Quest™

Foglight® 5.9.x
User Guide

owners.

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.

Foglight User Guide
Updated - May 2018
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Getting Started with Foglight

The *Quest Foglight User Guide* helps you monitor your enterprise from a variety of perspectives using the Alarms, Domains, Service Operations Console, and Hosts dashboards. It presents workflows for drilling down and investigating problems in your monitored environment using these dashboards.

This guide also introduces you to navigating the Foglight browser interface and using reports to share data from Foglight with others in your organization.

This guide is intended for users who have been assigned the Operator or Advanced Operator role and who need to perform tasks such as monitoring their environment, working with alarms, and creating reports.

NOTE: This guide uses terminology that is specific to the Foglight browser interface. For more information about these terms, see the Foglight User Help (navigate to Help > Help Contents > Using Foglight > User Help > Getting Started with Foglight > Working with Dashboards in the action panel and then click Working with Dashboards).

Getting Started

This chapter provides instructions for logging in to Foglight and describes the Welcome page you see when you log in with the Operator or Advanced Operator role. It also introduces you to navigating the Foglight browser interface and discusses best practices for navigation.

NOTE: Your Administrator may have configured Foglight so that the actual displays are different from those described in this chapter. The following information is intended as a general guide.

Perform these steps before following the instructions in this chapter:

- Obtain your Quest Foglight user name and password from your Administrator.
- Ensure that your Web browser has JavaScript functionality enabled.

Logging in to Foglight

This topic describes how to log in to the Quest Foglight browser interface.

To log in to Quest Foglight:

1 Open a Web browser instance.

NOTE: For a list of browsers supported by Foglight, see the System Requirements and Platform Support Guide.

2 Navigate to a URL that uses the following syntax:

`http://localhost:8080/`

where *localhost* is the name of the machine that has a running instance of the Management Server.

The Quest Foglight login page appears.

3 Enter your user name and password in the login page.

This guide assumes that you are a user with the Operator or Advanced Operator role, in which case the Welcome to Quest Foglight page is the first dashboard you see when you log in to Quest Foglight.

NOTE: The appearance of the Welcome page and the range of dashboards you can access from this page vary depending on your user role. If you have Administrator-level permissions, you can access advanced dashboards and configuration workflows. See the *Administration and Configuration Guide*. Users with the Operator role (but not the Administrator role) have permission to access a smaller set of dashboards.

If you are a user who has a role or a role combination assigned to you that does not provide sufficient privileges to do anything useful in Foglight, a warning page is displayed. Contact your Quest Foglight Security Administrator to get additional roles assigned to your account or to request that a different home page be configured for you.

Starting from the Welcome Page

Foglight Users:

An Operator's welcome page lists the following commonly-performed tasks:

- **View, Acknowledge, and Clear Recent Alarms**: View the state of all alarms across the entire Quest Foglight installation in the Alarms dashboard so you can take immediate action on them. The Alarms dashboard shows alarm counts by time, allowing you to identify excessive alarm counts or outage events. This link takes you to the Alarms dashboard. Another way to access this dashboard is by choosing **Alarms** under **Homes** on the navigation panel. See Viewing, Acknowledging, and Clearing Alarms on page 46.
- **View Enterprise Health Organized by Monitoring Domain**: View an end-to-end, top-level summary of all domains in the Domains dashboard and drill down to view their managed instances. This link takes you to the Domains dashboard. Another way to access this dashboard is by choosing **Domains** under **Homes** on the navigation panel. See Monitoring Your Domains on page 52.
- **View the Health of Critical Services:** Choose a level of service as a focal point by subscribing to services of interest and viewing their dependencies. This link takes you to the Service Operations console. Another way to access this dashboard is by choosing **Services Operations Console** under **Homes** on the navigation panel. For more information, see Monitoring Your Services on page 55.
- **View the Health of the Monitored Hosts in Your Enterprise:** View alarms and a high-level summary of performance on your monitored hosts. This link takes you to the Hosts dashboard. Another way to access the Hosts dashboard is by choosing **Hosts** under **Homes** on the Navigation panel. For more information, see Monitoring Your Hosts on page 62.
- **Report on Your Enterprise:** View reports that are scheduled, run a report using a report template, create a custom report, schedule a report to run at a specific time, and manage reports. This link takes you to the Reports dashboard. Another way to access this dashboard is by choosing **Reports** under **Homes** on the navigation panel. For more information on reports, see Reporting on Your Enterprise on page 66.
- **Tap into the Foglight Community:** Takes you to the *foglight.org* Web site, which discusses topics related to Application Management and Foglight.

The Welcome to Foglight page is your default home page. For instructions on changing your home page to a dashboard of your choice, see Choosing a Home Page.

Foglight for Virtualization, Enterprise Edition Users:

When you log in to Foglight for Virtualization for the first time, the **Getting Started** tab of the Environment Overview page appears in the display area.

NOTE: The General Access role is required to see the Foglight Welcome page.

This tab displays tiles based on the products that are installed. For example, when you install Foglight for Virtualization, Enterprise Edition, a trial version of Foglight Storage Manager is also installed. The **Getting Started** tab displays both Foglight for Virtualization and Storage Manager tiles.

From this tab, you can quickly perform a number of activities:

- **Explore Hyper-V**—access the Hyper-V Environment Overview page.
- **Explore VMware**—access the VMware Environment Overview page.
- **Add Monitoring**—add Hyper-V or VMware agents to your environment.
- **Start Trial**—activate the 45-day trial version of Foglight Storage Manager 2.5.0. After the trial is activated, the **Add Monitoring** button appears. Click this button to start creating Storage Manager agents. For more information, see the *Managing Storage in Virtual Environments User and Reference Guide*.

You can also obtain information about the status of your license for Storage Manager and Quest Foglight. This status is indicated by messages displayed on the tile of the installed products. For more information on licenses, see the *Administration and Configuration Guide*.

In addition, the Getting Started provides several video tutorials and the *Evaluation Guide* which is intended for anyone who wants to perform a quick evaluation of the power and ease-of-use of Quest Foglight.

To access the Perspective views for any of the installed vFoglight cartridges, open the navigation panel, expand the Dashboard module, and click **Perspective Selector > Perspective**.

The Perspective dashboard provides a summary view of the different parts of your environment. Each perspective summarizes the key information related to a particular area of interest. Each perspective contains a section on the right side that shows the total number of alarms for each severity. Most perspectives also include a detailed view that list the number of objects (VMs, Hosts, and so on) within that environment, broken down by the entity's alarm status. If a single object has multiple alarms, each alarm is counted. For this reason, the total number of alarms frequently exceeds the total number of objects with alarms.

Each perspective contains an **Explore** button. Click **Explore** to investigate the full details displayed in the VMware Environment dashboard.

Navigating Foglight

In addition to the links on the Welcome page, use the navigational aids described in the sections below to navigate Foglight.

NOTE: Foglight displays dynamic data that is updated regularly. For this reason, avoid using your browser's navigation buttons, as this may display cached views or result in an error message. Use the links in the navigation panel and display area instead.

TIP: Visit http://eDocs.quest.com to watch our learning videos. See *Introduction to the Foglight User Interface*.

Using the Navigation Panel

Use the left-hand navigation panel to move between dashboards. This panel lists all dashboards that are available to you based on your roles. Expand a module and select a dashboard to view it in the display area (for example, **Dashboards > Services > Service Levels**).

Quest Foglight remembers the state of the navigation panel between logins, so if you collapse the navigation panel when you log out, it is collapsed the next time you log in.

Using the Breadcrumb Trail

The name of the current dashboard is displayed in bold at the top of the dashboard, at the end of a path called the breadcrumb trail.

Figure 1. An example of the breadcrumb trail.

When you move directly from one dashboard to another, the names of the previous dashboards are displayed in a breadcrumb trail.

Use the links in the breadcrumb trail to return to previously-viewed dashboards in a workflow or series of drilldowns.

Using Drilldowns

Use the graphical and text links in views to drill down to additional details that help you diagnose problems. Depending on the link, you drill down to a different dashboard or a smaller view called a popup that appears above the dashboard you are currently viewing.

You can drill down from many different parts of a view, including names of monitored components (such as hosts or services), the Explore links in a popup, and items like charts, tables, cylinders, and icons.

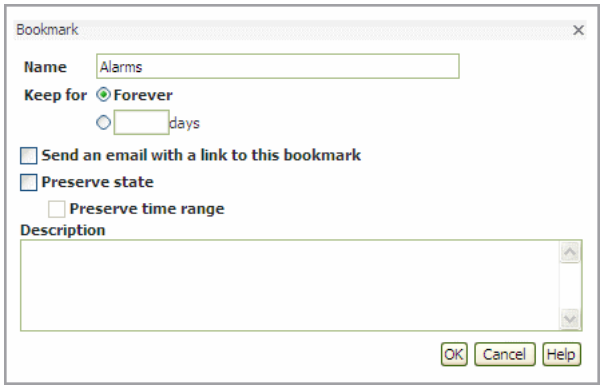
For example, in the Service Operations Console dashboard, click the icon in the Host tier column that indicates that the tier is in a fatal state ( ). An Outstanding Alarm(s) popup appears that lists the hosts in the tier. Drill down further into a host's health or alarms to diagnose problems.

Using Bookmarks

Use bookmarks to keep track of dashboards and views that you want to revisit or access quickly, without having to drill down several levels. A bookmark can be a snapshot of data that is "frozen" at a specific point in time, or it can be updated with current data when you access it. For example, you could create a bookmark to quickly access the System Overview on a particular host from last Wednesday.

You create a bookmark by navigating to the dashboard you want to bookmark, selecting **Bookmark** from the action panel, and then selecting options from the Bookmark dialog box. See the online help for the Bookmark dialog box for details.

Figure 2. The Bookmark dialog box.



The bookmarks you create are listed in the Bookmarks section of the navigation panel. When you select a bookmark, it appears in the display area.

To email a link to a bookmark:

1 In the Bookmarks area of the navigation panel, select a bookmark to display it.

2 Select **Email** from the action panel. An email window opens, containing a link to the bookmark.

3 Fill in the required information and click **Send**.

To delete a bookmark in the navigation panel:

1 Place the cursor over the dimmed delete icon beside the name of the bookmark. The icon turns red: ⛔.

2 Click the delete icon.

3 On the confirmation dialog, click **Delete** to delete the bookmark.

Opening a New Window

Opening a new window instead of using the current browser is useful, for example, when you want to open a link or print a document, such as a PDF. When you use a new window, the document downloads or prints in the background and you are prevented from accidentally closing the browser window when closing the PDF.

To open a new window:

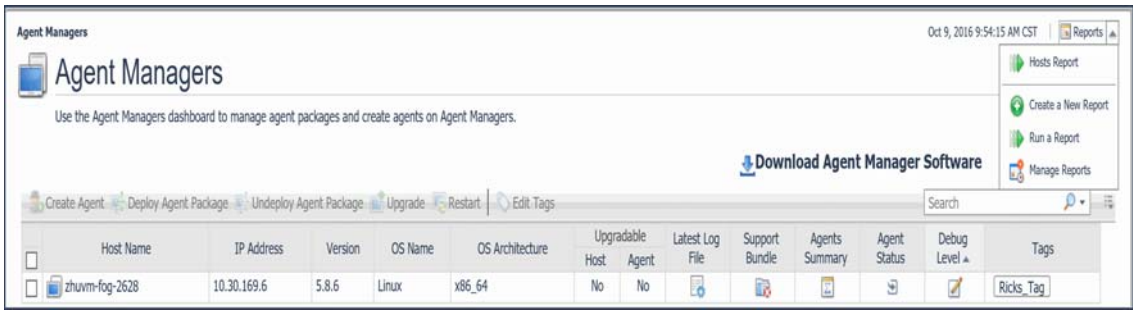
1 Click the **New Window** link in the action panel to open a new browser window and change the URL to create a sub-session.

2 Navigate and click on the sub-session tab to reload the new browser window or tab independently of the source session.

Running a Report

You can run, create, and manage your reports from any dashboard. The Reports menu is available on the top right corner of a dashboard. Some dashboards have an associated report template displayed at the top of this menu. For example, open the hosts dashboard. The *All Hosts Report* template is listed. In addition, if a user has created reports based on a dashboard and allowed your user role access to it, these reports are also listed in the Reports menu for that dashboard. For more information on reports, see Reporting on Your Enterprise on page 66.

Figure 3. The Monitored Hosts dashboard with the Report menu selected.



Choosing a Home Page

You can choose any dashboard and make it your personal home page. Other dashboards can also be designated as home pages by a dashboard developer. These are listed under Homes in the navigation panel.

To set your personal home page:

1. Select any dashboard in the navigation panel on the left. Choose the dashboard that is most appropriate for your needs.
2. Click **Make this my home page** in the action panel.

   The dashboard is listed under **Homes** in the navigation panel and will be the first page that Quest Foglight displays every time you log in.

If you later choose another dashboard as your home page, it replaces the previous one.

NOTE: You can have multiple homes. When you mark something as a home page, it becomes the default home and it is added to the list of possible homes. For example, if you add the Service Operations Console dashboard as your home page, Foglight adds it to the your default set of homes and it becomes your current home. If you log out and log back in, you will access the Service Operations Console dashboard.

Getting Started FAQ

When I log into Foglight, why I do not see any dashboards in the navigation panel?

Foglight controls access to dashboards and views by means of roles. Your Administrator assigns users to groups and then assigns roles to those groups.

If you do not see any dashboards in the navigation panel, the user you signed in as may not have been assigned to a group. Contact your Administrator for assistance.

What determines which dashboards and views I can access?

When you try to access a dashboard or view, Foglight matches the roles of the groups to which you belong against the relevant roles and the allowed roles that were set for that dashboard or view.

Relevant roles control which dashboards and views are listed in the navigation and action panels. Allowed roles control which dashboards and views a group can access. In some dashboards, one or more views may not be available because your roles have not been set as allowed roles for them.

Table 1. The Operator and Advanced Operator roles have the following permissions:

This role:	Has these permissions:
Operator	Access to basic dashboards. Operators can also access dashboards like Service Operations Console, Agents, and Hosts.
Advanced Operator	Extends Operator to include dashboards like the Service Builder.

If I navigate away from a dashboard, do I see the same views when I return?

Yes. If you leave a dashboard and then return to it, you see the last views that were displayed.

Working with Dashboards

This group of topics describes how to work with Quest Foglight dashboards and provides an overview of the common elements that are found on most dashboards.

Introduction to Views and Dashboards

Quest Foglight uses views to group, format, and display monitoring data.

Dashboards are top-level views that do not need to receive data from other views. Dashboards typically contain a number of other views that display monitoring data. You access dashboards using the navigation panel.

Quest Foglight includes a number of monitoring views and dashboards. You can also create and edit your own custom views and dashboards.

For information about common elements that are found on most dashboards, as well as creating your own custom views and dashboards, see the following topics:

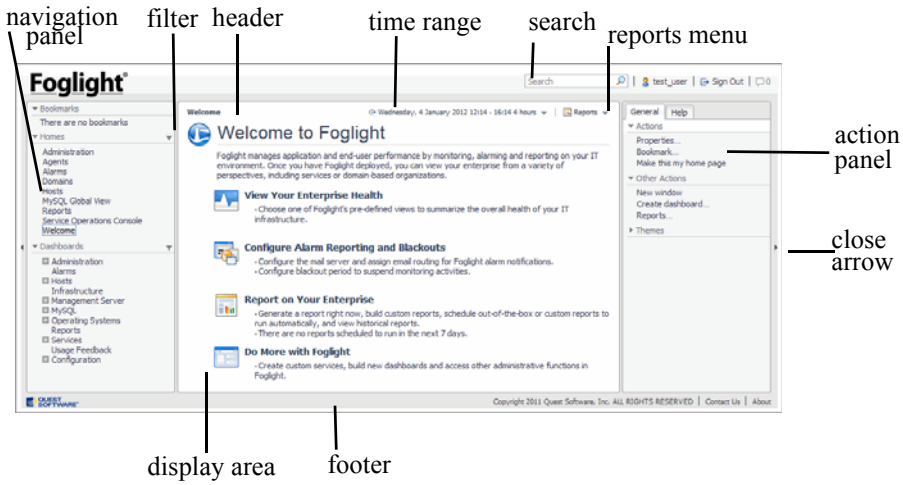
- State Indicators
- Severity Indicators
- Availability Indicators
- Tooltips, Dwells, and Popups
- Drop-Down Lists and Trees
- Customizer
- Exporting Data from Charts and Tables
- Common Views
- Switching to Console Mode
- Creating a Custom Dashboard
- Customizing Dashboards
- Working with Charts

Screen Elements

This section describes the Quest Foglight screen elements that you can see regardless of which cartridges have been installed.

In addition to the display area and the two panels, a typical screen in Quest Foglight includes other elements, which are indicated in the following graphic.

Figure 4. Elements in a typical screen.



