

Foglight® 5.9.x
Transition Guide



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Legend



WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.



CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

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Before You Begin

Welcome to the *Transition Guide*. This *Transition Guide* includes information that allows you to quickly transition to Foglight® 5 using from a Foglight 4 perspective. Use it to find your Foglight 4 components in Foglight 5, understand typical workflows, and perform some of the basic administrative tasks. This guide is intended for Foglight 4 users who are getting started with Foglight 5.

Before you get started with Foglight 5, you need to ensure that your system is up and running and that you have appropriate permissions to access all of the system components.

- [Introducing Foglight 5](#)
- [How Do I Get Started?](#)

Introducing Foglight 5

Foglight® 5 is a powerful performance management solution that builds data models in real time. Unlike Foglight 4, where metric collection is somewhat static, Foglight 5 offers more flexibility by organizing the data into a hierarchical structure.

In addition to the changes to data collection, Foglight 5 includes a portable, Web-based interface which eliminates the need for a platform-dependent administrative application. To access the administrative interface, simply launch a Web browser instance and go to the Foglight Console URL.

This manual helps you get started with Foglight 5 quickly and efficiently, understand typical workflows, and perform some of the basic administrative tasks. For complete information on how to administer and use Foglight 5, see the *Administration and Configuration Help* and the *Foglight User Help*.

In most scenarios, a typical workflow includes the following procedure.

To get started with Foglight 5:

- 1 Launch the Foglight Management Server, your Foglight Agent Manager instances, and log into Foglight. For instructions, see [How Do I Get Started?](#) on page 5.
- 2 Find Foglight 4 components in Foglight 5 using the administrative interface. Locate Foglight 5 agents, ASPs, rules, or registry variables. For more information, see [Appendix: Finding Foglight 4 Components in Foglight 5](#) on page 112.
- 3 Familiarize yourself with typical workflows in Foglight 5. For example, find out what is the diagnostic workflow or where to find dashboards. For more information, see [Finding Your Way Around: Finding Your Way Around](#) on page 8.
- 4 Learn more about basic administrative tasks. For example, find out how to edit rules or registry variables. For more information, see [Setting Up For Long-Term Use: Setting Up For Long-Term Use](#) on page 49.

How Do I Get Started?

Before you start familiarizing yourself with the new environment, you need to ensure that you launch and obtain access to the following Foglight® 5 components:

- Foglight Management Server
- Foglight Agent Manager
- A Foglight user name and password

To get started:

- 1 Ensure that your Foglight Management Server and each of your Foglight Agent Manager instances are up and running.

For example, on Windows® platforms, you can start the Foglight Management Server by choosing **Start > Programs > Quest Software > Foglight 5.9.x > Start Foglight**. To start the Foglight Agent Manager, on the monitored host, navigate to `<foglight_agent_manager_home>/bin` and from there, issue the `fglam -s` command. For more information about this and other Foglight commands, see the *Command-Line Reference Guide*.

- 2 Obtain your Foglight user name and password.

For more information, refer to the *Installation and Setup Guide*.

- 3 Start the Foglight Console.

You can start the Foglight Console by opening a Web browser instance and navigating to the following URL:

`http://localhost:8080/console`

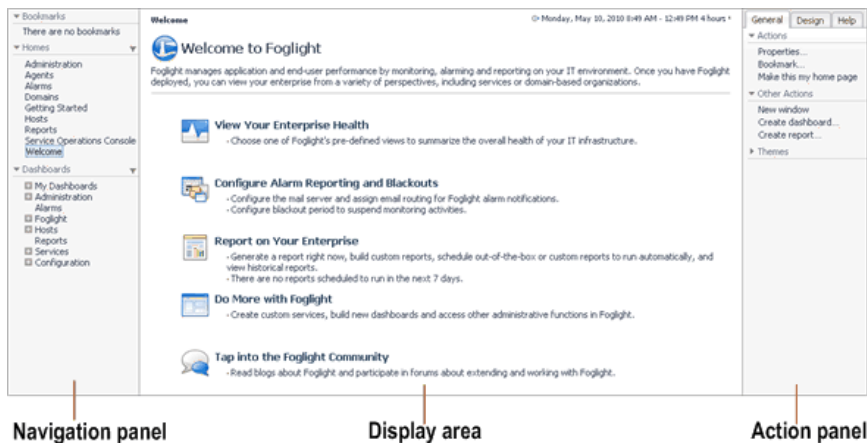
NOTE: The above URL assumes the default HTTP port number, 8080. For more information about default port assignments, see the *Foglight Administration and Configuration Help*.

Where *localhost* is the name of the machine that is running the Foglight Management Server.

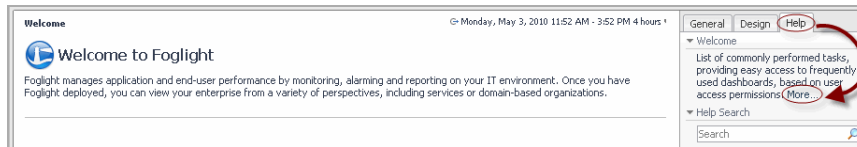
The Foglight login page appears in the Web browser.

- 4 Provide the user name and password you obtained in [Step 2](#).

The Welcome to Foglight page appears in the display area.



The Welcome page lists several tasks that you can perform by clicking an entry in the list. The appearance of the page depends on your user permissions. If your user account belongs to a group that has the Administrator role, this is what you see when you log into Foglight for the first time. If you do not have the Administrator role, and you have the Operator role, a slightly different version of the Welcome page appears in the display area. For more information about the Welcome page, refer to the online help topic for this page. You can view this help topic by clicking **More** on the action panel's **Help** tab.



From here, you can go to any of the following sections:

- [Finding Your Way Around](#) on page 8
- [Setting Up For Long-Term Use](#) on page 49

Finding Your Way Around

Once the Foglight® 5 components are up and running, you can start familiarizing yourself with Foglight 5 workflows. This chapter gets you started with a basic set of tasks, such as where to find the administrative interface, how to start a typical workflow, how to define services, and other important features.

i | NOTE: Each of the procedures in this chapter continues from [How Do I Get Started?](#) on page 5.

- [Where's the FOC?](#)
- [How Do I Know if My Agents Are Connected?](#)
- [How Do I Fix the Agents That Are Not Connected?](#)
- [What is My Single Pane of Glass?](#)
- [What Dashboards Are Available?](#)
- [How Do I Bookmark a Dashboard for Easy Access?](#)
- [How Do I Share My Dashboards with Other Users?](#)
- [What is the Diagnostic Workflow?](#)
- [How Do I Create Custom Maps?](#)
- [Where Are the Service Models?](#)
- [Why Do I See Only One Set of System Agent Variables?](#)
- [Can Multiple People Share My User Name?](#)
- [Can I Configure Everything to Look and Feel Like Foglight 4?](#)

Where's the FOC?

In Foglight® 5, the browser interface offers the functionality of the Foglight Operations Console (FOC) and Foglight Web Console through a comprehensive and intuitive interface, which lets you configure, administer, and manage Foglight in real time using a Web browser. The Web-based interface offers rich support for all of the FOC's capabilities while eliminating the need for a platform-dependent administrative application.

To perform an administrative task, simply open a Web browser instance and navigate to the Foglight browser interface URL. From here, you can administer and manage users, agents, cartridges, and rules, and explore dashboards and metric collections.

For information on where to find some of the common interface components that you used in Foglight 4, such as service model or rule browsers, see [Appendix: Finding Foglight 4 Components in Foglight 5](#) on page 112.

For information on the types and versions of Web browsers supported in Foglight 5, see the *System Requirements and Platform Support Guide*. To find out how to launch the Foglight Console, see [How Do I Get Started?](#) on page 5. For complete information, refer to the *Administration and Configuration Guide* or the *Foglight User Guide*.

See also

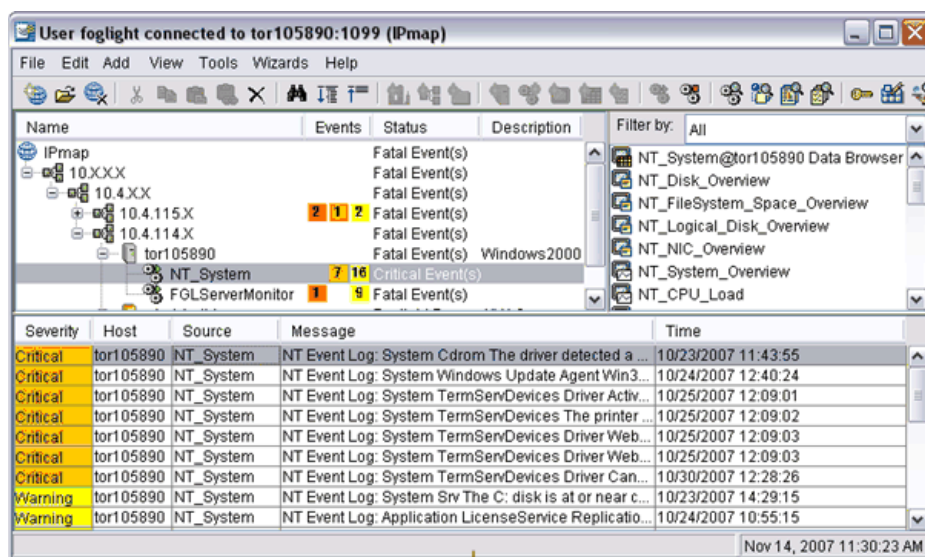
- [How Do I Get Started?](#) on page 5

- [How Do I Know if My Agents Are Connected?](#) on page 9
- [What is My Single Pane of Glass?](#) on page 14
- [What is the Diagnostic Workflow?](#) on page 32
- [Can I Configure Everything to Look and Feel Like Foglight 4?](#) on page 47

How Do I Know if My Agents Are Connected?

In Foglight® 4 you could check the status of your agent instances by looking at the IP map either in the Foglight Operations Console or the Foglight Web Console.

Figure 1. Foglight 4 user interface



Foglight 4: Foglight Operations Console

Foglight 4: Foglight Web Console



Foglight 5 offers two interfaces that let you find out if your agents are active and collecting data:

Figure 2. Agent Status dashboard in the browser interface

Agent Status

Use the Agent Status dashboard to manage agents. Start by deploying agent packages to Agent Managers. After deployment, you can create agents, edit their properties and activate them.

Agents

State	Status	Collecting Data	Private Property	Host Name	Agent Name	Namespace	Type	Tags	Version	Upgradable	Log File
<input type="checkbox"/>	✓			torrdv466	Monitor@l2000-cs	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	✓			torrdv466	Monitor@lab-sl10-01	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	✓			torrdv466	Monitor@lab-sl10-08a	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	✗			torrdv466	Monitor@plsqaw01	HostAgents	WindowsAgent		5.7.2	No	
<input type="checkbox"/>	✓			torrdv466	Monitor@rd_aix11	HostAgents	UnixAgent		5.7.2	No	

Tasks

Status	Action	Details	Host Name	Status Message	Duration Time
There Is No Task To Display					

Figure 3. Agents on All Hosts dashboard, a Foglight 5 equivalent of the IP map

Agents on All Hosts

The Agents dashboard lists the agents that are available for each host.

Monitored Hosts and Agents

Name	Type	Agent Health	State	Health	Alarms	Health History
All Hosts					1	
Host1						
Host2.example.com					1	

1 Outstanding Alarm(s) for All Hosts

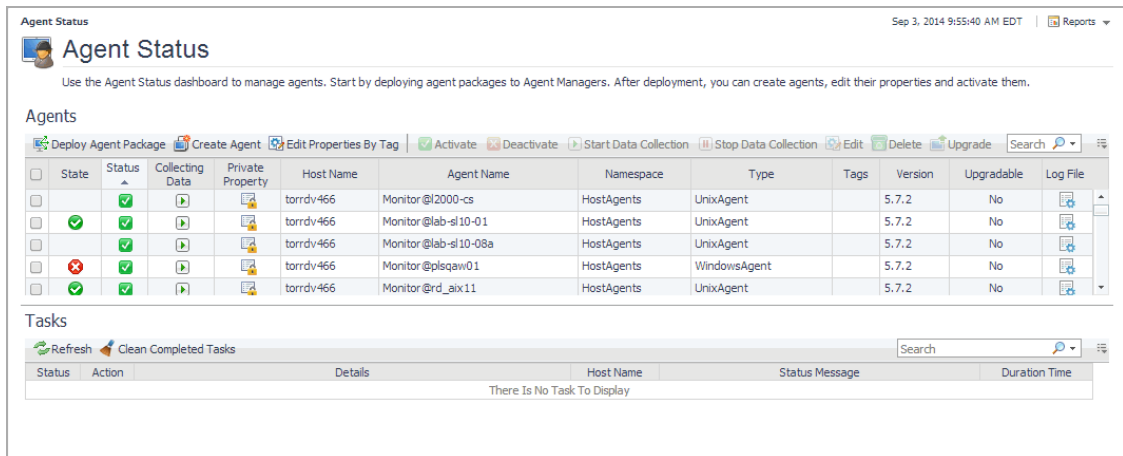
1 Alarm(s) | 1 Error Instance(s) | 1 Related Host(s) | 1 Related Agent(s)




S...	Time	Ack'd	Cleared	Host	Instance	Message
	11/28/11 2:29 PM	No	No	Host2.example.com	Host2.example.com (Host)	Excessive Interrupts Detected. Excessive interrupts are be

To find out if your agents are connected using the Agent Status dashboard:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow () on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
The Agent Status dashboard appears in the display area, showing a list of all agent instances.



For each agent that is currently active and collecting data, the **Collecting Data** icon () appears to the right of the **Active State** column () in the row containing the agent record. Similarly, the **Not Collecting Data** icon () indicates that an agent is active but is not collecting data:


To find out why an agent is not collecting data, see [How Do I Fix the Agents That Are Not Connected?](#) on page 13.

For more information about the Agent Status dashboard, see the *Administration and Configuration Guide*.

To find out if your agents are connected using the Agents on All Hosts dashboard:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow () on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Management Server > Agents**.

The Agents on All Hosts dashboard appears in the display area.

Figure 4. Agents on All Hosts dashboard



- 3 **Optional**—if you plan to use this dashboard on a regular basis, you might want to add it to the Bookmarks for easy access. For instructions, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25.

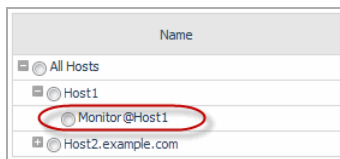
- 4 View the agents that are used to monitor a particular host.
 - a In the **Monitored Hosts and Agents** view, ensure that **All Hosts** is selected in the upper-left corner of the display area.

Figure 5. Selecting all hosts



- b In the **Monitored Hosts and Agents** view, in the **Name** column, expand a host node.
A list containing one or more monitoring agent instances appears under the host node.

Figure 6. Selecting a monitoring agent instance



For each agent that is currently collecting data, in the **Monitored Hosts and Agents** view, the **State** column shows the agent status.

When the agent instance is running, the following status indicator appears:

- **Collecting Data**

When the agent instance is running but not collecting data, one of the following status indicators appear:

- **Starting**
- **Stopped**
- **Stopping**
- **Unknown**

- 5 **Optional**—choose a different host.

In the **Monitored Hosts and Agents** view, expand the host node.

A list of agents that are collecting data from the selected host appears under the host node.

To find out why an agent is not collecting data, see [How Do I Fix the Agents That Are Not Connected?](#) on page 13.

For more information about Foglight 5 dashboards, see the *Foglight User Guide*.



See also

- [How Do I Get Started?](#) on page 5
- [How Do I Fix the Agents That Are Not Connected?](#) on page 13
- [How Do I Edit Agent Properties?](#) on page 49
- [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25

How Do I Fix the Agents That Are Not Connected?

If you find Foglight® agents that are not collecting data, you can perform a series of steps that will help you determine the root of the problem. If an agent is not collecting data, on the Agent Status dashboard, the **Not Collecting Data** icon (⊗) appears in the agent row.

Figure 7. Data collection stopped

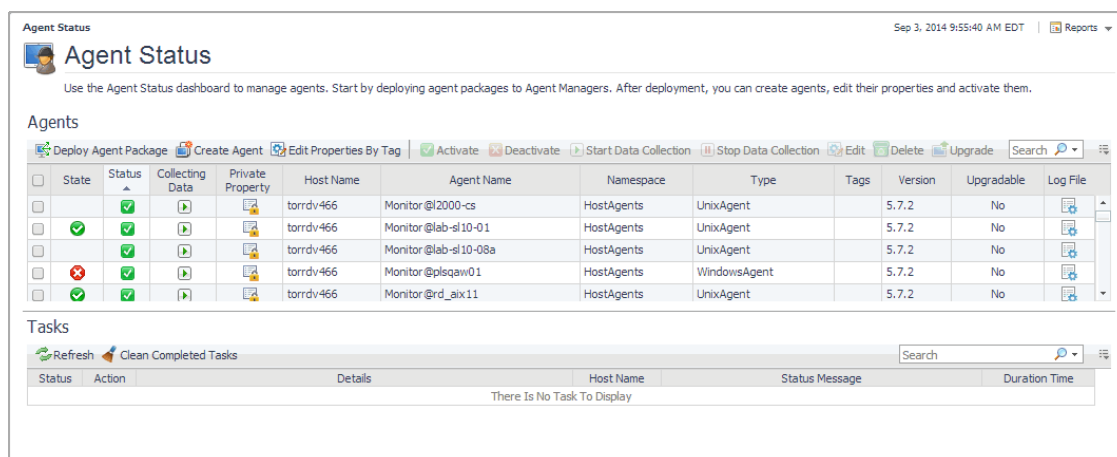
	Host1	Monitor@Host1	HostAgent: WindowsAgent	5.6.3	
---	-------	---------------	-------------------------	-------	---


























To fix an agent that is not connected:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
The Agent Status dashboard appears, showing a list of all agent instances.

Figure 8. Agent Status dashboard



State	Status	Collecting Data	Private Property	Host Name	Agent Name	Namespace	Type	Tags	Version	Upgradable	Log File
				torrdv466	Monitor@l2000-cs	HostAgents	UnixAgent		5.7.2	No	
				torrdv466	Monitor@lab-sl10-01	HostAgents	UnixAgent		5.7.2	No	
				torrdv466	Monitor@lab-sl10-08a	HostAgents	UnixAgent		5.7.2	No	
				torrdv466	Monitor@plsqa01	HostAgents	WindowsAgent		5.7.2	No	
				torrdv466	Monitor@rd_aix11	HostAgents	UnixAgent		5.7.2	No	

For those agent instances that are not collecting data, the **Not Collecting Data** icon (⊗) appears in the agent row.

- 3 If an agent instance appears in the Agent Status dashboard, but is not collecting data (see [To find out if your agents are connected using the Agent Status dashboard](#): on page 10), select the agent's row in the list and click **Start Data Collection** in the lower-right corner.
- 4 If you cannot successfully start an agent's data collection, or if the agent instance does not appear in the Agent Status dashboard, ensure that the Foglight Agent Manager is up and running. For more information, see [How Do I Get Started?](#) on page 5.
- 5 If the Foglight Client is up and running, check the agent's log files. Foglight stores information about agent activities in agent log files whose name and location use the following syntax:

```
<agent_mgr_home>/state/default/logs/<cartridge_name>/<cartridge_version>/<agent_type>/<agent_instance_name>_@<host_name>_<yyyy>_<mm>_<dd>_<hhmmss>_<file_ID>.log
```

Where:

- *agent_mgr_home* is the installation directory of the Foglight Agent Manager.
- *cartridge_name* is the name of the cartridge. For example, *HostAgents*.
- *cartridge_version* is the cartridge version. For example, *5.9.x*.
- *agent_type* is the agent type. For example, *WindowsAgent*.
- *agent_instance_name* is the name of the agent instance.
- *host_name* is the name of the host computer. For example, *Host2.example.com*.
- *yyyy, mm, dd, and hhmmss* specify the date and time the agent instance was started.

For example:

```
C:\Quest_Software\Foglight_Agent_Manager\state\default\logs\HostAgents\5.9.x\WindowsAgent\Monitor
@Host2.example.com_2011-11-28_141933_001.log
```

- 6 If you do not find any indicators in the log files, refer to the Foglight *Release Notes* and *Administration and Configuration Help* for more information.
- 7 If you do not find any relevant information in the documentation, contact Quest Support. See [Contacting Quest](#) on page 114.

See also

- [How Do I Get Started?](#) on page 5
- [How Do I Know if My Agents Are Connected?](#) on page 9
- [How Do I Edit Agent Properties?](#) on page 49

What is My Single Pane of Glass?

The browser interface allows you to create a dashboard that centers around your monitoring needs, and add it to the bookmarks for easy access. You can choose from a wide selection of portlet views that are available in the action panel on the right, and add them to your dashboard simply by dragging one or more views as required.

The type and range of views that appear in the action panel depend on the selection of the active Foglight® 5 cartridges in your monitoring environment, as well as your user permissions. For information on how to set user permissions in Foglight 5, see [How Do I Limit a User's Access?](#) on page 104.

Your selection of views should reflect the nature of your monitoring role. For example, if your role involves monitoring the overall health of host machines in your network, you can add the following portlet views to your dashboard page:

- *Host Summary Selector*. Displays the state of the CPU, memory, disk, and network resources for a selected host computer.
- *Alarm List with Filter*. Lists all of the system alarms chronologically and shows the severity, host, and additional information for each alarm.

To add portlet views to a dashboard:

i | **NOTE:** To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

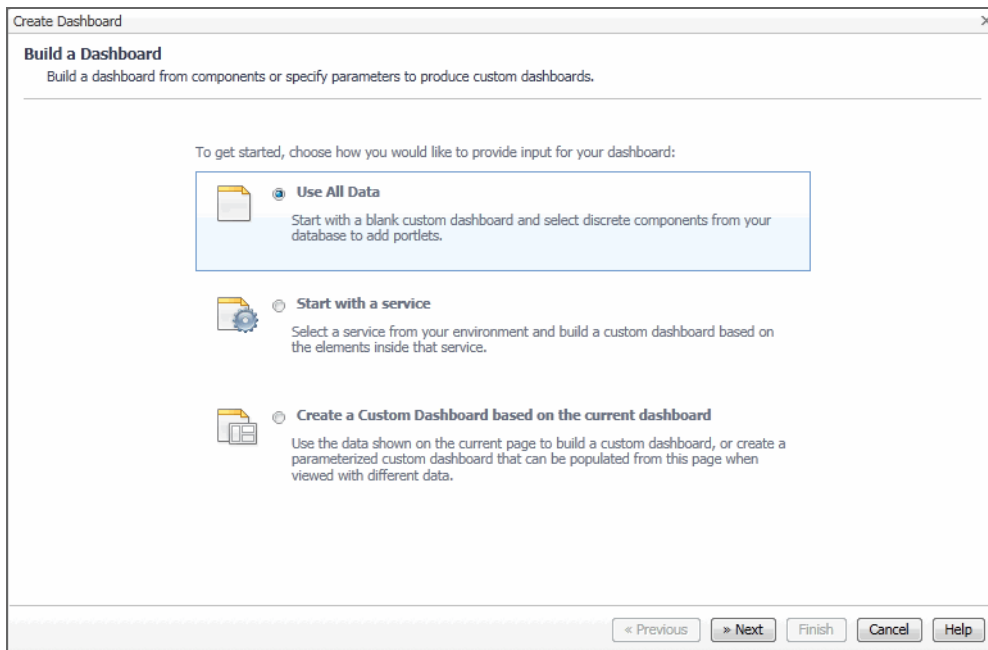
- 1 Evaluate your monitoring requirements.
- 2 Ensure that the navigation and action panels are open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

To open the action panel, click the left-facing arrow (◀) on the right.

- 3 On the action panel, on the **General** tab, under **Other Actions**, click **Create dashboard**.

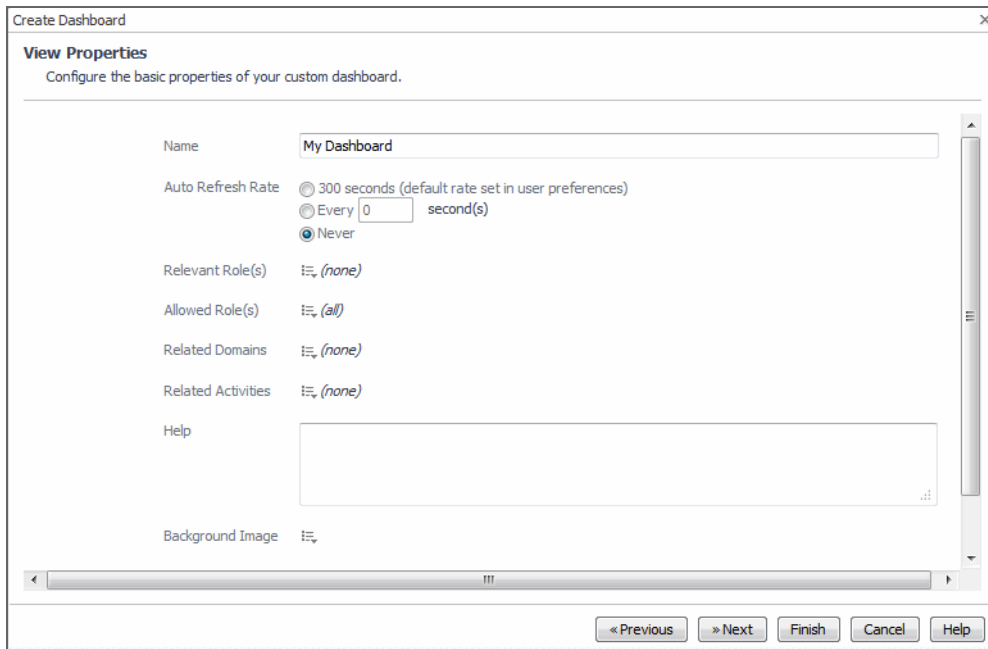
Figure 9. Create Dashboard wizard with the Build a Dashboard page open



- 4 Choose the type of data input for your dashboard.

In the **Create Dashboard** wizard, on the **Build a Dashboard** page, select **Use All Data** to build a dashboard from the available data elements, and click **Next**.

Figure 10. View Properties page in the Create Dashboard wizard



- 5 Specify the settings for the dashboard that you want to create.

For example, to name the dashboard *My Alerts*, and have it refresh automatically every five minutes, complete the following steps.

- a On the **View Properties** page, in the **Name** box, type `My Alerts`.

Note Some dashboards do not show an input table and you do not need to select inputs. This table provides a list of inputs on the current dashboard and appears when you are viewing a dashboard that has some inputs. In other words, if you do not know what information to include on your dashboard, you can leave the **Inputs** table as-is.

- b Under **Auto Refresh Rate**, ensure that the **300 seconds (default refresh interval set in user preferences)** option is selected.
- c **Optional**—if required, limit the user access by specifying the user roles that are required for viewing this dashboard. For the purpose of this example, you can keep the default settings: **none** for the **Relevant Role(s)** and **all** for the **Allowed Role(s)**. They act as filters, allowing a user to view only those dashboards that are applicable to their user needs. For more information, see the *Web Component Guide*.

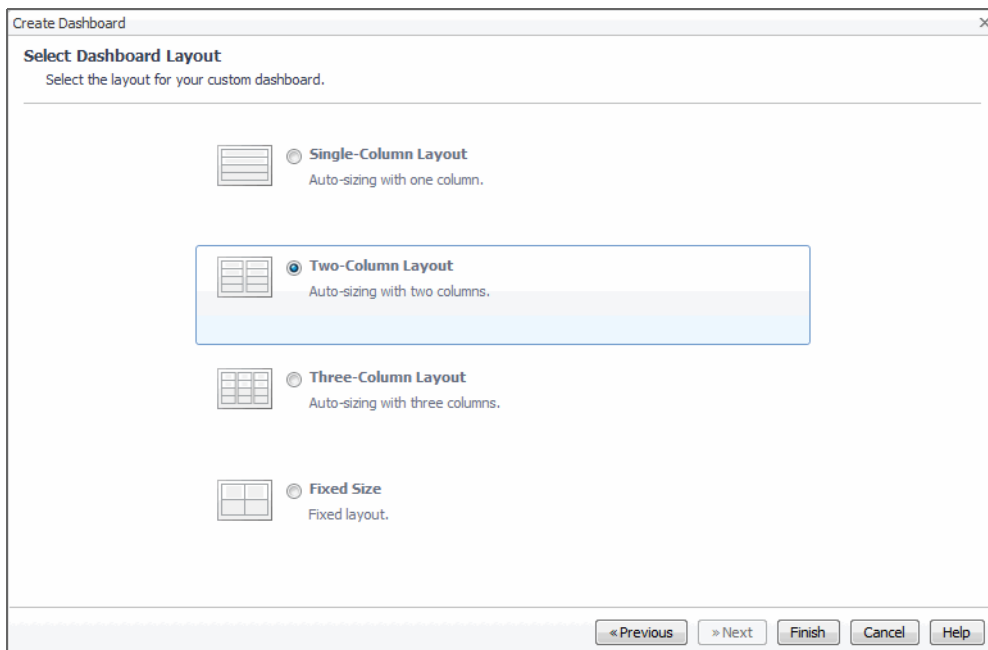
- d **Optional**—write help text for this dashboard by typing it into the **Help** box.

This text appears in a tooltip when you hover over the dashboard name in the navigation panel. For the purpose of this example, you can keep the **Help** box blank.

- e **Optional**—if you want this dashboard to be available as a reportlet, select the **Allow this view to be included in other views** check box. For the purpose of this example, you can keep the check box clear.

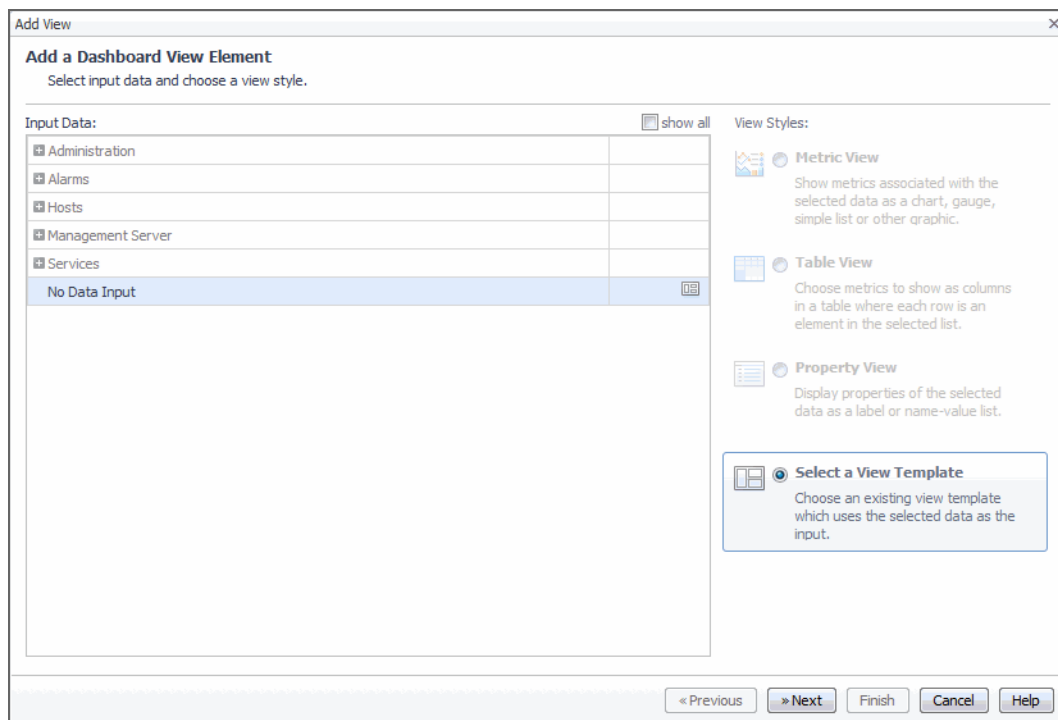
- 6 In the **Create Dashboard** wizard, click **Next**.

Figure 11. Select Dashboard Layout page in the Create Dashboard wizard



- 7 Choose the type of layout for your custom dashboard. For example, to have the dashboard contents appearing in two columns, select **Two-Column Layout**, and click **Finish**.

Figure 12. Add View wizard

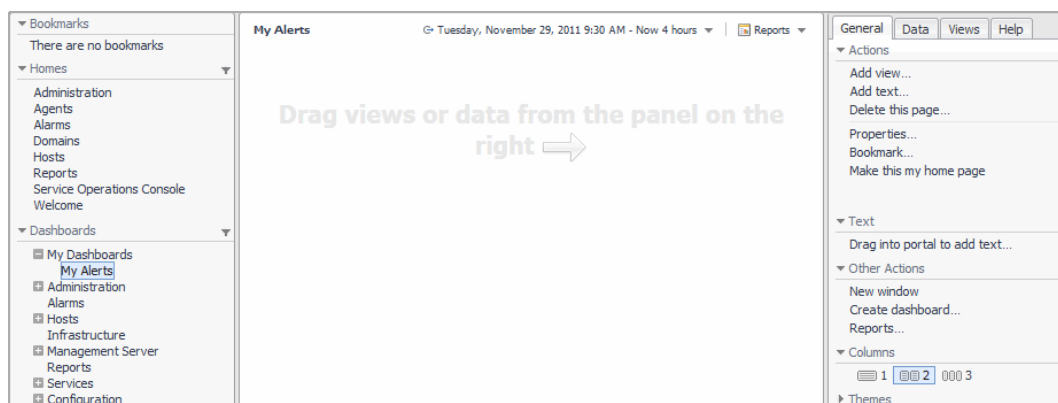


The **Add View** wizard allows you to select data and a view type, and to add it to the newly created dashboard. For the purpose of this example, we will use a different approach: instead of selecting data elements and choosing a view type, we will add views that already exist in the system.

- 8 Click **Cancel** to close the **Add View** wizard.

The newly created dashboard, **My Alerts**, appears in the display area. A node representing that dashboard, **My Alerts**, appears on the navigation panel under **Dashboards > My Dashboards**.

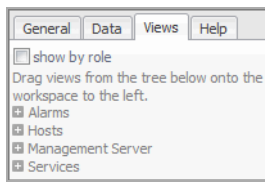
Figure 13. My Alerts dashboard



- 9 On the action panel, open the **Views** tab.

The **Views** tab shows the modules containing the views that you can add to your dashboard. The range of modules depends on the selection of installed cartridges.

Figure 14. Views tab

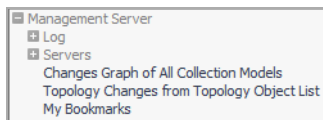


- 10 **Optional**—observe the nodes representing the views that appear in the action panel. To see a list of views contained by a module, in the action panel, expand the node representing that module.

For example, expand the **Management Server** node.

A list of views and/or sub-nodes appears under the **Management Server** node.

Figure 15. Expanding the Management Server node



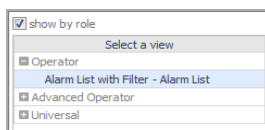
- 11 **Optional**—filter the views that appear in the action panel by role.

A role defines a set of tasks that a user can perform, and is assigned to one or more groups as required. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

To filter the views, select the **show by role** check box.

The **Views** tab refreshes, showing a list of nodes, each representing a role.

Figure 16. Filtering views

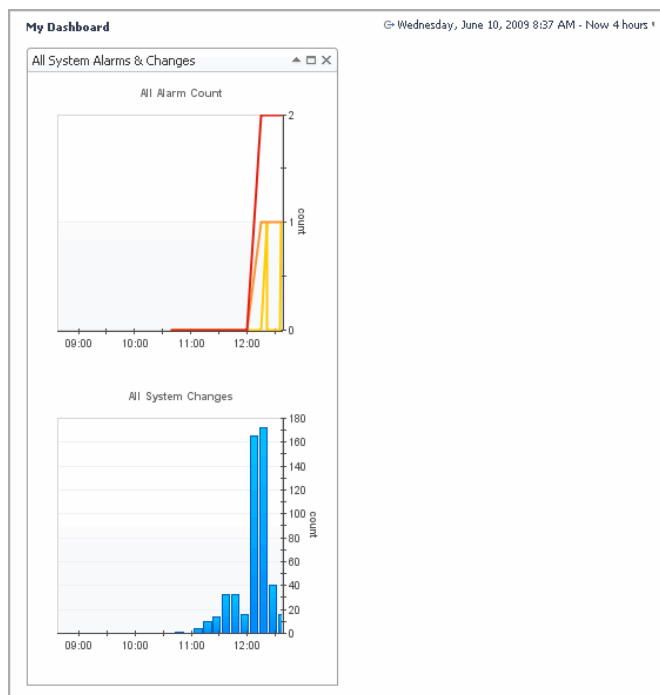


- 12 On the **Views** tab, use the navigation tree to select one or more views that best represent your monitoring needs and add them to your dashboard.

