are consumed to avoid higher disk space utilization):

• Windows:

%NnmDataDir%¥shared¥nnm¥databases¥custompoller¥export¥final

• Linux:

\$NnmDataDir/shared/nnm/databases/custompoller/export/final

## Note

These flags are NOT required for exporting a custom collection as a Report Group in the iSPI Performance for Metrics (NPS). One must use these flags only if there is any third-party application or any other reason for analyzing the custom collected data.

<u>File Edit View Favorites Iools Help</u>												
🔾 Back 🔹 🕤 🗸 🦻 🔎 Search 🎓 Folders 🕼 🔅 X 🌂 🛄 -												
Address 🛅 C: \nnm\nnmdata\shared\nnm\databases\custompoller\export\final												
Folders ×	Name 🔺	Size	Туре	Date Modified	Attributes							
	DiskStorageUsed_20100330203806218.csv DiskStorageUsed_20100330204232206_ccv	21 KB	CSV File	3/30/2010 8:42 PM	A							
E i bin	DiskStorageUsed_20100330204731265.csv	25 KB	CSV File	3/30/2010 8:52 PM	A							
🗄 🧰 examples												
🕀 🧰 java												
IDIN     Icense-agreements												
🗄 🧰 migration												
🕀 🧰 misc												
E 💼 msg												
🗄 🧰 newconfig												
E C certificates												
🗉 🧰 installation												
🕀 🧰 log 📃												
🗆 🧰 shared												
actions												
E Certificates												
E Coll												
eventdb												

#### The CSV files can be imported into Microsoft Excel for easy viewing and graphing.

A		В	С		D	E	F	G	Н
218 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b	9dd-113165ae9a9c	15.2.127.135	cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3	.1.4) 1270312174234.0	0 31250	0.2	11928150
219 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b	9dd-113165ae9a9c	15.2.127.135	cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3.	1.4) 1270312202984.0	0 28750	0.2	11928150
220 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b	9dd-113165ae9a9c	15.2.127.135	cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3.	1.4) 1270312232984.0	0 30000	0.2	11928150
221 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b	9dd-113165ae9a9c	15.2.127.135	cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3	1.4) 1270312262984.0	0 30000	0.2	11928150
222 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b9dd-113165ae9a9c		15.2.127.135	cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3.	1.4) 1270312292984.0	0 30000	0.2	11928150
223 DiskStorageUsed_20100403102732859.csv:0d6b5062-f6d1-44ca-b9dd-113165ae9a9c			cheese.cnd.hp.com	((.1.3.6.1.2.1.25.2.3.1.	6 / 1000) * .1.3.6.1.2.1.25.2.3	1.4) 1270312324218.0	0 31234	0.2	11928228
224									
225									
226	13400000								
227	13200000								
228	13000000								
229	12800000								
230	12600000								
231	12400000								
232	12200000								
233	12000000			Series1					
234	11800000	-							
235	11600000								
236	11400000								
237	11200000								
238	1 2 5	58 <u>7</u> 28 1	6 2 2 3 3 3 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4	80					
239		N N M 4 4 1		17					
240									

# **Troubleshooting Tips**

NNMi provides feedback on common errors. This section describes some common types of feedback.

For Custom Poller Collections, NNMi supports queries of the following types (as defined in the MIB). Watch for possible aliases on the types.

Supported MIB Poll Variable Type	Supported MIB Filter Variable Type					
INTEGER, Integer32	INTEGER, Integer32					
Unsigned32	Unsigned32					
Counter, Counter32, Counter64	Gauge, Gauge32					
Gauge, Gauge32	OCTET STRING					
TimeTicks	IP Address					
OCTET STRING						

If you set up a Custom Poller Collection using a MIB Poll Variable or MIB Filter Variable of an unsupported type, NNMi displays an error in the Discovery State. NNMi also provides some additional information about the failure in the Discovery Information attribute.

Custom I	Custom Node Collections 🗶											
Status	Node	Active State	▼ Status Last Modified	Custom Poller Policy	Discovery Stat	Discovery State Last M	Discovery State Information					
0	sp-vcefxtw201300h9-floatir	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 24, 2016 3:44:01 .						
Ø	sp-virt-fcmovm4	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 24, 2016 3:44:00	No MIB instances found on node with filter value: 1					
0	sp-esxi4	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Failed	Aug 24, 2016 3:43:58	MIB Variable requested .1.3.6.1.2.1.2.2.1.17 does not exist on node					
$\oslash$	sp-cisco-basic-card-rhino	Active	Aug 23, 2016 1:17:25 .	DiskStorageUsed	Completed	Aug 24, 2016 3:44:02	No MIB instances found on node with filter value: 1					

If no Polled Instances pass the defined filter, you also see a notification in the Discovery Information attribute.

Custom I	Custom Node Collections ¥												
C   🗃   C 🕸   🦘 🔥													
Status	Node	Active State	▼ Status Last Modified	Custom Poller Policy	Discovery Stat	Discovery State Last M	Discovery State Information						
<b>V</b>	sp-vcextw2820000a-floating	Active	Aug 23, 2016 1:17:26.	DiskStorageUsed	Completed	Aug 24, 2016 3:44:00.							
0	sp-vcextw28220023-floatin	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 24, 2016 3:44:00.							
$\oslash$	sp-cp-c5500-ls1010	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 24, 2016 3:43:59	No MIB instances found on node with filter value: 1						
0	sp-vceftw27330009-floating	Active	Aug 23, 2016 1:17:26 .	DiskStorageUsed	Completed	Aug 24, 2016 3:44:01 .							

Custom Poller log messages can be found in the nnm.\*.log and nnm-trace.\*.log files.

# We appreciate your feedback!

If an email client is configured on this system, by default an email window opens when you click here.

If no email client is available, copy the information below to a new message in a web mail client, and then send this message to **network-management-doc-feedback@hpe.com**.

Product name and version: NNMi 10.30

Document title: Step-by-Step Guide to Custom Poller

Feedback:



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