For more information, see the following topics:

- Navigation Panel
- Display Area
- Action Panel
- Zonar and Time Range

- Close Arrows
- Header
- Footer
- Search
- Reports Menu

Navigation Panel

The navigation panel contains all the dashboards that you can access based on your role. On the left side of the page, hover your mouse over the arrow to view the list of available dashboards. Expand a module and select a dashboard to view it in the display area. When you move your mouse away, the navigation panel closes to give you a full view of the dashboard contents. If you want to keep the navigation panel open, click the arrow on the left of the display area. To close the panel, click the arrow again. See Close Arrows.

Quest Foglight remembers the state of the navigation panel between logins, so if you collapsed the navigation panel when logging out, the panel is collapsed the next time you log in.

NOTE: If you do not see any dashboards in the navigation panel, the user you signed in as may not have been assigned to a group. For more information, see Getting Started FAQ.

Filter Icon

Select the Filter icon  to filter by preferred role. This way, you see only those dashboards that have preferred roles that match the ones you have set for your user account. This way, you see only those views that interest you.

To filter dashboards based on one of your roles:

1. Click the **Filter** icon for Homes or Dashboards.
2. In the Filter dialog, select the check box next to each role that you want to use as your preferred role.
3. Click **Apply**.

Action Panel

The action panel lists the various actions that you can perform on the current dashboard. It also lists views and data that you can add to a dashboard or report that you are creating and provides access to the online help.

On the right side of the page, hover your mouse over the arrow to view the list of the available actions. When you move your mouse away, the action panel closes to give you a full view of the dashboard contents. If you want to keep the action panel open, click the arrow on the right of the display area. To close the panel, click the arrow again. See Close Arrows.

Quest Foglight remembers the state of the action panel between logins, so if you collapsed the action panel when logging out, the panel is collapsed the next time you log in.

Tabs

The following tabs are available in the action panel:

- **General** tab—contains a number of actions that you can perform on the current dashboard or report, as well as other actions you can perform (such as opening a new window or creating a new dashboard or report).
- **Help** tab—provides access to the online help and a search field for the help.

When you are working with a custom dashboard or report template, two more tabs appear:

- **Views** tab—add a view from the list to your report or dashboard by dragging it to the display area. See Adding a View Using the Drag and Drop Functionality for more information.

- **Data** tab—display a data object in a view (that Quest Foglight adds to your dashboard) by dragging the object into the display area. See Adding a View Using the Drag and Drop Functionality for more information.

Close Arrows

The Close arrows are used to conserve space on the display area. Click the arrows to:

expand the display area and collapse the navigation and action panels.

Header

Table 2. The header contains the icons described in this table.

Icon	Description
Foglight	Click the product name to navigate back to your Home page. By default the Welcome page is your home page. For information about changing your home page, see Choosing a Home Page.
Search 	Type a search string to see hits in all Monitored Objects, Online Help, and Definitions. For more information, see Search.
username	Displays your user name.
Sign Out	Click this icon to log out. When you log out, Quest Foglight reclaims all resources used in the current session. **NOTE:** This is the recommended way to exit Quest Foglight, rather than just closing the browser.

Search

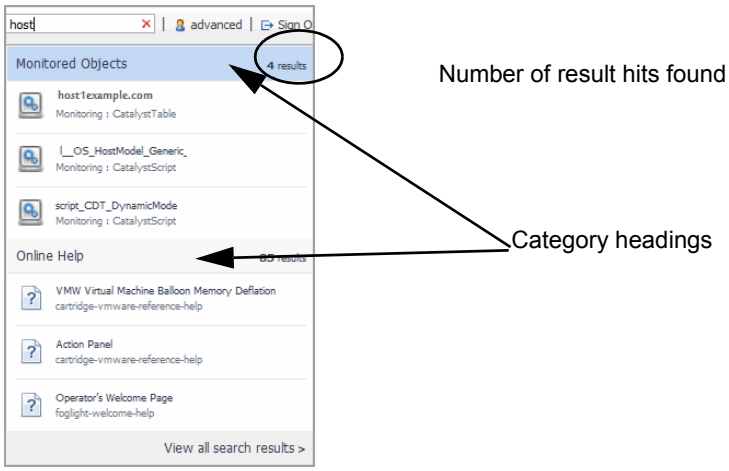
The Search field, located in the header, is a global search tool which allows you to search for any monitored object or help topic.

NOTE: If you have the cartridge developer role, you can also view Web Component Framework (WCF) search hits listed under the Definitions category.

To complete a global search:

1 Type a search string into the search text box.

Figure 5. A list of results is displayed.



TIP: To quickly remove your search string and start a new search, click **Esc**.

2 **Optional**—click the category heading to view all entries found for that category.

3 **Optional**—click **View all search results**.

   a **Optional**—in the left pane, narrow your search results by selecting one or more of the following category check boxes:

   Monitored Objects: displays search results found in Quest Foglight.

   Online Help: displays search results found in the online help.

   Definitions: displays search results found in the Configurations > Definitions dashboard.

   b **Optional**—sort your search results by selecting one of the following options from the **Sort By** list:

   Relevant: sort by the most relevant search items found first in the list.

   Subject: sort by the display name.

   Category: sort by category: Monitored Objects, Online Help, and Definitions (WCF).

   c **Optional**—in the **Recent Searches** list on the left pane, select a recent search string to review the found results.

4 Select an entry to view the search result.

- Clicking an entry under the **Monitored Objects** category opens a dashboard associated with the monitored object. If the object is not associated with a specific dashboard, a summary view opens to display the metric details for that object.
- Clicking an entry under the **Online Help** category opens a new browser tab and displays the online help topic.
- Clicking an entry under the **Definitions** category opens the Configuration > Definitions dashboard to display the details of the WCF component.

Reports Menu

You can run, create, and manage your reports from any dashboard. On the top right corner of the dashboard is a reports menu. Some dashboards have an associated report template displayed in the top of this menu. For more information on reports, see Reporting on Your Enterprise on page 66.

Display Area

The display area is where you view dashboards or reports and work with elements in your custom dashboards and reports. See Creating a Custom Dashboard and Building a Custom Report Template for more information.

TIP: Maximize the size of the display area by closing the navigation and action panels.

Footer

Table 3. The footer contains the links described in this table.

Copyright Quest Software, Inc.	Links to the copyright page on the Quest web site.
Contact Us	Links to local contact information on the Quest web site.
About	Displays product, contact, and support information.

Zonar and Time Range

Quest Foglight controls the current time range using a special control called a zonar. See Time Range for more information. The default time range is the last 4 hours.

Time Range Freeze Control

You can freeze the data Quest Foglight displays at a specific time range to diagnose problems that occurred during that interval. See Freezing a Time Range for more information.

Time Range

The time range at the top of a dashboard indicates the current time range for all the views on the page. You can override the default current time range setting (the last 4 hours), by choosing another interval in the User Preferences page. For more information, see Setting Your User Preferences.

NOTE: If some of the views contained in a dashboard have independent time ranges, Foglight does not display the time range.

By default, the time range in a dashboard is displayed in real time. You can freeze the time range so that the data Quest Foglight displays in the views reflects a certain interval. When the time range is frozen, the views do not display new data. Freezing the time range helps you diagnose problems that occurred during a specific interval. For further details, see Freezing a Time Range.

Changing the time range in a dashboard normally affects all the views in the dashboard. If an individual view in a dashboard has a different time range, that takes precedence over the time range for the dashboard.

Click the time range (shown below) to access the timeline and calendar options, which allow you to specify a new time range.

Figure 6. Time range.

NOTE: The time range for a summary view is likely to be different from the time range for a detail view. Therefore, the time range that you select affects only the current view and drill-downs from it; it does not affect higher-level views.

Timeline

Click the **Timeline** option in the time range to:

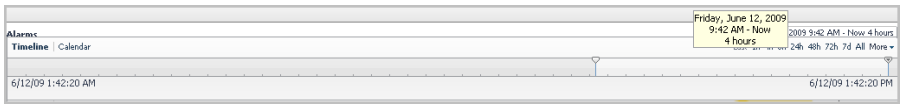
- Select a pre-defined time range interval, from the last hour to ‘all time’.

- Specify a custom time range using a sliding bar called the zonar.

Figure 7. The sliding bar called the zonar.

Hover the cursor over the zonar to cause a popup to appear that displays the dates and interval (number of hours or days) spanned by the time range.

Figure 8. Popup displaying the dates and interval spanned.



Using the zonar

Click the middle of the zonar to drag it to the left or the right. The start and end times of the range changes, but the total interval it spans stays the same.

Increase or decrease the interval by clicking and dragging one side of the zonar. As you drag, the popup displays the new time range.

As you drag the edges of the zonar, the timeline scale adjusts automatically, increasing or decreasing the units of time.

If you drag the right edge of the zonar when the time range is in real time (the word *Now* is shown in the time range display), the interval persists and not the specific date and time to which you set the zonar.

Calendar

Use the calendar options to set a specific time range by specifying the time and date from which and to which you want the range to span.

To adjust the time range using the calendar options:

1. On the left side of the time range, click **Calendar**.
2. Use the **From** and **To** fields to set the time range:
   a. Click the calendar icon ( ) in the **From** field to set the starting point for the time range. Alternatively, select **Earliest available**.
   b. **If you clicked the calendar icon:** in the calendar popup, select a date and specify a time. Click above the field to close the popup.
   c. Click the calendar icon ( ) in the **To** field to set the end point for the time range. Alternatively, select **Current time**.
   d. **If you clicked the calendar icon:** in the calendar popup, select a date and specify a time. Click above the field to close the popup.
3. Set the **Granularity**. See About granularity for more information.
4. Click **Apply** to update the views based on the new time range.

NOTE: If you enter an invalid date or time, a red exclamation mark appears and you cannot apply your changes.

About granularity

Granularity controls the size of the metric intervals. The default option is **Raw**, which displays the actual collected data points. The **Auto** option uses intervals that are sized according to the time range. For example, a one-hour

range has five-minute intervals, while a one-week range has one-hour intervals. Ranges from **1 minute** to **1 week** are also available.

If you set too large an interval, there may not be enough points to plot on a chart. For example, if you only have one day of data, an interval of six months results in a single point. If an interval is too small, there may be too many data points to display if the chart is small.

The maximum and minimum values of a metric are actual numbers, while data points inside an interval are averaged. Agents may report their data at uneven intervals. Quest Foglight sets the data to be plotted in evenly-spaced intervals using data collected from any number of agents.

To do this, the data points inside the interval are averaged. This has the effect of evening out the maximum and minimum values if an interval contains more than one real data point. The maximum and minimum values of a metric are based on real data and not an averaged value. These values are often plotted as markers on the chart. Therefore the averaged values on the plotted curve or bar may not match the real values of the markers.

To select a granularity value:

1 In the Calendar, select an option from the **Granularity** menu on the right side of the interface.

2 Click **Apply**.

Freezing a Time Range

By default, the time range on a dashboard is displayed in real time. You can tell this at-a-glance if the word *Now* is shown in the time range display.

Figure 9. The word Now indicates that the time range is displayed in real time.

You can disconnect from real time and “freeze” a dashboard at a specified time range. When this occurs, the views on the dashboard will not receive any new data.

Some views show a frozen time range by default. This type of time range is called a diagnostic time range. See Diagnostic Time Range for more information.

To freeze a time range:

1 Select the dashboard for which you want to freeze the time range.

2 Click the icon to the left of the displayed time range at the top right of the dashboard.

TIP: When you hover over the icon a popup indicates if the time range is real time or frozen:

The time range is set and the icon changes to .

Hover over the icon to display the message: *Time range is in the past, click to switch to real time*.

3 If you later refresh a dashboard, you may notice that the time range remains fixed even though the time that is displayed in the zonar changes.

Figure 10. For example, the time range ends at 10:01, but the current time is later.

To unfreeze a time range:

- Click the icon.

  The time range changes to end at the last monitoring time range that you used (for example, the last four hours).

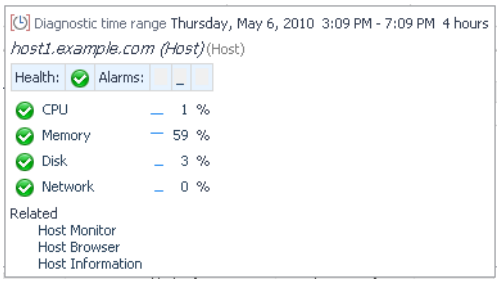
Diagnostic Time Range

In some places in the Quest Foglight browser interface, a diagnostic time range is calculated when drilling down on an item of interest. This most often happens when looking at the details of an alarm. By default, Quest Foglight shows a four hour window, where the alarm time range is placed three hours into the window (that is, three hours prior and one hour past the alarm). The diagnostic time range stays frozen until you unfreeze (toggle) the time range.

The diagnostic time range function works as follows:

- For any alarm that is not in the current time range, clicking on a drill down places you into a diagnostic time range.
- Some drilldowns indicate that you are in diagnostic time range as shown in the dialog box below.

Figure 11. The drilldown indicates that you are in diagnostic time range.



NOTE: The diagnostic time range function is not available for all drill-downs.

State Indicators

There are several different types of alert indicators used to represent monitoring data in Quest Foglight. The types are:

- Severity Indicators
- Availability Indicators

The severity and state icons tell you about the condition of an application, server, or process. What they represent changes according to their context. They often represent a rolled-up state of the data collected on the object. For example, the same state icon can indicate that a server is down or that a process is down.

Many summary views show icons that represent an aggregation of the detailed objects of similar types. You can have Quest Foglight prioritize the data when determining the aggregation by creating a service level agreement to do this. For example, if three test servers are down, and one production server is active, then a summary view would show a critical icon, not a fatal icon.

Depending on where it is, you can hover over a severity or state icon or click it to get further information about the condition it represents.

Severity Indicators

Severity indicators can indicate:

- the severity level of alarms that have fired.
- the status of an object. For example, a domain, server, application, or process.

Table 4. Severity indicators:

Severity Indicator	Indicates...	Description
	Normal	The component is operating within normal thresholds. A normal severity level indicates that there have been no critical, warning, or fatal events fired. Quest Foglight does not record events that are successful; it can only determine that there are no events that had problems.
	Warning	Represents a possible performance problem, based on calculations on current server metrics against best-practices thresholds.
	Critical	Indicates that the current metric values point strongly towards performance-related problems with the specified component.
	Fatal	There is a very strong indication that the server is experiencing conditions which will degrade performance.

Availability Indicators

Availability indicators show the availability of a service.

Table 5. Availability indicators.

Icon	Description
	Available
	Not available

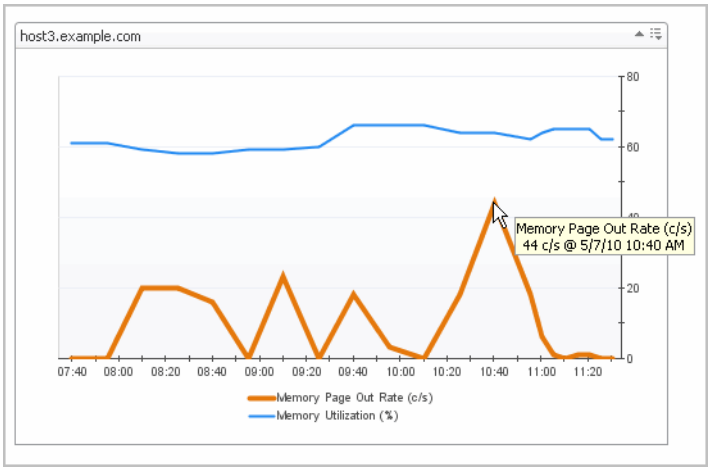
Tooltips, Dwells, and Popups

Different types of smaller views provide additional detail about an element in a view. Examples of these views are:

- A tooltip element describes what it represents when you hold the cursor over a status icon. A tooltip also appears when you hover the cursor over a line in a chart (as shown below).
- A dwell displays additional information about the item when you hold your cursor over a line in a table.
- A popup displays additional information and options if you click a line in a table.

Tooltips and dwells disappear when you move the mouse, but a popup remains open until you close it by clicking outside it or clicking the close icon  in the corner. You can also maximize some popups by clicking the maximize icon  in the upper right corner.

Figure 12. Tooltips appear when yo uhover the cursor over a line in the chart.



Columns

When you are creating a custom dashboard or report, you can choose one of the options under Columns under the General tab in the action panel to divide the display area into one, two, or three columns.

Figure 13. Column options.

Drop-Down Lists and Trees

Drop down lists are views that change the context of other views, such as those in the same container view. When you select an item from a drop down list, the view is refreshed with new data. For example, a view may contain a drop-down list of metrics, a chart, and a table. Selecting a different metric changes the context of the page, and the chart and table are updated accordingly.

A drop down displays a list of single options. A tree expands to display a hierarchy of options. Both can have the same effect on the context.

Customizer

Depending on how the chart was designed, the customizer icon might appear when you hover the cursor over a chart or might always be visible. For example, on the Alarms dashboard, the customizer for the Alarm(s) table is always visible.

NOTE: Depending on the context, the customizer icon is also called the Edit or Options icon.