To add a portlet view to the dashboard, expand the node representing the module that contains the view, and drag the view from the action panel to the dashboard.

For example, to add a view that shows all system alarms and changes to your dashboard, on the action panel, ensure the **show by role** check box is cleared, expand the **Alarms** module, followed by clicking and dragging the **System Alerts and Changes** node to the dashboard pane.

Figure 17. All System Alerts and Changes view



For complete information on how to add portlet views to dashboards, see the *Foglight User Guide*.

See also

- [How Do I Get Started?](#) on page 5
- [What Dashboards Are Available?](#) on page 19
- [What is the Diagnostic Workflow?](#) on page 32

What Dashboards Are Available?

Foglight® 5 offers a number of dashboards you can use to monitor your environment in real time. The type and range of available dashboards reflect the type of Foglight 5 cartridges in your monitoring environment and your user permissions. For information on how to set user permissions in Foglight 5, see [How Do I Limit a User's Access?](#) on page 104.

There are several types of dashboards that you can access:

- *Administration dashboards* include a collection of dashboards that let you manage agents, cartridges, users, and thresholds. You can find them in the navigation panel under **Dashboards > Administration**.
- *System dashboards* include a set of core Foglight dashboards, and the dashboards that are installed with any cartridges that are running in your monitoring network. Typically, any dashboards that are accessible through the navigation panel, are core dashboards.:
 - **Dashboards > Alarms**
 - **Dashboards > Hosts**
 - **Dashboards > Management Server**
 - **Dashboards > Reports**
 - **Dashboards > Services**

- *User dashboards* include any dashboards that you define. You can find them in the navigation panel under **Dashboards > My Dashboards**. For more information on how to create dashboards, see [How Do I Build a Graph?](#) on page 87.
- *Configuration dashboards* include a set of dashboards that let you look at data and create your own dashboards. You can find them in the navigation panel under **Dashboards > Configuration**.
- *Cartridge dashboards* are the dashboards that come with Foglight 5 cartridges. You can find them under **Dashboards > cartridge**, where *cartridge* is the cartridge name.

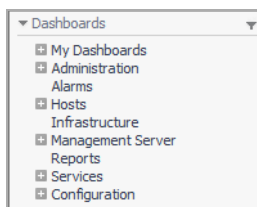
In addition to the system and user dashboards, you can add dashboards to the Bookmarks module for easy access if required. For instructions, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25.

To view Foglight 5 dashboards:

NOTE: To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

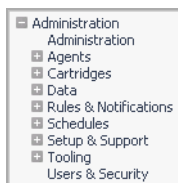
- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 Observe the modules that appear in the navigation panel under **Dashboards**.

Figure 18. Dashboard modules



- 3 Look at administrative dashboards.
 - a On the navigation panel, under **Dashboards**, expand the **Administration** module.
A set of sub-modules appears under the **Administration** module.

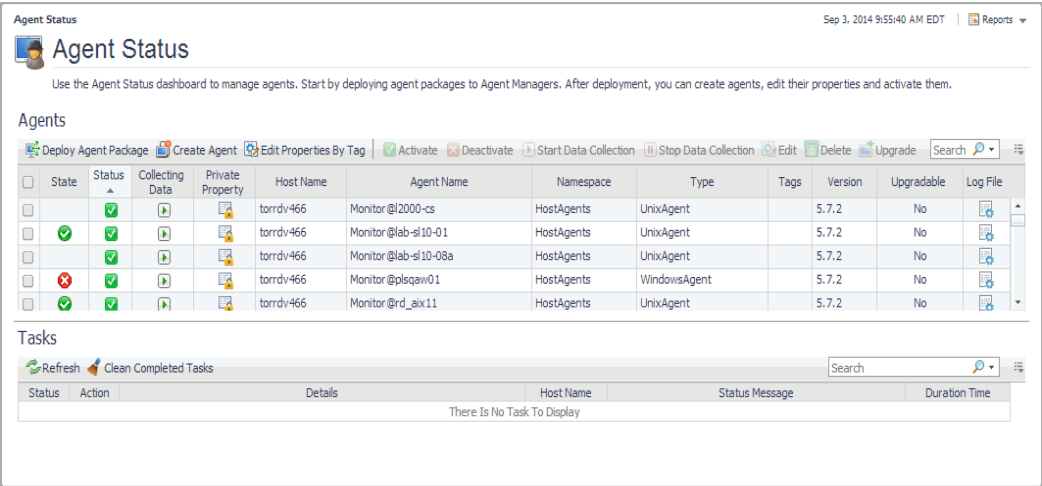
Figure 19. Administration modules



Each of the sub-modules that appear contains one or more dashboards.

- b Expand a sub-module and select a dashboard.
The dashboard appears in the display area. For example, to look at the Agent Status dashboard, under **Dashboards**, choose **Administration > Agents > Agent Status**.
The Agent Status dashboard appears in the display area.

Figure 20. Agent Status dashboard

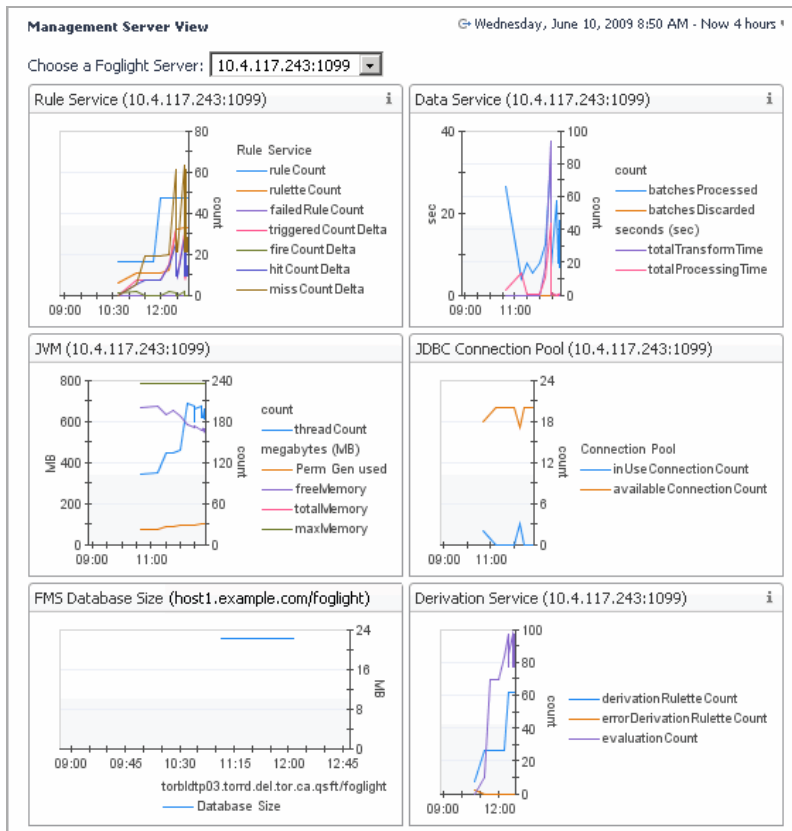


- 4 View a core Foglight dashboard.
- a On the navigation panel, under **Dashboards**, expand the **Management Server** node.
A set of sub-modules appears under the **Management Server** node.

Figure 21. Management Server modules



- b Expand a sub-module and select a dashboard.
The selected dashboard appears in the display area.
For example, to look at the Management Server View dashboard, on the navigation panel, under **Dashboards**, choose **Management Server > Servers > Management Server View**.
The Management Server View dashboard appears in the display area.

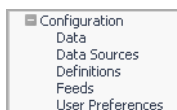


5 Look at the configuration dashboards.

- On the navigation panel, under **Dashboards**, expand the **Configuration** module.

A set of sub-modules appears under the **Configuration** module.

Figure 22. Configuration modules



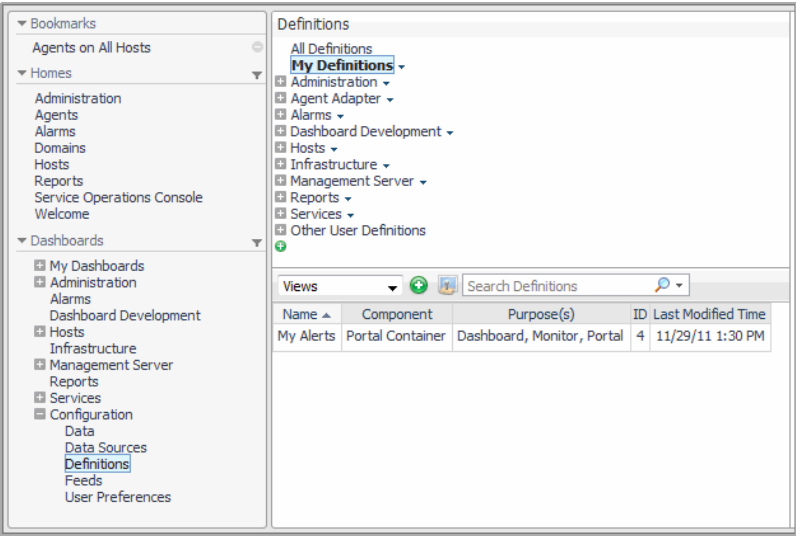
Each of the sub-modules represents a dashboard.

- Select a sub-module. The dashboard appears on the right.

For example, to look at the Definitions dashboard that lets you create views, queries, and other Web components, under **Dashboards**, choose **Configuration > Definitions**.

The Definitions dashboard appears in the display area.

Figure 23. Definitions dashboard



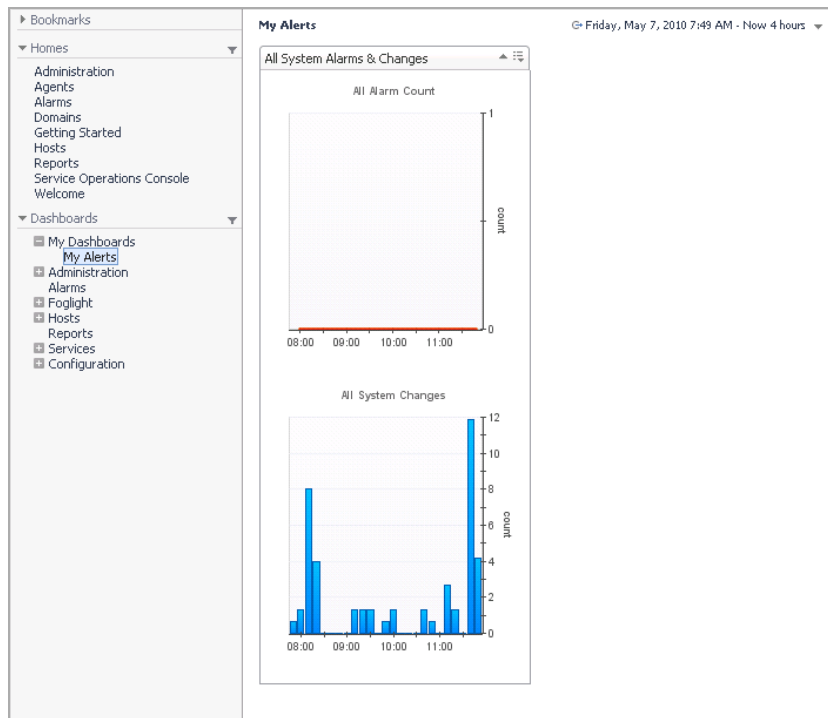
- 6 If you previously created any dashboards, you can access them using the **My Dashboards** node in the navigation panel.
- a On the navigation panel, under **Dashboards**, expand **My Dashboards** module.
One or more sub-modules appear under the **My Dashboards** module.

Figure 24. My Dashboards module



- b Select a sub-module that represent a dashboard.
The dashboard appears in the display area.
For example, to select the dashboard that was created in [What is My Single Pane of Glass?](#) on page 14, *My Alerts*, under **Dashboards**, choose **My Dashboards > My Alerts**.
The dashboard appears in the display area.

Figure 25. My Alerts dashboard

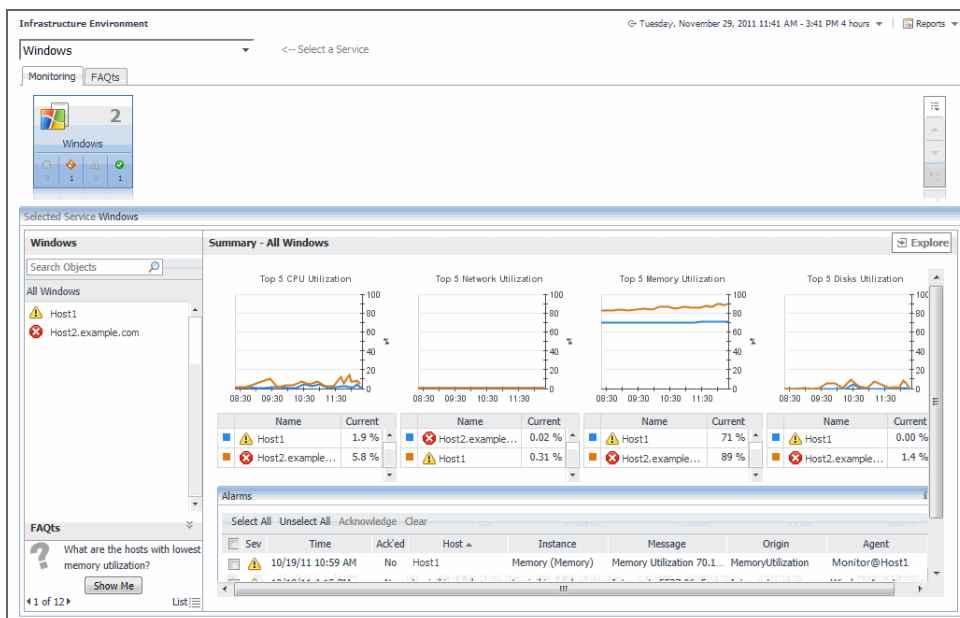


7 Look at a cartridge dashboard.

For example, if you have the Infrastructure cartridge installed in your environment, on the navigation panel, under **Dashboards**, click the **Infrastructure** node.

The Infrastructure Environment dashboard appears in the display area.

Figure 26. Infrastructure Environment dashboard



See also

- [How Do I Get Started?](#) on page 5

- [What is My Single Pane of Glass?](#) on page 14
- [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25
- [How Do I Share My Dashboards with Other Users?](#) on page 27
- [What is the Diagnostic Workflow?](#) on page 32
- [How Do I Build a Graph?](#) on page 87

How Do I Bookmark a Dashboard for Easy Access?

If you plan to use one or more Foglight® 5 dashboards on a regular basis, you can add them to Bookmarks in order to quickly access them when required.

To add a dashboard to Bookmarks:

NOTE: To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that both the navigation and action panels are open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

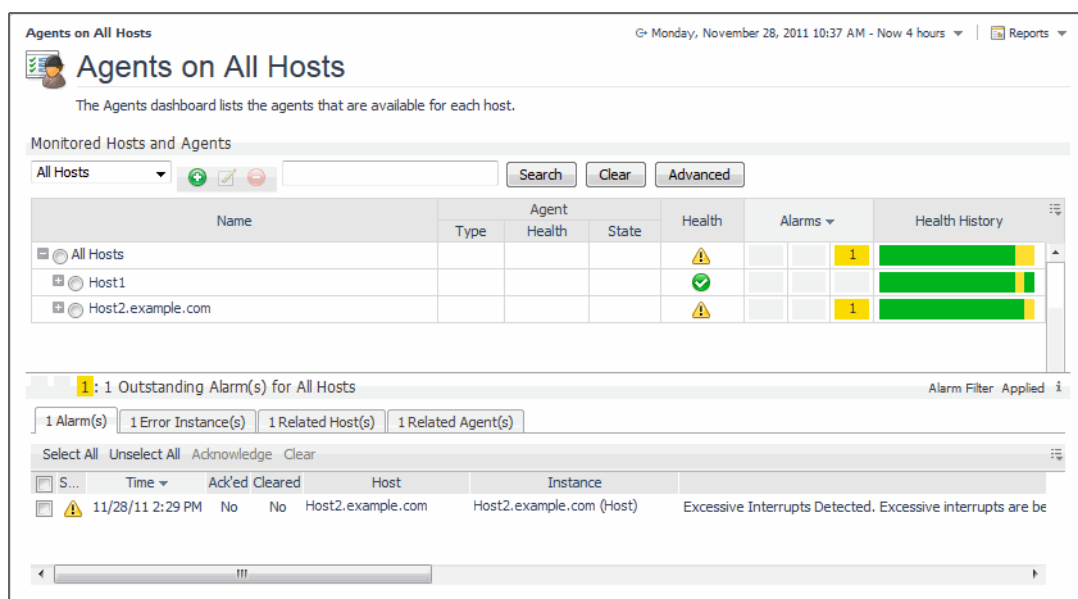
To open the action panel, click the left-facing arrow (◀) on the right.

- 2 Use the navigation panel to locate the dashboard that you want to add to Bookmarks.

For example, to bookmark the core Agents on All Hosts dashboard, on the navigation panel under **Dashboards**, choose **Management Server > Agents**.

The Agents on All Hosts dashboard appears in the display area.

Figure 27. Agents on All Hosts dashboard



- 3 On the action panel, on the **General** tab, under **Actions**, click **Bookmark**.

The **Bookmark** dialog box appears.

Figure 28. Bookmark dialog box

- 4 Use the **Bookmark** dialog box to specify the settings for the Agents on All Hosts dashboard as required.

The **Bookmark** dialog box closes and the node representing the newly-bookmarked dashboard appears under **Bookmarks** on the navigation panel. If you chose to add the Agents on All Hosts dashboard to Bookmarks, the **Agent on All Hosts** module appears under **Bookmarks** on the navigation panel.

Figure 29. Agent on All Hosts module



- 5 On the navigation panel, click the newly-created bookmark.

The Agents on All Hosts dashboard appears in the display area.

Figure 30. Agents on All Hosts dashboard

Name	Type	Agent Health	State	Health	Alarms	Health History
All Hosts				⚠	1	[Green bar]
Host1				✓		[Green bar]
Host2.example.com				⚠	1	[Green bar]

1: 1 Outstanding Alarm(s) for All Hosts

1 Alarm(s) | 1 Error Instance(s) | 1 Related Host(s) | 1 Related Agent(s)

S...	Time	Ack'd	Cleared	Host	Instance	Message
⚠	11/28/11 2:29 PM	No	No	Host2.example.com	Host2.example.com (Host)	Excessive Interrupts Detected. Excessive interrupts are be

See also

- [How Do I Get Started?](#) on page 5
- [What is My Single Pane of Glass?](#) on page 14
- [What Dashboards Are Available?](#) on page 19

- [How Do I Share My Dashboards with Other Users?](#) on page 27

How Do I Share My Dashboards with Other Users?

When you create a dashboard, a module representing that dashboard appears in the navigation panel under Dashboards > My Dashboards. You can use that module to view the newly-created dashboard.

Other Foglight® users with the Cartridge Development and Operator roles can copy or edit that dashboard as needed. Assuming that you have the appropriate access permissions, you can view a dashboard that has been created by another user by copying it to your dashboard definitions. When you copy another user's dashboard, view it by selecting the module representing that dashboard in the navigation panel, under Dashboards > My Dashboards.

For information on user permissions, see [How Do I Create a User?](#) on page 99 and [How Do I Limit a User's Access?](#) on page 104; for information on how to create custom dashboards, see the *Web Component Tutorial*.

To view a dashboard created by another user:

NOTE: To complete this procedure, your user account must belong to a group with the Dashboard Designer role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

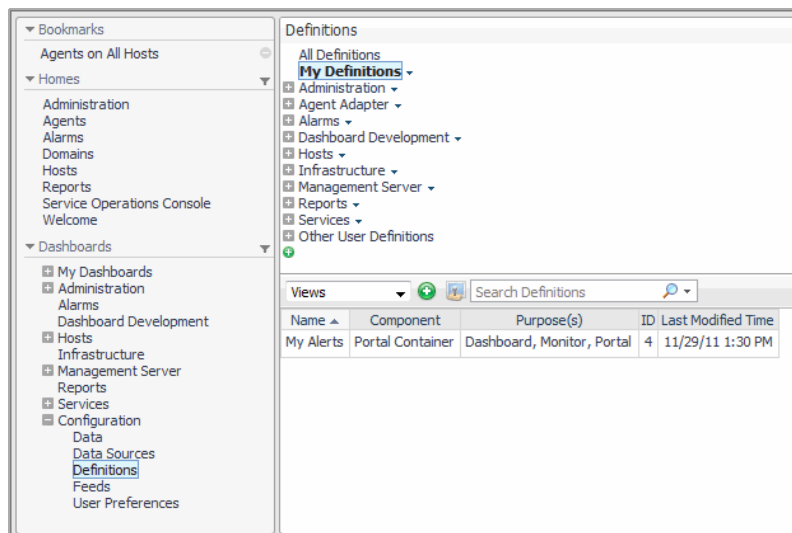
- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Definitions**.

The Definitions dashboard appears in the display area, showing a navigation tree in the **Definitions** pane and a series of tabs in the lower-left pane.

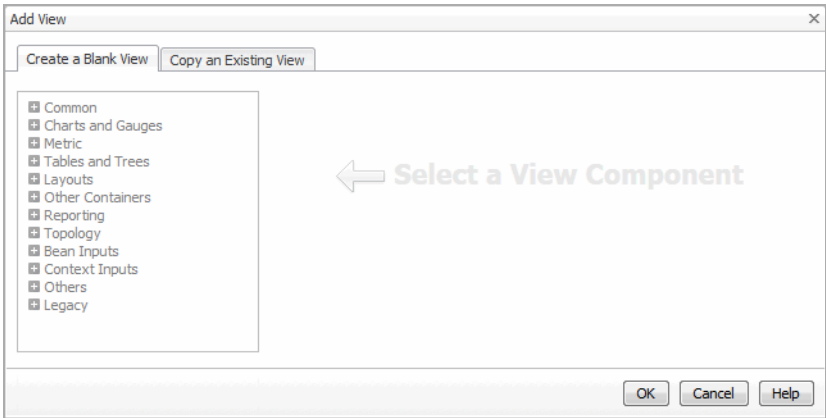
Figure 31. Definitions dashboard



- 3 In the **Definitions** pane, ensure that **My Definitions** node in the navigation tree is selected.
- 4 In the lower-left pane, ensure the **Views** entry is selected.
- 5 Click

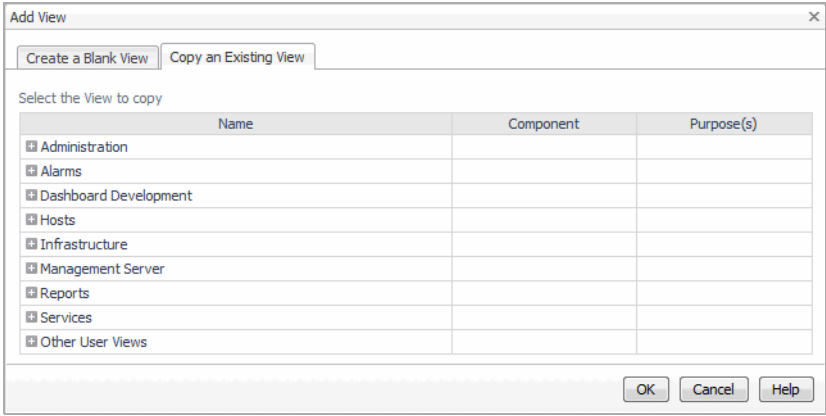
The **Add View** wizard appears.

Figure 32. Add View wizard



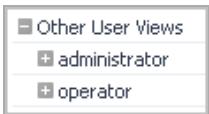
- 6 Choose from existing views.
- In the **Add View** wizard, open the **Copy an Existing View** tab.
- On the **Copy an Existing View** tab, a navigation tree appears.

Figure 33. Copy an Existing View tab



- 7 On the **Copy an Existing View** tab, expand the **Other User Views** node.
- One or more nodes appear under the **Other User Views** node, each representing a user.

Figure 34. Other User Views node



- 8 Expand the node representing the user whose dashboard you want to copy.
- One or more views appear under the selected user node.

Figure 35. Finding other users' views

Other User Views		
administrator		
Acknowledgement Info	Cell-Oriented Table	Dialog
Alarm List with Filter - Alarm List	Row-Oriented Table	Monitor, Pagelet, Reportlet, Data View
Alarm List with Filter - Current Alarms	Grid Layout	Page, Pagelet
Alarm Origin	Label	Pagelet
Clearing Info	Cell-Oriented Table	Dialog
Host Selector	Row-Oriented Table	Dashboard, Page, Pagelet
Info Not Available	Label	Pagelet
operator		

- 9 Select a view representing the dashboard that you want to copy and click **OK**.

The **Add View** wizard closes and the dashboard definitions appear in the right pane of the Definitions dashboard with the **General** tab open.

Figure 36. General tab

- 10 In the **New View** tab of the Definitions dashboard, click **Save** to add that dashboard to your collection of dashboards.

In the lower-left pane of the Definitions dashboard, an entry representing that dashboard appears in the list of views.

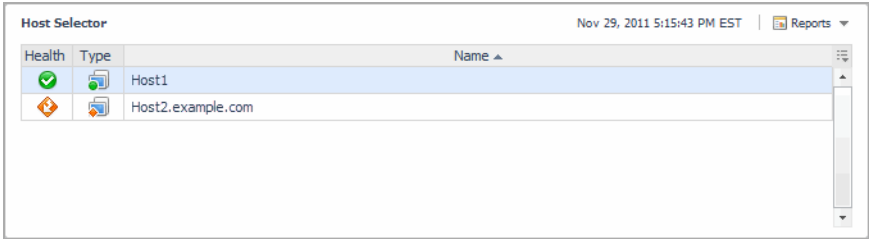
Figure 37. Dashboard view

Name	Component	Purpose(s)	ID	Last Modified Time
Copy of Host Selector	Row-Oriented Table	Dashboard, Page, Pagelet	7	11/29/11 5:14 PM
My Alerts	Portal Container	Dashboard, Monitor, Portal	4	11/29/11 1:30 PM

- 11 To view the contents of the newly copied dashboard, on the navigation panel, under **Dashboards**, expand **My Dashboards** module and select the node representing the newly-copied dashboard.

The contents of the selected dashboard appear in the display area.

Figure 38. Viewing the contents of the copied dashboard

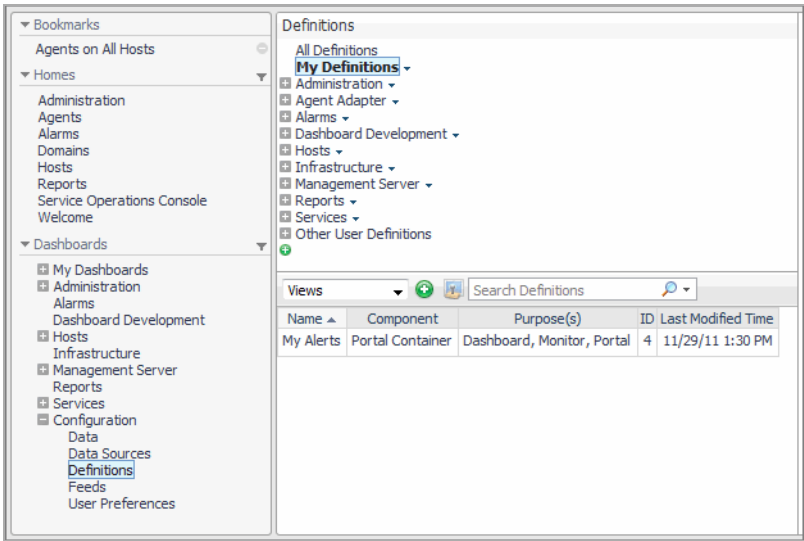


To edit a dashboard created by another user:

NOTE: To complete this procedure, your user account must belong to a group with the Dashboard Designer role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Definitions**.
The Definitions dashboard appears, showing a navigation tree in the **Definitions** pane and a series of tabs in the lower-left pane.

Figure 39. Definitions dashboard



- 3 In the **Definitions** pane, expand the **Other User Definitions** node.
One or more nodes appear under the **Other User Definitions** node, each representing a user.

Figure 40. Other User Definitions node



- 4 Click the node representing the user whose dashboard you want to edit.
In the lower-left pane, in the **Views** tab, one or more views appear.

Figure 41. User definition views

Views				
Search Definitions				
Name	Component	Purpose(s)	ID	Last Modified Time
Copy of Host Selector	Row-Oriented Table	Dashboard, Page, Pagelet	7	11/29/11 5:14 PM
My Alerts	Portal Container	Dashboard, Monitor, Portal	4	11/29/11 1:30 PM

- 5 Select a view representing the dashboard that you want to edit.

The dashboard definitions appear in the right pane of the Definitions dashboard.

Figure 42. Dashboard definitions

Copy of Host Selector ✕

Edit Remove Validate Test Move Copy

Module: foglight
 Name: Copy of Host Selector
 Component: Row-Oriented Table
 Purpose(s): Dashboard, Page, Pagelet
 Comments:

Context Inputs

Key	Name	Usage	Data Type	Fallback Value
hosts		Optional	Monitoring:List of Hosts	Function (getPhysicalHosts' from the System module Management Server/Commons)
host		Optional	Monitoring:Host	

Primary Input: hosts

Configuration

- Rows Context <hosts> returning "Localized Value"
- Columns
 - Column
 - Stack Mode Configuration
 - Value Context <currentRow>/aggregateState returning "Localized Value"
 - Cell Data Availability
 - ID wcf_column_0
 - Header String Template (Health)
 - Width
 - Sizing Specified
 - Value 32
 - Header Alignment
 - Cell Alignment

- 6 To edit the selected dashboard, in the right pane, click  Edit.

The dashboard definitions appear in the right pane of the Definitions dashboard with the **General** tab open.

Figure 43. Editing a dashboard

Copy of Host Selector ✕

Save Cancel Test Config Wizard

General Context Configuration Flow

Module: foglight
 Component: Row-Oriented Table
 Name: Copy of Host Selector
 Public: ☐
 Deprecated: ☐
 Refresh Interval: second(s)
 Priority: None
 Purpose(s): Dashboard, Page, Pagelet
 Custom Purpose(s):
 Relevant Role(s): (none)
 Allowed Role(s): (all)
 Comments:
 Context Help:

- 7 Edit the dashboard definitions, as required.

For more information on how to edit or create a dashboard, see the *Web Component Tutorial*.

See also

- [How Do I Get Started?](#) on page 5
- [What Dashboards Are Available?](#) on page 19
- [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25
- [How Do I Create a User?](#) on page 99
- [How Do I Limit a User's Access?](#) on page 104

What is the Diagnostic Workflow?

Foglight® 5 allows you to set up the administrative interface in the way that best suits your monitoring role by bookmarking existing dashboards and using existing views to create new dashboards quickly and efficiently. The selection of dashboards and portlet views you can choose from largely depends on the monitoring requirements as well as your user role. Once you set up Foglight, you will quickly access dashboards and views of your choice in order to investigate problems in your monitoring environment and diagnose the cause of any bottlenecks.

Start by examining the available dashboards and views. If you find one or more dashboards that you want to use on a regular basis, you can add them to the bookmarks. For more information about Foglight 5 dashboards, see [What Dashboards Are Available?](#) on page 19. To acquire instant access to one or more portlet views, use the commands in the action panel to quickly create a dashboard and add those views to that dashboard. For instructions on how to add portlet views to a dashboard, see [What is My Single Pane of Glass?](#) on page 14.

Any dashboards that you create appear under Dashboards > My Dashboards while the existing dashboards that your bookmarked appear under Bookmarks in the navigation panel. For instructions, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25. Once you add dashboards to the Bookmarks and My Dashboards modules, use those modules as a starting point in your investigation.

To view Bookmarks and My Dashboards:

i | **NOTE:** To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

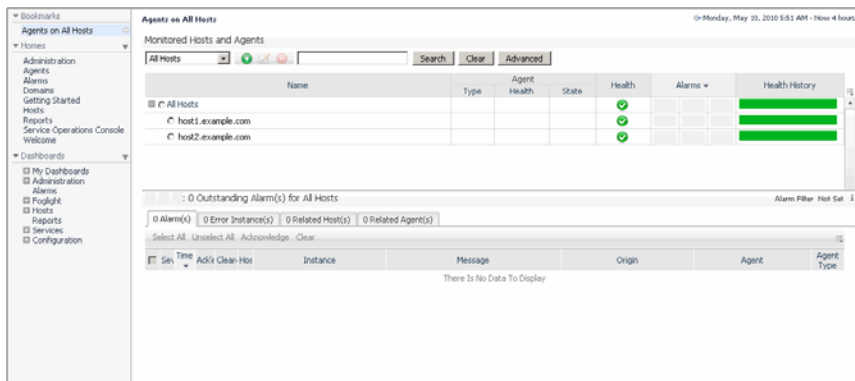
- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (►) on the left.

- 2 To view the contents of a dashboard that you previously added to Bookmarks, on the navigation panel, select the module that represents that dashboard under **Bookmarks**.

The contents of the selected dashboard appear in the display area.

Figure 44. Dashboard appearing in the display area

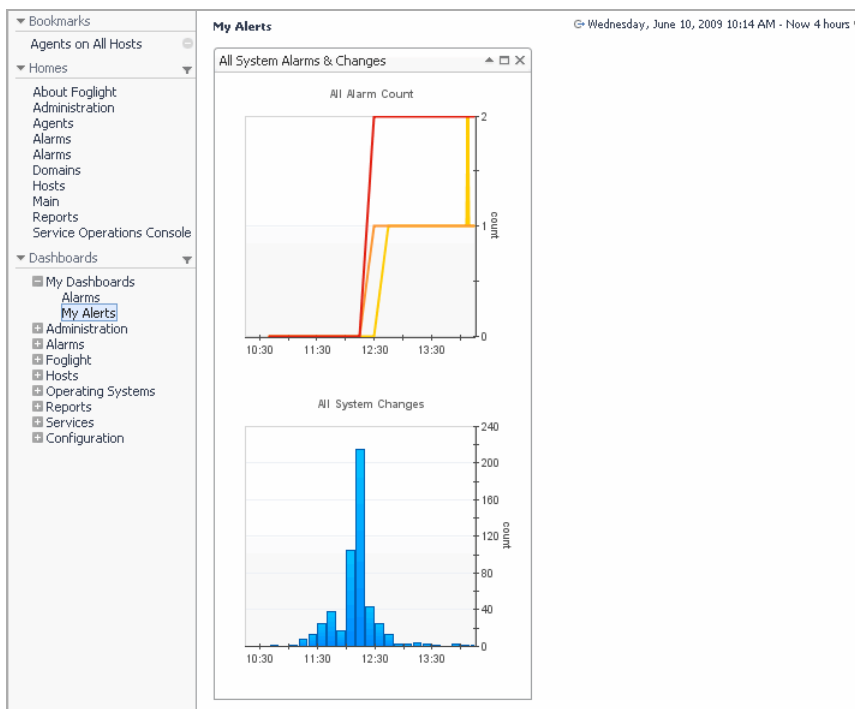


For instructions on how to add a dashboard to Bookmarks, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25.

- 3 To view the contents of a dashboard that you have previously created, on the navigation panel, under **Dashboards**, expand **My Dashboards** and select the module representing that dashboard.

The contents of the selected dashboard appear in the display area.

Figure 45. Viewing a selected dashboard



For information on how to create a dashboard, see [How Do I Build a Graph?](#) on page 87.

See also

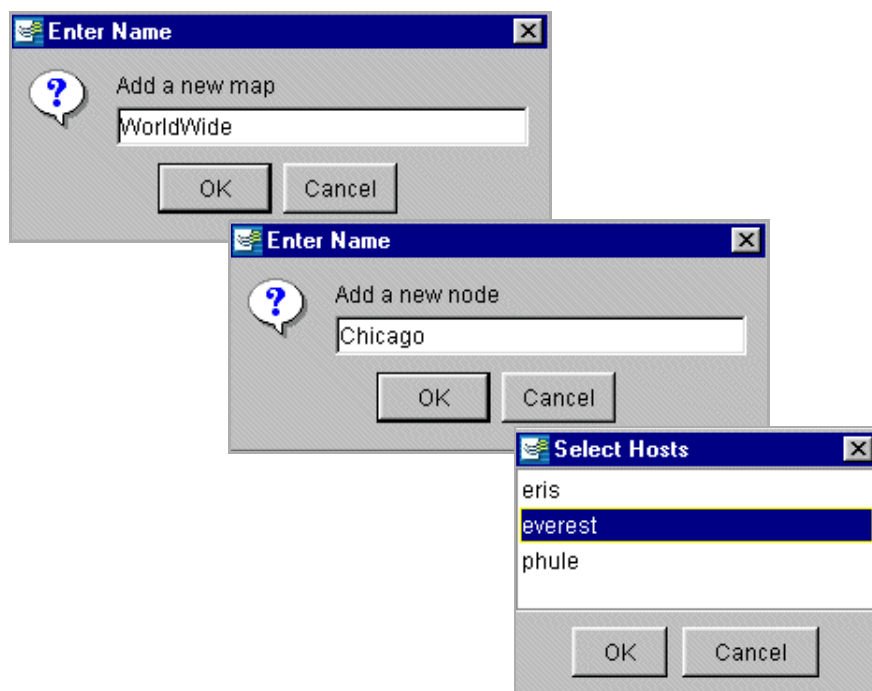
- [How Do I Get Started?](#) on page 5
- [What is My Single Pane of Glass?](#) on page 14
- [What Dashboards Are Available?](#) on page 19
- [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25.

How Do I Create Custom Maps?

The concept of custom maps that existed in Foglight® 4 has been replaced by services in Foglight 5. A service is a collection of monitoring components that you can use to define your business processes. It can contain other logical components such as other services, as well as physical components such as host machines.

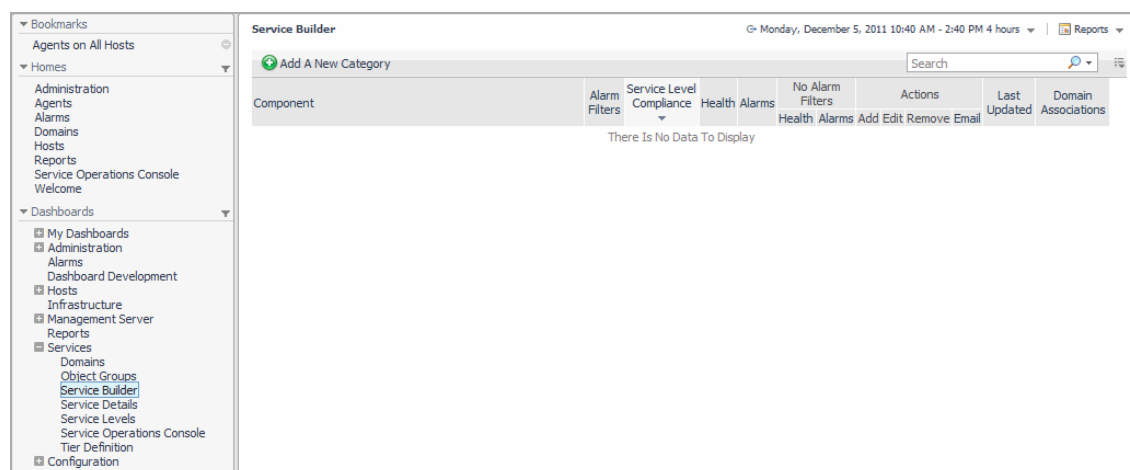
In Foglight 4, you used menu commands to create custom maps and add nodes—such as a city, subnet, or folder—and hosts to each custom map.

Figure 46. Creating custom maps in Foglight 4



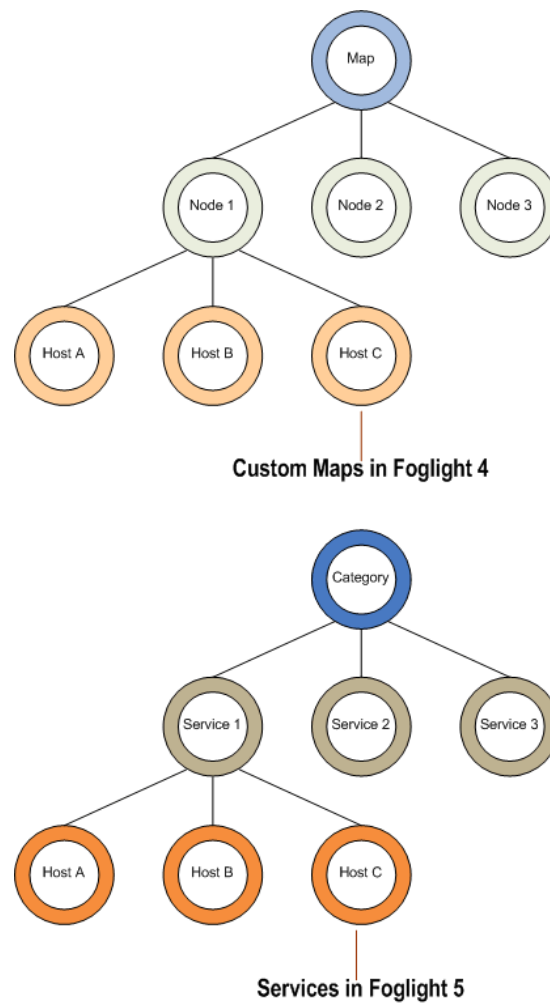
In Foglight 5, you can use the Service Builder dashboard to create custom maps using services.

Figure 47. Foglight 5 Service Builder



Services can be used as equivalents of Foglight 5 maps, while categories in Foglight 5 can represent Foglight 4 nodes. The relationship between categories, services, and hosts in Foglight 5 is equivalent to that of maps, nodes, and hosts in Foglight 4, as illustrated in the following diagram.

Figure 48. Maps and services



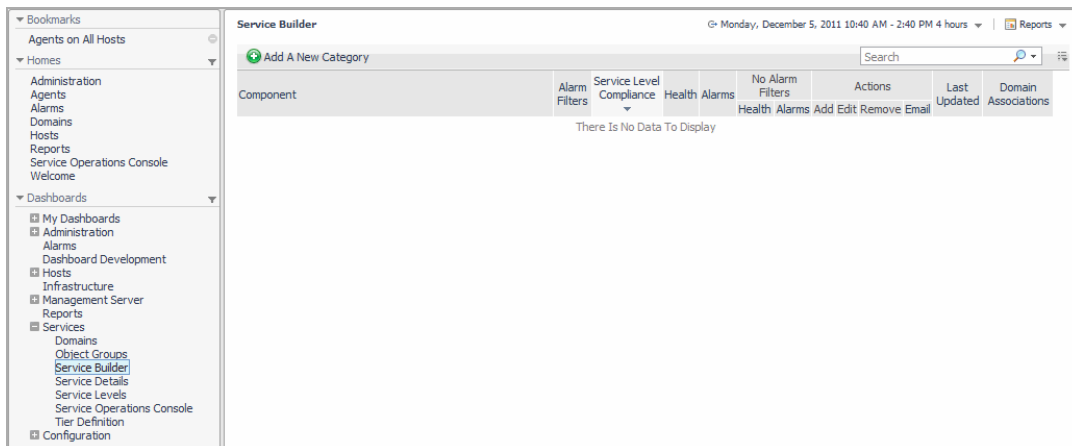
Like maps in Foglight 4, a category in Foglight 5 can have one or more services, while a service can have one or more hosts. For the purpose of the following example you will create a category called *MyCustomMap*, add a service to the *MyCustomMap* category, *MyNode*, and finally, add a host to the *MyNode* service. The layout and functionality of the resulting structure in Foglight 5 resembles a Foglight 4 custom map.

To create a custom map using the Service Builder dashboard:

NOTE: To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

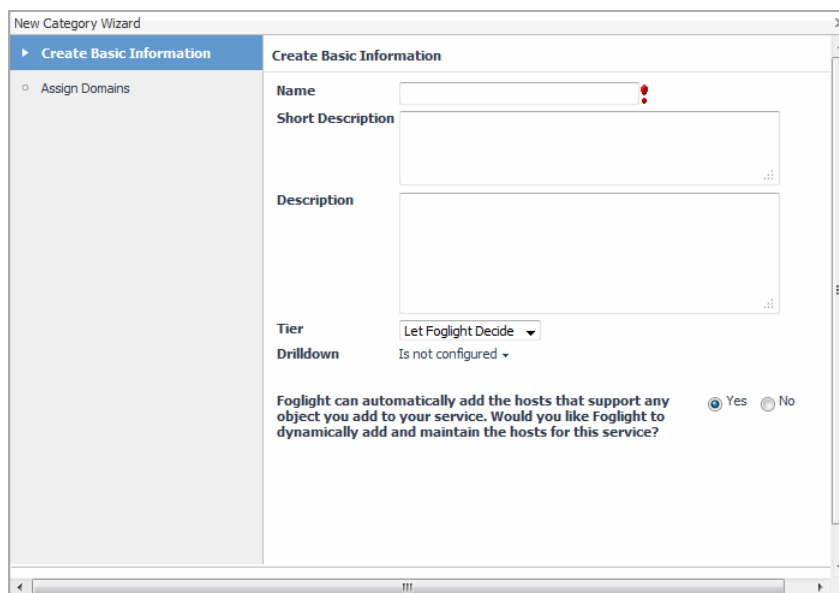
- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (►) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Services > Service Builder**.
The Service Builder dashboard appears in the display area.

Figure 49. Service Builder



- 3 Create a new map.
 - a In the upper-left corner of the Service Builder dashboard, click **Add A New Category**.
The **New Category Wizard** appears.

Figure 50. New Category Wizard

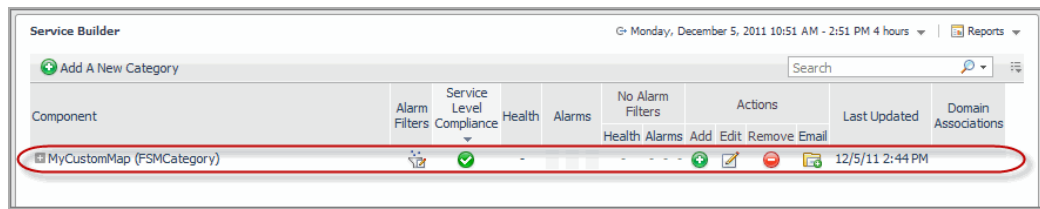


- b In the **New Category Wizard**, in the **Name** box, type the map name. For example: MyCustomMap.
 - c **Optional**—use the **Short Description** and **Description** boxes to add information about the custom map that you are about to create, and select one of the **Perspective** options to describe the category type.


Leave the other settings at their default values.
 - d **Optional**—to automatically add any hosts that support any objects that you are about to add, ensure that **Yes** is selected. This is a default setting. For the purpose of this example, there is no need to change it.
 - e Click **Finish**.

The **New Category Wizard** closes and the newly added service category representing your custom map appears in the Service Builder dashboard.

Figure 51. New service category in the Service Builder

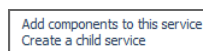


4 Add a node to the custom map.

- a On the Service Builder dashboard, in the row containing the newly created service component, in the **Add** column, click .

A menu appears.

Figure 52. Adding components to a service



- b In the menu, click **Create a child service**.

A menu appears.

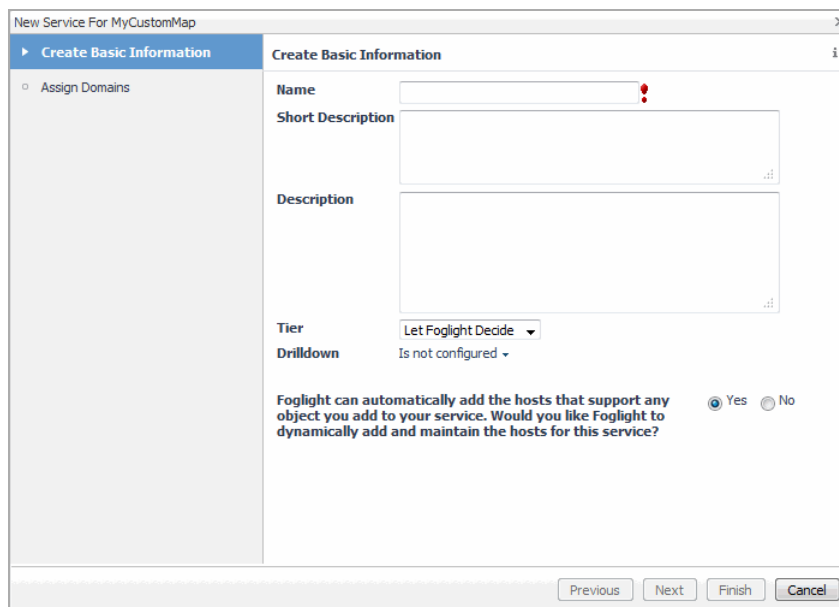
Figure 53. Creating a child service



- c In the menu, click **New Local Service**.

The **New Service For MyCustomMap** wizard appears.

Figure 54. New Service For MyCustomMap wizard



- d In the **New Service For MyCustomMap** wizard, in the **Name** box, type the node name.
For example, MyNode.
- e **Optional**—use the **Short Description** and **Description** boxes to add information about the node that you are about to add, and select one of the **Perspective** options to describe the service type.
Leave the other settings at their default values.

- f Click **Finish**.
- g When the **New Service For MyCustomMap** wizard closes, expand the **MyCustomMap** node on the Service Builder dashboard.

The newly-created node, **MyNode**, appears under **MyCustomMap**.

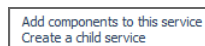
Figure 55. Node added to the service

Component	Alarm Filters	Service Level Compliance	Health	Alarms	No Alarm Filters	Health	Alarms	Add	Edit	Remove	Email	Last Updated	Domain Association
MyCustomMap (FSMCategory)		✓	-		-	-	-	+		-		12/5/11 2:57 PM	
MyNode (FSMChildService)		✓	-		-	-	-	+		-		12/5/11 2:57 PM	
0 Hosts Managed By Foglight													

- 5 Add a host to the newly-created node in your custom map.
 - a In the row containing the newly created service component, in the **Add** column, click .

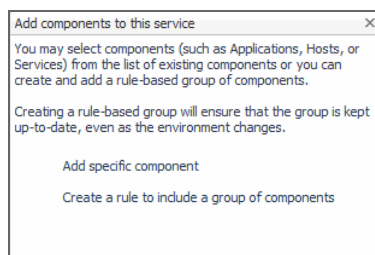
A menu appears.

Figure 56. Adding components to a service



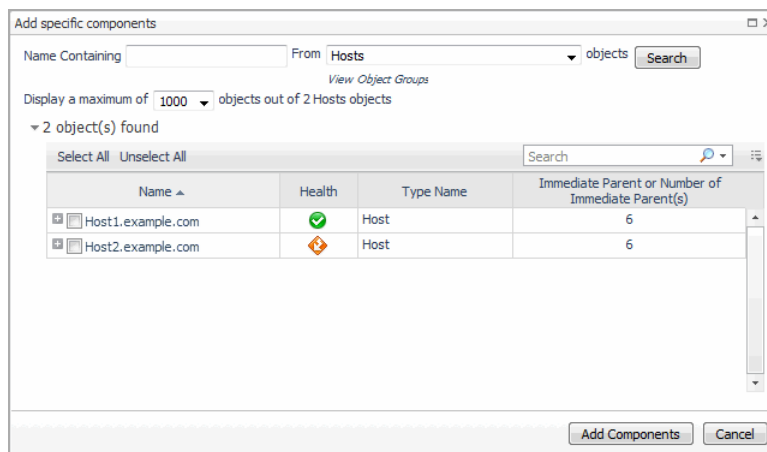
- b In the menu, click **Add components to this service**.
- The **Add Service Components** dialog box appears.

Figure 57. Add Service Components dialog box



- c In the **Add Service Components** dialog box, click **Add specific component**.
- The **Add specific components** dialog box appears.

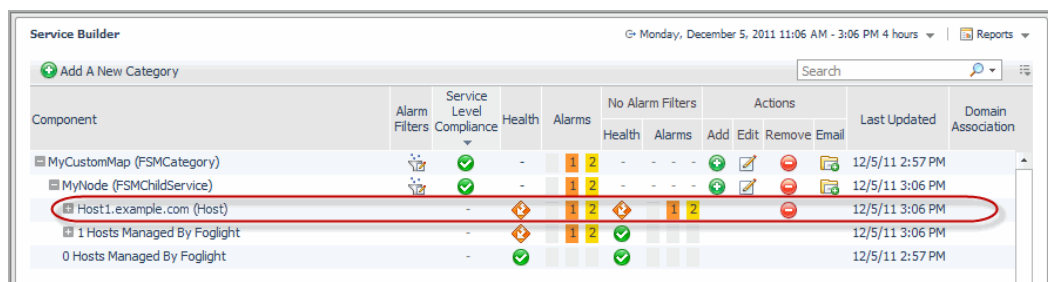
Figure 58. Add specific components dialog box



- d Select a desired host object and click **Add Components**.

The **Add specific components** dialog box closes and the Service Builder dashboard refreshes, showing the newly added host node.

Figure 59. Host added to the service tree



See also

- [How Do I Get Started?](#) on page 5
- [Where Are the Service Models?](#) on page 39

Where Are the Service Models?

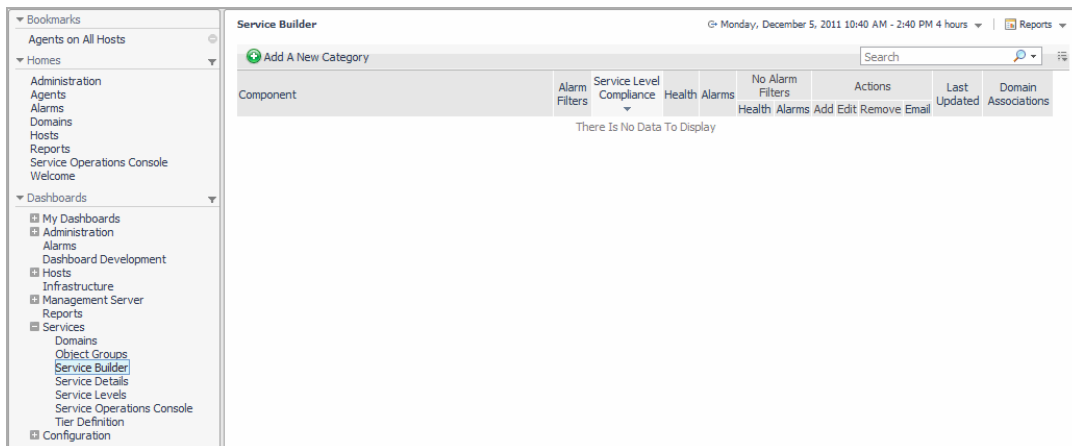
In Foglight® 5, you can re-create your Foglight 4 service models using the Service Builder dashboard.

To open the Service Builder dashboard:

i **NOTE:** To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Services > Service Builder**.
The Service Builder dashboard appears in the display area.

Figure 60. Service Builder dashboard



- 3 Add or remove services as required.

For complete instructions on how to add a service, see [Step 3](#) through [Step 5](#) in [To create a custom map using the Service Builder dashboard](#): on page 35.

For more information about the Service Builder dashboard, see the *Foglight User Guide*.

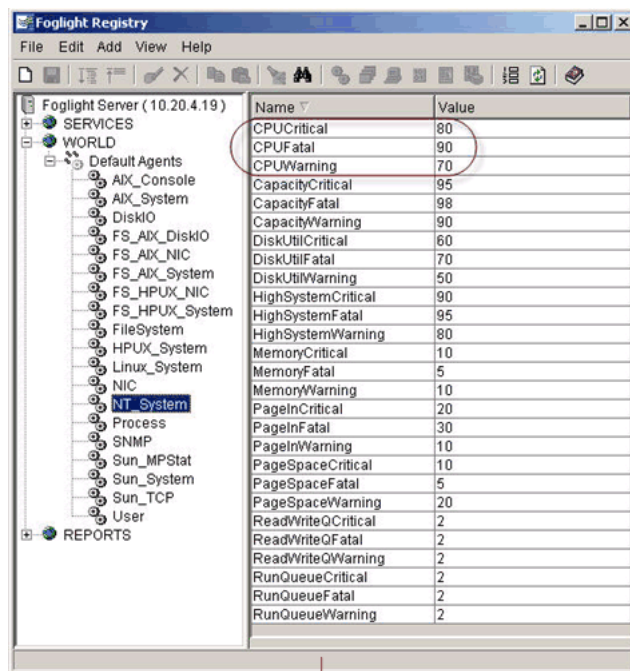
See also

- [How Do I Get Started?](#) on page 5
- [What is My Single Pane of Glass?](#) on page 14
- [How Do I Create Custom Maps?](#) on page 34

Why Do I See Only One Set of System Agent Variables?

In Foglight® 4, each OS agent includes its own set of registry variables, including CPUFatal, CPUCritical, CPUWarning, and others. These variables can be viewed and edited in the Foglight Registry viewer, by navigating to **WORLD > Default Agents > Operating System Agent**.

Figure 61. Foglight 4 Registry



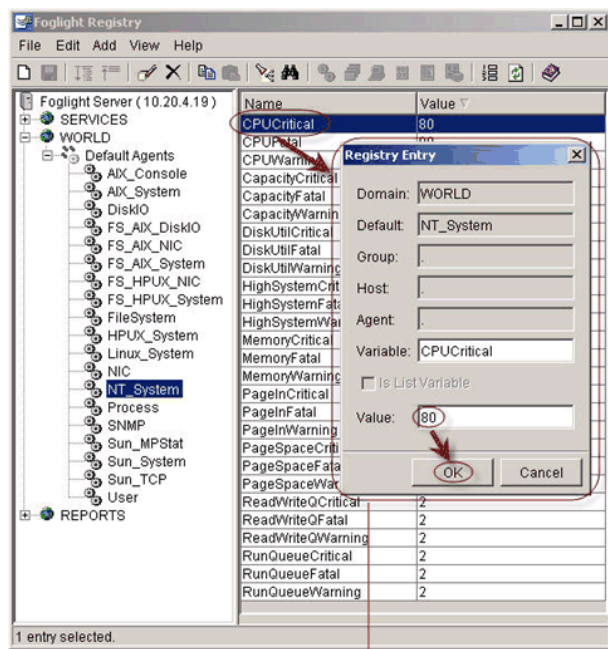
Foglight 4 Registry Viewer

The default values of the CPUFatal, CPUCritical and CPUWarning variables are the same for each agent type:

- **CPUWarning:** 70
- **CPUCritical:** 80
- **CPUFatal:** 90

These defaults are editable and can be changed for individual agent types by double-clicking the registry variable in the **Foglight Registry** viewer, and editing its value in the **Registry Entry** dialog box.

Figure 62. Editing registry variables in Foglight 4



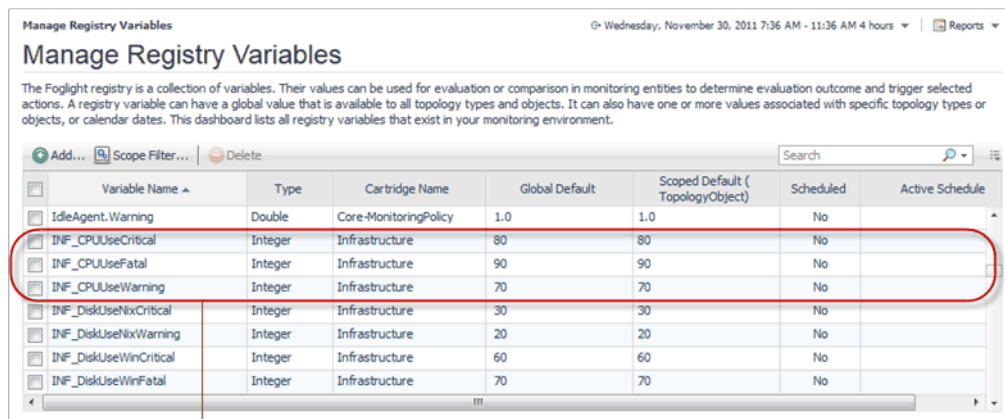
Editing Registry Variables in Foglight 4

In Foglight 5, each cartridge (including core and installed cartridges) can include its own collection of registry variables. For example, the Infrastructure cartridge, used to monitor OS performance, includes a set of registry variables that are used to evaluate the CPU usage:

- **INF_CPUUseWarning:** 70
- **INF_CPUUseCritical:** 80
- **INF_CPUUseFatal:** 90

These variables can be found on the Manage Registry Variables dashboard.

Figure 63. Manage Registry Variables dashboard in Foglight 5



Shared System Agent Variables in Foglight 5

Foglight 5 registry variables are used in rules and derived metrics to customize behavior. Every registry variable can have any of the following values:

- A global value
- A value bound to a particular type, such as `Windows_Host` or `Linux_Host`

- A value bound to a particular instance, such as `Host1` on a particular host

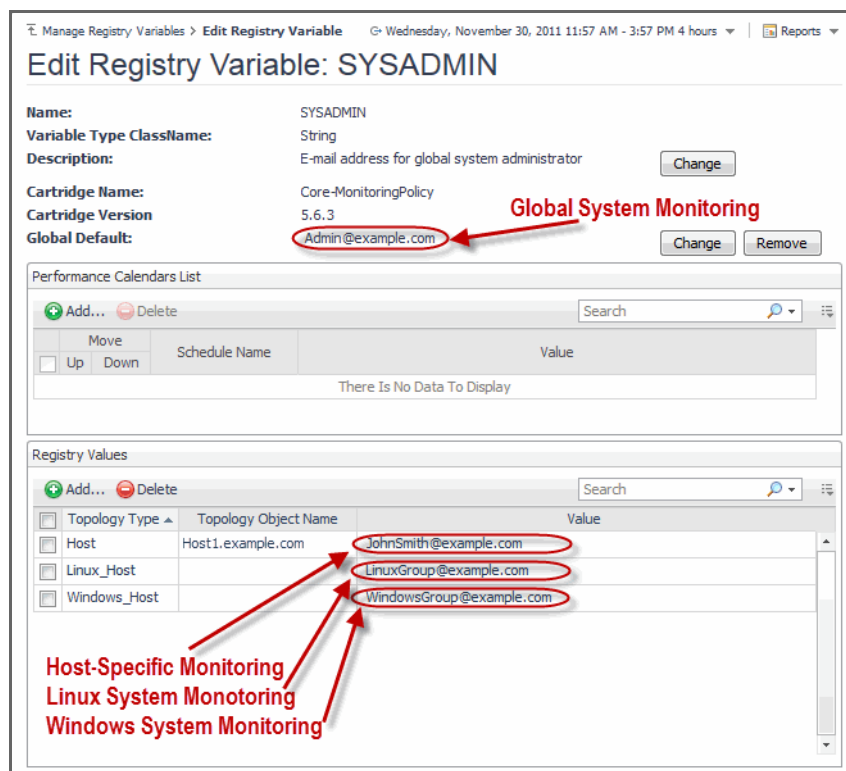
Foglight determines the value of a registry variable at run-time by scoping on types and instances.

For example, you can use this capability to direct alarm emails to appropriate targets, by configuring the `SYSADMIN` registry variable. This variable is included with the Management Server, and Foglight uses it to control where alarm emails are sent. Most often this value is set globally. In some implementations, it is quite common to have different system administrators manage different hosts and OS platforms. Beyond that, you can set up a special value for a particular host by scoping on a specific `Host` object instance.

For example:

- **Global System Monitoring:** `Admin@example.com`
- **Windows® System Monitoring:** `WindowsGroup@example.com`
- **Linux® System Monitoring:** `LinuxSysAdmin@example.com`
- **Host-Specific Monitoring:**
 - **Host Object Instance:** `Host1.example.com`
 - **Administrator:** `john.smith@example.com`

Figure 64. Editing a registry variable in Foglight 5



The above setup results in emailing all alarms to the global `Admin@example.com` email. In addition, Windows-related alarms are sent to the Windows email alias, and all Linux-related alarms to the Linux email alias. Any alarms associated with `Host1.example.com` are also sent to `John.Smith@example.com`, regardless of the host's OS.

To email alarms to selected recipients:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

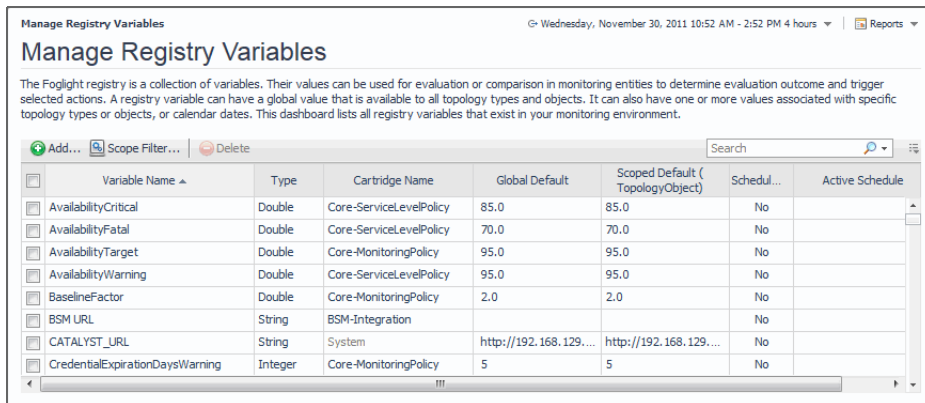
- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Administration > Rules & Notifications > Manage Registry Variables**.

The Manage Registry Variables dashboard appears, listing all available registry variables.

Figure 65. Manage Registry Variables dashboard



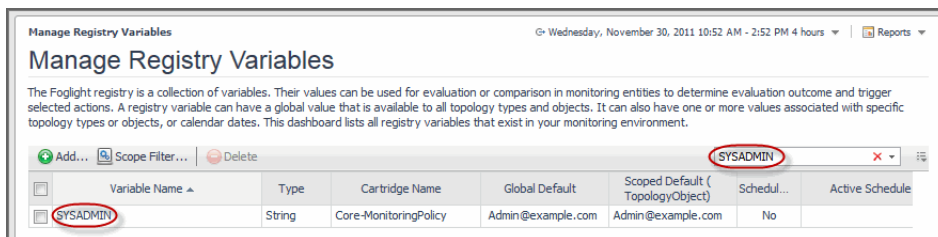
The screenshot shows the 'Manage Registry Variables' dashboard. At the top, there's a title bar with the dashboard name, a timestamp 'Wednesday, November 30, 2011 10:52 AM - 2:52 PM 4 hours', and a 'Reports' link. Below the title is a descriptive paragraph about the Foglight registry. A toolbar contains 'Add...', 'Scope Filter...', and 'Delete' buttons, along with a search box. The main area is a table with columns: Variable Name, Type, Cartridge Name, Global Default, Scoped Default (TopologyObject), Schedul..., and Active Schedule. The table lists several variables like AvailabilityCritical, AvailabilityFatal, AvailabilityTarget, AvailabilityWarning, BaselineFactor, BSM URL, CATALYST_URL, and CredentialExpirationDaysWarning.

Variable Name	Type	Cartridge Name	Global Default	Scoped Default (TopologyObject)	Schedul...	Active Schedule
AvailabilityCritical	Double	Core-ServiceLevelPolicy	85.0	85.0	No	
AvailabilityFatal	Double	Core-ServiceLevelPolicy	70.0	70.0	No	
AvailabilityTarget	Double	Core-MonitoringPolicy	95.0	95.0	No	
AvailabilityWarning	Double	Core-ServiceLevelPolicy	95.0	95.0	No	
BaselineFactor	Double	Core-MonitoringPolicy	2.0	2.0	No	
BSM URL	String	BSM-Integration			No	
CATALYST_URL	String	System	http://192.168.129...	http://192.168.129...	No	
CredentialExpirationDaysWarning	Integer	Core-MonitoringPolicy	5	5	No	

- 3 On the Manage Registry Variables dashboard, locate the row containing the SYSADMIN variable.

TIP: You can filter the list of variables using filters. At the top of the Manage Registry Variables dashboard, in the **Search** box, type SYSADMIN.

Figure 66. SYSADMIN variable



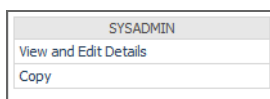
This screenshot shows the same dashboard as Figure 65, but with the search filter 'SYSADMIN' entered in the search box. The table now only displays one variable, 'SYSADMIN', which is highlighted with a red circle. The variable is of type 'String', has a cartridge name of 'Core-MonitoringPolicy', and its global and scoped defaults are 'Admin@example.com'.

Variable Name	Type	Cartridge Name	Global Default	Scoped Default (TopologyObject)	Schedul...	Active Schedule
SYSADMIN	String	Core-MonitoringPolicy	Admin@example.com	Admin@example.com	No	

- 4 In the **Variable Name** column, click **SYSADMIN**.

A menu appears.

Figure 67. Editing the SYSADMIN variable



The screenshot shows a context menu that appears when clicking on the 'SYSADMIN' variable name. The menu has a title 'SYSADMIN' and two options: 'View and Edit Details' and 'Copy'.

SYSADMIN
View and Edit Details
Copy

- 5 In the menu, click **View and Edit Details**.

The Manage Registry Variables dashboard refreshes, showing the **Edit Registry Variable** view.

Figure 68. Edit Registry Variable view

- 6 Specify the global email address.
- a In the top part of this view, locate the **Global Default** value, and click **Change** on the right.
- The **Global Value Wizard** dialog box appears.

Figure 69. Global Value Wizard dialog box

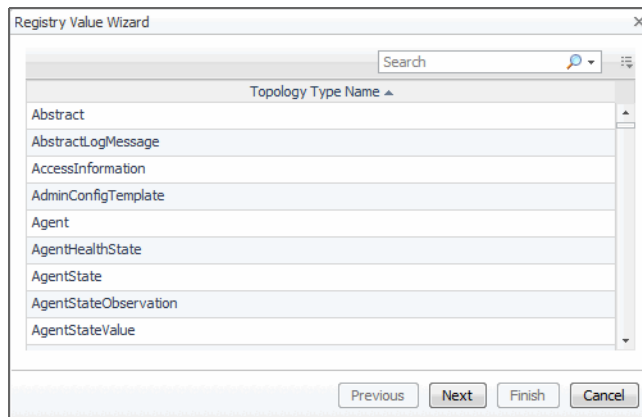
- b In the **Global Value Wizard** dialog box, ensure that Static Value is selected, and type the global administration address. For example, Admin@example.com.
 - c Click **Finish**.
- The **Global Value Wizard** dialog box closes.
- 7 Specify the email addresses for different host types. For the purpose of this example, use the following values:

Table 1. Topology objects used to specify email addresses

Topology Type	Topology Object Name	Registry Value
Windows_Host	N/A	WindowsGroup@example.com
Linux_Host	N/A	LinuxGroup@example.com
Host	Host1.example.com	John.Smith@example.com

- a In the **Registry Values** view, click **Add**.
- The **Registry Value Wizard** appears.

Figure 70. Registry Value Wizard



- b In the **Registry Value Wizard**, select the appropriate topology instance, and click **Next**. For example, to add the **Windows_Host** type, select this type in the list, and click **Next**.

TIP: Use the **Search** box to look up a particular type name.

The **Registry Value Wizard** refreshes, showing all object instances of the selected type.

For the purpose of this example, there is no need to scope on any specific `Windows_Host` or `Linux_Host` instances, because you want to send alarms to the appropriate groups whenever any of these instances are affected.

However, when associating `Host1.example.com` with `John.Smith@example.com`, you must scope on `Host1.example.com` which is an instance of the `Host` type.

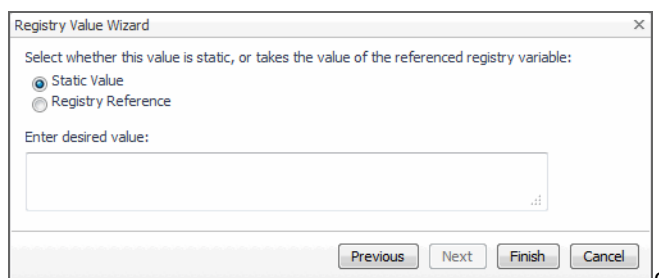
- c When scoping on `Windows_Host` and `Linux_Host` types, do not specify any of the types, just click **Next**.