If the customizer icon is enabled you can:

- Select which columns you want to appear in a table.
- Change the chart type dynamically. See Changing the Chart Type.
- Export charts and tables to PDF, CSV, Excel, XML, or Image format. See Exporting Data from Charts and Tables.

Exporting Data from Charts and Tables

The option to export data to PDF, Excel, CSV, XML, and Image formats are available for charts and tables.

For example, you can create new graphs using drag and drop metrics onto a dashboard, and then export the data to CSV output. Therefore, you can create multiple metrics, set a time range, export to CSV, and then open the data in Excel.

To export charts and tables:

1. Navigate to the chart or table you want to export.
2. Click the Customizer icon in the top right-hand corner of the table or chart.
3. Click **Export**.
4. Choose the format to export.
5. Select a format and click **Next**.
6. If you have chosen to use the PDF format, you can customize the PDF report by completing any of the following steps:
    a. In the **Title** box, type a title for your report.
    b. In the **Notes Before** box, type a note to appear after the title of your report.
    c. In the **Notes After** box, type a note to appear after the exported view.
    d. Click **Yes** to include a table summary of the data from the exported view.
    e. In the **View Export** dialog box, click **Save as Report** to save it to **My Dashboard** in the navigation panel, or click **Export** to view it in a separate browser window.
7. Select the metrics to export.
8. Click **Export**.

Common Views

Quest Foglight makes use of common views in most of the standard dashboards. Using common views in dashboards is an effective way to enable and create easy workflows. Examples of views used in many of the dashboards include the Alarm List and Host Summary.

Alarm List

The Alarm List view displays a summary of alarms. The Alarm list view allows you to examine alarms from different perspectives by choosing one of the following tabs:

- Alarms(s). See Viewing, Acknowledging, and Clearing Alarms.
- Error Instance(s)
- Related Host(s)
- Related Agent(s)

Expand nodes in these tabs and click on details to drill down and further investigate aspects of the alarms in your system.

For additional information the Alarm List view, see the following topics:

- Hiding Columns
- Alarm Chaining
- Historical Alarm Occurrences
- Alarm Notes

Error Instance(s)

An error instance is any object in your environment that is the source of an alarm.

Quest Foglight lists each error instance's health, number of alarms, and health history in the Error Instance(s) tab.

Related Host(s)

You can isolate issues related to systems more easily by showing alarms organized by the originating host.

Quest Foglight lists each host's health, number of alarms, and health history in the Related Host(s) tab.

Related Agent(s)

You can understand which agents are causing alarms to fire by showing alarms organized by the agent that collected the data.

Quest Foglight lists each agent's health, number of alarms, and health history in the Related Agents(s) tab.

Hiding Columns

You can hide any of the columns in the Alarms List view.

To hide columns:

1 Click the edit icon above the table.

A popup displays a list of the columns in the table.

2 Clear the check boxes for the columns you want to hide and click **Apply**.

The columns are removed from the table.

Alarm Chaining

An alarm chain is a series of consecutive non-normal alarm states for the same alarm event. For example, the CPU utilization on a specific machine keeps changing values that trigger a non-normal state. The following chain describes the alarm from 10:55 until 11:30 (when it becomes normal again)

10:55 AM – Normal

11:00 AM – Warning

11:05 AM – Critical

11:15 AM – Fatal

11:20 AM – Warning

11:25 AM – Critical

11:30 AM – Normal

Using the Alarm Details dialog box, you can choose either the Acknowledge or Acknowledge Until Normal option for a current alarm if you want the alarm to remain acknowledged until it reaches a normal state. For example, if you choose the **Acknowledge until Normal** option at 11:00 AM, the alarm stays acknowledged until 11:30 AM. In contrast, if you choose the **Acknowledge** option at 11:00 AM, the alarm (chain) would be "Unacknowledged" again at 11:05 AM when the severity has changed.

NOTE: Alarm chains can only be seen in the Alarm Details dialog box. See Viewing Alarm Details for more information about this dialog box.

Historical Alarm Occurrences

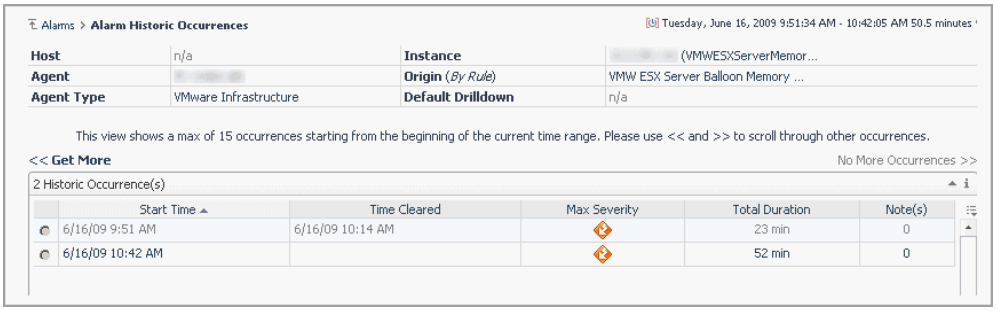
From the Alarm Details dialog box, you can drill down to a view that shows historic occurrences of an alarm. For example, if you are looking at the CPU utilization alarm for host1, you can go to a view that shows historic occurrences of that alarm (CPU utilization) on the same object (host1).

To view historical alarm occurrences for an object:

1 On the Alarms dashboard, drill down to an alarm and click the alarm to display the Alarm Details dialog box.

2 On the Alarm Details dialog box, click **Find Historic Occurrences**.

Figure 14. The Alarm Historic Occurrences view appears.



This view consists of the following main components:

- Time range menu: provides a quick way to change the current time range. Select an option in this menu changes the current time range to the selected time period and updates the entire view. If there is no alarm occurrence in the selected time period, nothing will be shown in the graph and in the table.
- Alarm historical occurrences table: lists alarm occurrences in the current time range. The dwell and popup on each row show the alarm severity transitions of the alarm occurrence in that row. The Notes column shows the number of notes added to each alarm occurrence. Details of these notes are available through the dwell and popup.
- A set of alarm occurrence controls: these controls show "`>> No more occurrences`" if there are no occurrences outside of the current time range. If there is a "`<< Get more`" control on the left, this indicates alarm occurrences prior to the current time range. Mouse over this control to show the creation time of the most recent occurrence before the current time range. Click on this control to display this alarm occurrence into the table and at the same time adjust the current time range to include this occurrence. The "`>> Get more`" control works the same way for alarm occurrences after the current time range.

Alarm Notes

Alarm notes provide you with a handy way to record information about an alarm for all other users to view. For example, if you are managing alarms during an installation of Quest Foglight and if an urgent alarm comes up, you can add a note to the alarm that you are checking if the back-up process may be causing the problem. The note, along with a username stamp and a timestamp, are attached to the alarm.

There are two ways to add notes from the Alarm Details dialog box, by using either the:

- **History** tab. The **Notes** icon in the Alarm History table is for maintaining notes attached to a particular alarm in the history table. Clicking the **Notes** icon, takes you to the Alarm Notes dialog box.
- **All Notes** tab. New notes are automatically attached to the most recent alarm in the alarm history.

Creating an Alarm Note

Alarm notes consist of free-form, non-localizable text, a user name, and a timestamp.

To create an alarm note:

1 From the Alarm Details dialog box you can either:

- In the **History** tab, click on the Alarm note icon. The Alarm Notes popup appears. Click **Add**.
- In the **All Notes** tab, click **New**.

2 In the Add Note dialog box, type a description of the note.

3 Click **Add**.

The description is added to the Alarm Notes dialog box.

Editing an Alarm Note

Only the creator of the note can edit the note.

To edit an alarm note:

1 From the Alarm Details dialog box, you can either:

- Click the **History** tab, and then click the **Notes** icon. The Alarm Notes dialog box appears.
- From the **All Notes** tab, go to step 2.

2 Click the **Edit** icon.

3 In the Edit Note dialog, change the description of the note.

4 Click **Submit**.

The description of the note changes to the modified text.

Deleting an Alarm Note

Only the creator of the note can delete the note.

To delete an alarm note:

1 From the Alarm Details dialog box you can either:

- Click the **History** tab, and then click the **Notes** icon. The Alarm Notes dialog box appears.
- Click the **All Notes** tab, go to step 2.

2 In the Alarm Notes dialog box, select the check box of the note(s) you want to delete.

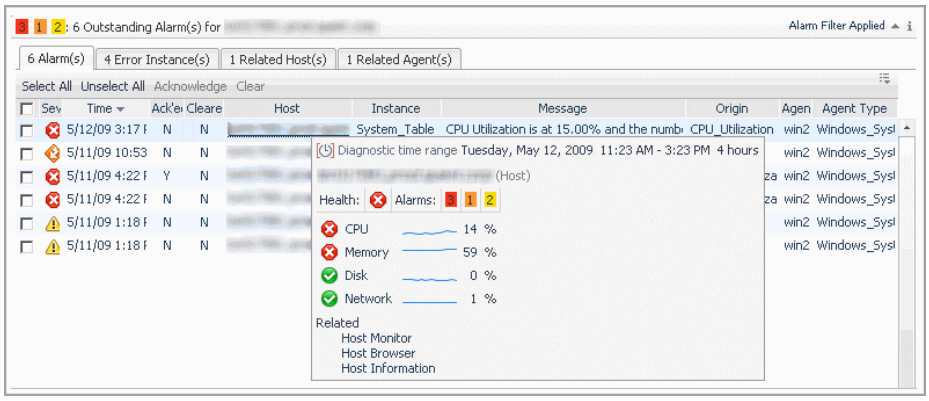
3 Click **Delete**.

The selected notes are removed.

Host Summary

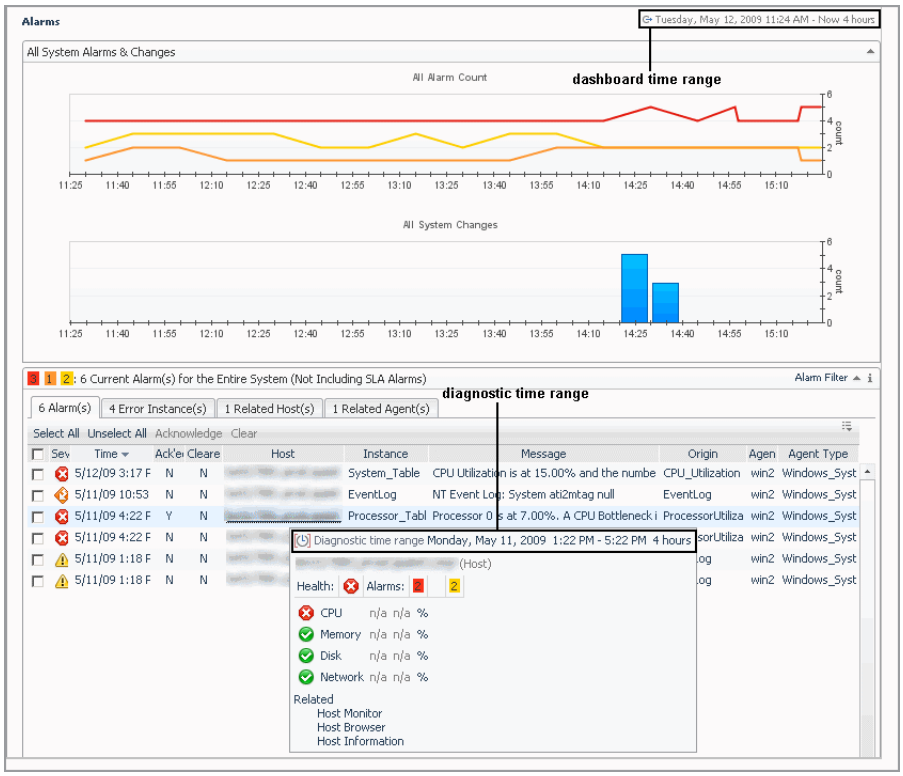
Click or hover the mouse over the name of a physical host to view a host summary popup or dwell.

Figure 15. Viewing a host summary popup or dwell.



A diagnostic time range is displayed at the top of the summary. This time range indicates the period during which the alarm was fired. It is usually in the past and is sometimes different from the time range that appears on a dashboard. For example, the following alarm occurred on Monday May 11th during a particular time range, while the date displayed on the dashboard is Tuesday May 12th.

Figure 16. A diagnostic time range is displayed at the top of the summary.



Click on items in the popup to drill down to more information about the host, its alarms, and its performance.

Drilling down from the popup retains the time range during which the alarm occurred. To go back to the monitoring time range you last used, “unfreeze” the range by following the procedures in Freezing a Time Range.

Switching to Console Mode

Switch to console mode if you want to maximize the space available in the Quest Foglight browser interface. For example, when you want to focus on one dashboard in a small or non-standard display.

To switch to console mode:

1 Navigate to the dashboard on which you want to focus.

> **TIP:** Create a custom dashboard to focus on a single view. Add just that view to the dashboard and then maximize it (**Options > Maximize** in the top-right corner of the view). See Creating a Custom Dashboard for more information.

2 Obtain the URL to the dashboard:

   a Click **General > Actions > Properties > Link to this page** in the action panel.

   b Copy the URL.

3 Paste the URL into your browser's address bar.

4 Replace *page* with *noc* in the URL. For example:

   http://host1.example.com:8080/console/noc/user:operator.1

5 Go to the new URL.

   Quest Foglight displays the dashboard in console mode. Any dashboards to which you drill down are also displayed in console mode.

   To log out manually, exit console mode by following the instructions below.

To exit console mode:

1 Delete everything after *console* from the URL. For example, if the URL is *http://host1.example.com:8080/console/noc/user:operator.1*, change it to the following:

   http://host1.example.com:8080/console/

2 Go to the new URL.

3 Log in to Quest Foglight.

   Quest Foglight displays your home page in standard mode.

Creating a Custom Dashboard

In addition to using the dashboards that are supplied with Quest Foglight or created by dashboard developers in your organization, you can create custom dashboards for your specific needs. These dashboards can contain any combination of tables and charts that you find useful.

As with creating a custom report, the custom dashboards that you create are located under My Dashboards in the navigation panel.

> **TIP:** Visit http://eDocs.quest.com to watch our learning videos. See *How to create custom Foglight dashboards*.

To create a dashboard:

1 On the action panel, click **Create Dashboard**.

   The Create Dashboard wizard appears.

2 Choose to base your custom dashboard on one of the following options:

- **Use All Data—**start with a blank dashboard and build it by selecting discrete components from your database. See Creating a Custom Dashboard Based on All Data.
- **Start with a service—**build a dashboard based on components of the service you select. See Creating a Custom Dashboard Based on a Service.
- **Create a Custom Dashboard based on the current dashboard—**use the data shown on the current dashboard to build a custom dashboard. See Creating a Custom Dashboard Based on the Current Dashboard.

NOTE: This option is disabled if no dashboard is currently selected. To choose the dashboard to be used as your starting point, select the name of that dashboard in the navigation panel.

TIP: You can create a custom dashboard or report using parameterized input values. By using Parameterized Input Values you can quickly redefine what data is displayed in your custom dashboard or report at any given time. See Using Parameterized Input Values.

When you finish creating your custom dashboard, you do not need to save it. It is automatically available under My Dashboards in the navigation panel.

Creating a Custom Dashboard Based on All Data

You can construct a custom dashboard based on all Quest Foglight data by selecting any data available. Quest Foglight provides you with a blank display area to which you can add any elements you want.

To create a dashboard based on all data:

1 In the Create Dashboard wizard, Build a Dashboard page, select **Use All Data**.

2 Click **Next**.

The View Properties page appears. See Setting View Properties.

Setting View Properties

To set view properties:

1 In the Create Dashboard wizard, View Properties page, type a unique name for the dashboard in the **Name** field. This is the only information required to create a new dashboard.

2 Select one of the following **Auto Refresh Rate** options:

- 300 seconds (default rate value)
- Every x second(s)—type the number of seconds in the box to indicate the length of the refresh interval
- Never

3 **Optional**—by default, if you do not select any relevant or allowed roles, the dashboard is available to all roles.

You can select specific roles to control access to your dashboard. However, the interaction between relevant roles and allowed roles is complex. Consult your organization's dashboard designer or your Administrator for details.

Click the edit icon beside **Relevant Role(s)** and/or **Allowed Role(s)** and select the appropriate roles.

- **Relevant Role —** Select the roles that allow existing dashboard users to view a dashboard. The Relevant Role applies to a user who has several roles, such as Dashboard Designer or Foglight Security Administrator. Selecting the **Operator** role allows anyone with this role to access the new dashboard.
- **Allowed Role —** Determines which user role is allowed to see the dashboard. Leaving the role set to the default 'all' allows all roles to access the new dashboard.

4 **Optional** — Click the edit icon beside **Background Image** and select a background image to use for your custom dashboard. See Using a Map or Diagram as a Background Image.

5 You can enter a description of the dashboard in the **Help** text box. This text appears in a tooltip when you hover over the dashboard name in the navigation panel.

6 Select the **Allow this dashboard to be included in other dashboards** check box if you want to include this dashboard in other custom dashboards.

7 Click **Next.**

The Select Dashboard Layout page appears. See Setting a Dashboard Layout.

Setting a Dashboard Layout

NOTE: You do not need to save your dashboard when you finish making changes. It is automatically available under My Dashboards in the navigation panel.

To set a dashboard layout:

1 In the Select Dashboard Layout dialog box, select an option to control the size and placement of information:

- **Single-Column Layout—**specifies an evenly divided, columnar layout in which the display area is segmented into one column.
- **Two-Column Layout**—specifies an evenly divided, columnar layout in which the display area is segmented into two columns.
- **Three-Column Layout**—specifies an evenly divided, columnar layout in which the display area is segmented into three columns.
- **Fixed Size**—gives you access to the Edit Page Layout option where you can precisely position the views. For more information, see Editing the Page Layout.

2 Click **Finish**.

Next, you can customize your dashboard by adding data and view elements to it. See Customizing Dashboards.

Creating a Custom Dashboard Based on a Service

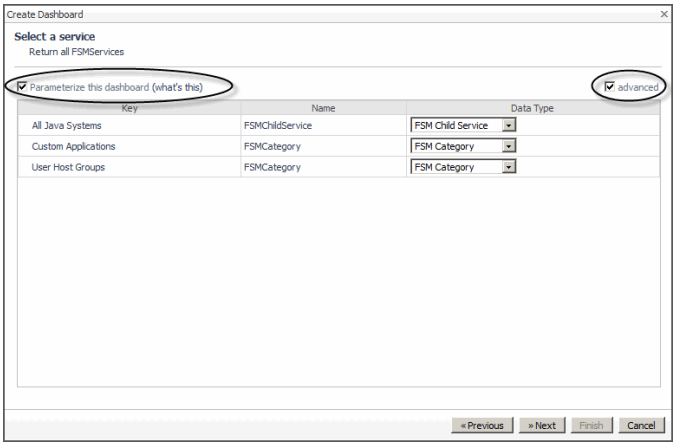
You can construct a custom dashboard based on a service by selecting any service in Quest Foglight. Quest Foglight provides you with a blank display area to which you can add any elements you want.

To create a custom dashboard based on a service:

1 In the Create Dashboard wizard, Build a Dashboard page, select **Start with a service**.

2 Click **Next**.

Figure 17. The Select a service page appears.



3 **Optional**—select the **Parameterize this dashboard** check box if you want to create a dashboard that is designed to run with any service.

4 **Optional**—when **Parameterize this dashboard** is selected, click the **advanced** checkbox to choose a data type for any of the services listed. This enables you to reduce the scope of the report to a particular data type.

> **TIP:** If you later decide to add more views or data elements to your custom dashboard using the drag and drop functionality, see Using Parameterized Input Values.

5 From the table, select a service and then click **Next**.

The View Properties page appears. See Setting View Properties.

Creating a Custom Dashboard Based on the Current Dashboard

You can create a custom dashboard based on an existing dashboard by selecting any dashboard in Quest Foglight as your starting point. Quest Foglight provides you with a blank display area to which you can add any elements you want.

To create a custom dashboard based on the current dashboard:

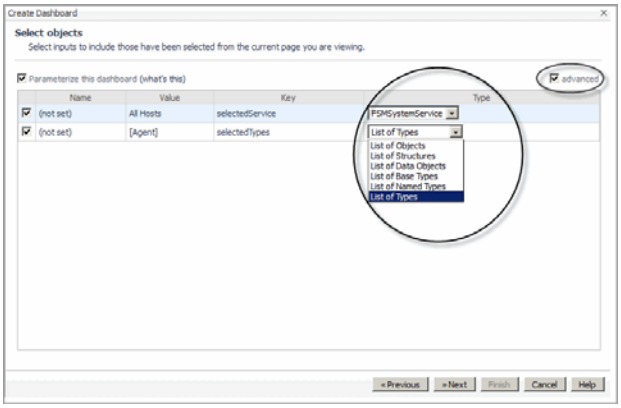
1 On the navigation panel, select a dashboard to use as your starting point.

2 On the action panel, click **Create Dashboard**.

3 In the Create Dashboard wizard, Build a Dashboard page, click **Create a Custom Dashboard based on the current dashboard.**

4 Click **Next**.

Figure 18. The Select objects page appears.



5 **Optional**—select the **Parameterize this dashboard** check box if you want to create a dashboard that is designed to run with any different instances of the specified parameters, which can be passed in from another view that is drilling into this one.

6 **Optional**—when **Parameterize this dashboard** is selected, click the **advanced** checkbox to choose a data type for any of the services listed. This enables you to reduce the scope of the report to a particular data type.

> **TIP:** If you later decide to add more views or data elements to your custom dashboard using the drag and drop functionality, see Using Parameterized Input Values.

7 From the table, select an object, and then click **Next**.

The View Properties page appears. See Setting View Properties.

Creating a Report Based on a Custom Dashboard

You can create a report based on a custom dashboard and schedule that report to generate at a specific time. For example, you have access to a custom dashboard which is monitoring the memory usage for a Host machine that has been experiencing memory leak problems the past several weeks; you want to send a report to several interested parties to inform them about the progress of performance for this particular host. To do this, you can quickly create and schedule a report based on this custom dashboard.

To create a report based on a dashboard:

1. On the navigation panel, under Dashboards > My Dashboards, open the custom dashboard on which you want to base your report.
2. On the action panel, open the **General** tab, and click **Other Actions > Reports > Createa New Report**.
3. If your custom dashboard does not use parameterized input values, click **Convert the current dashboard into a report** and then click **Finish**.

   You can now run the report or schedule the report. See Online-Only Topics or Online-Only Topics.
4. If your custom dashboard uses parameterized input values, click **Create a Report based on the current dashboard** and click **Next**.

   In the Select Options page, choose one of the following options:

   - **Direct Copy**—copy all of the parameterized inputs and report-compatible views from the current dashboard to the new report. If you have selected this option, click **Finish**. The report is displayed in the display area. You can now run or schedule the report. See Online-Only Topics or Online-Only Topics.
   - **New report with selected inputs**—create a blank report and use a selection of the custom dashboard's parameterized input values. If you have selected this option, select which parameterized input values you want your report to use, and then click **Finish**. The Add View wizard appears. See Adding a View and Using Parameterized Input Values.

     TIP: Watch the tutorial on how to use parameterized input values. From the toolbar in your report, click **Show Tutorial**.

Customizing Dashboards

You can add data to your custom dashboard and change the way it is displayed.

For more information, see the following topics:

- Adding a View
- Editing a View
- Adjusting View Options
- Working with Charts
- Adding Text
- Editing the Page Layout
- Using a Map or Diagram as a Background Image
- Editing Properties
- Deleting a Custom Dashboard

Adding a View

The Add View wizard is provided for the same function as creating a custom report.

To add views using the Add View wizard:

1 If the dashboard is not already opened, select the dashboard from the **My Dashboards** node.

2 On the Action panel, open the General tab, and click **Add view.**

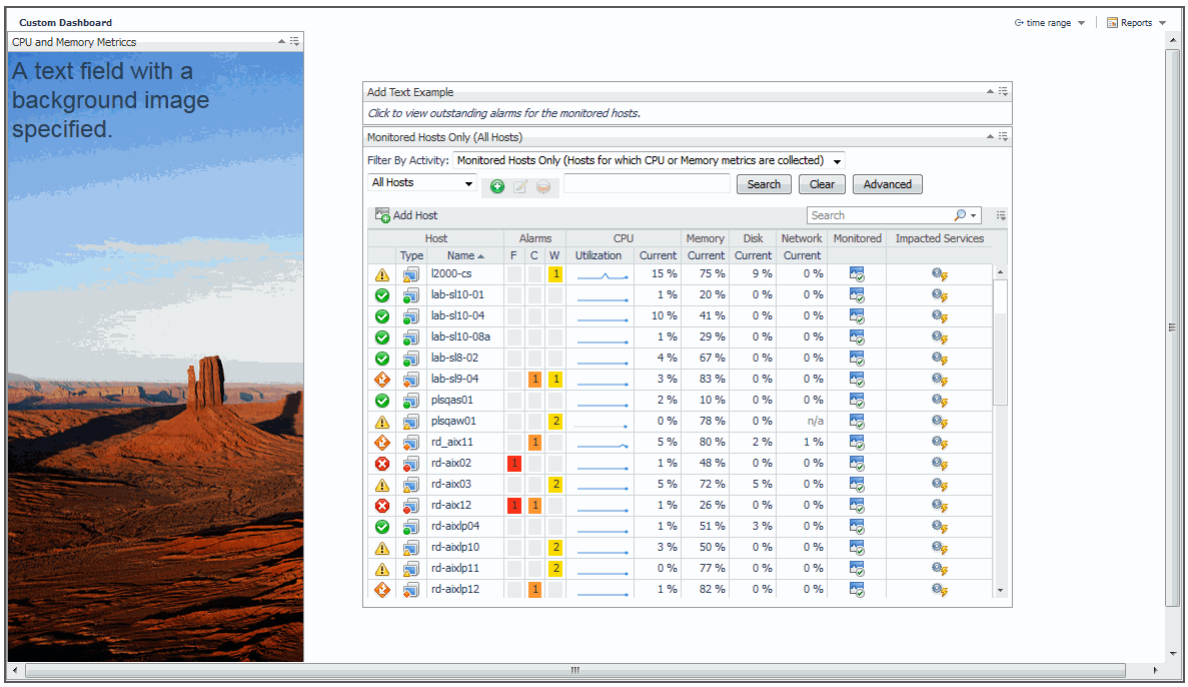
The Add View wizard appears.

3 Follow the instructions in Adding a View.

Adding Text

You can use the Add Text option, found on the General tab of the Action panel, to add text to your fixed position layout custom dashboard. The Add Text option allows you to set a font style for your text, specify a background image for the portlet view, and to configure an action for the portlet view. For example, you can configure the action to display a popup view when the user clicks on the text.

Figure 19. A text field with a background image specified.



To add text to a fixed position layout dashboard:

1 If the dashboard is not already opened, select the dashboard from the **My Dashboards** node on the navigation panel.

2 On the Action panel, click the **General** tab, and then click **Add text**.

The Entering User Text dialog box appears.

3 Choose to:

- Change the text **Style** (for example, Heading 1)
- Type the **Text** to appear on the dashboard.
- Add a **Background Image**.

For more information, see Using a Map or Diagram as a Background Image.

4 Click **OK**.

5 Next, position the text on your dashboard.

a Click the customizer icon on the top right corner of the portlet view and then click **Edit Layout**.

b Click the text view header and drag the portlet view to the position you want the text to appear on your custom dashboard.

c Click **Done**.

6 **Optional**—configure the portlet view to complete an action. For example, specify the action to be a popup view, of the outstanding alarms associated with a view in your custom dashboard, when the user clicks on the text.

a Click the customizer icon on the top right corner of the portlet view and then click **Edit Properties**.

The Config Portlet dialog box appears.

b Click the **Action** tab, select the check box for the text, and then click the edit icon .

The Configure Flow Action wizard appears.

c Follow the wizard instructions. For more information, see To configure actions:

Using a Map or Diagram as a Background Image

In conjunction with the fixed position layout custom dashboard, you can set the background to a geographical map or diagram and then precisely position views on top of it to represent the monitored state of objects at specific locations.

Use the Edit View Properties dialog box to upload a background image, such as map of a support or sales region or a diagram of your server rack.

TIP: Quickly add a map as your background image by selecting one of the map images that are included with Foglight from **Dashboard Development > Support > Maps > Base Theme**.

To customize your dashboard to represent physical locations:

1 On the navigation panel, under Dashboards, open the fixed position layout custom dashboard.

2 Select **General > Actions > Properties > Edit basic properties** from the action panel.

The Edit View Properties dialog box appears.

3 Click the **Background Image** icon ( ).

The Select an Image dialog box appears.

4 Enter the URL for the image or navigate to the image in the tree provided or click **Upload image** to specify your own image to use a background. If you have specified your own image, a *My Definitions* directory for your user account is added to the tree. Each additional uploaded image is added to this directory.

5 Preview the image and click **OK**.

6 Place monitoring views at specific locations by dragging data or views onto your image. For more information, see Adding a View Using the Drag and Drop Functionality.

Editing the Page Layout

If you chose the **Fixed Size** layout option in the Setting a Dashboard Layout dialog box, use the **Edit page layout** dialog box to position your view exactly where you want it.

You can also resize the view to fit the space you have available on the screen or change the view's display options.

To edit the layout of your dashboard:

1 Select **General > Actions > Edit page layout** from the action panel.

Quest Foglight displays the views within dashed line borders to indicate that they are selectable.

2 Click a view to cause the edit mode popup to appear.

3 Configure one or more of the following options:

- **Size and Position—**resize or change the co-ordinates of the view.
- **Grouping**—multi-select and group views that you have dragged onto the dashboard. For example, drag and drop a metric view and a property view related to one of our hosts onto your dashboard, select both, and click **Group** ( ) to group them together. You can then work with them as one view.

  NOTE: When you group views, Foglight nests them as static views. This means that they do not change when the views from which they were copied change and Foglight does not update the data they display.

  Ungroup the view (for example, to remove one view from the group) by clicking Ungroup ( ) in the edit mode popup.

  NOTE: You cannot edit the properties of grouped views.

- **Order—**change the stacking order (bring the view to the front, back, forward, or backward).
- **Display options—**select different options depending on whether you want to show the view title, show its border, or make it opaque.

  TIP: Clear the Show Title check box when grouping views so that the new grouped view does not display multiple titles.

4 Click **Done** at the top of the dashboard.

Editing a View

You can configure your settings for your custom views. For example, you can edit metric views by changing the display type, selecting metric labels, configuring chart settings, and choosing the action that occurs when you select or dwell over a metric.

To edit a view:

1 Navigate to the custom dashboard that contains the metric view you want to edit.

2 If your dashboard uses a column-based layout:

a Click the **Options** icon ( ) at the top-right corner of the view.

b Select **Edit properties**.

The Config Portlet dialog box appears.

If your dashboard uses a fixed position layout:

a Select **General > Actions > Edit page layout** from the action panel.

The views appear in dashed line borders indicating they are selectable.

b Click the particular view you want to edit.

A dialog box appears.

c Click the **Edit** icon.

The Config Portlet dialog box appears.

3 Make changes to your view. The options and tabs that are available in the Config Portlet dialog box vary depending on the type of view you are editing. For all view types, you can change the view title.

   If an Options tab appears, the options that it lists vary depending on the type of view you have chosen. Note that certain views and display types do not have options associated with them. If there are options available, you can save your settings. The next time you create or edit a view, Quest Foglight uses these settings for that particular view or display type as the default options for your user account.

   If you are editing a table view: you can adjust the columns, filter the data you selected based on rules, and configure actions. See Step 1 in Adding a Table View, Filtering a List, and Actions tab.

   If you are editing a property view: you can make changes to the property list or renderer and configure actions. See Step 8 and Step 9 in Adding a Property View and Actions tab.

   If you are editing a metric view: you can make changes to the following:

   - **Title—**rename the view.
   - **Height—**set the height for all views or this view by selecting the check box and specifying a value.
   - **Display type—**select the visual display. For more information, see Display type tab.
   - **Metrics—**choose the metric labels for the chart. For more information, see Metrics tab.
   - **Options—**configure settings according to the display type. For more information, see Options tab.
   - **Actions—**set what happens when a user interacts with the view. For more information, see Actions tab.

   NOTE: The options that are available on the Config Portlet view depend on the type of view you are editing. The options listed in step 3 are only an example.

4 Click **Apply** when you are finished editing your view.

Display type tab

The Display type tab contains options where you can select the visual layout according to a chart type, gauge type, or list type. For more information on the display types available and their settings, see Options tab.

Metrics tab

Use the check boxes in the Metrics tab to select the metrics that you want to appear in your view.