When scoping on `Host1.example.com`, select the host instance in the list, and click **Next**.

TIP: `Host1.example.com` is a fictional host name made up for the purpose of this example. It is very unlikely to have a host with that name in your environment. You can choose any host instance to proceed with this exercise.

The **Registry Value Wizard** refreshes.

Figure 71. Registry Value Wizard



- d In the **Registry Value Wizard**, ensure that **Static Value** is selected, and type the applicable email address.

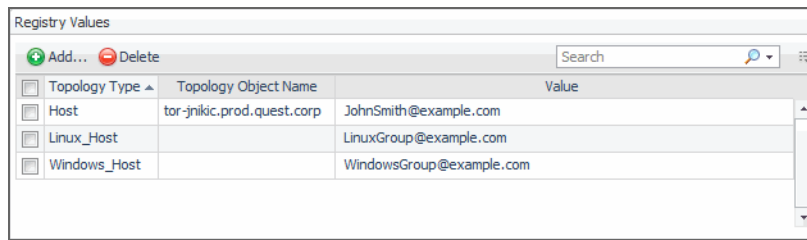
- e Click **Finish**.

The **Registry Value Wizard** closes.

To add another email address, scoped to the other monitored host, repeat this step.

When add you all of the topology-scoped value, observe the entries in the **Registry Values** table.

Figure 72. Registry Values table



Topology Type	Topology Object Name	Value
Host	tor-jnikic.prod.quest.corp	JohnSmith@example.com
Linux_Host		LinuxGroup@example.com
Windows_Host		WindowsGroup@example.com

For complete information about registry variables, see the *Administration and Configuration Help*.

See also

- [How Do I Get Started?](#) on page 5
- [How Do I Edit a Registry Variable?](#) on page 52
- [How Do I Edit a Rule?](#) on page 54

Can Multiple People Share My User Name?

Foglight® 5 supports simultaneous sessions. If necessary, you can share your user name and password with other users in order to log into the browser interface simultaneously, but this is not recommended. When multiple users share a single user name, Foglight associates any operations that those users perform with that one user name and logs them as applicable, which can complicate the audit process.

Regardless of the type of the session—simultaneous or unique—the type and range of features that are available through the Foglight Console reflect your user permissions. For information on how to set user permissions in Foglight 5, see [How Do I Limit a User's Access?](#) on page 104.

See also

- [How Do I Get Started?](#) on page 5
- [How Do I Share My Dashboards with Other Users?](#) on page 27
- [How Do I Create a User?](#) on page 99
- [How Do I Limit a User's Access?](#) on page 104

Can I Configure Everything to Look and Feel Like Foglight 4?

The look and feel of Foglight 5 is quite different from Foglight® 4. Probably the first thing you notice is the absence of the FOC, and the fact that the entire user interface is Web-based, similar to the Web Console in Foglight 4. In Foglight 5 you use the browser interface to manage users, agents, cartridges, data, views, and other entities. For more information, see [Where's the FOC?](#) on page 8. For information on where to find some of the common interface components that were available in Foglight 4, such as service model or rule browsers, see [Appendix: Finding Foglight 4 Components in Foglight 5](#) on page 112.

If you are planning to use the IP map on a regular basis, one thing you can do is add the Foglight 5 equivalent of the IP map, the Agents on All Hosts dashboard, to the **Bookmarks**. For instructions on how to add a dashboard to **Bookmarks**, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25.

See also

- [How Do I Get Started?](#) on page 5
- [Where's the FOC?](#) on page 8
- [What is My Single Pane of Glass?](#) on page 14
- [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25
- [What is the Diagnostic Workflow?](#) on page 32

Setting Up For Long-Term Use

This section describes some of the typical tasks you will perform after you install Foglight® 5. The tasks include editing agent properties, rules, user permissions, looking at collected metrics, and similar operations. For complete information, you can refer to the *Administration and Configuration Guide* and the *Foglight User Guide*.

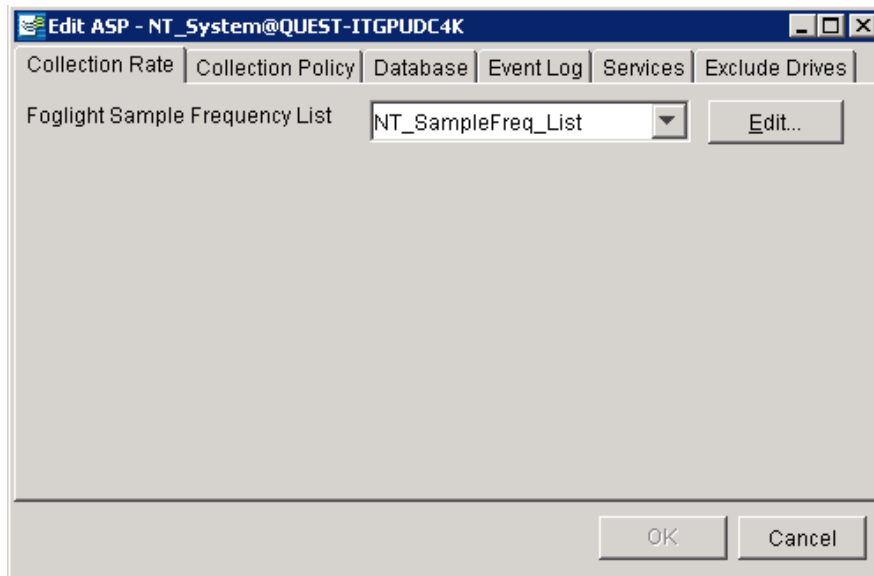
i | NOTE: Each of the procedures in this chapter continues from [How Do I Get Started?](#) on page 5.

- [How Do I Edit Agent Properties?](#) on page 49
- [How Do I Edit a Registry Variable?](#) on page 52
- [How Do I Edit a Rule?](#) on page 54
- [How Do I Select Table Data in Rule Conditions?](#) on page 59
- [How Do I Promote a Rule Severity?](#) on page 75
- [How Do I Edit a Blackout Schedule?](#) on page 80
- [How Do I Build a Graph?](#) on page 87
- [How Do I Build and Schedule a Report?](#) on page 90
- [How Do I Add Views and Data to a Report?](#) on page 95
- [How Do I Create a User?](#) on page 99
- [How Do I Limit a User's Access?](#) on page 104
- [Where Do I Find the Data?](#) on page 108

How Do I Edit Agent Properties?

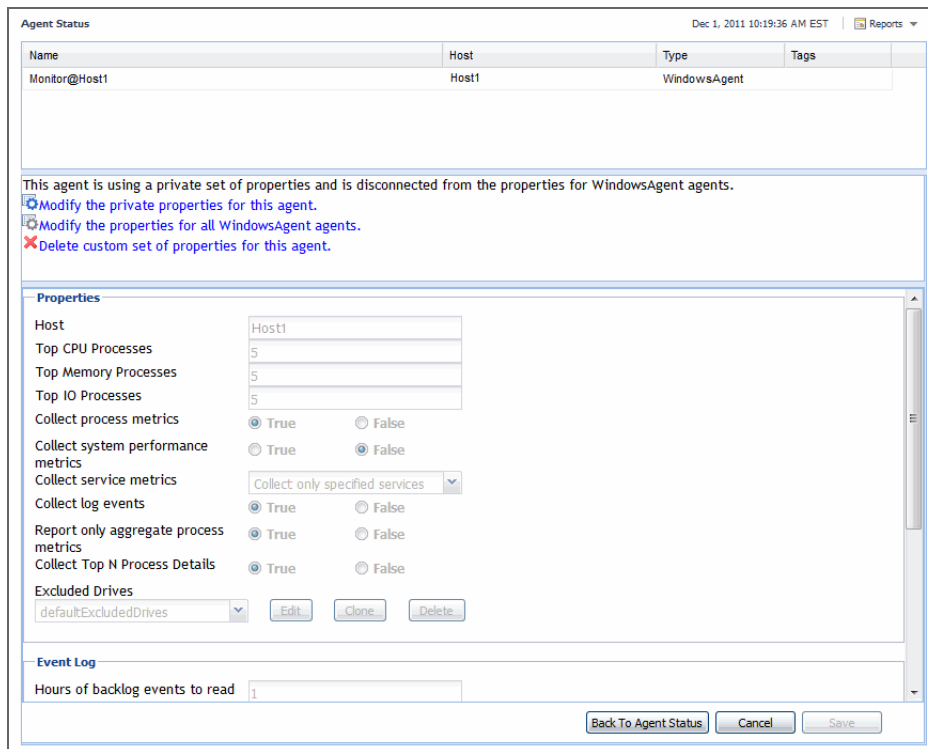
Foglight® 5 uses agent properties to specify what type of data to collect or to define collection or purging intervals. Foglight 5 agent properties are equivalent to agent startup parameters (ASPs) in Foglight 4. In Foglight 4, you used the Edit ASP dialog box to configure ASPs.

Figure 73. Edit ASP dialog box in Foglight 4



In Foglight 5, use the Agent Properties dashboard to edit agent properties. The Agent Properties page allows you to edit the properties of an agent instance, or the properties of all agents of the same type.

Figure 74. Agent Properties dashboard in Foglight 5



Agent startup parameters are called agent properties in Foglight 5. In Foglight 4, tabs in the Edit ASP dialog box show different groups of ASPs. In Foglight 5, agent properties appear on the same page, but they appear in different groups, such as Properties, Event Log, and so on. Every agent type has a unique set of agent properties.

To edit agent properties:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
The Agent Status dashboard appears, showing the list of all agent instances.

Figure 75. Agent Status dashboard

Agent Status

Sep 3, 2014 9:55:40 AM EDT | Reports

Use the Agent Status dashboard to manage agents. Start by deploying agent packages to Agent Managers. After deployment, you can create agents, edit their properties and activate them.

Agents

Deploy Agent Package Create Agent Edit Properties By Tag Activate Deactivate Start Data Collection Stop Data Collection Edit Delete Upgrade Search

State	Status	Collecting Data	Private Property	Host Name	Agent Name	Namespace	Type	Tags	Version	Upgradable	Log File
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	torrdv466	Monitor@l2000-cs	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	torrdv466	Monitor@lab-sl10-01	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	torrdv466	Monitor@lab-sl10-08a	HostAgents	UnixAgent		5.7.2	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	torrdv466	Monitor@plsqaw01	HostAgents	WindowsAgent		5.7.2	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	torrdv466	Monitor@rd_aix11	HostAgents	UnixAgent		5.7.2	No	

Tasks

Refresh Clean Completed Tasks Search

Status	Action	Details	Host Name	Status Message	Duration Time
There Is No Task To Display					

- 3 Select an agent in the list.
The row containing information about the selected agent appears highlighted in the list and several commands appear in the lower-right corner. The type of commands depends on the agent status. For example, if you select an agent that is currently collecting data, the commands include **Edit Properties**, **Edit Tags**, **Get log**, **Stop Data Collection**, **Deactivate**, and **Delete**; when you select an inactive agent, the commands are as follows: **Edit Properties**, **Edit Tags**, **Get log**, **Activate**, and **Delete**.
- 4 Click **Edit Properties**.
The property page appears, showing the properties of the selected agent.

Figure 76. Selected agent properties

Agent Status

Dec 1, 2011 10:19:36 AM EST | Reports

Name	Host	Type	Tags
Monitor@Host1	Host1	WindowsAgent	

This agent is using a private set of properties and is disconnected from the properties for WindowsAgent agents.

- Modify the private properties for this agent.
- Modify the properties for all WindowsAgent agents.
- Delete custom set of properties for this agent.

Properties

Host: Host1

Top CPU Processes: 5

Top Memory Processes: 5

Top IO Processes: 5

Collect process metrics: ☒ True ☐ False

Collect system performance metrics: ☐ True ☒ False

Collect service metrics: Collect only specified services

Collect log events: ☒ True ☐ False

Report only aggregate process metrics: ☒ True ☐ False

Collect Top N Process Details: ☒ True ☐ False

Excluded Drives: defaultExcludedDrives [Edit] [Clone] [Delete]

Event Log

Hours of backlog events to read: 1

[Back To Agent Status] [Cancel] [Save]

- 5 Edit the agent's properties as required.

For complete information about agent properties, see the *Administration and Configuration Guide*.

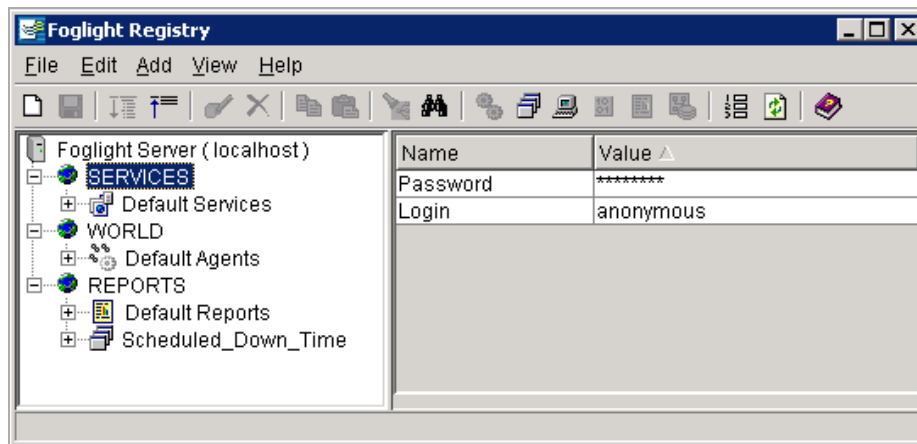
See also

- [How Do I Get Started?](#) on page 5
- [How Do I Know if My Agents Are Connected?](#) on page 9
- [How Do I Fix the Agents That Are Not Connected?](#) on page 13

How Do I Edit a Registry Variable?

In Foglight® 4, you used the Foglight Registry dialog box in the FOC to add, edit, and manage variables.

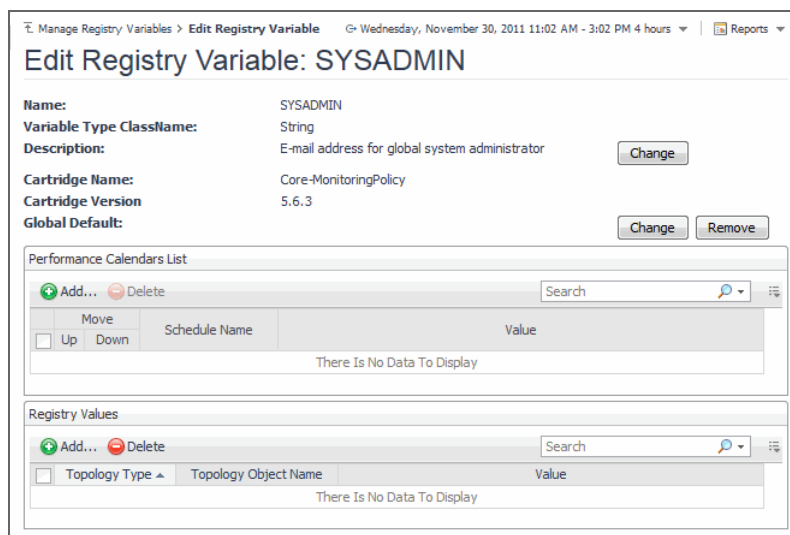
Figure 77. Foglight 4 Registry



The scope of a variable was dictated by system or user-defined domains, such as WORLD, SERVICES, and REPORTS.

In Foglight 5, note that registry variables can have both global and scope-related values. The Foglight 5 topology determines the scope which means that in addition to global values, a variable can have multiple values that are specific to particular topology objects.

Figure 78. Editing a Foglight 5 registry variable



In Foglight 5, use the Manage Registry Variables dashboard to view and edit registry variables. You can filter the list of registry variables using different criteria, such as topology, object, default values and cartridge. To edit a registry variable, click that entry in the list and edit the settings, as required.

To edit a registry variable:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 In navigation panel, under **Dashboards**, choose **Administration > Rules & Notifications > Manage Registry Variables**.
The Manage Registry Variables dashboard appears, listing all available variables.

Figure 79. Manage Registry Variables dashboard

Variable Name	Type	Cartridge Name	Global Default	Scoped Default (TopologyObject)	Schedul...	Active Schedule
AvailabilityCritical	Double	Core-ServiceLevelPolicy	85.0	85.0	No	
AvailabilityFatal	Double	Core-ServiceLevelPolicy	70.0	70.0	No	
AvailabilityTarget	Double	Core-MonitoringPolicy	95.0	95.0	No	
AvailabilityWarning	Double	Core-ServiceLevelPolicy	95.0	95.0	No	
BaselineFactor	Double	Core-MonitoringPolicy	2.0	2.0	No	
BSM URL	String	BSM-Integration			No	
CATALYST_URL	String	System	http://192.168.129...	http://192.168.129...	No	
CredentialExpirationDaysWarning	Integer	Core-MonitoringPolicy	5	5	No	

- 3 In the Manage Registry Variables dashboard, in the **Variable Name** column, click the variable that you want to edit.

The **Edit Registry Variable** view appears in the Manage Registry Variables dashboard, showing the settings for the selected registry variable.

Figure 80. Edit Registry Variable view

Edit Registry Variable: SYSADMIN

Name: SYSADMIN
Variable Type: String
Description: E-mail address for global system administrator Change
Cartridge Name: Core-MonitoringPolicy
Cartridge Version: 5.6.3
Global Default: Change Remove

Performance Calendars List

Move	Schedule Name	Value
<input type="checkbox"/> Up <input type="checkbox"/> Down		

There Is No Data To Display

Registry Values

Topology Type	Topology Object Name	Value

There Is No Data To Display

- 4 Edit the registry variable as required.
- For complete instructions, see the *Administration and Configuration Help*.

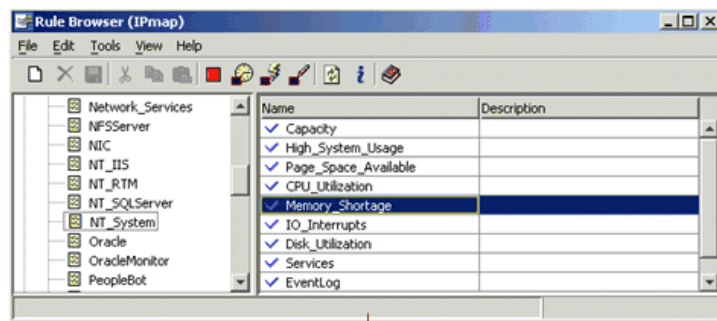
See also

- [How Do I Get Started?](#) on page 5
- [Why Do I See Only One Set of System Agent Variables?](#) on page 40
- [How Do I Edit a Rule?](#) on page 54

How Do I Edit a Rule?

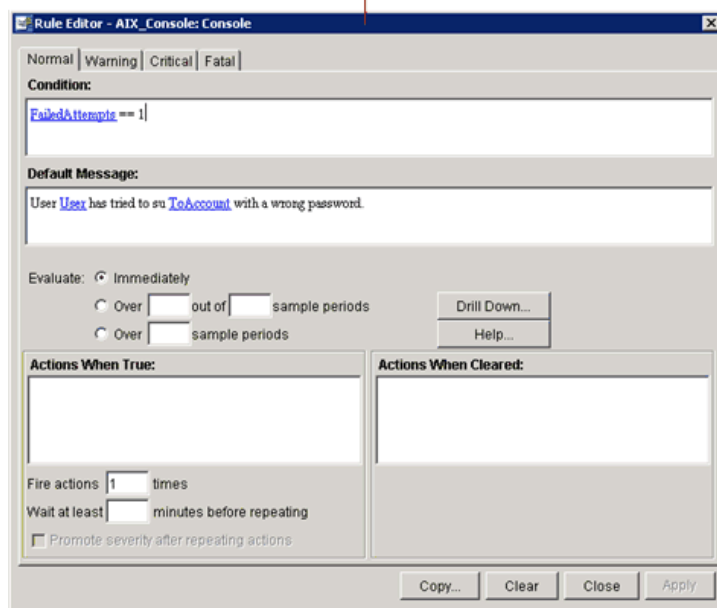
In Foglight® 4, you used the Rule Browser to look at rules and the Rule Editor to edit rules.

Figure 81. Foglight 4 Rule Browser and Rule Editor



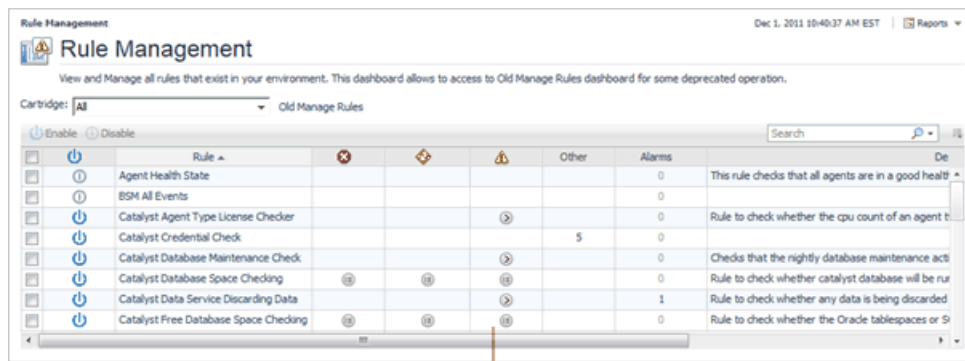
Foglight 4: Rule Browser

Foglight 4: Rule Editor



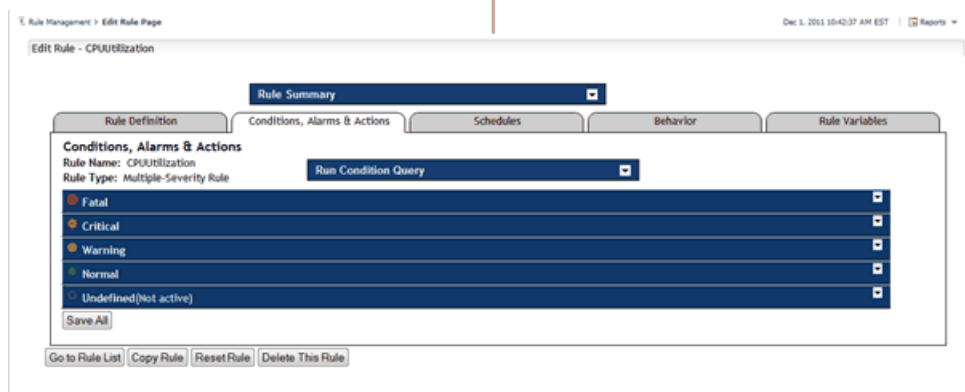
When you start using Foglight 5, you can view your old rules in the Rule Management dashboard, and drill down to the Edit Rule view to edit a rule.

Figure 82. Foglight 5 Rule Management dashboard and Edit Rule view



Foglight 5: Manage Rules Dashboard

Foglight 5: Edit Rule View (multiple severity rule)



The Rule Management dashboard allows you to select a rule and drill down to the Edit Rule view for the selected rule in order to define thresholds for severity levels (multiple-severity rules) or the Fire state (simple rules). Similar to Foglight 4, each rule has settings for the Fatal, Critical, Warning, and Normal severities, or the Fire state. Use the Manage Rules dashboard to list, and if required, filter the rules, and to drill down to the Edit Rule view.

To edit a rule:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

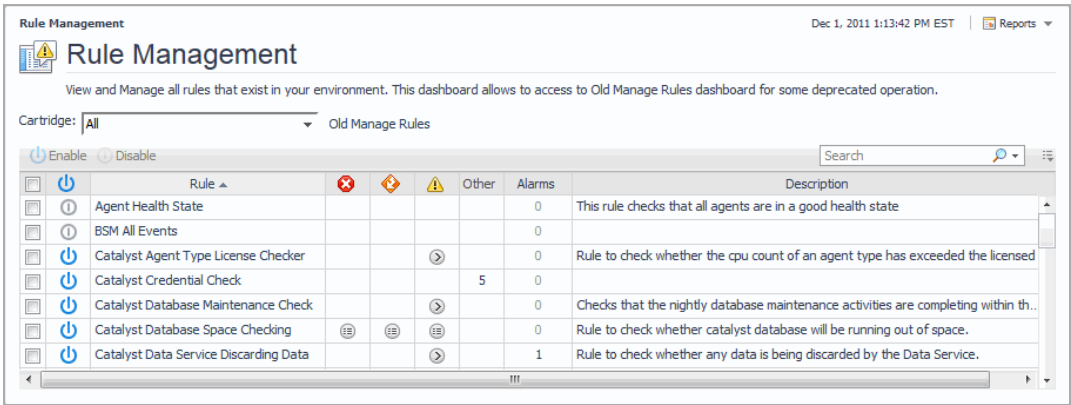
- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Administration > Rules & Notifications > Rule Management**.

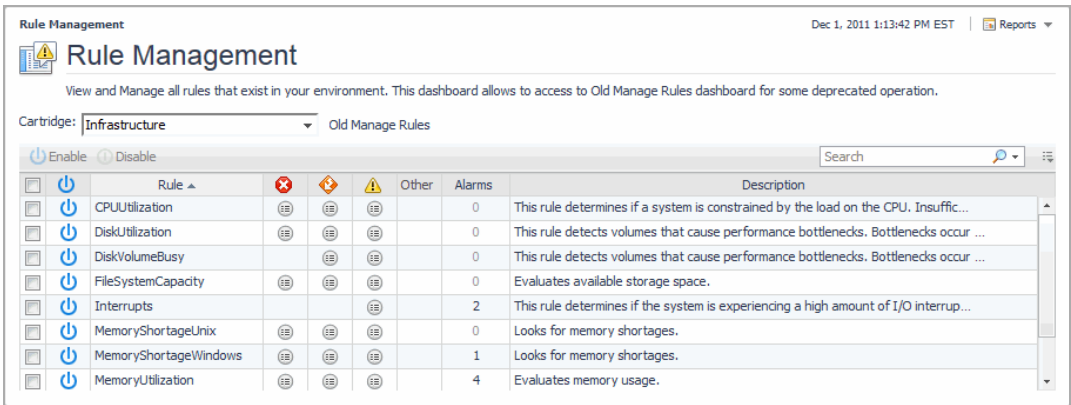
The Rule Management dashboard appears, listing all available rules.

Figure 83. Rule Management dashboard



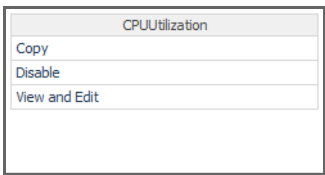
- 3 **Optional**—to filter the rules, use the **Search** box, or filter by cartridge.
- For example, to get a list of rules included with the Infrastructure cartridge, and in the list that appears, select **Infrastructure**.
- The list of rules refreshes, showing only the rules that exist in the specified cartridge.

Figure 84. Filtering the list of rules



- 4 On the Rule Management dashboard, in the **Rule** column, click the rule that you want to edit.
- A menu appears.

Figure 85. Actions associated with a rule



- 5 In the menu, click **View and Edit**.
- The **Rule Detail** dialog box appears.

Figure 86. Rule Detail dialog box

The screenshot shows the 'Rule Detail - CPUUtilization' dialog box. It has a title bar with a close button. Inside, there's a 'Rule Editor' button in the top right. A checkbox 'Enable Rule' is checked. Under 'Condition Thresholds:', there are three sections: 'Fatal' (with a red 'x' icon), 'Critical' (with an orange diamond icon), and 'Warning' (with a yellow triangle icon). Each section has an 'Enable Condition' checkbox checked. Below each section is a table with 'Condition Variable' and 'Value' columns. For 'Fatal', the values are 'SYSADMIN: Admin@example.com' and 'INF_ProcsRunQueueFatal: 11'. For 'Critical', the values are 'SYSADMIN: Admin@example.com' and 'INF_ProcsRunQueueCritical: 8'. For 'Warning', the values are 'SYSADMIN: Admin@example.com' and 'INF_ProcsRunQueueWarning: 5'. There is also an 'Other' section with a table that is empty, showing 'There Is No Data To Display'. At the bottom are 'OK' and 'Cancel' buttons.

Condition Variable	Value
SYSADMIN	Admin@example.com
INF_ProcsRunQueueFatal	11

Condition Variable	Value
SYSADMIN	Admin@example.com
INF_ProcsRunQueueCritical	8

Condition Variable	Value
SYSADMIN	Admin@example.com
INF_ProcsRunQueueWarning	5

- 6 In the **Rule Detail** dialog box, in the top-right corner, click **Rule Editor**.

The **Edit Rule Page** appears for the selected rule with the **Conditions, Alarms, & Actions** tab open, showing the properties of the selected rule, and a separate pane for each severity: **Fatal**, **Critical**, **Warning**, **Normal**, and **Undefined**.

Figure 87. Edit Rule Page

The screenshot shows the 'Edit Rule Page' for the 'CPUUtilization' rule. The page has a breadcrumb 'Rule Management > Edit Rule Page' and a timestamp 'Dec 1, 2011 1:46:22 PM EST'. Below the breadcrumb is a 'Rules & Notifications' section with 'Edit Rule - CPUUtilization'. There are five tabs: 'Rule Summary' (selected), 'Rule Definition', 'Conditions, Alarms & Actions', 'Schedules', 'Behavior', and 'Rule Variables'. Under the 'Conditions, Alarms & Actions' tab, there's a 'Rule Name: CPUUtilization' and 'Rule Type: Multiple-Severity Rule'. A 'Run Condition Query' button is present. Below this is a list of severity levels: 'Fatal' (selected with a red circle), 'Critical' (orange circle), 'Warning' (yellow circle), 'Normal' (green circle), and 'Undefined(Not active)' (grey circle). Each level has a dropdown arrow. At the bottom are 'Go to Rule List', 'Copy Rule', 'Reset Rule', and 'Delete This Rule' buttons.

- 7 Edit the rule as required.

For complete instructions, see the *Foglight Administration and Configuration Help*.

See also

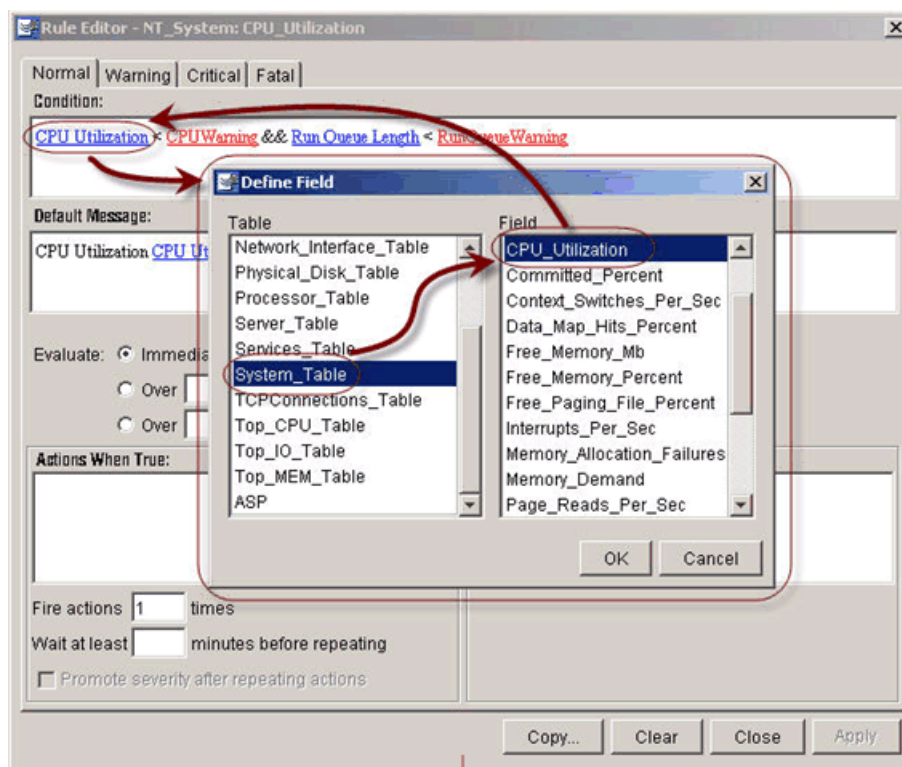
- [How Do I Get Started?](#) on page 5
- [How Do I Edit a Registry Variable?](#) on page 52

- [How Do I Select Table Data in Rule Conditions?](#) on page 59
- [How Do I Promote a Rule Severity?](#) on page 75

How Do I Select Table Data in Rule Conditions?

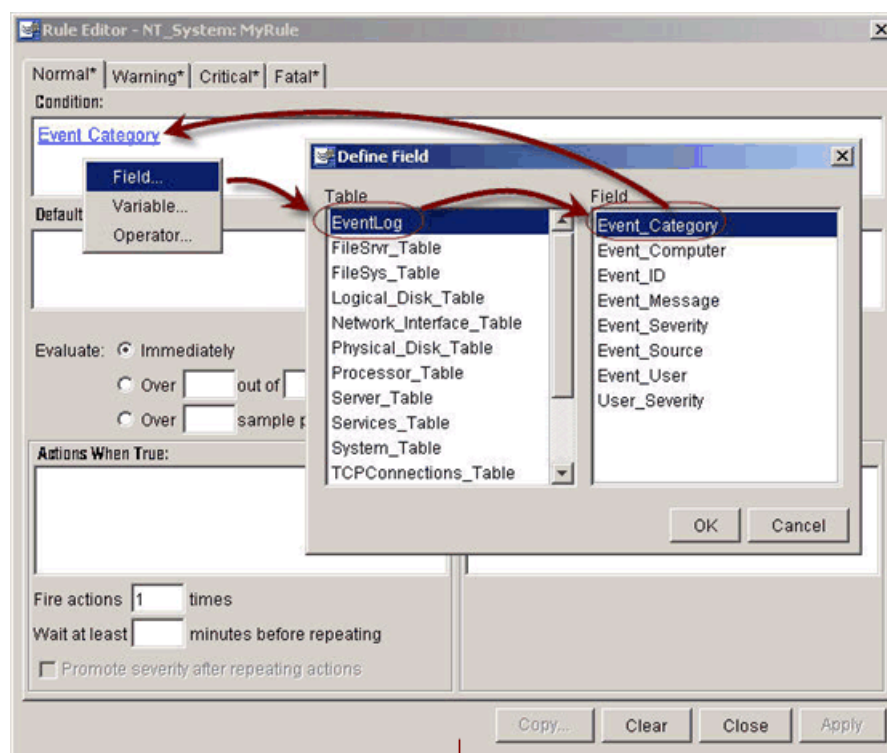
In Foglight® 4, you used rule conditions to select table data and to compare it with desired thresholds. In the Rule Editor, right-clicking the Condition box and choosing Field from the menu that appears (new conditions), or double-clicking a field name in the Condition box (existing conditions), invokes the Define Field dialog box that allows you to select a table field and add it to the rule condition, as illustrated below.

Figure 88. Foglight 4 Rule Editor, data selection flow for existing rules



Foglight 4: Selecting data in existing rule conditions

Figure 89. Foglight 4 Rule Editor, data selection flow for new rules



Foglight 4: Selecting data in new rule conditions

The process of selecting one or more table fields in rule conditions is referred to as scoping on rules. In Foglight 4, you can select any table data that is associated with the agent type whose rule you are editing.

Foglight 5 also allows for scoping on rules but with a greater degree of flexibility. Unlike the Foglight 4 schema that uses static, flat files, for storing collected metrics, Foglight 5 data models have a dynamic, tree-like structure, that consists of nodes. Each node is an object instance of a topology type, and each topology type includes a set of properties. Foglight 5 tables contain object instances as table records. Equivalent to table fields, where each field can store a certain type of data, as specified in the table definitions, each object property can contain a predefined data type, defined in the topology type that the object is an instance of.

Going back to the process of scoping on rules, a Foglight 5 rule definition can include a scoping query. Unlike the data selection statements in Foglight 4, a Foglight 5 query is not a part of the rule condition, it is specified prior to writing rule condition, which de-couples data selection, or the process of scoping on rules, from conditional expressions. In rule conditions, you can still make references to individual data elements without having to select the entire data set, thereby simplifying the conditional expressions and minimizing potential errors. De-coupling data selection from conditional expressions is particularly useful in complex expressions, making their troubleshooting easier and more efficient.