Options tab

The following tables lists the options available depending on the display type:

- Charts
- Gauge
- List

Table 6. Charts Table:

Icon	Name	Setting	Description	Option/Limits
	Plot (draws each series as a line graph) Area (draws each series as connected points of data, filled below the points) Stacking Area (draws each series as a stacked cluster) Bar (draws each series as a bar in a cluster)	Line Width	Specifies the thickness of lines in all charts or this chart.	• Automatic • Small • Medium • Large *available for Plot chart only
		Metric Value	Controls the type of value that is displayed for one metric or all metrics in a chart.	• None • Average: The chart displays the average value for the metric per interval. • Minimum: The chart displays the actual lowest value for the metric per interval. • Maximum: The chart displays the actual highest value for the metric per interval. • Minimum/Maximum: The chart displays the maximum and minimum value for the metric per interval. • Sum
		Show one chart per metric	Indicate if you only want to display one chart per metric.	Check box

Table 6. Charts Table:

Icon	Name	Setting	Description	Option/Limits
		Only show axis of selected metric (different charts will line up)	Select this option to show only the axis for the selected metric. For an example, see Grouping Metrics with Many Parent Hosts.	Check box
		Show thresholds for selected metric	If a metric has a threshold, it is displayed.	You can choose to show thresholds only for the selected metric.
		Show data at both start and end of intervals	Applies only to plot and area charts.	Check box
		Bounds	Sets the chart axis so that it does not go out of chart boundaries.	Selected by default.
		Show Overall	Displays the overall value for the set time range as a dashed line.	• Average displays the overall average. • Min displays the overall minimum. • Max displays the overall maximum.
		Show Min/Max As	Displays the minimum and maximum per interval.	• Envelope (a filled-in area between the minimum and maximum) • Marks • Lines
		Show Baseline Min/Max As	Displays the baseline minimum and maximum.	• Envelope (a filled-in area between the minimum and maximum) • Marks • Lines
		Show Standard Deviation As	Similar to the Min/Max setting; lets you highlight a range per interval.	• Envelope (a filled-in area between the minimum and maximum) • Marks • Lines
		Standard deviation multiplier	Determine the high and low values by setting the deviation from the average.	The default value is 1, but the unit of deviation depends on the metric.
	High/Low chart	Show Average Line	Emphasizes the highest and lowest values.	Settings for the other type of chart types are not available.

Table 7. Gauge Charts

Icon	Name	Setting	Description	Option/Limits
	Metric Indicator	Indicator Size	Useful for highlighting a fluctuating value in your real-time application in a visually meaningful way	• Normal • Wider
	Spinner	N/A	Represents data using a rotating wheel.	No options.
	Horizontal Bar	Bar Thickness	Horizontal bar, Vertical bar, and cylinder give you flexibility to present data in terms of a graduated scale	• Thinner • Normal • Thicker
	Vertical Bar	N/A		No options.
	Cylinder	N/A		No options.
	Flow Gauge	Sparkline options	Communication between host server components are represented by animated data flow that indicate the direction of the communication.	Show Sparkline: (check box) Sparkline displays: • Average • Minimum • Maximum • Extreme Flow Direction: • Left • Right Prominence • Less • Normal • More

Table 8. Lists Chart

Icon	Name	Setting	Description	Option/Limits
	Metric List	Show Sparkline	Displays a sparkline for each metric.	Check box
	Table List	Show Column For...	Display the columns you select.	Check boxes for: • Min (selected by default) • Average (selected by default) • Max (selected by default) • Sum • Baseline Min • Baseline Max • Standard Deviation

Actions tab

You can set the actions that occur when a user interacts with your view, such as its popup, dwell, and drill-down behavior. For example, you can configure an action so that a popup appears when a metric is selected.

To configure actions:

1. In the **Actions** tab, select the check box for the action you want to set.
2. Click the **Select a metric** check box to choose an action to describe how you want to show the next view.

   The **Edit** icon is enabled.
3. Click **Edit** .

   The Configure Flow Action wizard appears.
4. Select one of the following flow actions for Metric Selection:

   Popup—displays a view as a simple popup that has no title bar or borders and can be dismissed by clicking outside of it.

   Dialog—displays a view in an interactive window, which can be moved around or dismissed through its title bar.

   Next Page/Drill Down—drill into or go to another page containing a view of your choosing.

   External URL—displays a specific web page by specifying its URL.
5. Click **Next**. The Select a data item to use page of the wizard appears.
6. Select a data item to use from the following options:

   No Data—select a view that does not require any particular data from the existing view.

   Selected Metric Parent—select a parent of the metric selected from the chart.

   Selected Metric—select the metric from the chart.

   Metric Parents—select a parent from the list of parents of the metrics currently bound to the chart.

   Metrics—select a metric from a list of metrics currently bound to the chart.
7. Click **Next**. The Choose a target view page of the wizard appears.
8. Select a view from the list on the left column and then click **Finish**.
   - **Optional**—click the **show by role** check box to select a view for a particular role.

Adjusting View Options

You can make changes such as sharing a view, editing its properties, or maximizing it by clicking the **Options** icon ( ) in the title bar. See Working with Views.

Removing a View

To remove the view:

1. Click on the particular view you want to remove.
2. On the Edit Page Layout dialog box, click the **Remove** icon.

   A confirmation dialog box appears.
3. Click **OK** to confirm that you want to remove the view.

   The view is deleted from the dashboard.

Using Parameterized Input Values

Using parameterized input values for your custom dashboard or report allows you to redefine an input value during scheduling or at run-time. With parameterized input values, you can customize a dashboard or report at any given time.

For example, you have a custom dashboard which is designed to monitor memory, storage disk, and network utilization, as well as space used, for a particular host. If you want to use the same custom dashboard to monitor another host, you can so quickly by resetting the parameterized input value defined in the Action panel, General tab, and Page Input value.

TIP: When using parameterized input values for a custom dashboard or a report, it is recommended that you select a node that is higher in the tree to be a parameterized input value, instead of using a specific metric lower in the node tree. By doing so, more parameterized input values are available to select from to customize your dashboard or report.

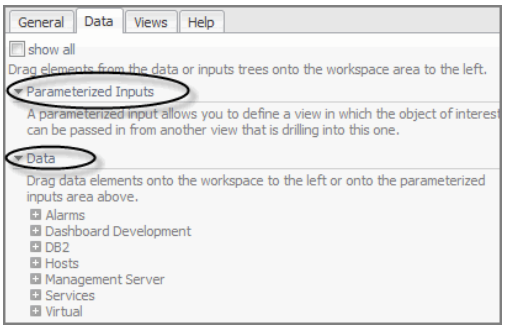
To use parameterized input values for a custom dashboard:

1 On the navigation panel, under **Dashboards > My Dashboards**, open your custom dashboard.

2 On the Action panel, open the **Data** tab.

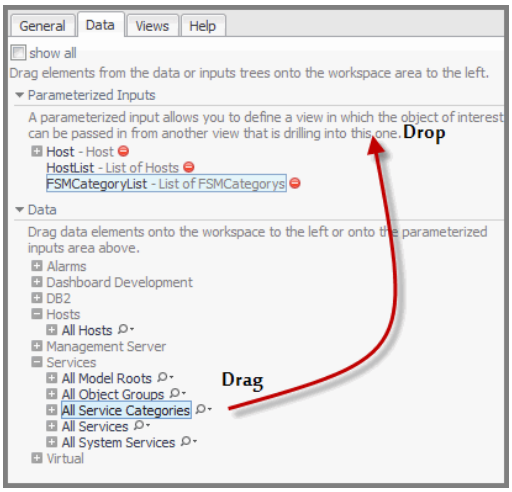
3 Click the down arrow to expand the **Parameterized Inputs** and **Data** elements.

Figure 20. The down arrows expand the elements.



4 Select a data element, and then drag and drop it onto the Parameterized Inputs link.

Figure 21. Drag and drop a data element.



5 From the Parameterized Input list, select an element and then drag and drop it onto your dashboard.

6 To change the parameterized input values used in this dashboard, on the Action panel, open the **General** tab.

7 Under **Page Inputs**, click the arrow to expand the parameterized input value.

8 Remove the check mark from the **Show Advanced** option.

The other parameterized input values below the parent node are listed.

9 Select another value in the list. In this example, select another host to base this dashboard on.

The information displayed in this dashboard updates automatically. To use parameterized input values for a report:

> **TIP:** Visit http://eDocs.quest.com to watch our learning videos. See *Customizing Foglight Reports with Parameterized Inputs*.

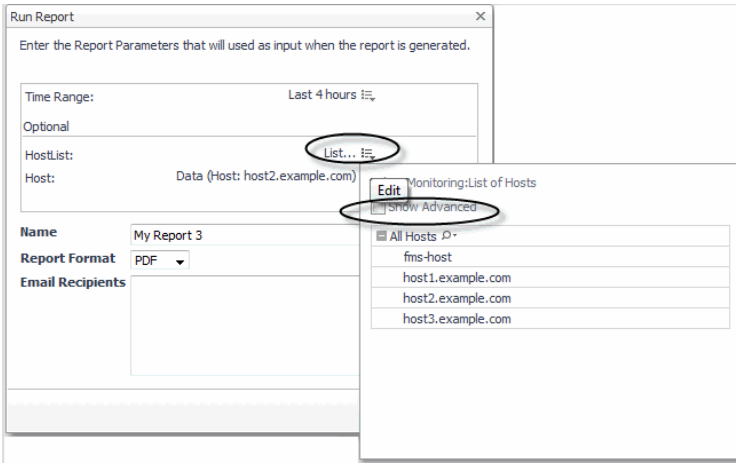
1 On the navigation panel, under **Dashboards > My Dashboards**, open your custom report.

2 Complete Step 2 through Step 5 in the previous procedure.

3 To change the parameterized input values when you run a report:

a On the top of your report, click **Run Report**.

Figure 22. The Run Report pane.



b Click the edit icon and then remove the check mark for **Show Advanced**.

c Select a new report parameter to use as the input value when the report is generated.

d Type a report name, select a report format, and if required, add email addresses of those who you want to send this report to.

e Click **Run**.

4 To change the parameterized input values when you schedule a report:

a On the top of your report, click **Schedule Report**.

b Click the edit icon and then remove the check mark for **Show Advanced**.

c Select a new report parameter to use as the input value when the report is generated.

d Click **Next**.

e Select the schedule for when you want this report to run.

f Click **Next**.

g Type a report name, format, retained value, enable this schedule immediately, and if required add email addresses for any desired recipients of this scheduled report.

h Click **Finish**.

To remove a parameterized input value:

1 On the Action panel, open the **Data** tab and expand **Parameterized Inputs**.

2 Click the delete icon to remove the parameterized input value.

Deleting a Custom Dashboard

You can delete any custom dashboard that you have created. You may also be able to delete dashboards created by other users, although this is not recommended. You cannot delete any default dashboards or dashboards created by dashboard developers in your organization.

To delete a custom dashboard:

1 Select the dashboard that you want to delete from the list under **My Dashboards**.

2 Click **Delete this page** in the action panel.

A confirmation dialog box appears.

3 Click **Delete** to confirm the deletion.

The dashboard is removed from the My Dashboards list.

Working with Charts

Add predefined charts to your custom dashboards and customize charts to access and analyze data provided by Quest Foglight.

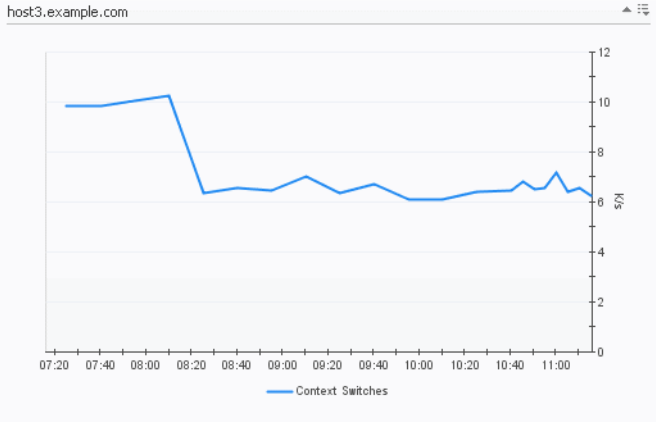
Charts display data graphically. Certain graphing behaviors that they possess result in data being interpreted rather than recorded. Start/end behavior, data granularity, treatment of data holes, line thickness, minimum/maximum versus average, and data envelopes all influence how data is interpreted and displayed in a chart.

TIP: If you want data that cannot be misinterpreted, use a table. However, make sure you output min/max, average, count and standard deviation.

You can create a metric chart using:

- The drag and drop functionality available with the metrics view in the Add View wizard (for creating a dashboard or report) or
- The **Data** tab in the action panel to drag a metric onto a portal.

Figure 23. An example of a metric chart.



You can also add one or more metrics to an existing chart.

- The metrics in the chart are indicated by differently colored lines.
- The line for the currently selected metric (by default, the first one chosen) is bold. To highlight other metrics in the chart, click on the lines in the legend.
- When you hover over a line in the chart, a dwell indicates the name, unit, and value of the metric, as well as the specific date and time when it was collected.

The *y*-axis shows the units for the metric. If there is more than one metric in the chart, the *y*-axis shows the units for the first metric that was charted, unless you have cleared the **Only show axis of selected metric (different charts will line up)** check box in the Options tab of the Add Metric View wizard (see Options tab for details).

By using the Customizer function you have the option to export metric data for charts to PDF, CSV, Excel, XML, or Image format. See Exporting Data from Charts and Tables.

For more information about working with charts, see the following topics:

- Using the Metrics Analyzer
- Changing the Chart Type
- Zooming into a Chart

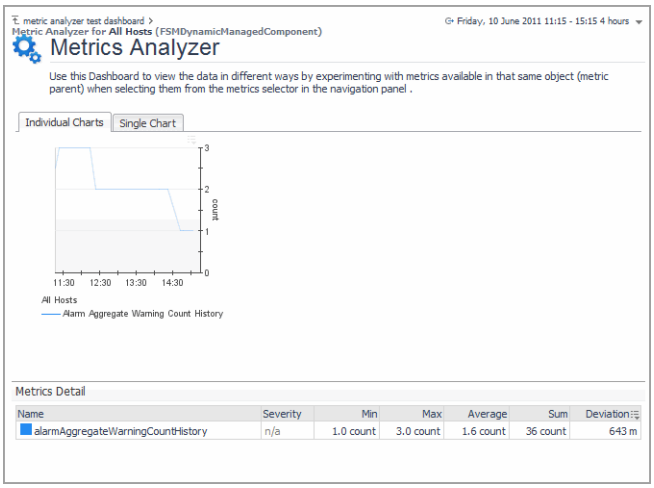
Using the Metrics Analyzer

For any custom dashboard visualization views that you create dynamically (drag and drop), there are built-in, default drilldowns available, so you can navigate to another view. You can use the metrics analyzer to view the data in different ways, by experimenting with metrics included in the same parent object.

To use the metric analyzer:

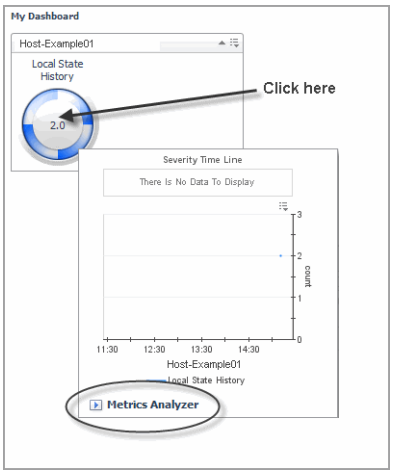
1 For any chart you have created, click on data in the chart.

Figure 24. Charts for these metrics appear in the Metrics Analyzer view.



2 For any other indicators you have added to your custom dashboard, such as a spinner, click on the indicator, and then click **Metrics Analyzer**.

Figure 25. The Spinner metric appears in the Metrics Analyzer view.



3 Select the **Individual Charts** tab to display each metric individually, or click the **Single Chart** tab to view all selected metrics in a single chart.

4 To view the data in different ways, experiment with metrics available in that same object (metric parent). Select metrics from the **Metrics Selector** in the navigation panel.

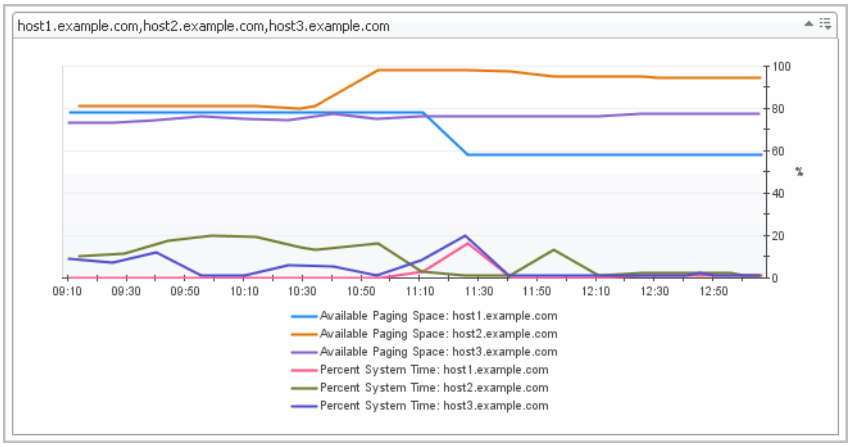
Individual charts are added to the view.

NOTE: By default, advanced metrics are not displayed. To see all metrics belonging to a parent object, in the navigation panel, under Metrics Selector, select the Show All check box.

Grouping Metrics with Many Parent Hosts

When you have many metrics from different parent hosts on a single chart, the parent label appears in the legend, as shown below.

Figure 26. Parent labels in the legend.



You can choose to display only the *y*-axis of the selected metric. This is useful when the metrics you are charting have different units or a wide range of values. See Editing a View for information about changing this option.

Changing the Chart Type

If the Customizer (sometimes referred to as Edit) icon is enabled for charts, you have the option to dynamically change the chart to a different chart type (for example, bar, plot, area, stacking area). For example, switch the

chart type to Area to emphasize the magnitude of change over time and illustrate the metric parts in relation to the whole graph.

To change the chart type:

1. Click the Customizer icon in the top right hand corner of the chart.
2. In the Chart Type dialog box, click the chart type to change.

   The chart dynamically changes to display the selected chart type.
3. In the **Bounds** section, set the chart Y axis range. The following options are available:
   - Use View Settings—based on the default settings for the current dashboard view.
   - Automatic—based on a calculation of the metric's data and unit.
   - From Data—based on the Min and Max data values. For example, if the Min value is 10, and the Max value is 90, the chart axis displays this range.
   - Data vs Calibrated—based on the actual and expected values for Min and Max.

   The chart dynamically changes to display the selected chart bounds option.
4. Select the metric to include in the export.

   The chart dynamically changes to display the selected metrics.

   NOTE: Applying changes to a customizer in a view is only a temporary change. Once you exit the view, the default settings for the chart are applied.

To export the chart to CSV, PDF, Excel, or XML format, see Exporting Data from Charts and Tables.

Zooming into a Chart

For plot or bar charts, you can zoom into an area to view data at different levels of detail by using CTRL + drag. You can also drag on an axis to specify the region you would like to zoom into (a zoom region).

To zoom into a chart:

1. In a line graph, zoom in to the area of the chart. Select one of the following methods to specify a zoom region:
   - press CTRL + drag on the area
   - drag on an axis of the chart
2. The chart zooms into the range selected and will locally change the time range so Quest Foglight displays all data points. Now you can view the data for the selected metric at a more granular level.
3. To zoom out and return the line chart to its original view, click the Reset Zoom icon in the top-right corner.

2

Viewing, Acknowledging, and Clearing Alarms

Alarms are triggered when problems arise in your monitored environment. Foglight fires alarms when a rule determines that certain pre-defined conditions are met.

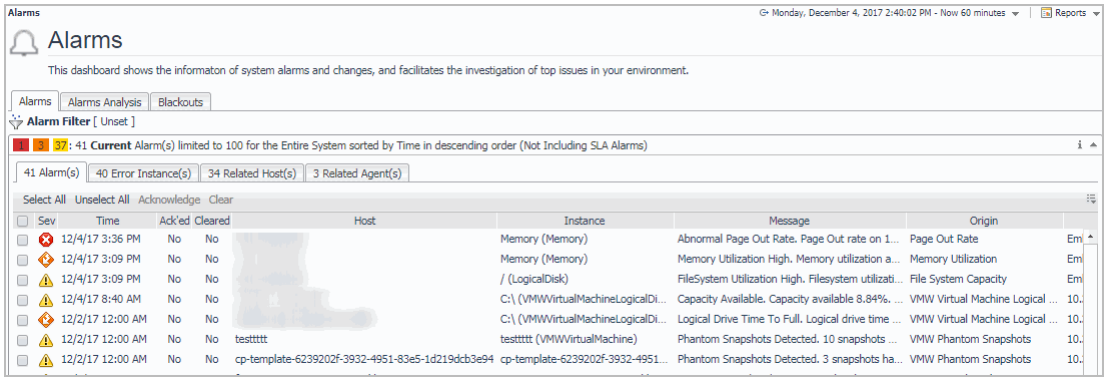
Use the Alarms dashboard to view the state of alarms across your monitored environment and take immediate action on them. The Alarms dashboard shows alarm counts by time, allowing you to identify excessive alarm counts or outage events.

NOTE: This chapter discusses managing alarms from the Alarms dashboard, however alarm lists appear in many places throughout Foglight —for example, at the bottom of the Service Operations Console dashboard or in the popup that appears when you click an alarm in the Domains dashboard. You can view details about, acknowledge, or clear alarms in these alarm lists by following essentially the same steps described in this chapter.

Input "*Alarms*" in the *Search* textbox on the Foglight Home page to access the Alarms dashboard.

TIP: You can also access this dashboard from the navigation panel: select **Homes > Alarms**.

Figure 1. The Alarms dashboard.



The Alarms dashboard shows the information of system alarms and changes, and facilitates the investigation of top issues in your environment. The Alarms dashboard includes the following elements:

- Alarms tab: See Alarm(s) for the Entire System and Viewing Alarms.
- Alarms Analysis tab: See Alarms Analysis.
- Blackouts tab: See the "*Blackout Configuration*" section in the *Foglight Administration and Configuration Help*.
- Alarm Filter button: See Filtering the Alarm List.

Alarms Analysis

The Alarm Analysis view is to provide a snapshot of alarms and to help you investigate top issues in your environment, so you can more proactively manage your alerts, thresholds, and monitored system. The alram count in this view includes SLA alarms.

The maximum number of alarms for the selected time range is set to 5000 by default. To change this value, type the number in the *Max Number of Evaluated Alarms* field, and then click **Apply**. The *Max Number of Evaluated Alarms* is scaled from 0 to 100,000 and is managed by the *Alarm_Analysis_Max_Object* variable. To change the value of this variable, search for and edit *Alarm_Analysis_Max_Object* from **Dashboards > Administration > Rules & Notifications > Manage Registry Variables**.

NOTE: It is not recommended that the value of *Alarm_Analysis_Max_Object* is set to be larger than 100,000; otherwise the loading of the Alarm Analysis view will be unsatisfactorily slow.

The Alarms Analysis (Preview) view contains the following elements:

- *Alarms by Source*: Lists all alarms (cleared or non-cleared) that are triggered by the alarm source. For more information about alarm sources, click **Dashboards > Administration > Rules & Notifications > Rules**.

  Click an alarm source to display a popup and see more detailed information about an alarm. For more information, see Viewing Alarm Details on page 48.

- *Counts by Severity chart*: Summarizes the totals for each severity of alarm (Warning, Critical, or Fatal) and the total number of alarms.

- *Alarms by Service*: Summarizes the total alarms and agents that are not included in services, as well as all alarms (cleared or non-cleared) that are triggered by services. For more information about services, click **Dashboards > Services > Service Builder.**

  Click a service to display a popup and see more detailed information about an alarm. For more information, see Viewing Alarm Details on page 48.

Alarm(s) for the Entire System

At the bottom of the Alarms dashboard, the view lists up to 5000 alarms for the current or historical time range. It does not list SLA alarms. You can filter the list, sort it by column, or acknowledge and clear alarms.

The alarms list also shows cleared alarms and indicates whether an alarm has been acknowledged or cleared. Cleared alarms appear dimmed and can be filtered out using the Alarm Filter dialog box. To access the Alarm Filter dialog box, click Alarm Filter in the top-left corner of the list.

To see more detailed information about an alarm, hover over or click a column to display a dwell or a popup. You can select an alarm and investigate, acknowledge, or clear it.

The alarm list view allows you to select different perspectives on alarms. This chapter discusses using the Alarm(s) tab. For information about using the other tabs, see the *User Help* (navigate to **Help > Help Contents > Using Quest Foglight > Quest Foglight User Help > Getting Started > Working with Dashboards** in the action panel and then click **Working with Dashboards > Common Views > Alarm List**).

Viewing Alarms

This section discusses viewing alarms in more detail.

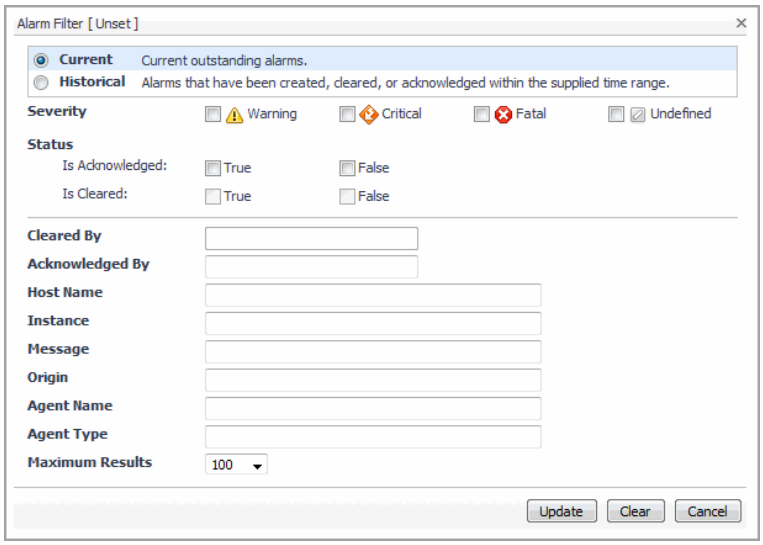
- Filtering the Alarm List
- Viewing Alarm Details

Filtering the Alarm List

You can filter the list according to different criteria by clicking 

in the top-left corner of the list and changing the settings in the Alarm Filter dialog box.

Figure 2. The Alarm Filter dialog box.



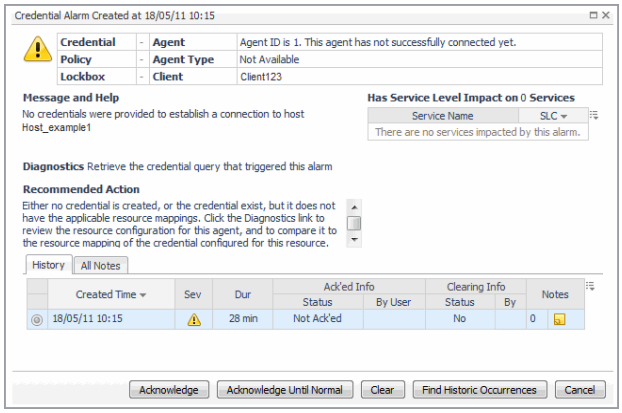
For example, you can filter the list of alarms to show only **Current** or **Historical** alarms. Select **Current** to shows all outstanding alarms. This is essentially the current outstanding set of alarms that need to be addressed. Use **Current** if you want to see what is immediately noteworthy. In contrast to **Current**, **Historical** shows all alarms that fired during a certain interval, regardless of whether they are active or cleared. Use **Historical** if you want to see what is happening in your monitored environment during a specific time range.

In the Alarm Filter dialog box, you can also set a number of other parameters to help you filter the list, and you can set the maximum number of results to display in the table.

Viewing Alarm Details

To view details about an alarm, click its severity icon in the Alarm(s) list. Information about that alarm is displayed in the Alarm Details dialog box. Depending on how a rule is set up, the Alarms Details view varies. If the rule is set up with no associations to its Rule ID, the following view is displayed:

Figure 3. An example of the Alarms Details view.



This dialog box shows the alarm's service level impact and its full history. The history includes all consecutive alarms fired by the same rule on the same object (instance) regardless of the dashboard's time range.

In addition, this dialog box displays a diagnostics and a recommended action message to assist you in resolving the problem. Click one of the provided links to display a drilldown page that will assist you in diagnosing the problem. For example, if an alarm is fired because the credentials were not established when trying to connect to a host machine, drilldown links to credential details are provided. Click the Diagnostics link to display the Credentials Query dialog box. From there, you can configure the credential query that triggered the alarm. Click

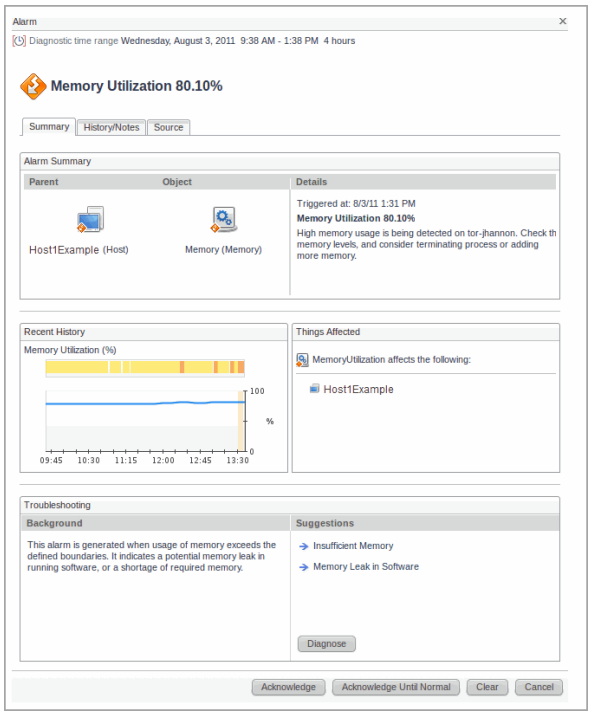
the Recommended Action link to display the Manage Credential dashboard. From there you can map each credential to one or more resources, choosing the parameters and patterning criteria that best suit your needs.

The Alarm Details dialog box also illustrates how the alarm has changed in the current alarm chain. See the *User Help* (navigate to **Help > Help Contents > Using Quest Foglight > Quest Foglight User Help > Getting Started > Working with Dashboards** in the action panel and then click **Working with Dashboards >** in the action panel and then click **Working with Dashboards > Common Views > Alarm List > Alarm Chaining**).

You can also drill down from this dialog box to investigate the severity of the alarm in more detail. For example, click the icon in the Service Level Impact table for information about the service whose Service Level Agreement is affected by the alarm. Performing impact analysis on an alarm helps you to determine the priority of the problem that caused the alarm to fire.

If an alarm has an association set up and is triggered by a rule, the following dialog box appears:

Figure 4. An example of an Alarm dialog box.



This dialog box shows the summary, history, and source information to assist you in diagnosing the cause of an alarm. From here you can identify the objects (instances) affected, and review the suggested causes and potential solutions. The Diagnose button appears if the rule diagnosis property is set in the rule and the user has the appropriate role to access the Diagnose view. Click the Diagnose button to review the resource configuration for the alarm. The History/Notes tab displays the recent history and associated notes for that alarm. The Source tab displays details about the agent that collected the data and the associated rule. Users with the Administrator role can edit the associated rule. For more information about creating and editing rules, see the *Administration and Configuration Guide*.

Investigating the Alarm Source

In the Alarms table, the Instance field lists the object in your monitored environment that is the source of the alarm. Click the listing for an alarm source to display its health summary. The health summary shows the number of alarms by severity and the health of the alarm source and lists the agents and host associated with the alarm source.

In addition, it provides a list of related views that show quick drilldowns to help identify the root cause. This list is based on the views that match the type of the alarm source. If no related views are available, then the default views (for example, Configuration > Data browser) are provided.

Adding Alarm Notes

Using alarm notes is a handy way to record information about an alarm for other users to view. For example, if an urgent alarm comes up that you want to investigate, you can add a note to the alarm that you are checking if a certain process is causing the problem. The note is attached to the alarm along with your user name and a timestamp.

You can view, filter, add, and edit alarm notes from the Alarm Details dialog box. Use the **History** tab to attach notes to a particular alarm in the history table. Use the **All Notes** tab to attach a note to the most recent alarm in the alarm history. For more information, see the *User Help* (navigate to **Help > Help Contents > Using Quest Foglight > Quest Foglight User Help > Getting Started > Working with Dashboards** in the action panel and then click **Working with Dashboards > Common Views > Alarm List > Alarm Notes**).

Acknowledging an Alarm

The Ack'ed column displays No for any alarms that have not been acknowledged. Once an alarm has been acknowledged, this setting cannot be changed.

If you have the Advanced Operator role, you can acknowledge alarms. To acknowledge multiple alarms at once, follow the instructions in To acknowledge one or more alarms: on page 50. To cause alarms to remain acknowledged until the monitored object returns to a normal state, follow the instructions in To acknowledge an alarm until the alarm source returns to a normal state: on page 50.

TIP: Choose Acknowledge Until Normal if, for example, a series of alarms is due to a known situation. Anyone looking at the Alarms dashboard will know that this known problem has been acknowledged.

To acknowledge one or more alarms:

1. Use the Alarm Filter to apply a filter on current or historical alarms.
2. In the Alarm(s) list, select the alarms that you want to acknowledge.
3. Click **Acknowledge** at the top of the table.

   The current alarms are acknowledged and Yes is listed in the Ack'ed column for them. If the alarms fire again at a later time (usually because the condition has recurred), they appear in the list as unacknowledged.
4. Hover the cursor over Yes in the Ack'ed column.

   A dwell appears that lists the alarm as acknowledged along with your user name and the time and date you acknowledged the alarm, Quest Foglight also stores this information in an audit report.

To acknowledge an alarm until the alarm source returns to a normal state:

1. Use the Alarm Filter to apply a filter on current or historical alarms.
2. In the Alarm(s) list, click **No** in the row for the alarm.

   The Alarm Details dialog box appears.
3. Click **Acknowledge Until Normal.**

   NOTE: This option is available for an outstanding (not-yet-cleared) alarm only.

   The current alarm and all consecutive alarms fired by the same rule on the same object remain acknowledged until the first alarm fired after the alarm source returns to a normal state. Ack'ed til Normal and your user name appear in the Ack'ed Info column.
4. Close the dialog box.

   In the Alarm(s) list,Quest Foglight displays Yes in the Ack'ed column for the alarm.