In Foglight 5, conditional expression syntax requires the use of hash marks '#' as data element delimiters. When you select a type in a scoping query, you reference their properties by enclosing them in hashmarks, as illustrated below.

Foglight 5: Scoping query

Host.cpu

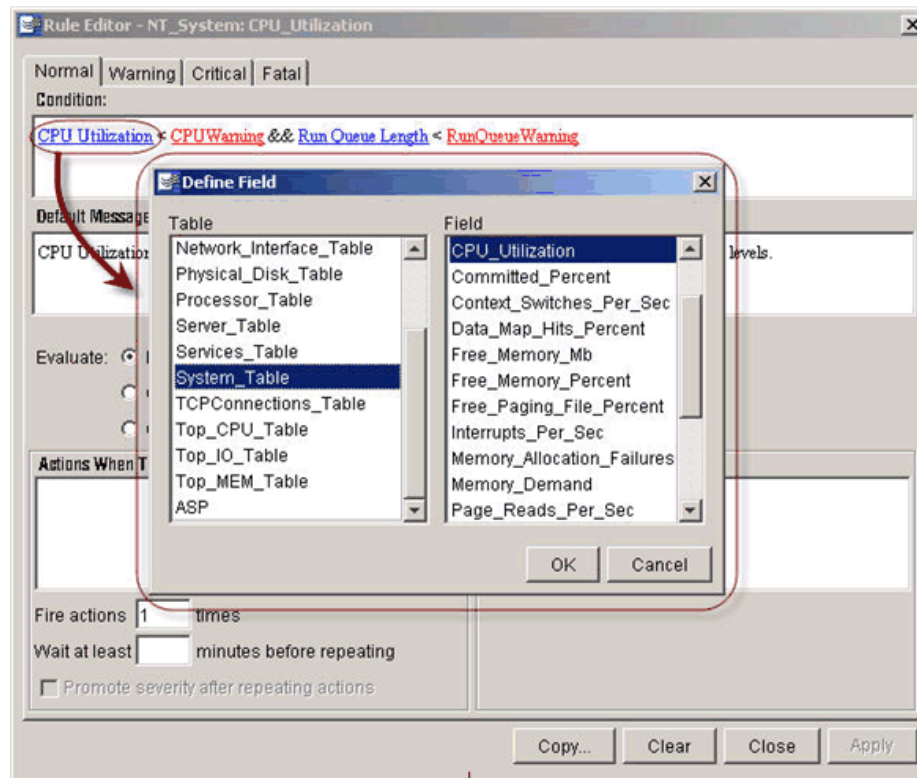
Foglight 5: Conditional expression

```
#utilization# >= registry("INF_CPUUseCritical") && #runQueueLength from $scope.host#
> registry("INF_ProcsRunQueueCritical")
```

In the above example, both `utilization` and `runQueueLength` are metric properties of the scoped `Host.cpu` topology type, while `CPUCritical` and `RunQueueCritical` are registry variables, hence the

difference in the syntax. For more information about the query and conditional expression syntax, see the *Administration and Configuration Help*.

Figure 90. Data selection in Foglight 4 rule conditions



Foglight 4: Rule conditions include data selection definitions

Figure 91. Data selection in Foglight 5 rule definitions

Rule Management > Edit Rule Page

Dec 1, 2011 1:46:22 PM EST | Reports

Edit Rule - CPUUtilization

Rule Summary

Rule Definition

Rule Name: CPUUtilization

Cartridge Name(Cartridge Version): Infrastructure(5.6.3)

Rule Type: Multiple-Severity Rule

Rule Triggering:

- ☐ Time Driven
- ☒ Data Driven
- ☐ Event Driven
- ☐ Schedule Driven

Rule Scope:

Topology Type: HostCPUs

Property: -- Properties --

Host.cpus

Host.cpus

Save

Go to Rule List | Copy Rule | Reset Rule | Delete This Rule

Foglight 5: Selecting data using the Rule Definition tab

Figure 92. Foglight 5 conditional expressions

Rule Management > Edit Rule Page

Dec 1, 2011 3:12:08 PM EST | Reports

Edit Rule - CPUUtilization

Rule Summary

Conditions, Alarms & Actions

Rule Name: CPUUtilization

Rule Type: Multiple-Severity Rule

Run Condition Query

Save | Copy condition/Alarm from... | Copy variables/actions from...

Condition

Severity Level Variables

Action

Activate

Condition:

#utilization# >= registry(\"INF_CPUUtilizationCritical\") && #runQueueLength from Scope.host# > registry(\"INF_ProcRunQueueCritical\")

Alarm Message:

CPU Utilization High. CPU Utilization at @var1. Run Queue is @var2. A CPU Bottleneck is being detected on @var1. Check the top processes to determine which processes are the greatest contributors to CPU Loads.

Severity Level Variables:

- Fatal
- Critical
- Warning
- Normal
- Undefined(not active)

Save All

Go to Rule List | Copy Rule | Reset Rule | Delete This Rule

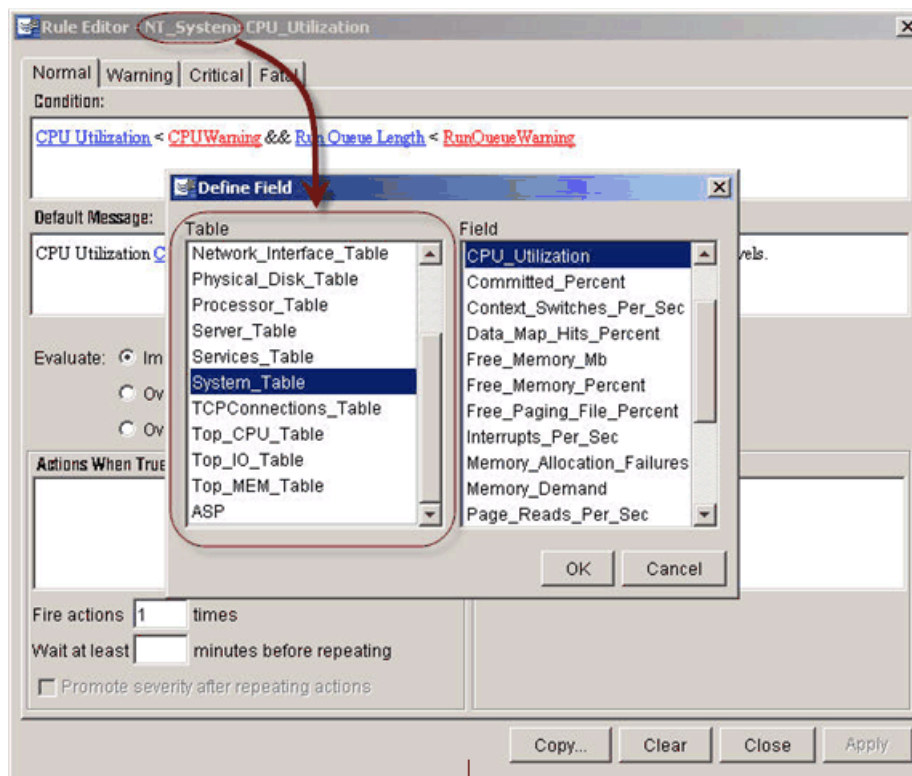
Foglight 5: Conditional expression on the Conditions, Alarms, & Actions tab

NOTE: The query that appears in the above illustration is not the default expression that is included with the Windows_System agent's CPU_Utilization rule. It is modified for the purpose of this example.

Another benefit of separating the data selection from conditional expressions in Foglight 5 is that the scoping queries have access to the entire database, not just the tables that are associated with a particular agent or cartridge, as this was a case in Foglight 4. What this means is that when you start writing a query in Foglight 5, you can select any topology type, including the topology types that come with the Foglight Management Server, or any types that come with any of the installed cartridges. The range of topology types that exist in your installation depends on the nature and complexity of your monitoring environment, and the collection of the installed cartridges.

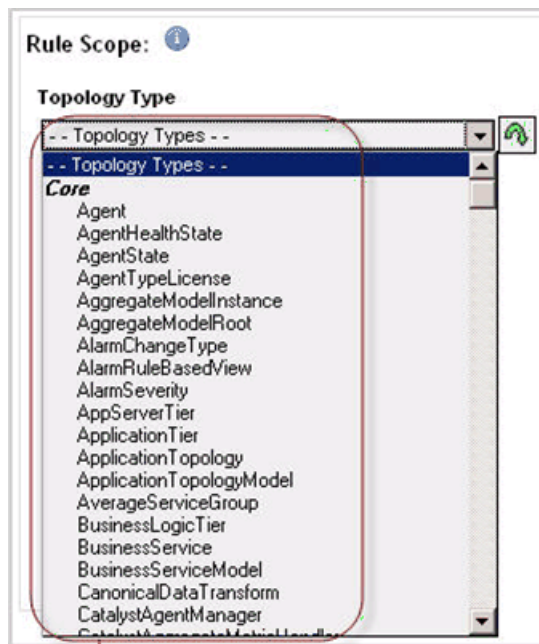
TIP: You can find out which topology types you have available by looking at the Schema Browser dashboard. A node representing this dashboard can be found in the navigation panel, under **Dashboards > Dashboard Development > Schema Browser**. For more information about the Schema Browser dashboard, see the *Dashboard Support Guide*.

Figure 93. Selecting data in Foglight 4 rules



Foglight 4: Selecting data is limited to the tables associated with the agent whose rule is being edited

Figure 94. Choosing a Foglight 5 rule scope



Foglight 5: Selecting data is not limited to cartridge-specific tables

In Foglight 5, a scoping query can be used to select all object instances of a selected type, as seen in the above example, or can include a property matching filter that selects one or more specific object instances, based on a property value. The following example shows an example where a scoping query includes a property matching filter.

Foglight 5: Scoping query with a property matching filter

Syntax

TopologyType where *PropertyName=PropertyValue*

Where:

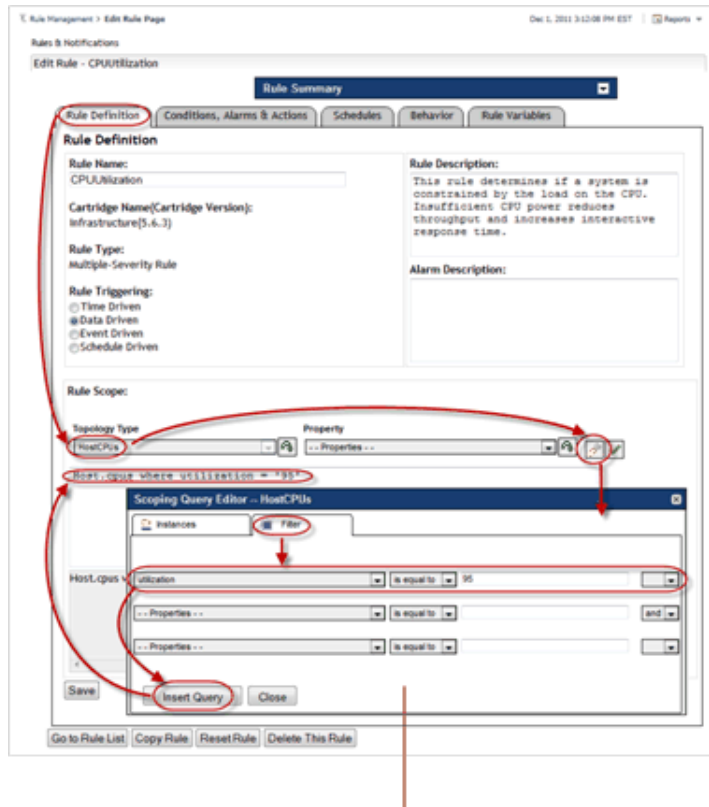
- *TopologyType* is the name of the topology type of the object instance that you want to select.
- *PropertyName* is the name of the property of the selected topology type that you want to use as a filter in the data selection.
- *PropertyValue* is the specific property value that you want to use to select only specific object instances of the selected topology type.

Example

```
Host.cpus where utilization = '95'
```

For more information about scoping queries, their syntax and usage examples, see the *Administration and Configuration Help*.

Figure 95. Foglight 5 scoping queries

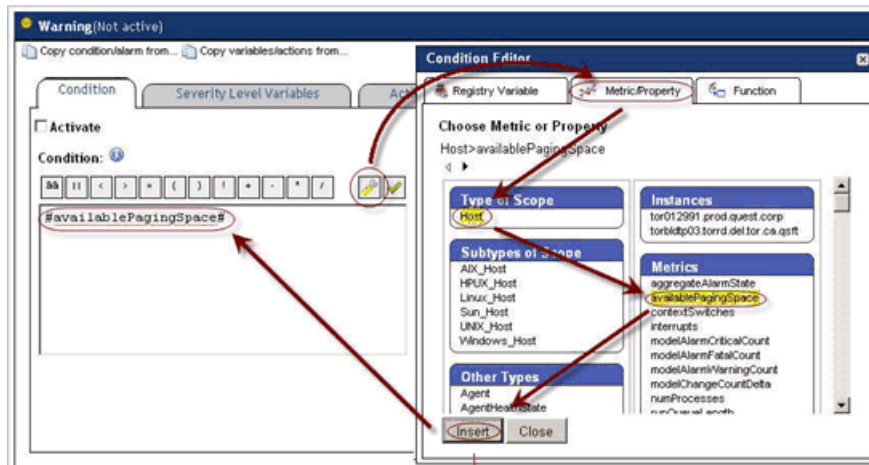


Foglight 5: Adding a scoping query to rule definitions to select data

NOTE: The query that appears in the above illustration is not the default expression that is included with the Windows_System agent's *CPU_Utilization* rule. It is modified for the purpose of this example.

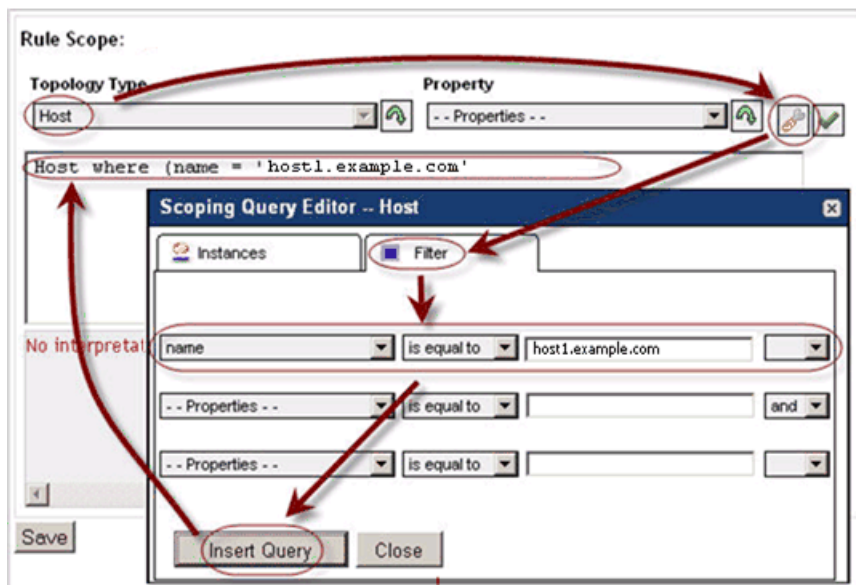
The query language in Foglight 5 requires that you follow a specific syntax for selecting data. You write queries either by typing them directly or by using the Scoping Query Editor. The selections you choose in the Scoping Query Editor translate into query expressions as you make your selections. Similarly to the use of the Scoping Query Editor, the conditional operators and the Condition Editor in rule conditions make the process of referencing registry variables and metric properties easier. Any selections you make in the Condition Editor can be added to the conditional expressions quickly and easily.

Figure 96. Foglight 5 Condition Editor



Foglight 5: Using the Condition Editor to add properties or registry values to conditional expressions

Figure 97. Foglight 5 Scoping Query Editor



Foglight 5: Using the Scoping Query Editor to write a scoping query

To write a scoping query and a conditional expression for a rule:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Create a new rule.

In this rule, you create a scoping query to select a specific host instance based on its name, and write a conditional expression for the rule's Warning severity. The rule uses this condition to evaluate the hosts's available paging space, and generates an alarm when the condition is met.

- a Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

- b On the navigation panel, under **Dashboards**, choose **Administration > Rules & Notifications > Create Rule**.

The Create Rule dashboard appears in the display area with the **Rule Definition** tab open.

Figure 98. Create Rule dashboard

2 Get started with the rule definitions.

In this step, you specify the rule name along with its type and trigger.

- a Specify the rule name.

On the Create Rule dashboard, on the **Rule Definition** tab, in the **Rule Name** box, type the rule name. For example, `My Test Rule`.

- b Set the rule type to multiple severity.

At a later step in this procedure, after having written a scoping query and a conditional expression, you will compose an alarm message that is generated when the rule condition is met. Foglight 5 includes two rule types: simple rules and multiple-severity rules. While simple rules do not raise alarms—they just fire, multiple-severity rules can generate alarms associated with each severity level. The rule you are about to create will have an active warning condition, and an alarm message associated with that condition. For complete information about different rule types, see the *Administration and Configuration Help*.

On the **Rule Definitions** tab, under **Rule Type**, select the **Multiple-Severity Rule** option.

- c Ensure that the rule trigger is data-driven.

Foglight 5 has three types of rule triggers: time-driven, data-driven, and event-driven triggers. The Foglight Management Server evaluates data-driven rules as it collects the related. For complete information about the different rule triggers, see the *Administration and Configuration Guide*.


On the **Rule Definitions** tab, under **Rule Triggering**, ensure that the **Data Driven** option is selected.

3 Write a scoping query for your rule to select a specific object instance from the topology model.

In this step, you write a scoping query for this rule to select a desired `Host` object from the topology model using its name as a property matching filter, followed by validating the query expression. You do that by selecting the `Host` type using the **Topology Type** box and specifying the property matching filter in the Scoping Query Editor, as described below. For complete information about scoping queries and the Scoping Query Editor, see the *Administration and Configuration Guide*.

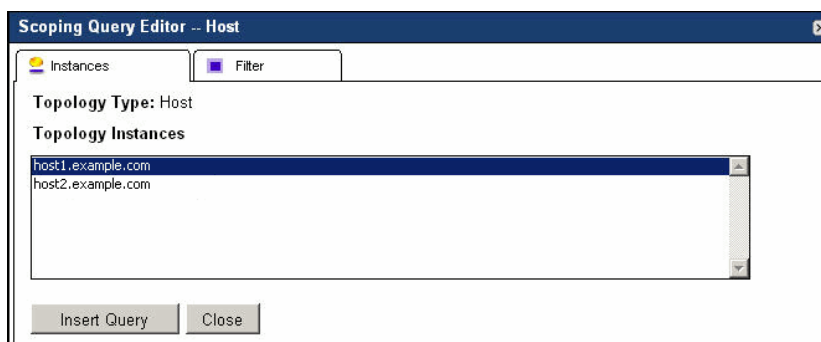
- a On the **Rule Definitions** tab, in the **Rule Scope** area, click the Topology Type box and in the list that appears, under **Core**, select the **Host** entry.

TIP: The topology types that appear in this list represent the entire collection of the types that exist in your topology model, including the types that come with the Foglight Management Server, along with the types that come from any of the installed cartridges.

- b In the **Rule Scope** area, click the Scoping Query Editor button .

The **Scoping Query Editor** dialog box appears, with the **Instances** tab open.

Figure 99. Scoping Query Editor dialog box

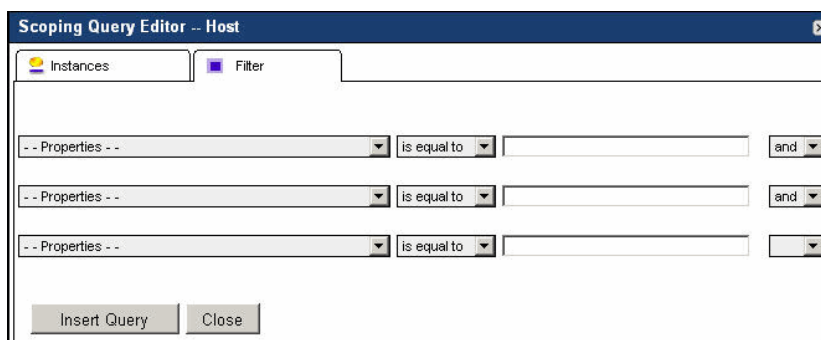


The **Instances** tab shows the object instances of the `Host` topology type, selected in [Step a](#). In this procedure, you select an existing `Host` object instance using its name. The names of existing objects instances appear in the **Topology Instances** list on this tab. Choose one specific object instance and record its name. You will use it in the next step.

- c Narrow down your data selection to one specific object instance using the `name` property value of the selected `Host` object instances as a filter.

In the **Scoping Query Editor** dialog box, open the **Filter** tab.

Figure 100. Filter tab



TIP: The **Filter** tab allows you to create a property matching clause in the query expression.


On the **Filter** tab, click the upper-left **Properties** box and select the **name** entry from the list that appears. Ensure that the box to its right is set to `is equal to`, and in the box next to it, type the host name recorded in [Step b](#).

- d On the **Filter** tab, click the upper-right box, and set it to a blank entry.

- e In the **Scoping Query Editor** dialog box, click **Insert Query**.

On the Create Rule dashboard, on the **Rule Definitions** tab, the **Rule Scope** area refreshes, showing the newly created scoping query.

Figure 101. Inserting a query

- f Close the **Scoping Query Editor** dialog box.
- g Validate the scoping query by clicking the Validate Rule Scope button .

The **Rule Scope** area refreshes, indicating that the scoping query is valid, and shows the name of the selected object instance.

Figure 102. Rule scope validation

- 4 Get started with creating a condition and an alarm message for the rule by moving to the next step in the workflow.

On the Create Rule dashboard, click the **Next** button in the upper-left corner.

Figure 103. Create Rule dashboard flow

The **Conditions, Alarms, & Actions** tab opens on the Create Rule dashboard.

Figure 104. Conditions, Alarms, & Actions tab

The screenshot shows the 'Create Rule' dialog box with the 'Conditions, Alarms, & Actions' tab selected. The 'Run Condition Query' button is visible. Below the tabs, the 'Define Conditions, Alarms & Actions' section shows the 'Rule Name' as 'My Test Rule' and the 'Rule Type' as 'Multiple-Severity Rule'. A list of severity levels is displayed: Fatal (Not active), Critical (Not active), Warning (Not active), Normal, and Undefined (Not active). The 'Warning' level is selected. A 'Cancel' button is at the bottom left.

You will use this tab to create a Warning condition that evaluates a metric property of the object instance selected in [Step 3](#).

- 5 Get started with composing the conditional expression and alarm message for the rule's Warning severity.

On the Create Rule dashboard, on the **Conditions, Alarms, & Actions** tab, click the **Warning** bar.

A pane containing the definitions for the Warning severity expands under the **Warning** bar, with the **Condition** tab open.

Figure 105. Warning condition

The screenshot shows the 'Warning (Not active)' dialog box with the 'Condition' tab selected. The 'Condition' field has a calculator icon and the 'Alarm Message' field has a text editor icon. The 'Condition' field is empty, and the 'Alarm Message' field is empty. The 'Activate' checkbox is unchecked.

- 6 Define the rule condition for the Warning severity.

The conditional expression that you are about to write compares the value stored in the selected Host object's `availablePagingSpace` property with the value of the `PageSpaceWarning` registry variable. When the metric value exceeds the value stored in the registry variable, Foglight generates a Warning alarm associated with this rule. Both values indicate the percentage of the available paging space. The default value of the `PageSpaceWarning` registry variable is 20.

To write the conditional expression, use the Condition Editor and the relational operators appearing on top of the **Condition** box, as described below. For complete information about rule conditions and scoping queries and the Condition Editor, see the *Administration and Configuration Guide*.

Use the Condition Editor and conditional operators to create the expression, as described below.


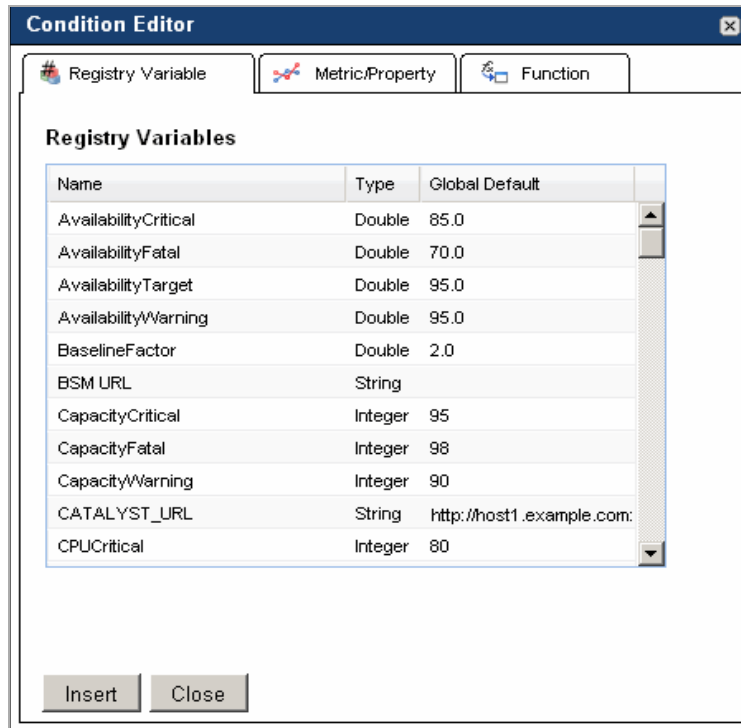
- h In the **Warning** area, on the Condition tab, click the Condition Editor button .
- The **Condition Editor** dialog box appears with the **Registry Variable** tab open.

Figure 106. Condition Editor



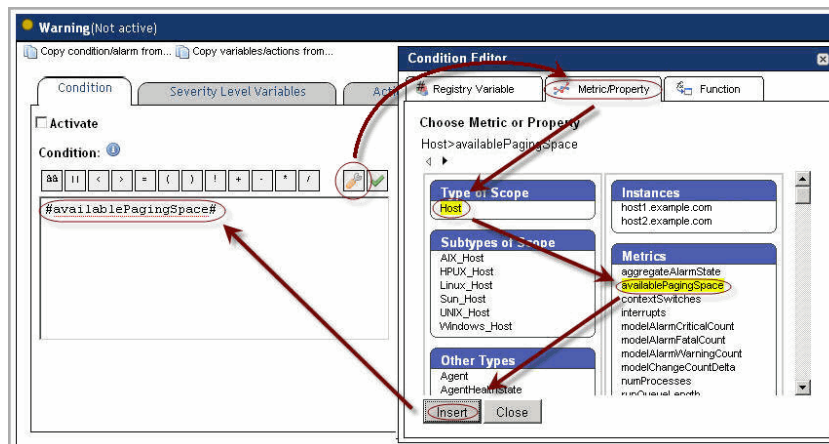
- i Add the `availablePagingSpace` metric to the expression. The rule compares the value of this metric with the `PageSpaceWarning` registry variable, with the metric as a left operand in the relational expression and the registry variable as the right operand, with the greater than operator `'>'` between the two operands:

```
#availablePagingSpace# > registry ("PageSpaceWarning")
```

In the **Condition Editor** dialog box, open the **Metric/Property** tab. On the **Metric/Property** tab, in the **Type of Scope** area, click **Host**. In the **Metrics** area that appears, click **availablePagingSpace**, followed by clicking the **Insert** button.

In the **Warning** pane, on the **Condition** tab, the **Condition** box refreshes, showing the `availablePagingSpace` metric, newly-added to the conditional expression.

Figure 107. Adding a metric to conditional expression



- j Add the greater than operator '>' to the expression by clicking the greater than sign on top of the **Condition** box.

Figure 108. Adding an operator to conditional expression

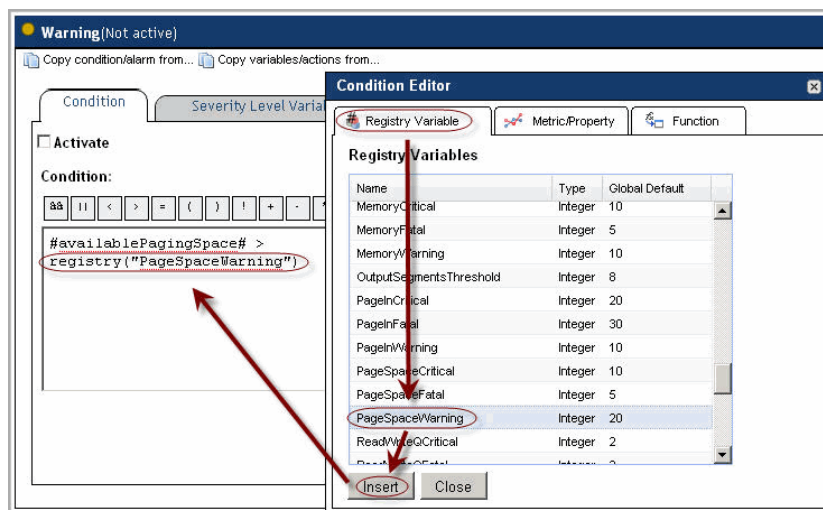



- k Add the `PageSpaceWarning` registry variable as a right operand to the expression.

In the **Condition Editor** dialog box, open the **Registry Variable** tab. On this tab, in the **Registry Variables** list, click the **PageSpaceWarning** entry, followed by clicking the **Insert** button.

In the **Warning** pane, on the **Condition** tab, the **Condition** box refreshes, showing the `PageSpaceWarning` registry variable, newly added to the conditional expression.

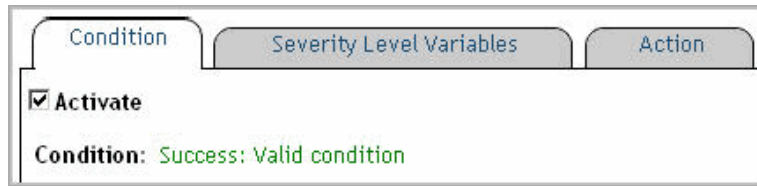
Figure 109. Adding a registry variable to conditional expression



- l Evaluate the conditional expression.
- m Validate the conditional expression by clicking the Validate Condition button  on top of the **Condition** box.

In the **Warning** pane, the **Condition** tab refreshes, indicating that the conditional expression is valid.

Figure 110. Conditional expression validation



- 7 Define the alarm message that you want to generate when the Warning condition is reached..

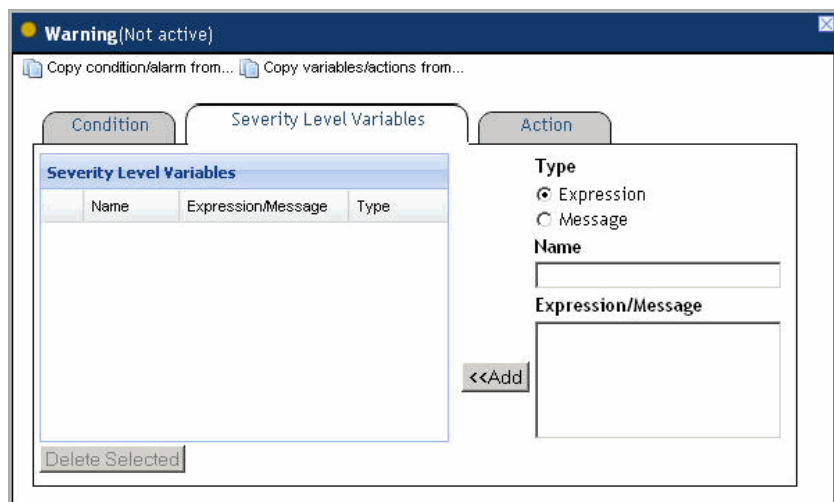
Alarm messages contain expressions that can contain both literal text strings and severity-level variables. Severity-level variables can reference any registry variables or metrics that are available to the rule, as specified by its scoping query. At run-time, they form a meaningful statement in the form of an alarm message that indicates the nature of the problem when the alarm is generated. Before you get started with defining an alarm message, you need to define all of the severity-level variables that you want to use in the alarm message. For more information, see the *Administration and Configuration Guide*.

The purpose of the alarm message that you are about to write is to inform the end-user about the amount of free paging space on the selected host. It uses two severity-level variables: the first one (`var1`) contains the host name while the second one (`var2`) contains the percentage of the available paging space.

- a Specify the severity variables for the alarm message.

In the **Warning** pane, open the **Severity Level Variables** tab.

Figure 111. Severity Level Variables tab



- b Use this tab to add the two severity variables to the rule. The definitions of each variable are listed in the following table.

Table 2. Severity-Level Variables

Name	Value	Type
var1	<code>scope.get("name")</code>	Expression
var2	<code>scope.get("availablePagingSpace")</code>	Expression

To add a variable, specify its type, name, and expression, followed by clicking the **Add** button.

- c Return to the **Condition** tab in the **Warning** pane.
- d In the **Warning** pane, on the **Condition** tab, in the **Alarm Message** box, type the following alarm message:

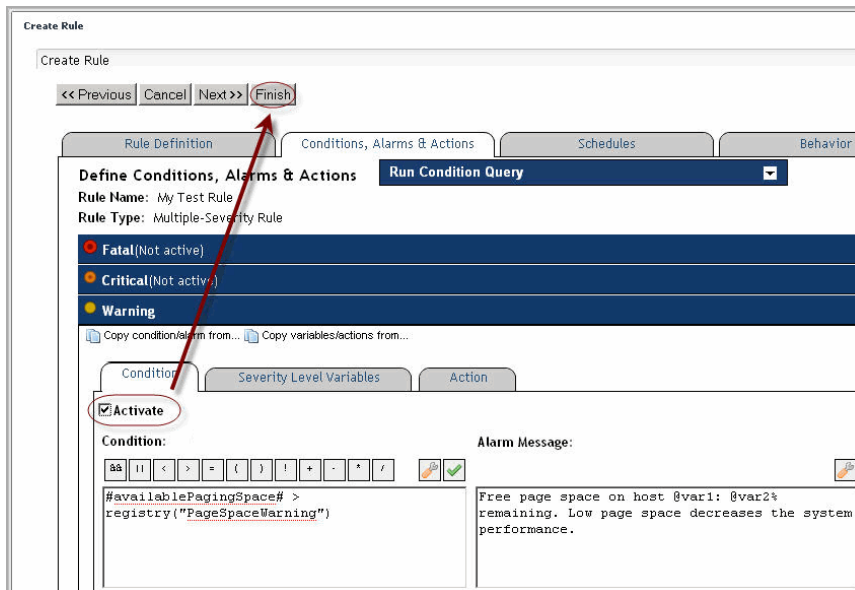
Free page space on host @var1: @var2% remaining. Low page space decreases the system performance.

With `var1` being set to the host name, and `var2` set to the amount of available paging space, the above message syntax generates an alarm message similar to the following one:

Free page space on host myHost: 10% remaining. Low page space decreases the system performance.

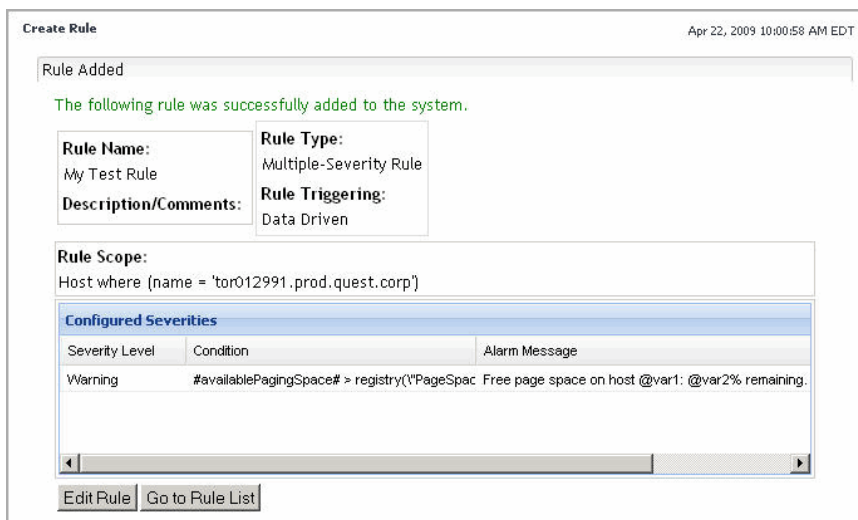
- 8 Activate the Warning condition and save the rule by clicking the Activate check box on the **Condition** tab of the **Warning** pane, followed by clicking the **Finish** button in the upper-left corner.