Clearing an Alarm

In most cases, Quest Foglight clears an alarm when the condition or conditions that triggered the alarm changes. For example, an alarm fires when the CPU usage metric for a monitored host exceeds a certain threshold. If the value of the metric drops below this threshold, Quest Foglight clears the original alarm. If the alarm condition occurs again, the alarm reappears.

If you have the Advanced Operator role, you can also manually clear alarms. However, you should only do so when alarms do not clear themselves—for example, for log messages or one-time events that generate alarms.

The Cleared column in the Alarm(s) list indicates whether an alarm has been cleared or not. In addition, cleared alarms appear dimmed.

To clear one or more alarms:

1. Use the Alarm Filter to apply a filter on current or historical alarms.
2. In the Alarm(s) list, select one or more alarms that you want to clear.
3. Click **Clear** at the top of the table.

   If you are filtering the list on current alarms, the alarms are removed from the list. If you are filtering the list on historical alarms, the alarms appear dimmed and Yes is listed in the Cleared column for them.

Alternatively, you can clear an alarm from the Alarms details dialog box. It appears dimmed in the dialog box when you have done so. If you are filtering the Alarm(s) list to show current alarms, the alarm is also removed from the list.

3

Monitoring Your Domains

In Foglight, domains are monitored components grouped together by a common technology. For example, operating systems are grouped together in the Infrastructure domain and application servers are part of the Custom Applications domain. Domains represent parts of your environment that you are interested in monitoring.

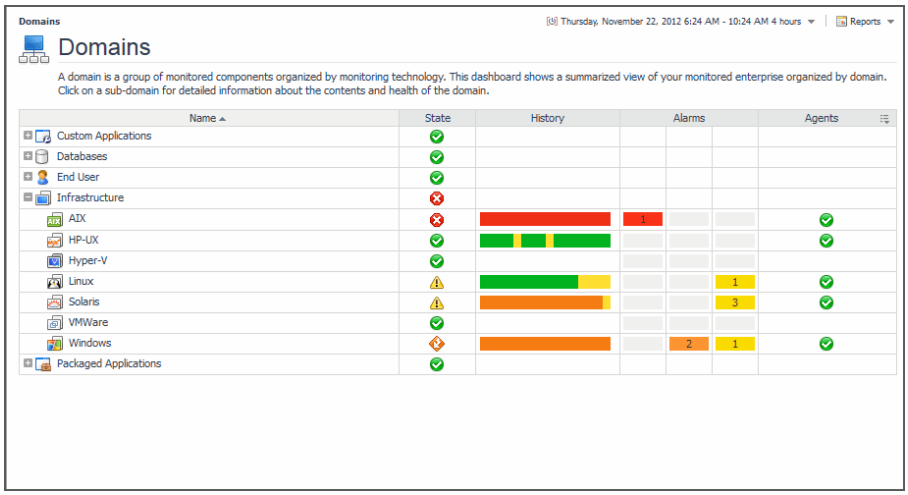
Each technology type is considered a subdomain. For example, each type of operating system in the Infrastructure domain is a subdomain.

Use the Domains dashboard to monitor your environment if you are a domain Administrator or simply prefer to think of your environment in terms of domain groups. This dashboard allows you to obtain a high-level view of the state of your monitored domains and investigate problems in a particular domain. It also shows you what domains you are not monitoring, but could be.

Access the Domains dashboard from the Welcome page by clicking **Homes > Welcome > View Your Enterprise Health > View Enterprise Health Organized by Monitoring Domain**.

TIP: You can also access the Domains dashboard from the navigation panel: select Homes > Domains.

Figure 1. The Domains dashboard.



Viewing detailed information for a domain or subdomain

Drill down on a domain name to view a high-level summary of its monitored components. For example, click **Infrastructure** to view all monitored virtual and physical hosts in the Hosts dashboard.

By default, the Domains dashboard shows only top-level domains. Expand a domain node to view its subdomains.

Each monitored subdomain comprises the actual instances of that technology type in your environment. Click a subdomain name to drill down to details about it. For example, click **Linux** to navigate to the list of Linux hosts or click **Oracle** to drill down to the Oracle Global View.

Investigating Problems in a Domain

Use the Domains dashboard to monitor for problems in your domains — for example, to see if a domain is in a Critical state, or if any alarms have been fired for its components — and take action on them.

Investigating a Domain or Subdomain's State

By default, a domain or subdomain reflects the current worst state (normal, warning, critical, or fatal) of its components.

Click the **State** icon to investigate the state of a domain or subdomain that is displaying a warning, critical, or fatal icon.

A popup appears that lists the domain or subdomain's alarm sources (for example, hosts, application servers, or databases) and their health. These are the components that contributed to the domain or subdomain's state.

Depending on the problem you are investigating, do one of the following to drill down to more detailed views:

- Click an alarm source to drill down and see more details about it.
- Drill down to views that display the health of all alarm sources.
- Drill down to view the health of the current object (for example, Infrastructure domain or the Linux subdomain).
- Drill down to view all outstanding alarms for the domain or subdomain.

Investigating a Subdomain's Health

Quest Foglight displays each monitored subdomain's recent health in the History column. This column summarizes the subdomain's health for the dashboard's time range.

The colored segments in the column represent the subdomain's alarm severity state at different intervals within the time range. Yellow segments represent warning alarms, orange segments represent critical alarms, and red segments represent fatal alarms. Green segments represent intervals without alarms.

To investigate the health history:

1 Hover the cursor over a segment in the health history bar to display a popup with a list of related alarms that occurred during that interval.

2 Click the health history bar.

A more detailed Health History view appears.

3 Click and drag the timeline to zoom in on an interval in the bar.

The chart zooms in on the selected time range.

> **TIP:** After zooming in, hover the cursor over the bar to cause the zoom menu to appear. To restore the previous time range used by the bar, click the Previous Zoom icon ( ). To restore the bar's timeline to its initial state, click the Restore Zoom icon ( ). To freeze the dashboard's time range at the same interval spanned by the bar's zoomed-in range, click the Update page with zoomed time range icon ( ).

4 Click a red, orange, or yellow segment in the detailed health history bar to find alarms that are causing the host to be in a non-normal state during that interval.

A popup with details about the alarms that fired during that interval appears. See Viewing, Acknowledging, and Clearing Alarms on page 46 for more information about working with alarms.

Investigating a Subdomain's Alarms

The counts in the Alarms column represent the total number of alarms fired for the components in a subdomain; for example, for all monitored virtual hosts in the **Infrastructure > VMWare** subdomain.

Use this column to view the number and type of alarms fired for these components during the dashboard's current time range.

Click an alarm to display a popup that contains the standard alarm list. See Viewing, Acknowledging, and Clearing Alarms for more information about working with alarms.

Investigating Problems with a Subdomain's Agents

You can view the state of the agents related to a subdomain in the Agents column.

Click a warning, critical, or fatal state icon to display a list of agents with health problems or drill down to the Agents dashboard. For more information, see the online help for the Agents dashboard.

4

Monitoring Your Services

In Quest Foglight, a service is any component or group of components that you want to monitor. If you have the Advanced Operator role, you create services in the Service Builder dashboard that reflects the components in your monitored environment that are meaningful or interesting to your organization.

Examples of services include:

- An application, including its Web servers, application servers, and databases.
- A collection of related systems, such as all Windows machines in your monitored environment.
- A business process, such as retail banking.

Each service can include any component in your monitored environment, including other services. A service inherently has a service level and relationships of impact and dependency to other services.

For information about how to create a service, see the topic “Creating a Service” in the online help.

The Service Operations Console dashboard is the best way to monitor a selected set of services. Use it to tailor the way Quest Foglight presents information about monitored components so that it suits your specific needs.

Access the Service Operations Console dashboard from the Welcome page (**Homes > Welcome > View Your Enterprise Health >View the Health of Critical Services)**.

TIP: You can also access this dashboard from the navigation panel: select Homes > Service Operations Console.Visit http://eDocs.quest.com to watch our learning video. See Working with the Service Operations Console Dashboard.

Figure 1. The Service Operations Console dashboard.

Follow the instructions in this chapter to monitor a specific group of services that interests you by:

- Selecting these services.
- Displaying service breakdowns based on the tiers that are relevant to you.
- Drilling down to see more information about your services, such as the state of the monitored components within a tier and see the hosts that are related to it.
- Viewing details about your services, such as their state, contents, and dependencies.

Selecting the Services You Want to Monitor

By default, no services are listed in the Service Operations Console dashboard. This is by design: it gives you the opportunity to customize the Service Operations Console dashboard to suit your needs. Select the set of services that you want to monitor so that they appear in this dashboard.

To select services:

1 Open the Service Operations Console dashboard and click **Select services and tiers to monitor**.

The Select services and tiers to monitor dialog box appears.

2 In the **Service Selector** tab, explicitly select each service you want to monitor (selecting a service does not automatically select its children).

TIP: Use the search features to find services you are interested in. The search is per keyword, delimited by spaces. For example, if you want to search on “Global Service” (instead of “Global”), add quotes around “Global Service” to match that exact string.

3 **Optional**—select **Enable the display of the status of the nested services** if you want to automatically display all nodes under the parent service.

4 Click **Apply**.

The Service Operations console dashboard displays only the services you selected.

5 In the **Tier Selector** tab, select the tiers that interest you. Quest Foglight lists columns for these tiers in the Service Operations Console dashboard. For example, as a database Administrator, you can hide the Web Tier column if it is not relevant to you.

NOTE: Columns for the Host and Agent tiers are always shown by default.

6 Click **Apply**.

The Service Operations Console dashboard displays only the tiers you selected for each service to which you subscribed.

Service Dependencies

A service is a grouping of one or more components that interest you. The Service Operations Console is designed to assist with incident management workflows. Added functionality, from the Cartridge for Dependency Mapping, enables you to monitor application, database, and virtual machine performance using dependency data. You can group monitored resources into services, investigate whether any service disruptions have occurred, and edit existing services, as necessary. By reviewing service dependencies in your monitoring the environment, you can quickly triage service problems.

NOTE: Foglight for Applications Operations must be installed to use the **Update Service from Dependency Data** and **Edit Service Dependency** action panel options. By default, if Foglight for Applications Operations is installed, it installs the Dependency Mapping capabilities. Once installed, the Service Operations Console dashboard displays a number of additional tiles to assist you in investigating incident and problem management processes on multi-tier applications.

NOTE: To use the following functions, Foglight users require the Advanced Operator role.

Updating a Service From Dependency Data

You can update selected services you are monitoring in the Service Operations Console dashboard by clicking **Update Service from Dependency Data** found on the action panel. If you have the Cartridge for Dependency Mapping installed, this feature allows you to update a service by adding or removing components from that service, based on dependency data collected by the Cartridge for Dependency Mapping.

For example, if you have existing Quest Foglight services and you would like to update them based on new or changing dependency information, use this functionality to review the dependencies that exist between objects within your existing services. From here you can identify any objects that are external to these services, and have dependencies with other internal objects. You can update these services to include the newly discovered external objects that have dependencies. You can also use this functionality to periodically monitor changes in your service dependencies and update them, as necessary.

For more information about how to use this functionality, see the *Managing Dependency Mapping User Guide.*

Editing Service Dependencies

You can manually add or ignore dependencies between components inside a selected service and external components using the Service Operations Console. To edit service dependencies for a selected service, open the Service Operations Console dashboard and click **Edit Service Dependencies** found on the action panel.

For more information about how to use this functionality, see the *Managing Dependency Mapping User Guide.*

Monitoring a Service

Once you subscribe to a service, you can drill down and view details about that service.

These sections describes workflows for monitoring the overall health of your critical services and investigating problems with them.

- Investigating service level compliance and availability
- Investigating alarms
- Drilling down into a service
- Viewing the state of and drilling down into a tier
- Viewing more details about your services

Investigating service level compliance and availability

You monitor services because you have a specific business requirement to ensure the availability of these components. The icons in the Service Level Compliance column reflect the availability of your services. Use this column as a starting point for investigating how problems with your services affect their service levels.

Quest Foglight automatically examines each service and establishes its availability and service level compliance. By default, a service is available if it does not have any fatal alarms.

In Quest Foglight, a service's state is based on the worst state of the components it includes. For example, a MyApplication service contains services for its Web servers, application servers, and databases. The databases service is in a fatal state because it has a fatal alarm and the other two are in a warning state. MyApplication is also in a fatal state and is listed as non-compliant with its Service Level Agreement (SLA).

To investigate a service's availability and service level compliance:

1 In the row for the service, click the Fatal icon in the Service Level Compliance column. This icon indicates that your service is not compliant with its SLA.

   A Service Level Compliance Summary popup appears for that service.

2 Use this dialog box to view the service level agreements, compliance, current and recent availability, and any service level alarms that have been fired for that service.

3 If there is anything in the dialog box that you want to investigate further, drill down on that aspect of service level compliance.

   For example, the Availability History sparkline displays dips that concern you. You want to investigate your service's availability for a specific interval you are concerned about, so you click **Explore > Service Level Agreement(s)** to navigate to the Service Levels dashboard. You then zoom in on one of the availability graphs in this dashboard. See the online help for the Service Levels dashboard for more information about it.

   TIP: Both current availability and SLA measurements are; use them in different situations:

   - Use the current availability measurement to find and address immediate problems quickly.
   - Use SLA measurements to determine if you are meeting overall service level expectations.

Investigating alarms

Investigate a service's alarms to get more details about the problems contributing to its non-normal state.

To investigate alarms related to a service:

- Click the icon that represents the service's warning, critical, or fatal alarms.

  An alarm list appears showing only those alarms. See Viewing, Acknowledging, and Clearing Alarms on page 46 for information about working with alarms.

Drilling down into a service

When you drill down into a service by clicking in the Explore column for a particular service. The view that appears depends on whether or not your Administrator configured a custom view using the Service Builder. If your Administrator did not configure a custom drill-down, you see a Service Summary dialog box listing the outstanding alarms and links to a default service breakdown. In addition, it provides a link to edit the service using the Service Builder dashboard. If your Administrator chose a custom view, it appears in the drill-down dialog box.

Viewing the state of and drilling down into a tier

Use the tier icons to get an at-a-glance overview of each tier's state. A tier's state is the aggregate of its components' state; it is a rollup of all alarms fired for components in that tier.

If one of your services' tiers is in a warning, critical, or fatal state, hover the mouse over the icon to view information about the state and health of the components in that tier, alarms for that tier, and other tier-specific information.

Click an icon to view the same information in a popup that also allows you to drill down further to related views and dashboards. For example, you can investigate specific alarms or see metrics relevant to a particular component (such as CPU, memory, disk, and network metrics for a host).

Default Tiers

With the exception of the Host and Agent tiers, the default tiers in the Service Operations Console dashboard are similar to the domains you monitor. These tiers are described below.

NOTE: Your Administrator uses the Tier Definition dashboard to decide what tiers are relevant globally to users in your organization. The group of tiers you see in the Service Operations Console dashboard might be larger or smaller than the set described below.

User

The User tier icon displays the worst state of all components monitored by agents included in the EU (End User) cartridges.

Web

If your Administrator assigns a service to the Web tier using the Service Builder dashboard, Quest Foglight categorizes components as part of this tier. The Web tier icon displays the worst state of all components in the service.

App

The App tier icon displays the worst state of all components monitored by agents included in the cartridges for .NET, Siebel, SAP, PeopleSoft, Oracle eBusiness, and Java EE technologies.

Database

The Database tier icon displays the worst state of all components monitored by agents included in the cartridges for Oracle, SQL Server, Sybase and DB2.

Permanent Tiers

The Host and Agent tiers are always displayed in the Service Operations Console dashboard.

Host

The Host tier icon displays the worst state of all hosts that are part of that service. This set of hosts includes:

- All hosts your Administrator added directly to the service.
- All hosts your Administrator added to one of the services it contains (services nested in its hierarchy).
- All monitored host(s) related to the components your Administrator added to this service.

Agent

The Agent tier icon displays the worst state of all the agents that are part of that service. This set of agents includes:

- All agents your Administrator added directly to the service.
- All agents your Administrator added to one of the services it contains (services nested in its hierarchy).
- Agents on all monitored host(s) that are related to the components your Administrator added to the service.

Viewing more details about your services

View more details about your services by selecting one of the tabs at the bottom of the dashboard and then scroll through the list in the service table

Table 1. View more details about your services by selecting one of the tabs at the bottom of the dashboard

Select the Tab...	To show...
Alarms	A list of alarms fired for components included in the selected service. The alarm count includes all filtered alarms fired on hosts that are part of the service. See Viewing, Acknowledging, and Clearing Alarms on page 46 for information about working with alarms.
Service Level Agreement(s)	A summary of the service level compliance, alarms, and availability. This summary also appears in the Service Levels dashboard. For more information, see Investigating service level compliance and availability on page 57 or the online help for the Service Levels dashboard.
Service(s) Impacted	The list of services that are impacted by the state of the current service. For more information, see Understanding what services are impacted on page 60.
Service Contents	The contents of a service without having to drill down into it. A service's contents include all components added to the selected service and its child services, no matter how many levels deep they are nested.
Service Dependencies	The list of services on which the selected service depends. That is, the list of services added to the selected service. This diagram shows the composition of your service and the state of each component it contains. Use it to quickly scan for the root cause of a problem reported on the service. For details, see Visualizing the dependencies among services on page 61.
Advanced Service Visualization	Advanced Service Visualization allows you to define relationships among services. A relationship can be visualized as a flow from one tier to another. This functionality is for advanced users. Consult your Administrator if it is not configured.