Figure 112. Activating a condition



The Create Rule dashboard refreshes, indicating that the rule is successfully added to the system, and showing the rule summary.

Figure 113. Rule successfully added



See also

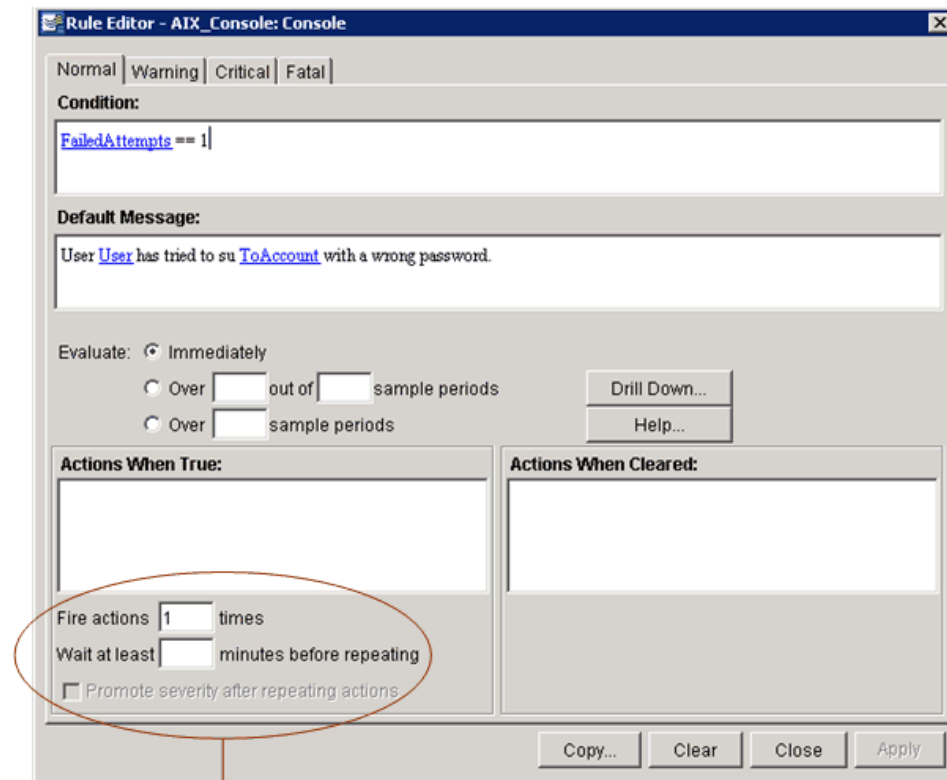
- [How Do I Get Started?](#) on page 5

- [How Do I Edit a Rule?](#) on page 54
- [How Do I Promote a Rule Severity?](#) on page 75

How Do I Promote a Rule Severity?

In Foglight® 4, you used the Rule Editor to promote the rule severity if an alarm triggered by a rule remains in the same state for a certain amount of time.

Figure 114. Foglight 4 Rule Editor

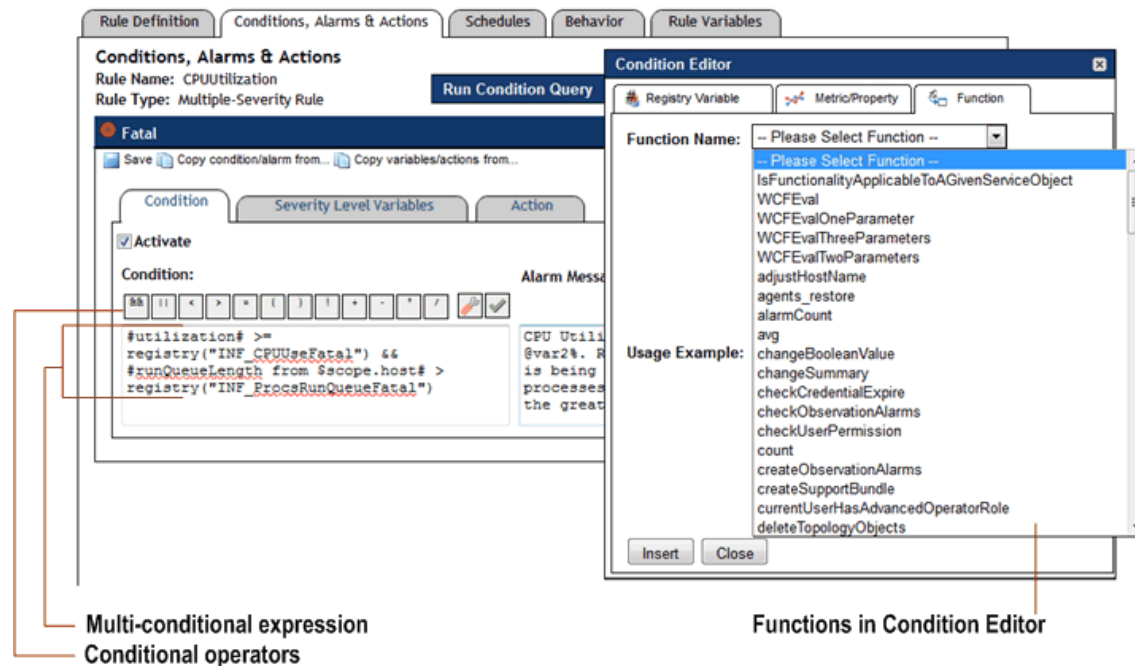


Interfaces for assigning time-based severity in Foglight 4

In Foglight 5, use the Edit Rule view to promote a rule severity using time-based functions and multi-condition expressions. Use the OR operator to separate conditions in expressions and the avg function to return the rule severity in each individual condition during a desired time period.

For example, you can create a multi-condition expression that triggers a critical alarm if a rule remains in a warning state for 30 minutes along with a fatal alarm if the rule remains in the same state for 60 minutes.

Figure 115. Multiple condition expression



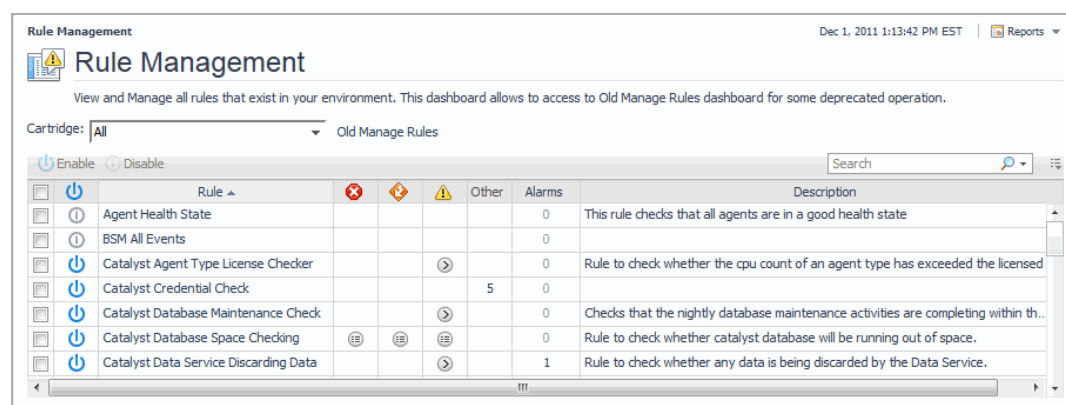
To promote a rule severity:

- NOTE:** To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
- On the navigation panel, under **Dashboards**, choose **Administration > Rules & Notifications > Rule Management**.

The Rule Management dashboard appears in the display area, listing all available rules.

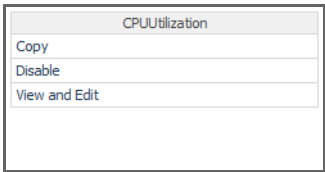
Figure 116. Rule Management dashboard



- On the Rule Management dashboard, locate and click the rule to which you want to assign a time-based severity.
- On the Rule Management dashboard, in the **Rule** column, click the rule that you want to edit. For example, CPUUtilization.

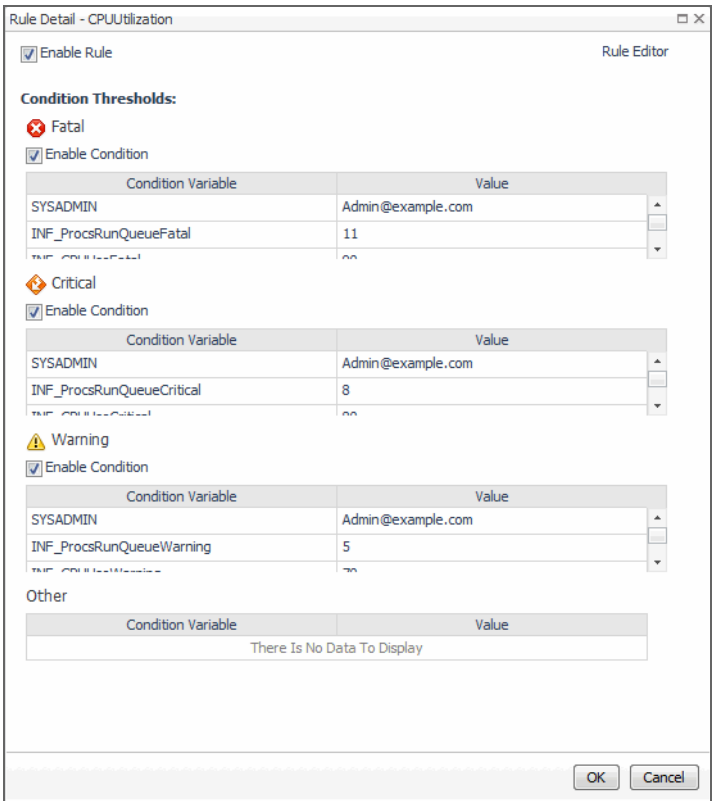
A menu appears.

Figure 117. Editing a rule menu



- 5 In the menu, click **View and Edit**.
The **Rule Detail** dialog box appears.

Figure 118. Rule Detail dialog box



- 6 In the **Rule Detail** dialog box, in the top-right corner, click **Rule Editor**.
The **Edit Rule Page** appears for the selected rule with the **Conditions, Alarms, & Actions** tab open, showing the properties of the selected rule, and a separate pane for each severity: **Fatal, Critical, Warning, Normal, and Undefined**.

Figure 119. Edit Rule Page

- 7 Add a time-based severity to the Warning condition.

- a In the **Edit Rule** view, click **Warning**.

A pane containing the settings for the Warning condition expands under the **Warning** bar.

Figure 120. Warning condition

- b Observe the Warning condition for the CPUUtilization rule:

```
#utilization# >= registry("INF_CPUUseWarning") &&
#runQueueLength from $scope.host# > registry("INF_ProcsRunQueueWarning")
```

- c Copy the Warning condition without making any changes to it.

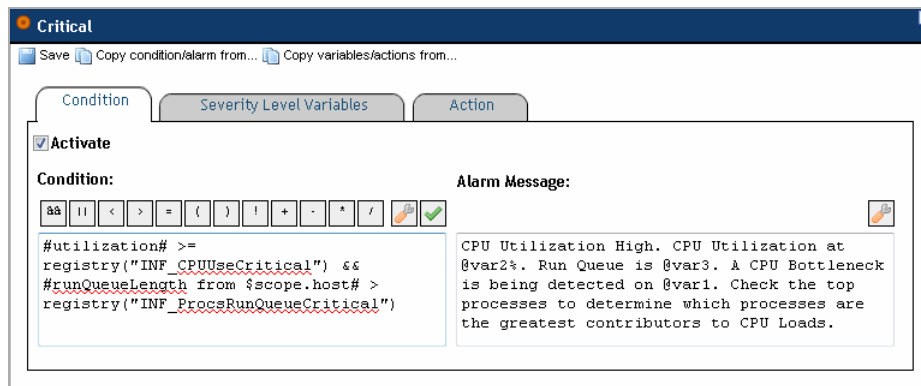
i | TIP: Click the **Warning** bar to collapse the pane.

- 8 Add a time-based severity to the Critical condition that will cause the CPU_Utilization rule to trigger a critical alarm if it remains in a warning state for 30 minutes.

- a In the **Edit Rule** view, click **Critical**.

A pane containing the settings for the Critical condition expands under the **Critical** bar.

Figure 121. Critical condition



- b Observe the Critical condition of the CPU_Utilization rule:

```
#utilization# >= registry("INF_CPUUseCritical") &&
#runQueueLength from $scope.host# > registry("INF_ProcsRunQueueCritical")
```

- c Add the Warning condition that you copied in [Step 7](#) immediately below the existing lines of code and edit the expression as follows:

```
(#utilization# >= registry("INF_CPUUseCritical") &&
#runQueueLength from $scope.host# >
registry("INF_ProcsRunQueueCritical")) ||

(avg(#utilization for 30 minutes#) >= registry("INF_CPUUseWarning") &&
avg(#runQueueLength from $scope.host for 30 minutes#) >
registry("INF_ProcsRunQueueWarning"))
```

This updated conditional expression now causes the rule to trigger a critical alarm if the rule meets the original condition, or if it remains in a warning state for 30 minutes.

- d Copy the Critical condition.

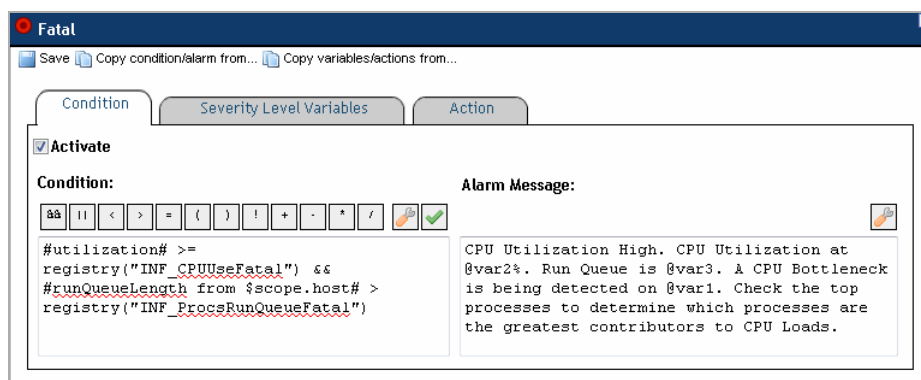
TIP: Click the **Critical** bar to collapse the pane.

- 9 Add a time-based severity to the Fatal condition that will cause the CPU_Utilization rule to trigger a critical alarm if it remains in a warning state for 30 minutes, and a fatal alarm if the rule remains in a warning state for 60 minutes.

- a In the **Edit Rule** view, click **Fatal**.

A pane containing the settings for the Fatal condition expands under the **Fatal** bar.

Figure 122. Fatal condition



- b Observe the Fatal condition for the CPU_Utilization rule:

```
#utilization# >= registry("INF_CPUUseFatal") &&
#runQueueLength from $scope.host# > registry("INF_ProcsRunQueueFatal")
```

- c Add the Critical condition that you edited in [Step 8](#) immediately below the existing lines and edit the expression as follows:

```
(#utilization# >= registry("INF_CPUUseFatal") &&
#runQueueLength from $scope.host# > registry("INF_ProcsRunQueueFatal"))
||

(avg(#utilization for 30 minutes#) >= registry("INF_CPUUseCritical") &&
avg(#runQueueLength from $scope.host for 30 minutes#) >
registry("INF_ProcsRunQueueCritical")) ||

(avg(#utilization for 60 minutes#) >= registry("INF_CPUUseWarning") &&
avg(#runQueueLength from $scope.host for 60 minutes#) >
registry("INF_ProcsRunQueueWarning"))
```

This updated conditional expression now causes the rule to trigger a fatal alarm if the rule meets the original condition, or if it remains in a critical state for 30 minutes, or if it remains in a warning state for 60 minutes.

See also

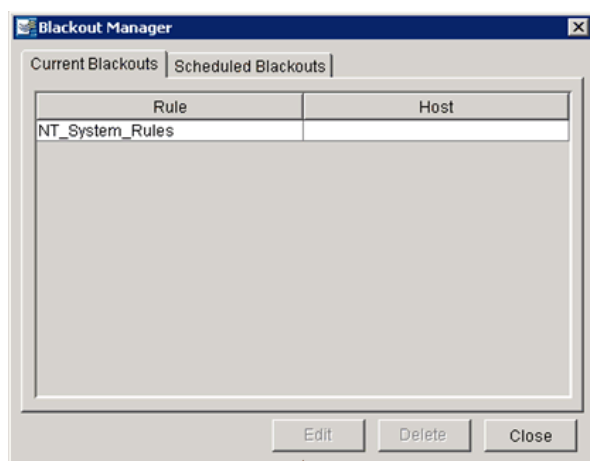
- [How Do I Get Started?](#) on page 5
- [How Do I Edit a Rule?](#) on page 54
- [How Do I Select Table Data in Rule Conditions?](#) on page 59

How Do I Edit a Blackout Schedule?

An agent blackout is a scheduled event during which the agent does not collect data for set intervals. For example, you might want to set the times when regularly scheduled maintenance is performed on a server as the blackout period for the agents that run on that server.

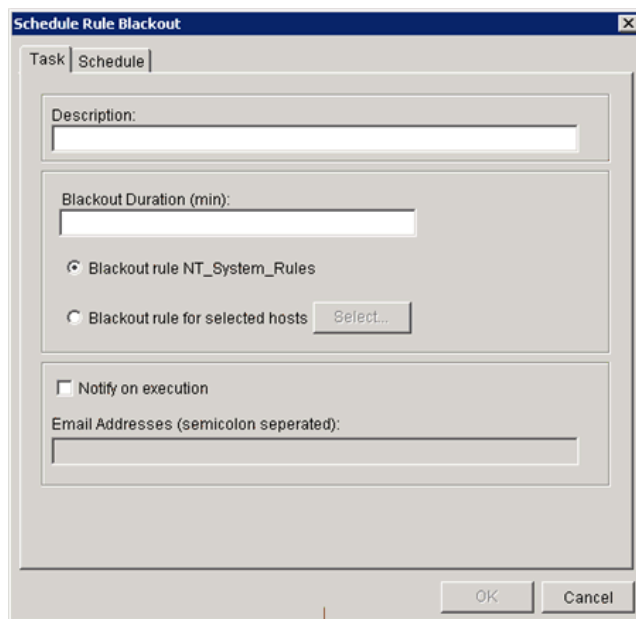
In Foglight® 4, you used the Blackout Manager dialog box to look at agent blackout schedules, and the Schedule Rule Blackout and Immediate Blackout dialog boxes to prevent agent rules from firing.

Figure 123. Foglight 4 Blackout Manager



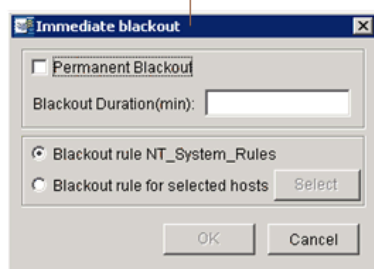
Foglight 4: Looking at Blackout Schedules

Figure 124. Scheduling and assigning rule blackouts in Foglight 4



Foglight 4: Scheduling Rule Blackouts

Foglight 4: Assigning Immediate Blackout Schedules



Along with agent blackouts, Foglight 5 allows you to assign blackout schedules to topology objects. Foglight 5 uses the data it collects to create topology models. A topology model is a graph that contains topology nodes. Each node represents an object instance of a topology type. Unlike agent blackouts, which prevent the data collection for the agent instance to which the blackout is assigned, topology object blackouts only prevent any rules from analyzing that object, without interrupting their data collection. For information about assigning blackouts to agents and topology objects, see the *Administration and Configuration Help*.

The way you assign blackout schedules is somewhat different in Foglight 5. In Foglight 4, you typically select an agent in the Rule Browser and assign one of the existing blackout schedules to prevent one or more rules from firing.

In Foglight 5, you use blackout schedules to prevent agents from collecting data. You can use an existing schedule or create another one if required.

To edit and assign a blackout schedule:

- NOTE:** To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Edit a schedule using the Manage Schedules dashboard and **Edit Schedule** view.

Figure 125. Manage Schedules dashboard

Edit Schedule

Schedule Name:

Last Modified Date: 8/21/14 4:55 PM

Description/Comments: A schedule that runs very frequently. Primarily used for testing. This schedule is used to trigger an activity. As a result it does not have a significant duration.

Next Scheduled Time	Recurrence Pattern	Range of Occurrence	Details	Time Range
Wed Sep 03, 2014 11:40:27 EDT	Hourly	No End	Every 5 minute(s) ,Duration 1 minute(s)	N/A

For instructions, see [To edit a schedule:](#) on page 82.

- 2 Assign the edited schedule to an agent using the Blackouts dashboard.

Figure 126. Blackouts dashboard

Blackouts Nov 23, 2010 2:37:37 PM EST

A blackout is a period of time where normal monitoring activities (data collection or alarms) are suspended due to administrative preference. Blackouts are commonly created to prevent noisy alerts during scheduled maintenance periods.

Create a One-Time Blackout
 • Turn off data collection or alarms for select items until a specified end time or for a fixed period. Useful for unscheduled maintenance.

Create a Scheduled Blackout
 • Select a group of items and schedule a cessation of monitoring activities on a regular basis. Useful for coordinating with scheduled maintenance.

Manage Blackouts
 • Create, edit and delete blackouts.


View Blackouts by Object
 • View top-level objects which have their alarms suspended, and the blackouts to which they belong.

View Blackouts by Agent
 • View agents which have their data collection suspended, and the blackouts to which they belong.

For instructions, see [To assign a blackout schedule to an agent instance:](#) on page 83.

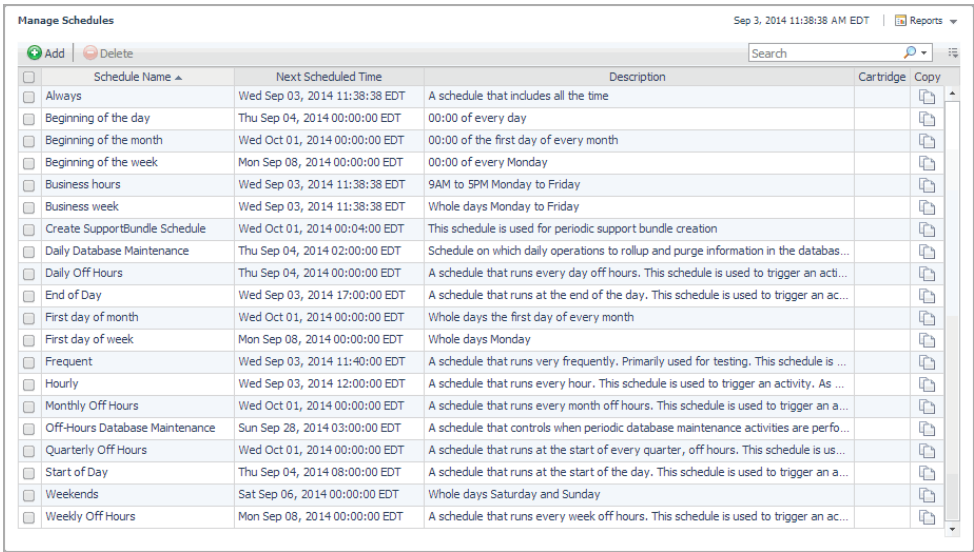
To edit a schedule:

- i | NOTE:** To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
 To open the navigation panel, click the right-facing arrow () on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Schedules > Manage Schedules**.

The Manage Schedules dashboard appears, listing all available schedules.

Figure 127. Manage Schedules dashboard

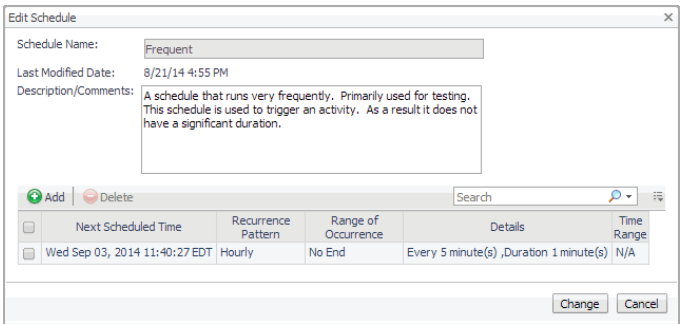


Manage Schedules				
Add Delete		Search		
<input type="checkbox"/>	Schedule Name	Next Scheduled Time	Description	Cartridge Copy
<input type="checkbox"/>	Always	Wed Sep 03, 2014 11:38:38 EDT	A schedule that includes all the time	
<input type="checkbox"/>	Beginning of the day	Thu Sep 04, 2014 00:00:00 EDT	00:00 of every day	
<input type="checkbox"/>	Beginning of the month	Wed Oct 01, 2014 00:00:00 EDT	00:00 of the first day of every month	
<input type="checkbox"/>	Beginning of the week	Mon Sep 08, 2014 00:00:00 EDT	00:00 of every Monday	
<input type="checkbox"/>	Business hours	Wed Sep 03, 2014 11:38:38 EDT	9AM to 5PM Monday to Friday	
<input type="checkbox"/>	Business week	Wed Sep 03, 2014 11:38:38 EDT	Whole days Monday to Friday	
<input type="checkbox"/>	Create SupportBundle Schedule	Wed Oct 01, 2014 00:00:00 EDT	This schedule is used for periodic support bundle creation	
<input type="checkbox"/>	Daily Database Maintenance	Thu Sep 04, 2014 02:00:00 EDT	Schedule on which daily operations to rollup and purge information in the databas...	
<input type="checkbox"/>	Daily Off Hours	Thu Sep 04, 2014 00:00:00 EDT	A schedule that runs every day off hours. This schedule is used to trigger an acti...	
<input type="checkbox"/>	End of Day	Wed Sep 03, 2014 17:00:00 EDT	A schedule that runs at the end of the day. This schedule is used to trigger an ac...	
<input type="checkbox"/>	First day of month	Wed Oct 01, 2014 00:00:00 EDT	Whole days the first day of every month	
<input type="checkbox"/>	First day of week	Mon Sep 08, 2014 00:00:00 EDT	Whole days Monday	
<input type="checkbox"/>	Frequent	Wed Sep 03, 2014 11:40:00 EDT	A schedule that runs very frequently. Primarily used for testing. This schedule is ...	
<input type="checkbox"/>	Hourly	Wed Sep 03, 2014 12:00:00 EDT	A schedule that runs every hour. This schedule is used to trigger an activity. As ...	
<input type="checkbox"/>	Monthly Off Hours	Wed Oct 01, 2014 00:00:00 EDT	A schedule that runs every month off hours. This schedule is used to trigger an a...	
<input type="checkbox"/>	Off-Hours Database Maintenance	Sun Sep 28, 2014 03:00:00 EDT	A schedule that controls when periodic database maintenance activities are perfo...	
<input type="checkbox"/>	Quarterly Off Hours	Wed Oct 01, 2014 00:00:00 EDT	A schedule that runs at the start of every quarter, off hours. This schedule is us...	
<input type="checkbox"/>	Start of Day	Thu Sep 04, 2014 08:00:00 EDT	A schedule that runs at the start of the day. This schedule is used to trigger an a...	
<input type="checkbox"/>	Weekends	Sat Sep 06, 2014 00:00:00 EDT	Whole days Saturday and Sunday	
<input type="checkbox"/>	Weekly Off Hours	Mon Sep 08, 2014 00:00:00 EDT	A schedule that runs every week off hours. This schedule is used to trigger an ac...	

- 3 In the Manage Schedules dashboard, in the **Schedule Name** column, click the schedule that you want to edit.

The **Edit Schedule** dialog box appears, showing the properties of the selected schedule.

Figure 128. Edit Schedule dialog box



Schedule Name: Frequent

Last Modified Date: 8/21/14 4:55 PM

Description/Comments: A schedule that runs very frequently. Primarily used for testing. This schedule is used to trigger an activity. As a result it does not have a significant duration.

Add Delete

Search

<input type="checkbox"/>	Next Scheduled Time	Recurrence Pattern	Range of Occurrence	Details	Time Range
<input type="checkbox"/>	Wed Sep 03, 2014 11:40:27 EDT	Hourly	No End	Every 5 minute(s), Duration 1 minute(s)	N/A

Change Cancel

- 4 Edit the schedule as required.

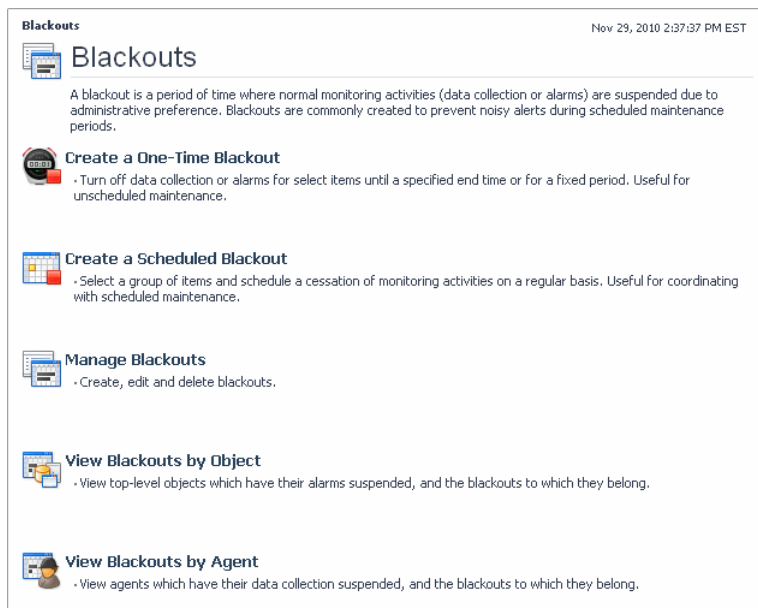
For complete instructions, see the *Administration and Configuration Help*.

To assign a blackout schedule to an agent instance:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
- To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Setup & Support > Blackouts**.
- The Blackouts page appears in the display area.

Figure 129. Blackouts page

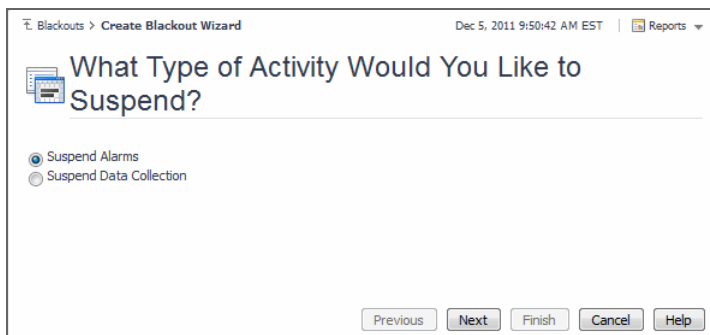


- 3 Indicate that you want to create a scheduled blackout.

On the Blackouts page, click **Create a Scheduled Blackout**.

The display area refreshes, showing the first step in the Create Blackout Wizard.

Figure 130. Create Blackout Wizard



- 4 Indicate that you want to black out agents.

In the Create Blackout Wizard, select **Suspend Data Collection**, and click **Next**.

IMPORTANT: Blacking out an agent instance stops the data collection for that instance.

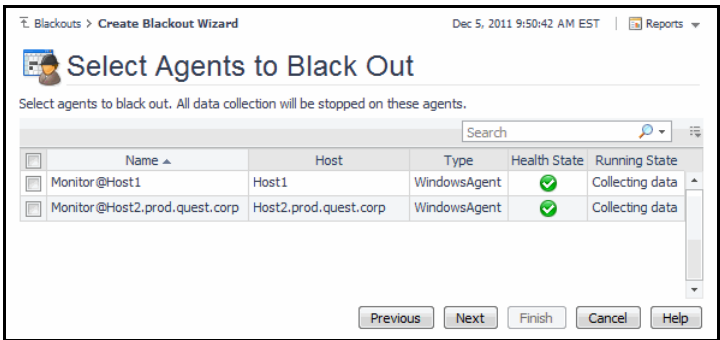
The display area refreshes, showing the next step in the wizard.

Figure 131. Select Agents to Suspend Data Collection step



- 5 Indicate that you want to choose agents by selecting specific agent instances.
- In the Create Blackout Wizard, ensure that **Select the Agents Directly from a List** is selected, and click **Next**.
- The display area refreshes, showing the next step in the wizard.

Figure 132. Select Agents to Black Out step



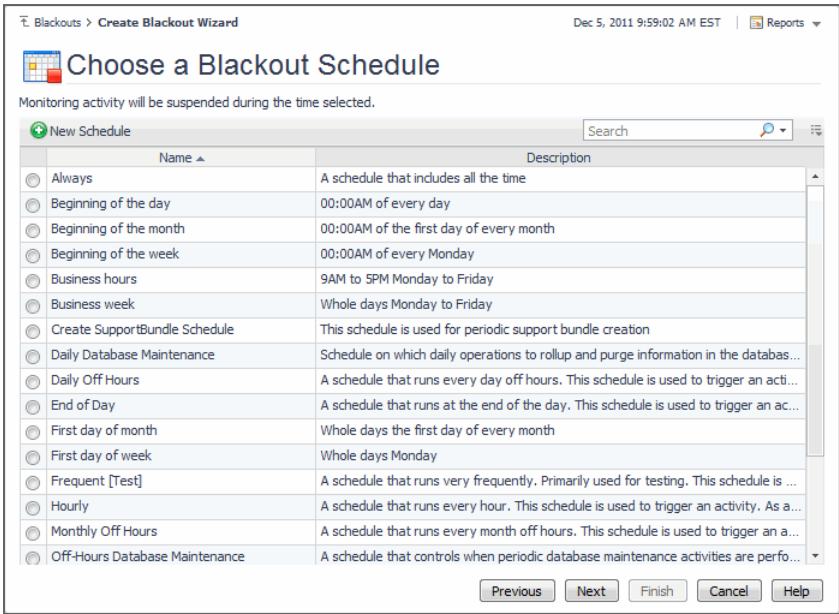
- 6 Choose the agent instances whose data collection you want to stop.
- In the Create Blackout Wizard, select one or more rows containing the agent entries, and click **Next**.

CAUTION: Selecting an agent instance stops its data collection.

TIP: To select all agent instances, use the check box at the top of the list.

The display area refreshes, showing the next step in the wizard.

Figure 133. Choose a Blackout Schedule step



The list shows the schedules that exist in your Foglight installation and their descriptions. This includes default schedules packaged with Foglight, and any schedules that you create.

7 Select a schedule that you want to associate with the topology blackout.

- a Review the list of schedules.
- b If you do not find a schedule that meets your needs, you can create a new one.

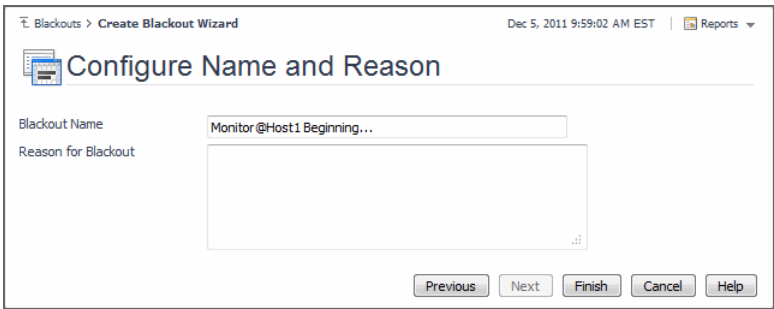
IMPORTANT: Choosing to create or edit the existing schedules causes you to exit the wizard.

To create a new schedule, click **Create New Schedule** and follow the flow in the Simple New Schedule Wizard. For more information, see the *Administration and Configuration Help*.

- c Select the schedule that you want to assign to the topology blackout and click **Next**.

The display area refreshes, showing a default name for the blackout.

Figure 134. Configure Name and Reason step



8 **Optional.** Specify a different name or a reason for the blackout.

IMPORTANT: Specifying a reason for the blackout is not mandatory, but is strongly recommended.

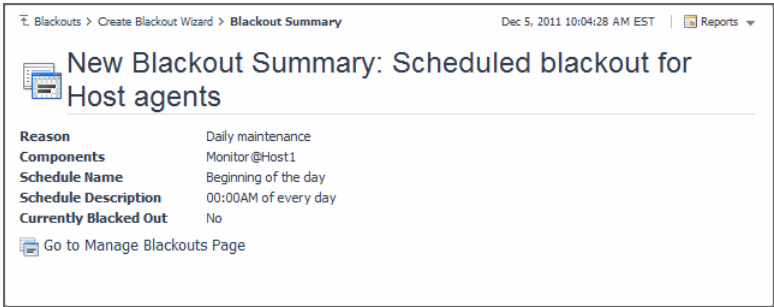
For example:

- **Blackout Name:** Scheduled blackout for Host agents
- **Reason for Blackout:** Daily maintenance

Click **Finish**.

The display area refreshes, showing the blackout summary.

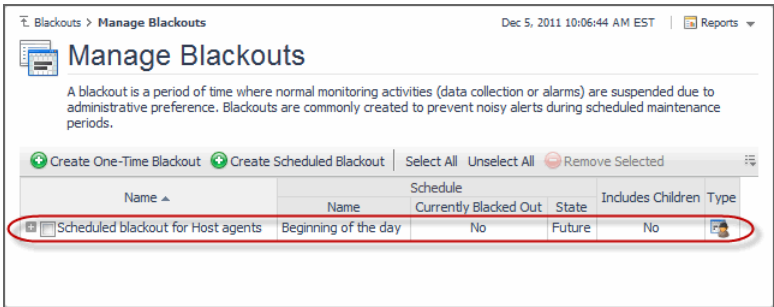
Figure 135. Blackout Summary



- 9 Click **Go to Manage Blackouts Page**.

The Manage Blackouts dashboard appears in the display area. The newly created blackout appears on the list.

Figure 136. Manage Blackouts dashboard



For more information about blackout schedules, see the *Administration and Configuration Help*.

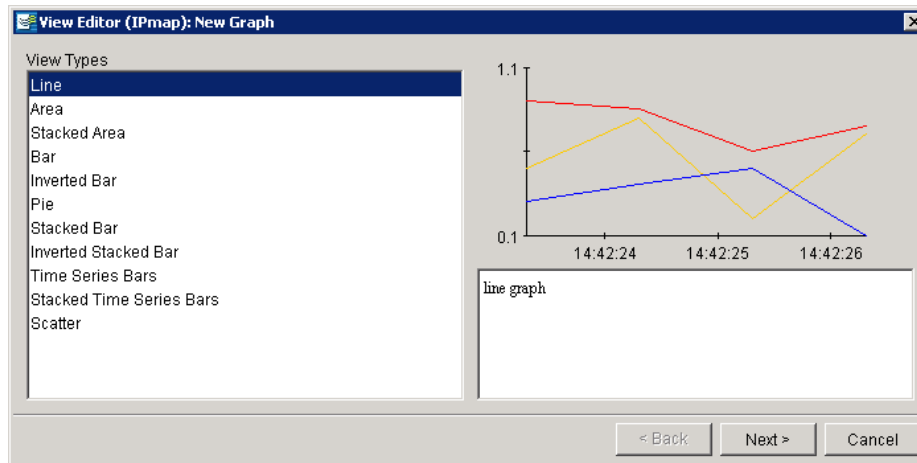
See also

- [How Do I Get Started?](#) on page 5
- [How Do I Edit Agent Properties?](#) on page 49
- [How Do I Build and Schedule a Report?](#) on page 90

How Do I Build a Graph?

In Foglight® 4, you used the View Editor to create different types of graph views.

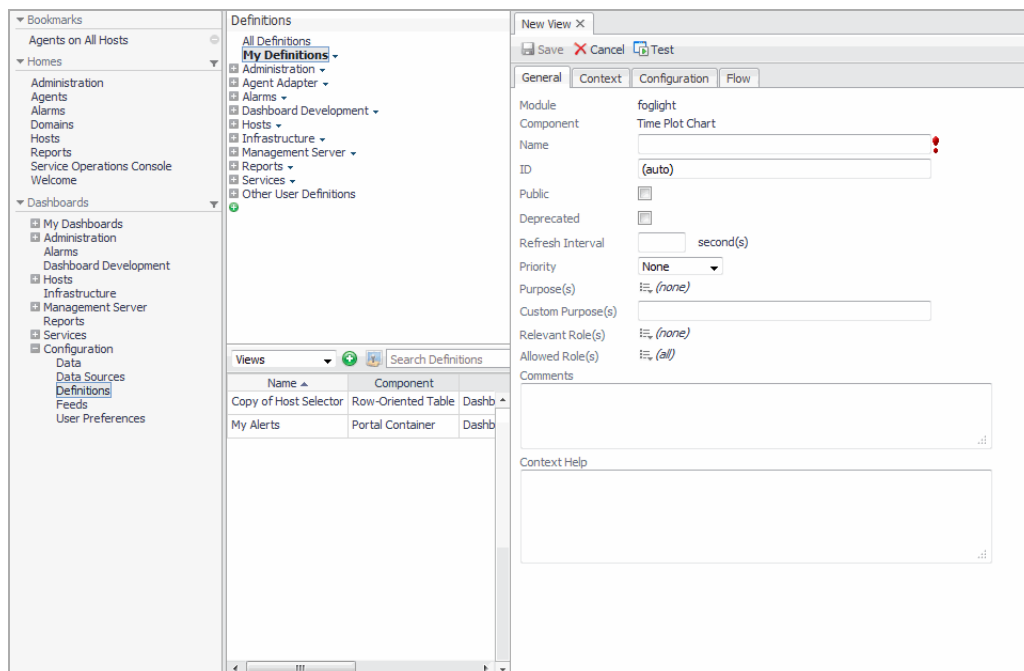
Figure 137. Foglight 4 View Editor



Typically, you followed the same workflow that included choosing the graph type, writing queries to extract information from one or more tables, and reviewing the graph.

In Foglight 5, use the Definitions dashboard to create a graph view.

Figure 138. Foglight 5 Definitions dashboard



Start by creating a new chart or copying an existing one, and define or edit the data sources and context for the graph. Additionally, if you plan to use that graph on a regular basis, you can promote it to a dashboard and add it to the bookmarks for easy access. For information on how to bookmark a dashboard, see [How Do I Bookmark a Dashboard for Easy Access?](#) on page 25 on page 25.

To build a graph:

NOTE: To complete this procedure, your user account must belong to a group with the Dashboard Designer role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

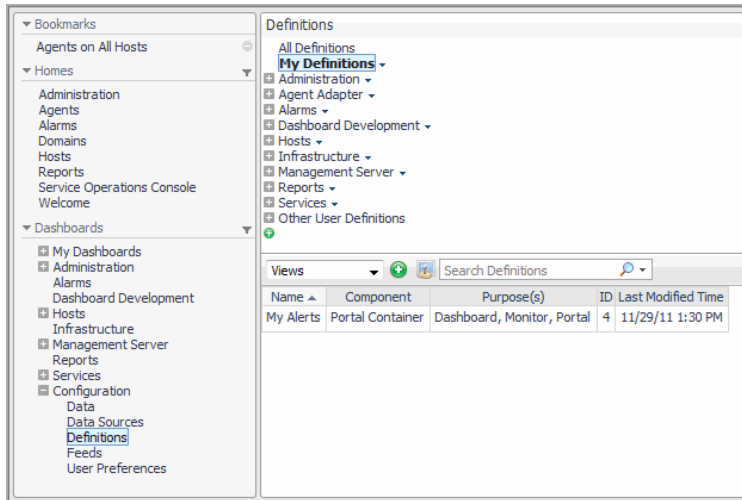
- 1 Ensure that the navigation panel is open.


To open the navigation panel, click the right-facing arrow (▶) on the left.

- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Definitions**.

The Definitions dashboard appears, showing a navigation tree in the upper-left pane and a series of tabs in the lower-left pane.

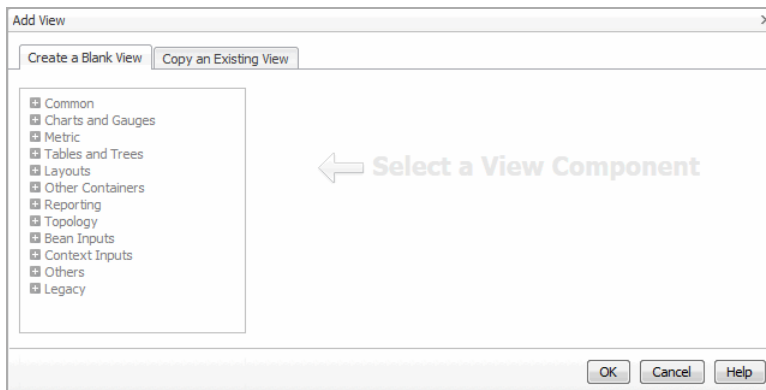
Figure 139. Definitions dashboard



- 3 In the **Definitions** pane, ensure that **My Definitions** node in the navigation tree is selected.
- 4 In the lower-left pane, ensure the **Views** entry is selected.
- 5 Click .

The **Add View** dialog box appears.

Figure 140. Add View dialog box



In the **Add View** dialog box, on the **Create a Blank View** tab, a navigation tree shows different groups of views.

TIP: In addition to creating blank views, you can also copy existing views and modify them as desired. For more information, see the [How Do I Share My Dashboards with Other Users?](#), [How Do I Share My Dashboards with Other Users?](#) on page 27.

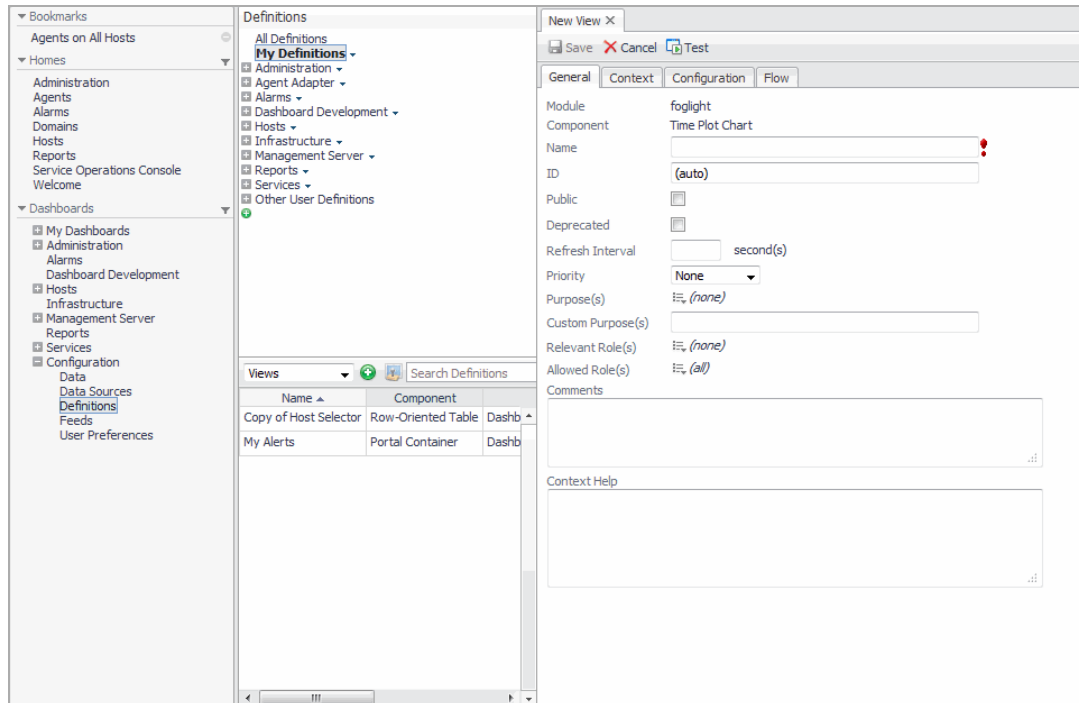
The **Common** and **Charts and Gauges** nodes contain graph objects or charts. You can use any of the available chart objects to create a graph.

- 6 Choose the type of view that you want to create.

For example, to build a plot chart that shows how a metric changes over time, choose **Charts and Gauges** > **Time Plot Chart**, followed by clicking **OK**.

The **Add View** dialog box and the pane on the right of the Definitions dashboard refreshes to show a series of tabs that let you define view properties, with the **General** tab open.

Figure 141. General tab



7 Use the tabs in the **Definitions** pane to define your chart as required.

- **General:** Specifies the chart name, description, size, and role.
- **Context:** Specifies the context keys.
- **Configuration:** Specifies the look of components in the view and their source of data.
- **Flow:** Specifies context-related application flows.

For examples on how to create and edit charts and other types of views, see the *Web Component Tutorial*. For detailed information about the components that appear in the Definitions dashboard, see the *Web Component Guide*.

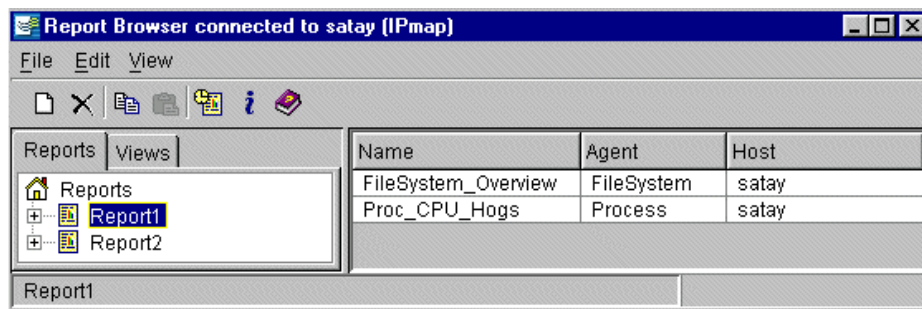
See also

- [How Do I Get Started?](#) on page 5
- [What Dashboards Are Available?](#) on page 19
- [How Do I Share My Dashboards with Other Users?](#) on page 27

How Do I Build and Schedule a Report?

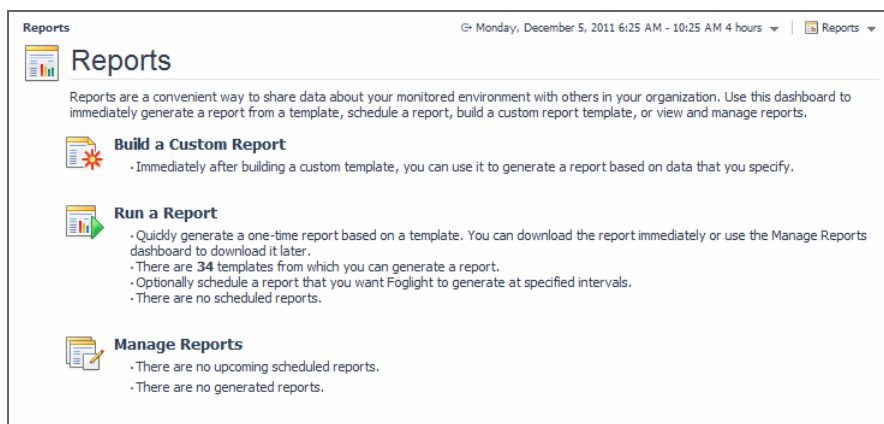
In Foglight® 4, you used the Report Browser to browse through reports.

Figure 142. Foglight 4 Report Browser



Foglight 5 includes the Reports dashboard that allows you to create, schedule, and browse through existing reports.

Figure 143. Foglight 5 Reports dashboard



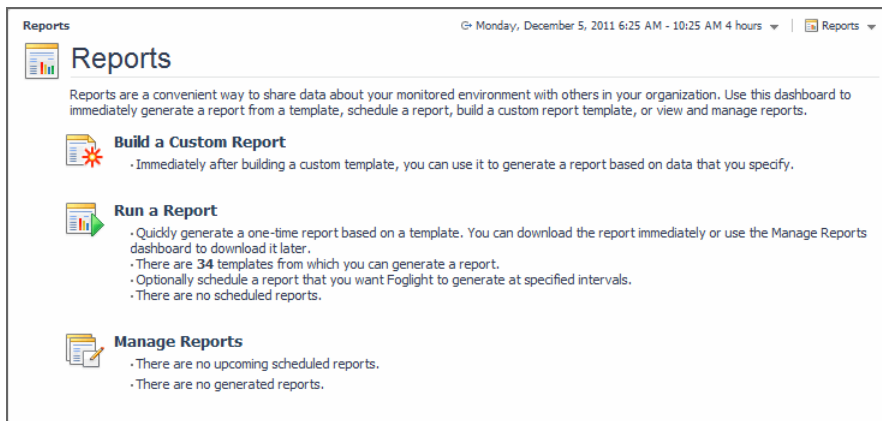
In addition to the Reports dashboard that lets you choose from existing report templates, you can quickly create a custom report by assembling it from one or more views and data objects. For more information, see [How Do I Add Views and Data to a Report?](#) on page 95.

To build and schedule a report:

NOTE: To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
To open the navigation panel, click the right-facing arrow (►) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Reports**.
The Reports dashboard appears in the display area.

Figure 144. Reports dashboard



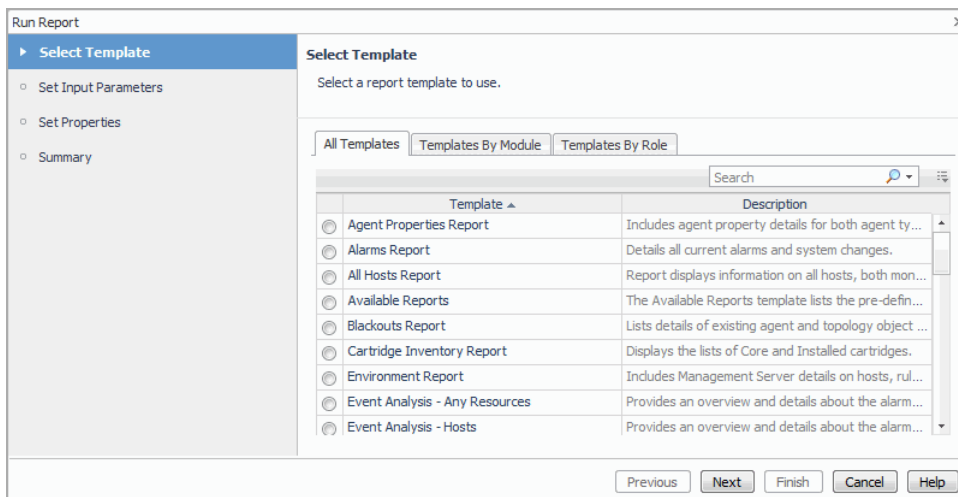
The Reports dashboard provides access to different workflows for working with reports.

- 3 Choose the workflow for building and scheduling a report.

On the Reports dashboard, click **Run a Report**.

The **Run Report** wizard appears.

Figure 145. Run Report wizard



- 4 Choose the report template.

Foglight includes a set of predefined report templates that define the data that appears in the report and its layout. Select a report template from the list and click **Next**.

The **Run Report** wizard refreshes.

Figure 146. Run Report wizard, Set Input Parameters step

The screenshot shows the 'Run Report' dialog box with the 'Set Input Parameters' step selected. The left sidebar contains a tree view with 'Select Template' (checked), 'Set Input Parameters' (selected), 'Set Properties', and 'Summary'. The main area is titled 'Set Input Parameters' and contains the instruction 'Supply the values for the report input parameters.' Below this, it says 'Details all current alarms and system changes.' There is a 'Time Range:' label followed by a text input field containing 'Last 4 hours' and a dropdown arrow. At the bottom, there are five buttons: 'Previous', 'Next', 'Finish', 'Cancel', and 'Help'.

The information you see in the dialog box describes the selected report template and lists the report inputs.

- 5 Edit the report inputs, as required, and click **Next**.

The **Run Report** wizard refreshes.

Figure 147. Run Report wizard, Set Properties step

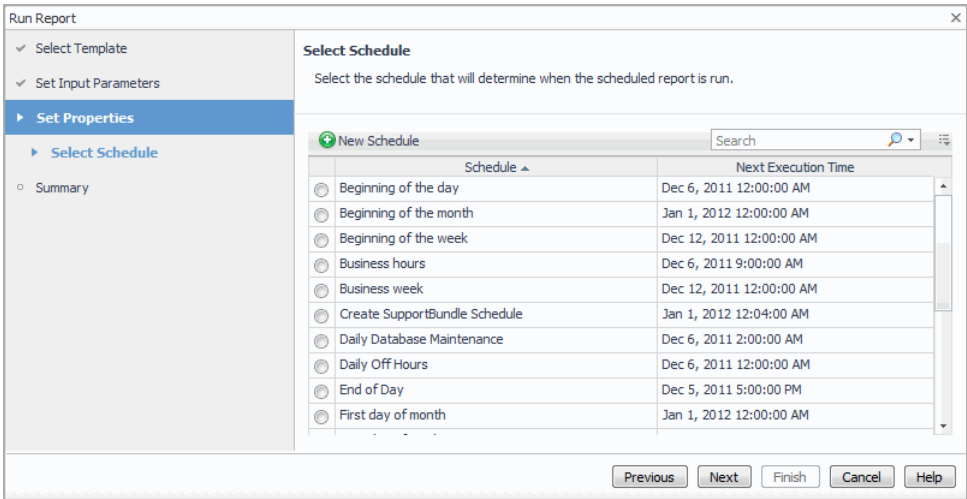
The screenshot shows the 'Run Report' dialog box with the 'Set Properties' step selected. The left sidebar contains a tree view with 'Select Template' (checked), 'Set Input Parameters' (checked), 'Set Properties' (selected), and 'Summary'. The main area is titled 'Set Properties' and contains the instruction 'Enter the report name, select a format, and if you want to email this report, type a comma-separated list of email addresses.' There are three input fields: 'Name' (text input), 'Output Format' (dropdown menu showing 'PDF'), and 'Email Recipients' (text input). Below these, there is a checkbox labeled 'Schedule This Report' which is checked, and a 'Retain' label followed by a text input field containing '5'. At the bottom, there are five buttons: 'Previous', 'Next', 'Finish', 'Cancel', and 'Help'.

Specify the report name, report format, the number of entries in the report, and one or more email recipients (using comma ',' as a separator) to which the report is sent to. Ensure that **Schedule This Report** is selected.

i **IMPORTANT:** To enable Foglight to send reports to email recipients, ensure that Foglight email notifications are properly configured. For more information, see the *Administration and Configuration Help*.

The **Run Report** wizard refreshes.

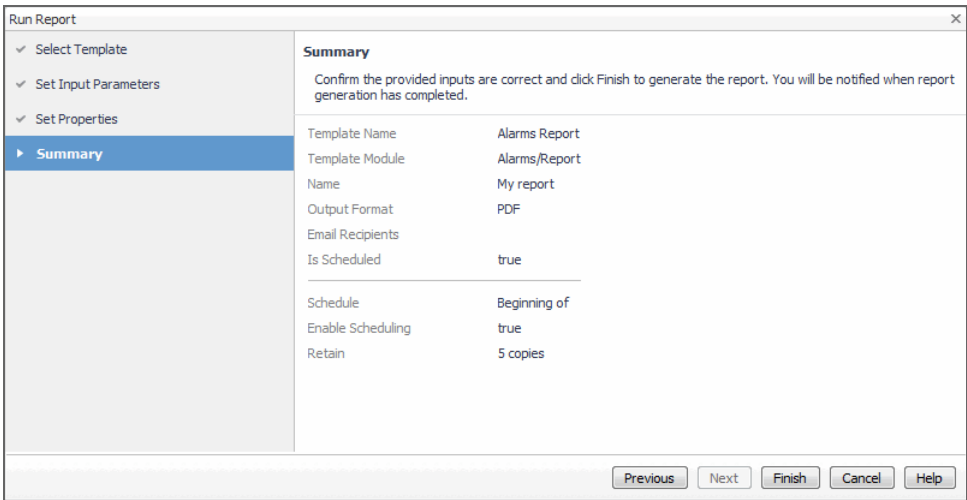
Figure 148. Run Report wizard, Select Schedule step



- 6 Choose a schedule from the list and click **Next**. If you do not find a schedule that meets your needs, click **New Schedule** and follow the workflow for creating new schedules. For more information about this workflow, in the **Simple New Schedule Wizard** that appears, click **Help**.

The **Run Report** wizard refreshes, showing the report summary.

Figure 149. Report summary



- 7 Click **Finish**.

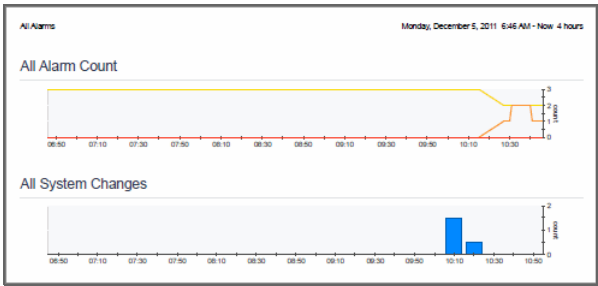
The **Run Report** wizard closes, and a status indicator appears.

Figure 150. Run Report wizard, status indicator



After a few moments, the report appears.

Figure 151. Newly created report



- 8 **Optional.** You can find the newly created report in the list of scheduled reports. To do that, on the Reports dashboard, click **Manage Reports**. The **Scheduled Reports** view shows the report in the list.

Figure 152. Scheduled Reports view

Scheduled Reports								
Manage								
Search								
<input type="checkbox"/>	Name	Template	Schedule	User	Retain	Enabled	Copy	Edit
<input type="checkbox"/>	My report	Alarms Report	Beginning of the day	foglight	5	true		

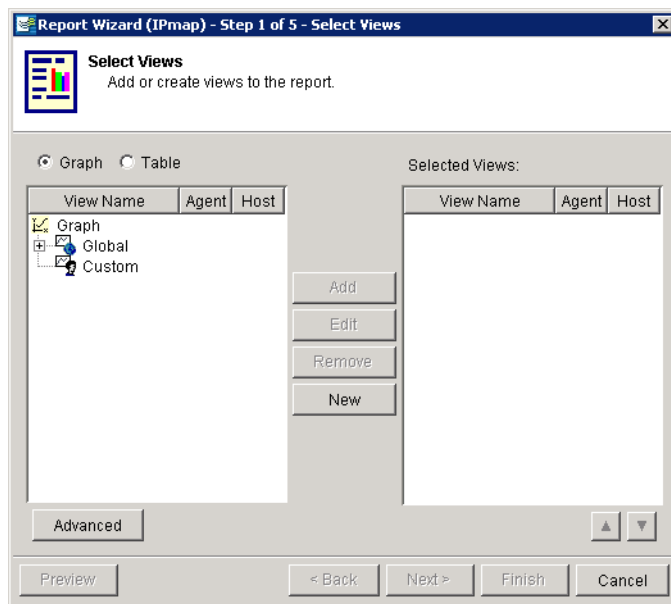
See also

- [How Do I Get Started?](#) on page 5
- [How Do I Add Views and Data to a Report?](#) on page 95

How Do I Add Views and Data to a Report?

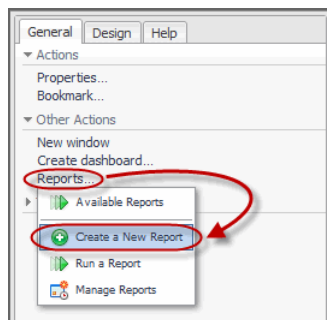
In Foglight® 4, reports contained views. You used the Report Wizard to choose from existing views and add them to reports.

Figure 153. Foglight 4 Report Wizard



Foglight 5 allows you to quickly create a report by choosing from a range of views associated with data objects.

Figure 154. Creating a report in Foglight 5



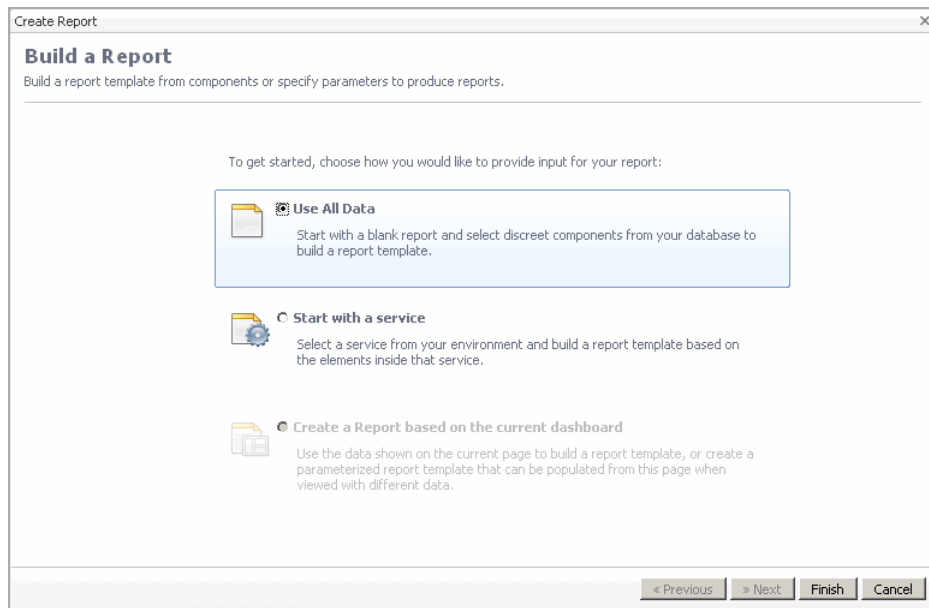
In addition to creating reports by selecting data objects and their views, you can also create a report using a report template, browse through existing reports and schedule them as needed using the Reports dashboard. For more information, see [How Do I Build and Schedule a Report?](#) on page 90.

To add views and data to a report:

NOTE: To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation and action panels are open.
To open the navigation panel, click the right-facing arrow (▶) on the left.
To open the action panel, click the left-facing arrow (◀) on the right.
- 2 On the action panel, ensure that the **General** tab is open.
- 3 On the action panel, on the **General** tab, under **Other Actions**, click **Reports**, and choose **Create a New Report** from the menu that appears.
The **Create Report** dialog box appears.

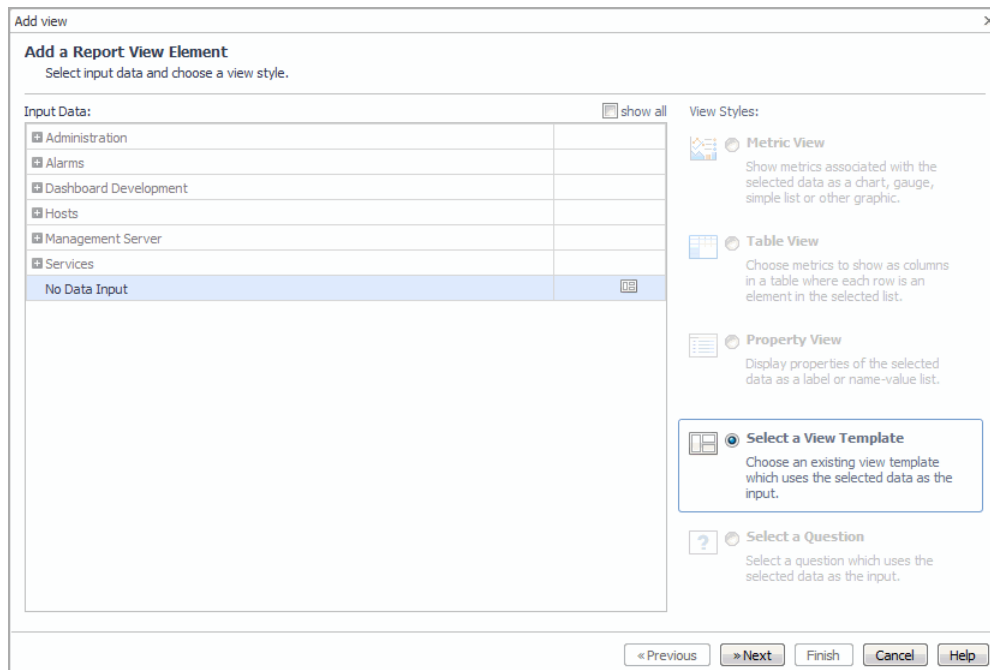
Figure 155. Create Report dialog box



- 4 In the **Create Report** dialog box, ensure that the **Use All Data** option is selected and click **Finish**.

The **Create Report** dialog box closes and the **Add View** wizard appears, allowing you to add input data to the report.




Figure 156. Add view wizard



- 5 Specify the input data for the report.

In the **Add view** wizard, use the **Input Data** tree to choose the topology object instance that you want to use as the source of information for the report.

For example, to display a list of current alarms in the report, in the **Input Data** tree, choose **Alarms > Current Alarms**.

Each object instance can have one or more views associated with it. These views can have simple metrics and tabular layouts, and appear as graph views whose appearance can be controlled with a set of chart templates. The layout of a view depends on the data type with which it is associated, and any related definitions in the cartridge in which the view is defined. In the **Input Data** table, the right-most column indicates the layouts that can be used for the view associated with the selected object instance: metric , table , template .

- 6 Observe the available layouts for the selected view.

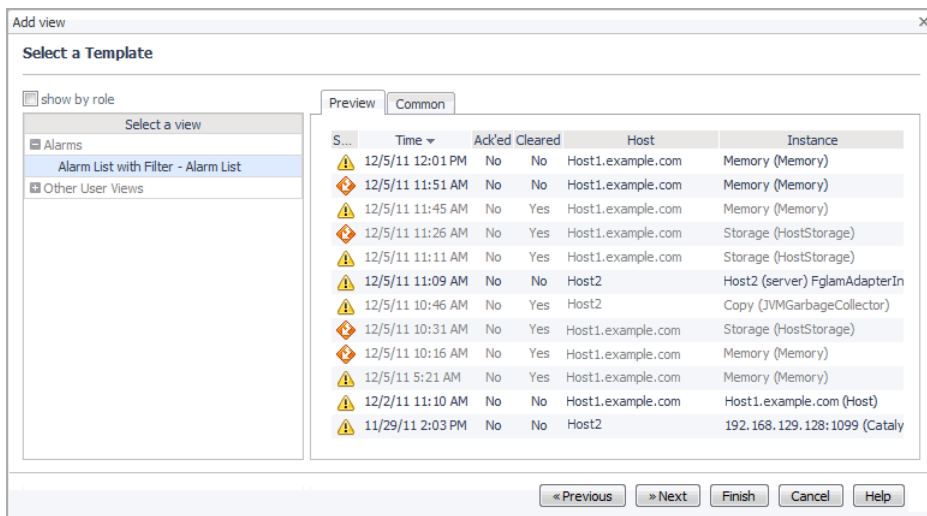
Figure 157. Available view layouts



- 7 Choose the view template.

In the **Add view** wizard, under **View Styles**, ensure that the **Select a View Template** option is selected, and click **Next**.

The **Add view** wizard refreshes.



The **Select a view** pane contains a data tree that you can use to choose a view, listed by data modules.

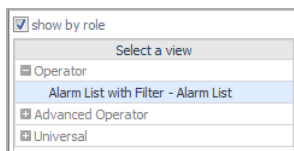
- 8 **Optional**—filter the views that appear in the action panel by role.

A role defines a set of tasks that a user can perform, and is assigned to one or more groups as required. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

To filter the views, in the **Add view** wizard, select the **show by role** check box.

The **Select a view** pane refreshes, showing a list of nodes, each representing a role. Each role contains one or more views that can be accessed by a user with that role.

Figure 158. Selecting a view by role

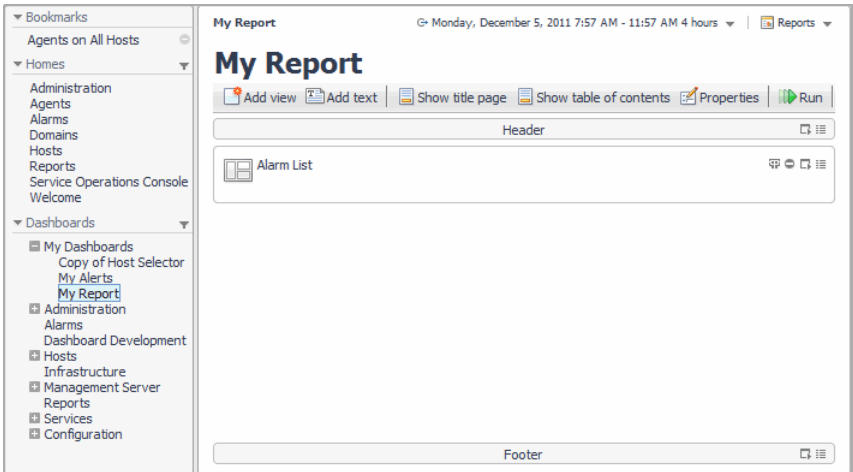


- 9 In the **Add view** wizard, on the Preview tab, observe the view.


- 10 Click **Finish**.

The **Add view** wizard closes and the display area refreshes, showing your report with the newly created view.

Figure 159. Viewing the report















The **Alarm List** view in the report represents the view.

- 11 To see the contents of this view, click Preview .

A dwell appears, showing the contents of the selected view.

Figure 160. Observing the contents of a view

Preview					
S...	Time	Ack'd	Cleared	Host	Instance
	12/5/11 12:01 PM	No	No	Host1.example.com	Memory (Memory)
	12/5/11 11:51 AM	No	No	Host1.example.com	Memory (Memory)
	12/5/11 11:45 AM	No	Yes	Host1.example.com	Memory (Memory)
	12/5/11 11:26 AM	No	Yes	Host1.example.com	Storage (HostStorage)
	12/5/11 11:11 AM	No	Yes	Host1.example.com	Storage (HostStorage)
	12/5/11 11:09 AM	No	Yes	Host2	Host2 (server) (FglamAdapter
	12/5/11 10:46 AM	No	Yes	Host2	Copy (JVMGarbageCollector)
	12/5/11 10:31 AM	No	Yes	Host1.example.com	Storage (HostStorage)
	12/5/11 10:16 AM	No	Yes	Host1.example.com	Memory (Memory)
	12/5/11 5:21 AM	No	Yes	Host1.example.com	Memory (Memory)
	12/2/11 11:10 AM	No	No	Host1.example.com	Host1.example.com (Host)
	11/29/11 2:03 PM	No	No	Host2	192.168.129.128:1099 (Catal

From here, you can add more views to the report, text, header and footer, and run and schedule the report. A node representing this report appears on the navigation panel, under **Dashboards > My Dashboards**. You can use it to access this report at a later time. For more information about reports and their usage in Foglight, see the *Foglight User Help*.

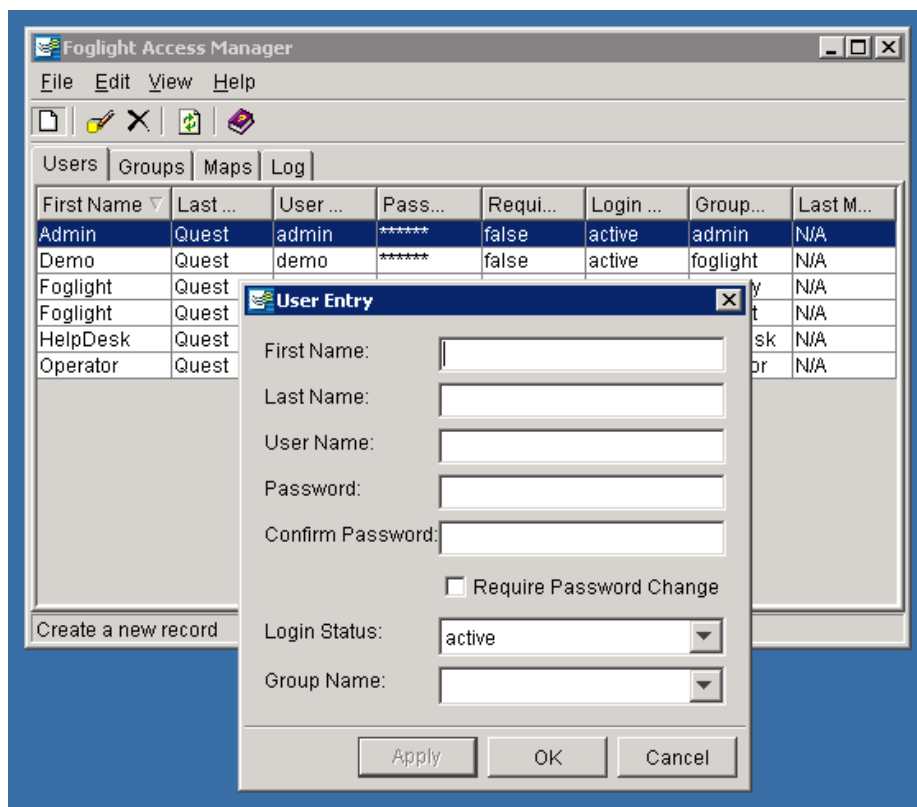
See also

- [How Do I Get Started?](#) on page 5
- [How Do I Build and Schedule a Report?](#) on page 90

How Do I Create a User?

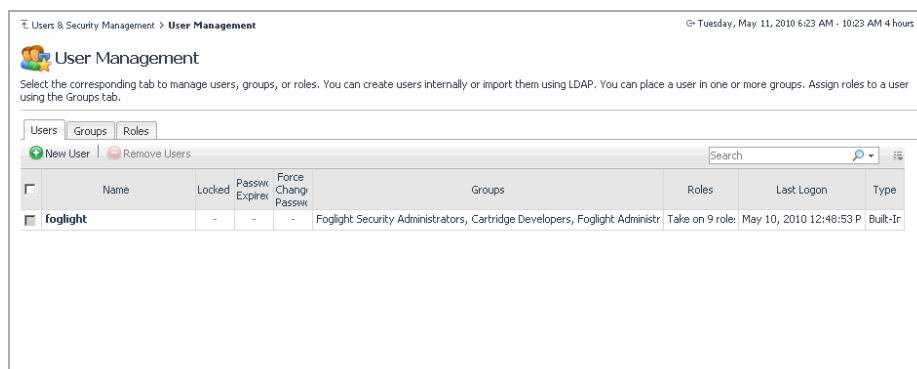
In Foglight® 4, you used the Foglight Access Manager to create users and assign them to groups as required.

Figure 161. Foglight 4 Access Manager



In Foglight 5, use the Users tab in the User Management view to create users. This view is accessible from the Users & Security Management dashboard.

Figure 162. Foglight 5 User Management



When you create a user for the first time, you supply their user name and password, and then specify their access permission. For information on how to edit users' permissions at a later time, see [How Do I Limit a User's Access?](#) on page 104.

To create a user:

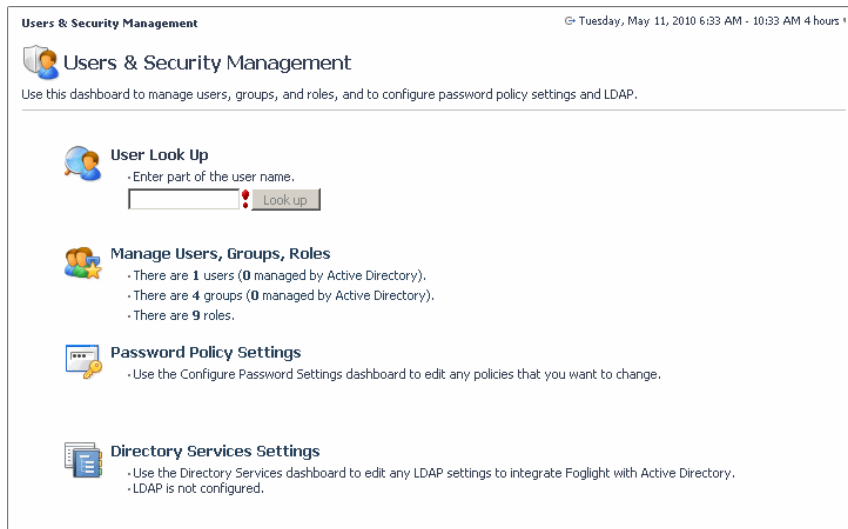
- NOTE:** To complete this procedure, your user account must belong to a group with the Administrator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.

To open the navigation panel, click the right-facing arrow (▶) on the left.

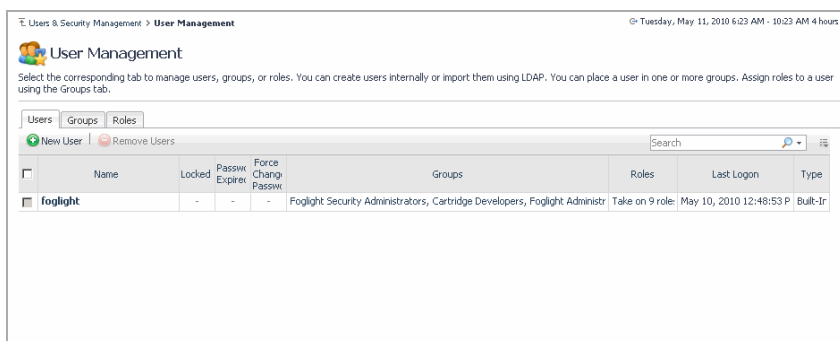
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Users & Security**.
The Users & Security Management dashboard appears.

Figure 163. Users & Security Management dashboard



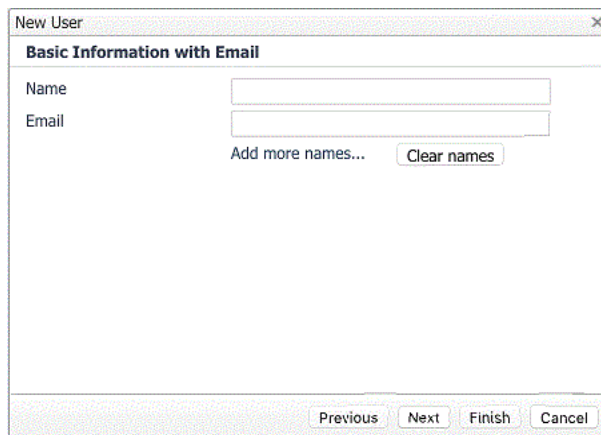
- 3 On the Users and Security Management dashboard that appears in the display area, click **Manage Users, Groups, Roles**.
The **User Management** view appears in the display area with the **Users** tab open.

Figure 164. User Management view



- 4 Start the workflow for creating new users.
On the **Users** tab, click **New User**.
The **New User** dialog box appears.

Figure 165. New User dialog box

The image shows a 'New User' dialog box with a title bar and a close button. The main section is titled 'Basic Information with Email'. It contains two text input fields: 'Name' and 'Email'. Below the 'Email' field, there is a link 'Add more names...' and a button 'Clear names'. At the bottom of the dialog, there are four buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

- 5 Specify the user names and email addresses for one or more user accounts that you want to create.

When creating multiple users, the set of access permissions defined in this flow applies to every user you create. You can edit their permission at a later time, if required.

- a In the **Name** box, type the user name; in the **Email** box, type the email address.

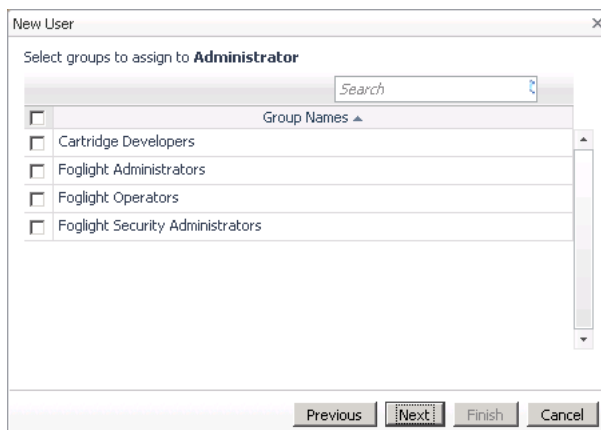
TIP: The maximum length of Name is 15 characters; the maximum length of Email is 80 characters.

For example, `test_user`.

- b To specify additional user names, click **Add more names**, and type them into the list that appears, followed by clicking **Add**.
 - c Click **Next**.

The **New User** dialog box refreshes.

Figure 166. User groups

The image shows the 'New User' dialog box with the 'Select groups to assign to Administrator' section. It features a search bar at the top. Below it is a list of groups with checkboxes: 'Cartridge Developers', 'Foglight Administrators', 'Foglight Operators', and 'Foglight Security Administrators'. At the bottom, there are four buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

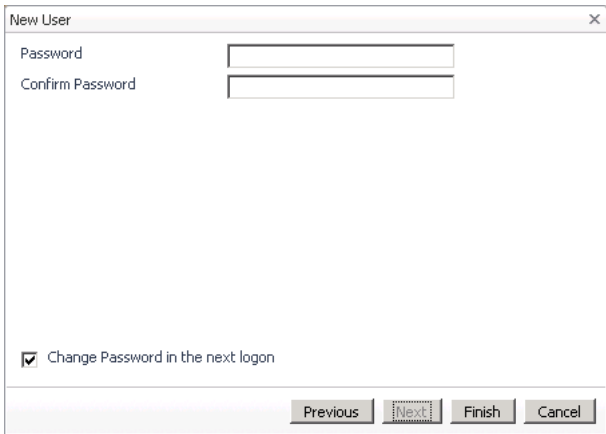
The list of available groups in the wizard shows the roles that are included with Foglight, and any additional groups that are created after the installation. In the above example, only the default groups appear due to the absence of added groups. To quickly find a desired group, for example, if the list of groups is too long, you can issue a search.

- 6 Select one or more groups that you want this user to belong to, followed by clicking **Next**. Adding a user to a group grants that user access to all of the roles that are associated with the group.

If access requirements associated with this user account change at a later time, you can change their groups and roles by editing the user details. For more information, see the *Administration and Configuration Help*.

The **New User** dialog box refreshes.

Figure 167. Specifying the user’s password



The 'New User' dialog box contains two text input fields labeled 'Password' and 'Confirm Password'. Below these fields is a checkbox labeled 'Change Password in the next logon' which is checked. At the bottom of the dialog are four buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

- 7 Specify the password for the user account you are about to create in each of the **Password** and **Confirm Password** boxes.

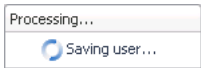
If you are creating multiple users, the password you specify here applies to each of those user accounts.

Selecting **Change Password in the next logon** protects the user credentials by ensuring that the user you are about to create is asked to change their password after the first successful logon attempt. This is useful if you are creating multiple user accounts using this flow. Forcing the password change in this step causes each of those users to change their individual passwords, thereby protecting their user credentials.

Click **Finish**.


A message box appears, indicating the user creation is in progress.

Figure 168. Saving user data



After a successful user creation, the message box closes. The **Users** tab refreshes, showing the newly created user entry.

Figure 169. User created



	Name	Locked	Password Expires	Force Change Password	Groups	Roles	Last Logon	Type
<input type="checkbox"/>	foglight	-	-	-	Foglight Security Administrators, Cartridge Developers, Foglight Administrators	Take on 9 ro	May 10, 2010 12:48:5	Built-In
<input type="checkbox"/>	test_user	-	-	-	Foglight Operators, Cartridge Developers, Foglight Security Administrators, Fog	Take on 9 ro		Intern

For more information about managing users in Foglight 5, see the *Administration and Configuration Guide*.

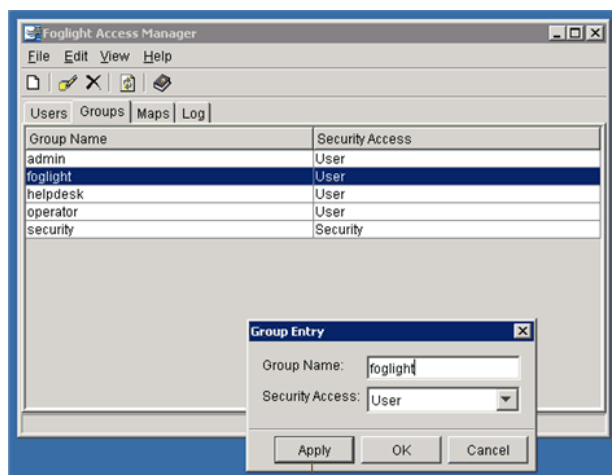
See also

- [How Do I Get Started?](#) on page 5
- [How Do I Share My Dashboards with Other Users?](#) on page 27
- [Can Multiple People Share My User Name?](#) on page 47
- [How Do I Limit a User’s Access?](#) on page 104

How Do I Limit a User's Access?

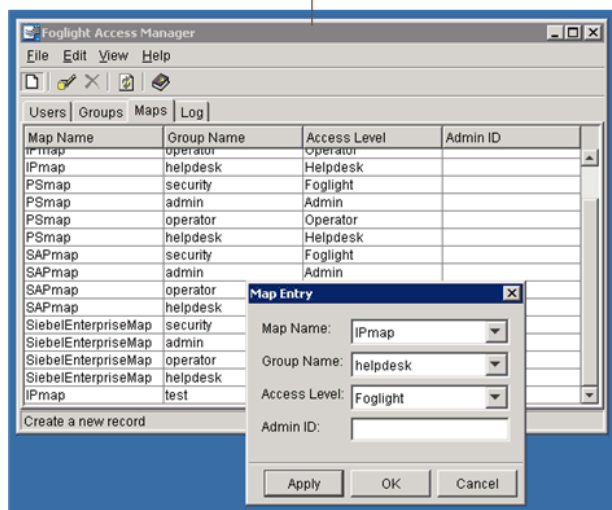
In Foglight® 4, you used the **Groups** and **Maps** tabs in the Foglight Access Manager to define user permissions.

Figure 170. Foglight 4 Access Manager, Groups and Maps tabs



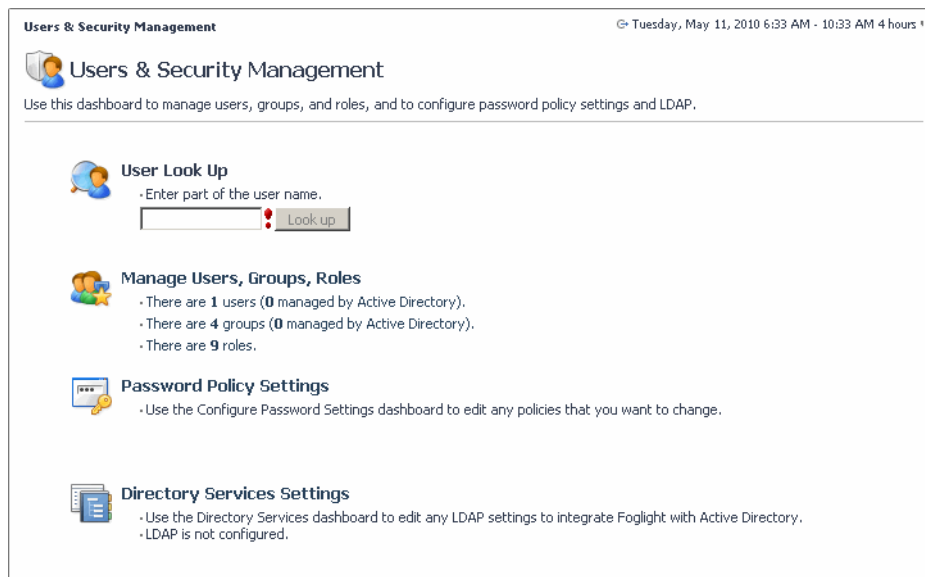
Foglight 4: Creating Groups

Foglight 4: Creating Maps



While Foglight 4 makes use of groups and IP maps to limit a user's access, Foglight 5 defines the users' access through groups and roles. In Foglight 5, you can administer users, groups, and roles using the Users & Security dashboard.

Figure 171. Foglight 5 Users & Security dashboard



Each user belongs to one or more groups and each group can have one or more roles. The set of tasks that a user has access depends on the roles that are either assigned to the groups that user is a member of, or directly to the user account. For example, in a typical Foglight 5 installation, a member of the *Foglight Operators* group has the *Console User* role which gives them access to the Common, Core, and Foglight dashboards, but not the Administration dashboards. Assigning the Administrator and Security roles to that user grants access to the Administration dashboards.

The following table shows a set of default groups found in a typical Foglight 4 environment and identifies their equivalents in Foglight 5:

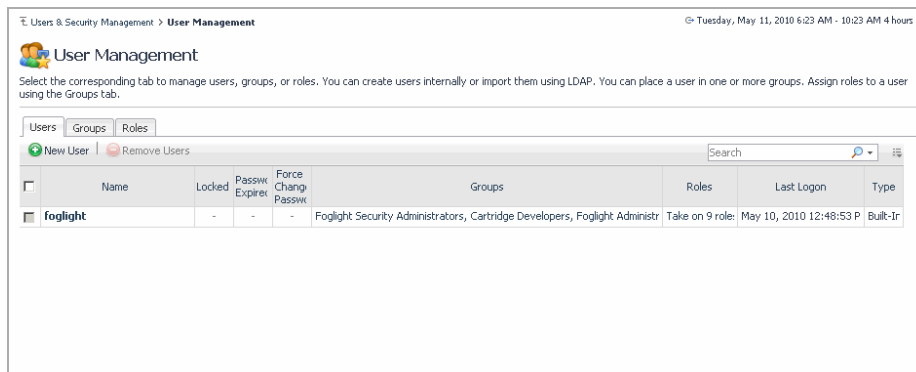
Table 3. Default user groups

Foglight 4	Foglight 5
security	Foglight Security Administrators
foglight	Foglight Administrators
admin	Foglight Administrators
operator	Foglight Operators
helpdesk	Foglight Operators

NOTE: Unlike the *operator* group in Foglight 4 that grants the users a permission to create and edit views, the *Foglight Operators* group in Foglight 5 does not include access to dashboard creation. A workaround would be to create a custom group, assign the *Dashboard Designer* role to that group, and then ensure that the user belongs to both groups: the custom group with the *Dashboard Designer* role and the *Foglight Operators* group.

Use the Users tab in the User Management view to create users. This view is accessible from the Users & Security Management dashboard.

Figure 172. Users tab in the User Management view



To limit a user's access:

NOTE: To complete this procedure, your user account must belong to a group with the Security role.

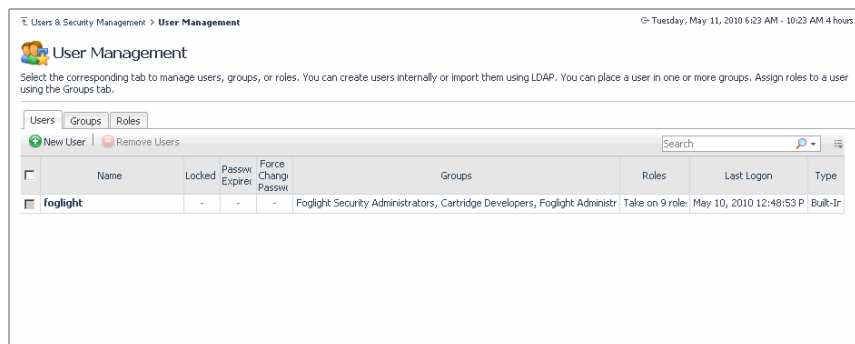
- 1 Add the user to one or more groups.
For instructions, see [To add a user to a group](#): on page 106.
- 2 Assign one or more roles to the user account.
For instructions, see [To assign a role to a user](#): on page 107.

To add a user to a group:

- 1 On the navigation panel, under **Dashboards**, choose **Administration > Users & Security**.
- 2 On the Users and Security Management dashboard that appears in the display area, click **Manage Users, Groups, Roles**.

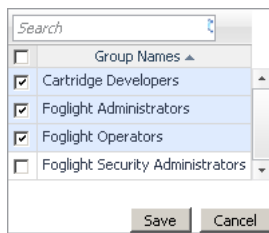
The **User Management** view appears in the display area with the **Users** tab open.

Figure 173. Users tab



- 3 On the **Users** tab, in the row containing the user account that you want to edit, click the **Groups** column.
A dialog box appears, showing the existing groups. Any groups that are already associated with the user account appear selected. If you are editing groups for an external account, and any of the external groups the user belongs to are selected for visibility on the **Groups** tab, those groups also appear in the list, but are disabled for selection.

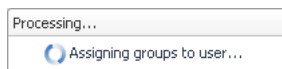
Figure 174. Available user groups



- 4 In the dialog box, use the check boxes on the left to add or remove groups, as required.
- 5 Click **Save**.

A message box appears, indicating the progress.

Figure 175. Assigning groups to users



After a few moments, the message box closes.

- 6 Observe the **Groups** column on the **Users** tab. Hovering over this column shows the list of current groups, taking into account the latest changes.

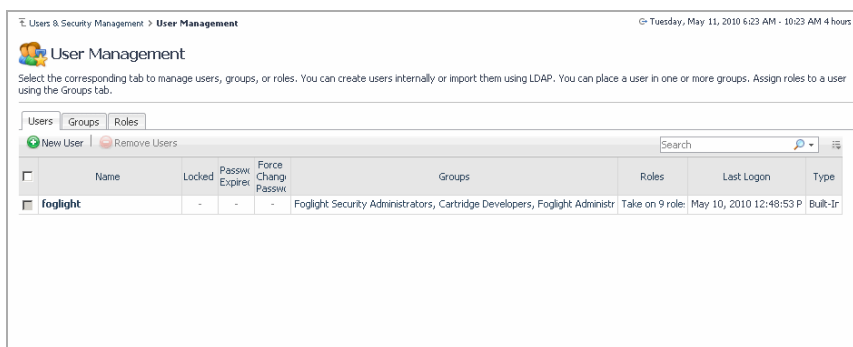
To assign a role to a user:

NOTE: To complete this procedure, your user account must belong to a group with the Security role.

- 1 On the navigation panel, under **Dashboards**, choose **Administration > Users & Security**.
- 2 On the Users and Security Management dashboard that appears in the display area, click **Manage Users, Groups, Roles**.

The **User Management** view appears in the display area with the **Users** tab open.

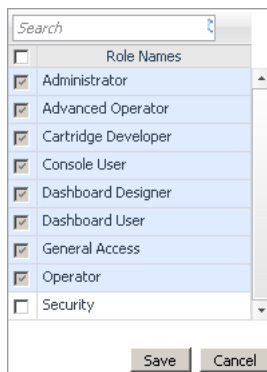
Figure 176. Users tab



- 3 On the **Users** tab, in the row containing the user account that you want to edit, click the **Roles** column.

A dialog box appears, showing the existing roles. Any roles that are already associated with the user account appear selected.

Figure 177. Available user roles



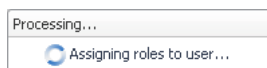
- 4 In the dialog box, use the check boxes on the left to grant a role to the user.

NOTE: Individual roles that are granted to the user through group membership cannot be removed from the user account, and appear disabled for selection. Removing such a role requires removing the user from all groups to which that role is granted. This will, however, disable access to all roles that are associated with the groups from which the user is removed. You can add them to the user account at a later time, as described in this procedure.

- 5 Click **Save**.

The dialog box closes and a message box appears, indicating the progress.

Figure 178. Granting roles to users



After a few moments, the message box closes.

- 6 Observe the **Roles** column on the **Users** tab. Hovering over this column shows the list of current roles, taking into account the latest changes.

See also

- [How Do I Get Started?](#) on page 5
- [How Do I Share My Dashboards with Other Users?](#) on page 27
- [Can Multiple People Share My User Name?](#) on page 47
- [How Do I Create a User?](#) on page 99

Where Do I Find the Data?

In Foglight® 4, you used the Data Browser to look at the data.

Figure 179. Foglight 4 Data Browser

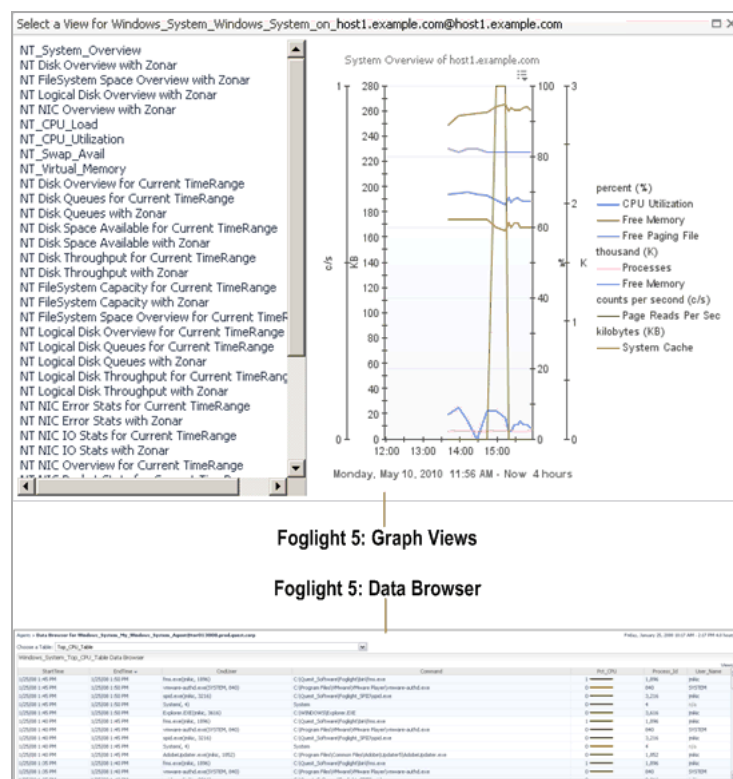
Time	Capacity_Available	Capacity_Used	FileSystem_Name	Space_Available	Space_Used	Total_Space
11/09/2007 12:52:05	76	23	C:	12568	3801	16369
11/09/2007 13:22:06	76	23	C:	12568	3801	16369
11/09/2007 13:52:07	76	23	C:	12568	3801	16369
11/09/2007 14:22:09	76	23	C:	12568	3801	16369
11/09/2007 14:52:10	76	23	C:	12568	3801	16369
11/09/2007 15:22:11	76	23	C:	12568	3801	16369
11/09/2007 15:52:12	76	23	C:	12568	3801	16369

Table: FileSys_Table Range: All Data Status: Ready

When you start using Foglight 5, you can use any of the following ways to look at the data:

- Find the data in agents' views and tables.

Figure 180. Foglight 5 agent views and tables



- Use the Data Browser.

Figure 181. Foglight 5 Data Browser

Property Viewer (Foglight:Object) Monday, December 5, 2011 9:59 AM - 1:59 PM 4 hours

Long Name	Memory (Memory)	0
Is Blacked Out	false	0
Local State	✓	0
Aggregate State	✓	0
Alarm Warning Count		0
Alarm Critical Count		0
Alarm Fatal Count		0
Alarm Total Count	0	0
Alarm Aggregate Warning Count		0
Alarm Aggregate Critical Count		0
Alarm Aggregate Fatal Count		0
Alarm Aggregate Total Count	0	0
Change Count	0	0
Aggregate Change Count	0	0
Topology Type Name	Memory	0
Topology Domain Name	Infrastructure	0

Local State Severity (AlarmSeverity)

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
9	9	1	11/28/11 2:02 PM	11/16/38 4:46 AM	12/2/11 11:08 AM	Normal	Normal (AlarmSeverity)	false	✓	✓				0

Aggregate State Severity (AlarmSeveri

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
9	9	1	11/28/11 2:02 PM	11/16/38 4:46 AM	12/2/11 11:08 AM	Normal	Normal (AlarmSeverity)	false	✓	✓				0

Monitored i

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
198	1,231	8	11/28/11 2:20 PM	11/16/38 4:46 AM	12/5/11 1:59 PM	jnlkic-2d2edfcc	jnlkic-2d2edfcc (Host)	false	✓	✓				0

To look at the data using the Data Browser:

NOTE: To complete this procedure, your user account must belong to a group with the Advanced Operator role. For more information about users, groups, and roles, see [How Do I Limit a User's Access?](#) on page 104.

- 1 Ensure that the navigation panel is open.
- To open the navigation panel, click the right-facing arrow (▶) on the left.
- 2 On the navigation panel, under **Dashboards**, choose **Configuration > Data**.
- The **Data** dashboard appears in the display area, showing a navigation tree in the left pane.

Figure 182. Data dashboard

Value	Data Type
Administration	
Alarms	
Dashboard Development	
Hosts	
Management Server	
Services	

The navigation tree contains nodes that represent collection models in Foglight 5. Each node in a collection model can have properties, metrics, and other nodes associated with it. Foglight Management Server adds these entities to the collection models as it collects data.

- 3 Expand a node and look at its structure.
- For the purpose of this exercise, we will look at the memory metrics collected by a Host agent. This agent is available with the Infrastructure cartridge, assuming that you have that cartridge installed.

In the left pane, navigate to **Management Server > All Agents > <Host agent instance> >monitoredHost > Memory**.

The Data Browser appears in the right pane, showing the data collected in the Server_Table of the selected agent instance.

Figure 183. Data Browser

Monday, December 5, 2011 9:59 AM - 1:59 PM 4 hours

Property Viewer (Foglight:Object)

Long Name	Memory (Memory)	0
Is Blacked Out	false	0
Local State	✓	0
Aggregate State	✓	0
Alarm Warning Count		0
Alarm Critical Count		0
Alarm Fatal Count		0
Alarm Total Count	0	0
Alarm Aggregate Warning Count		0
Alarm Aggregate Critical Count		0
Alarm Aggregate Fatal Count		0
Alarm Aggregate Total Count	0	0
Change Count	0	0
Aggregate Change Count	0	0
Topology Type Name	Memory	0
Topology Domain Name	Infrastructure	0

Local State Severity (AlarmSeverity)

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
9	9	1	11/28/11 2:02 PM	11/16/38 4:46 AM	12/2/11 11:08 AM	Normal	Normal (AlarmSeverity)	false	✓	✓				0

Aggregate State Severity (AlarmSeverity)

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
9	9	1	11/28/11 2:02 PM	11/16/38 4:46 AM	12/2/11 11:08 AM	Normal	Normal (AlarmSeverity)	false	✓	✓				0

Monitored i

Topology Object ID	Topology Object Version ID	Topology Object Version	Effective Start Date	Effective End Date	Last Updated	Name	Long Name	Is Blacked Out	Local State	Aggregate State	Alarm Warning Count	Alarm Critical Count	Alarm Fatal Count	Alarm Total Count
198	1,231	8	11/28/11 2:20 PM	11/16/38 4:46 AM	12/5/11 1:59 PM	jnlkic-2d2edfcc	jnlkic-2d2edfcc (Host)	false	✓	✓				0

For more information about the Data Browser, see the *Web Component Guide*.

See also

- [How Do I Get Started?](#) on page 5

Appendix: Finding Foglight 4 Components in Foglight 5

Quick Reference Sheet

Table 4. Foglight® 4 Components in Foglight 5

Component Name		Where to Find It in Foglight 5
Foglight 4	Foglight 5	
Access Manager	Users & Security Management dashboard	Browser interface > navigation panel > Dashboards > Administration > Users & Security
Agent Browser	Agent Browser	Browser interface > navigation panel > Dashboards > Management Server > Agents > Monitored Hosts and Agents > <i>Host</i> > <i>Agent</i>
Agent views	Select a View dialog box	Browser interface > navigation panel > Dashboards > Management Server > Agents > Monitored Hosts and Agents > <i>Host</i> > <i>Agent</i> > Related > Views
Data Browser	Data Browser dashboard	Browser interface > navigation panel > Dashboards > Configuration > Data > Management Server > All Agents > <i>Agent</i> > Metrics
Edit ASP dialog box	Edit properties view	Browser interface > navigation panel > Dashboards > Administration > Agents > Agent Status > <i>Agent</i> > Edit Properties
FOC	Browser interface	Web browser > http://FMS_host_name:FMS_port_number/console
Foglight Registry dialog box	Manage Registry Variables dashboard	Browser interface > navigation panel > Dashboards > Administration > Rules & Notifications > Manage Registry Variables
Help	Help	Browser interface > action panel > Help
IP Map	Agents on All Hosts dashboard	Browser interface > navigation panel > Dashboards > Management Server > Agents
Report Browser	Reports dashboard	Browser interface > navigation panel > Dashboards > Reports
Rule Blackout dialog boxes	Blackout Configuration dashboard	Browser interface > navigation panel > Dashboards > Administration > Setup & Support > Blackouts
Rule Editor	Edit Rule view	Browser interface > navigation panel > Dashboards > Administration > Rules & Notifications > Rule Management > <i>Rule</i> > View and Edit > Rule Editor
Scheduler	Manage Schedules dashboard	Browser interface > navigation panel > Dashboards > Administration > Schedules > Manage Schedules
Service Model Browser	Service Builder dashboard	Browser interface > navigation panel > Dashboards > Services > Service Builder
View Editor	Definitions dashboard	Browser interface > navigation panel > Dashboards > Configuration > Definitions > Views > <i>View</i> > Edit

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- Download software and technical documentation.
- View how-to-videos.
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- Chat with support engineers online.
- View services to assist you with your product.