Understanding what services are impacted

Each of your services can have an impact on other services to which it is related. Use the Services Impacted view to see details about the services that are impacted by the state of one particular service.

For example, you are responsible for monitoring a service called Application Servers, which represents the application servers for your Banking Application. You subscribe to this service and notice that Quest Foglight has fired has three critical alarms for it. This means that Application Servers is now in a critical state.

To find out if Application Servers' state impacts other services, you select Application Servers and click the Service(s) Impacted tab.

Your Banking Application service is listed and its health is critical. The Banking Application service depends on and contains the service Application Servers. Quest Foglight has not fired alarms for any of the other services that the Banking Application service contains, so Banking Application's state is critical, just like Application Servers'.

To investigate impacted services:

1 In the table at the top of the dashboard, select the service that you want to investigate.

2 Click the **Services Impacted** tab.

Quest Foglight lists the other services that are impacted by the state of the one that you selected, as well these services' health (the state they are in—warning, critical, or fatal), alarms, and health history.

A serivce's health reflects the aggregate state of its components; it is a rollup of all alarms fired for components it contains.Quest Foglight displays each impacted service's recent health in the Health History column. This column summarizes the service's health for the dashboard's time range. The colored segments represent the service's alarm severity states at different intervals within the time range. Yellow segments represent warning alarms, orange segments represent critical alarms, and red segments represent fatal alarms.

See Viewing, Acknowledging, and Clearing Alarms on page 46 for information about working with alarms and To investigate the health history: on page 53 for information about drilling down into a health history bar.

3 Click the name of an impacted service to investigate it further.

A popup appears.

4 Drill down even further by following the links to more detailed views.

Table 2. Drill down to more detailed views:

Click this link	If you want to see...
Service Level Agreement(s)	A summary of the service level compliance, alarms, and availability. See Service Level Agreement(s) on page 60 for more information.
Monitored Component(s)	The Service Breakdown view for that service.
Default Service Breakdown or Drilldown: <View Name>	If your Administrator did not configure a drilldown view, the link is **Default Service Breakdown**. and clicking the link takes you to a view that lists all components added to the service and their status. If your Administrator configured a view, the link is **Drilldown: <View Name>** and clicking the link takes you to that view.
Edit Service	The Service Builder for the selected service. You can only follow this link if you have the Administrator role. For details about the Service Builder, see the *User Help* (navigate to **Help > Help Contents > Using Quest Foglight > Quest Foglight User Help > Working With Services >** in the action panel and then click **Building a Service**).

Visualizing the dependencies among services

Click the **Service Dependencies** tab to display a graphic representation of the hierarchy of services that the selected service comprises. Use the components state icons to trace the critical path of performance issues across a domain.

Use the depth control, in the upper right corner, to set the number of levels (1-3) in the diagram. The default setting is two levels.

The dots above the depth control determine the scale of the diagram.

- Click the smaller dot to reduce the scale for easier navigation of large diagrams.
- Click the medium dot to restore the diagram to its original scale.
- Click the largest dot to zoom to the highest zoom level.

By default, Quest Foglight arranges the components in a tree diagram. You can also manually change the components' layout to position them as you wish. When you move a component, Quest Foglight clears the **Auto Arrange** check box. Select the **Auto Arrange** check box to return to the original layout.

5

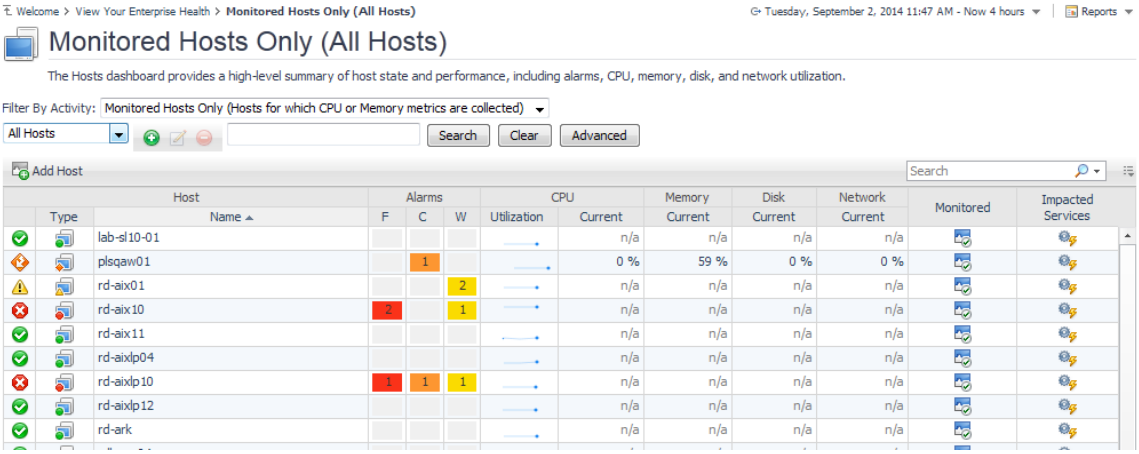
Monitoring Your Hosts

This chapter describes how to monitor hosts using workflows that start in the Hosts dashboard. By following these workflows, you can view the performance of all monitored hosts or drill down on a single host.

Access the Hosts dashboard from the Welcome page (**Homes > Welcome > View Your Enterprise Health > View the Health of the Monitored Hosts in Your Enterprise)**.

TIP: You can also access this dashboard from the navigation panel: select Homes > Hosts.

Figure 1. View the performance of all monitored hosts.



Use the Hosts dashboard to monitor for problems in your environment if you are responsible for the availability of a set of hosts and prefer to think in terms of systems. The Hosts dashboard provides the best high-level summary of host state and performance, including alarms, CPU, memory, disk, network utilization, if a host is being monitored, and impacted services.

Drill down from this dashboard to different dashboards and views that provide more detail about your hosts. You can also use this dashboard to see if a host's state has an impact on services and view the health history of each host.

TIP: Visit http://eDocs.quest.com to watch our learning videos. See *How to Use the Folflght Hosts Dashboard*.

Selecting a set of hosts to monitor

The Hosts dashboard is useful for monitoring environments with a large number of hosts, since you can choose to show only a subset of these hosts or display all hosts.

In many cases, you need to focus on a subset of these hosts. There are different ways to do this in the Hosts dashboard:

- Use the field at the top of the table to filter the list of hosts by name—for example, to display only the hosts with "database" in their names.

- Use the menu under the Filter By Activity area to show only hosts in a specific category—for example, all Windows hosts.

  NOTE: If a Host is not currently being monitored, contact your Administrator to configure the host. For more information, see the *Administration and Configuration Guide*.

If you need to see data for all hosts in your environment, you can:

- Work with the default settings in the Filter By Activity area and the menu underneath it (**Monitored Hosts Only** and **All Hosts**, respectively).

  All hosts for which Quest Foglight collects CPU and memory metrics are listed in the table.

- Select **All Hosts** from the Filter By Activity area and leave the default setting **All Hosts** in the menu underneath this area.

  All hosts in your monitored environment are listed in the table.

  TIP: If you have the Advanced Operator role, you can save the results of your search as a filter using the groups toolbar above the table. Type the search criteria in the field in this toolbar, click Search to filter the list of hosts by name, and then click the plus-sign button ( ). The Create Simple Global Service dialog box appears. Type a name for the filter and a description and then click **Create**. The Create Simple Global Service dialog box appears. Type a name for the filter and a description and then click Create. The filter is listed in the menu, along with the default filters.

Identifying the types of hosts you are monitoring

The icons in the Type column allow you to see at a glance what kind of hosts you are monitoring: physical hosts are identified by the icon , VMware images by the icon , and ESX servers by the icon . Each icon displays the state embedded on top. For example, a physical host in a normal state has the following icon .

Monitoring the state of hosts

Now that you have chosen the group of hosts you want to monitor, refer to the icons in the first column in the table to see the state of these hosts at a glance. Each state indicator shows the host's aggregate alarm state (excluding the state of agents on that host).

Investigating Alarms for a Host

Investigate a host's alarms to get more details about the problems contributing to its non-normal state. In the row for the host, click the icon that represents warning, critical, or fatal alarms to display an alarm list filtered to show only the warning, critical, or fatal alarms for that host. See Viewing, Acknowledging, and Clearing Alarms on page 46 for information about working with alarms.

Viewing the host performance

The CPU, Memory, Disk, and Network columns allow you to obtain a concise overview of your hosts' performance in these metric categories. The values in these columns—and the popups and drilldowns available from them—change with the dashboard's time range.

These columns display recent and current values for each metric category. Recent values are displayed as a sparkline in the Utilization column.

TIP: By default, a sparkline is shown only in the CPU Utilization column. To display sparklines for other metric categories, click the **Show columns** icon ( ) at the top of the table and select the **Utilization** checkbox under Memory, Disk, or Network.

To investigate a host's CPU-, memory-, disk-, and network-related performance:

1. Hover the cursor over the sparkline or current value in the CPU, Memory, Disk, and Network column for that host.

   A popup appears. It contains a utilization chart for that metric.

2. To investigate further, click the sparkline or current value.

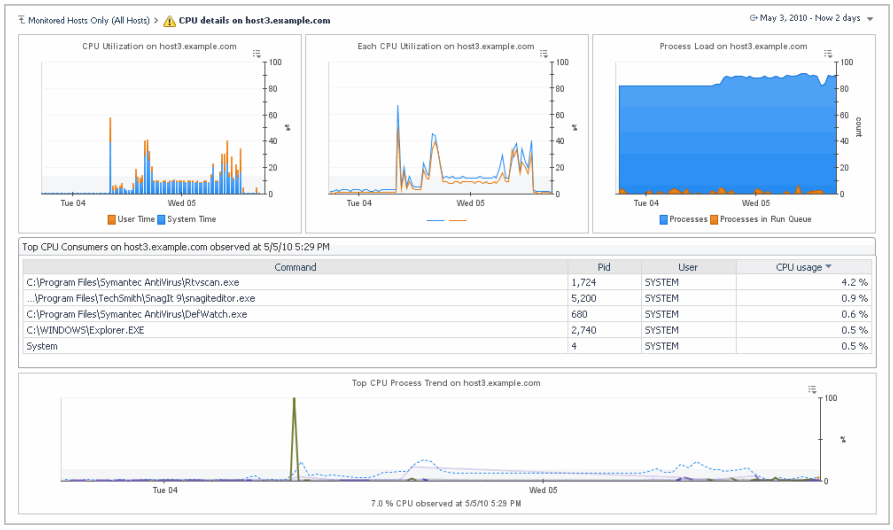
   A dashboard appears that contains details for that metric category.

   TIP: Hover over a line or area in a chart to display data for the nearest time in a tooltip.

Table 1. Click a column for a detailed dashboard.

If you click this column...	This dashboard appears...
CPU	CPU Details (example shown below): use it to identify the top CPU consumers on the host, see the top processes' utilization trends, and view charts for CPU utilization process load.
Memory	Memory Details: use it to investigate overall memory utilization on the host and the amount of memory the top processes are consuming. The Top Memory Consumers table lists both resident and virtual sizes for the top processes.
Disk	Disk Details: use it to identify the top disk I/O consumers on the host, see the utilization trends of the top CPU processes, and view charts for disk size and bytes read and written.
Network	Network Details: use it to investigate the aggregate network utilization of the host and view the activity of your network connections.

Figure 2. The CPU Details dashboard.



Viewing dependencies for a host

You can view the dependencies for a selected host you are monitoring in the Host Monitor dashboard by clicking **Host Dependencies** on the General tab of the action panel. If you have the Cartridge for Dependency Mapping installed, this feature allows you to view the elements in the host's dependency chain. For more information, see the *Managing Dependency Mapping User Guide*.

Determine if the state of a host impacts your services

If one of your hosts is in a state other than Normal ( ), use the impacted services popup to view which of your services that host might impact. This popup helps you establish whether critical services are affected by problems with your hosts and decide if immediate action is necessary to resolve these problems.

NOTE: You can only view user-defined impacted services. System services are not shown.

To view a host's impacted services:

- Click the icon ( ) in the Impacted Services column for the host you are investigating.

  The impacted services popup shows a summary that lists the name of the impacted service, its aggregate state, and its aggregate state history.

  NOTE: The Service Health History column is hidden by default. To view it, click the Show columns icon ( ) and then select the column in the popup.

TIP: In addition to the dashboards described in this chapter, Foglight provides you with other views on your hosts. For details, see the online help for the dashboards listed under **Dashboards > Hosts** in the navigation panel.

6

Reporting on Your Enterprise

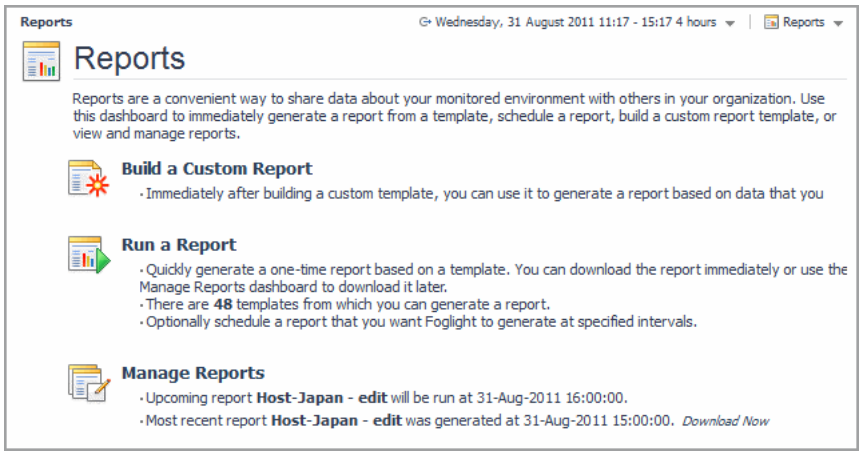
Reports are a convenient way to share data about your monitored environment with others in your organization. The Reports dashboard is your starting point for working with reports. Use it to create and schedule reports and to access the Manage Reports dashboard. You can create:

- Pre-defined reports. Use out-of-the-box templates to obtain a quick, high-level perspective on your data. See Running a Report on page 67.
- Custom reports. Create custom report templates to tailor the content and presentation of your reports to suit your needs. See Building a Custom Report on page 67.

The Report Manager role allows users to schedule as well as generate the reports for which they have role access. It is different from the Operator role, for example, in that users granted the Operator role can generate reports but cannot schedule them. With the Report Manager role, users cannot create new report templates through the Definitions editor or create reports using the drag and drop feature initiated from the action panel. The Advanced Operator role grants users access to all report functionality. Access the Reports dashboard from the Welcome page (**Homes > Welcome**) by clicking **Report on Your Enterprise**.

NOTE: You can also access this dashboard from the navigation panel: select **Homes > Reports**.

Figure 1. The Reports dashboard.



The Reports dashboard also provides at-a-glance reporting details. It displays the number of report templates available to you, the number of scheduled reports, and information about upcoming scheduled reports and recently generated reports.

A Reports menu is located at the top-right corner of each dashboard. From this menu, you can quickly create a new report, run a report, and manage reports. You can access the same menu from the **General** tab on the action panel by expanding **Other Actions** and clicking **Reports**.

Running a Report

Quest Foglight contains a number of pre-defined report templates. Each template serves a particular purpose, but many templates have the same expected inputs. The values you specify for these inputs define the content of the report.

Use a template as-is to quickly generate or schedule a report, or change the report input values to meet specific requirements.

Running a Report

Click **Run a Report** on the Reports dashboard to select and generate a report immediately (in the PDF format, for example) using the Create Report wizard. If you have the Manager Report role or the Advanced Operator's role, you can also schedule a report from this wizard. See the online help for the Reports dashboard for details about using this wizard.

Building a Custom Report

You can also create a custom report template, which is similar to creating a dashboard. By creating your own report templates, you can build reports directly from any dashboard or tailor the content and presentation of reports to suit your requirements.

Creating a Custom Report Template

Click **Build a Custom Report** on the Reports dashboard to choose the building blocks for your custom report using the Create Report wizard. See the online help for the Create Report wizard, for details about using this wizard.

Immediately after building a custom template, you can use it to generate a report

> **TIP:** To create a report based on the monitoring dashboard you are viewing, select Reports > Create a New Report from the reports menu at the top-right corner of the dashboard, and then select Create a report based on the current dashboard.

Generating a Custom Report

The custom report templates you create appear under My Dashboards in the navigation panel. To run a report immediately based on one of these templates, select the template and click **Run** () on the toolbar.

Each time you run a report based on a custom report template, you can change the data Quest Foglight includes in the report by setting the parameterized input values. For more information, see the online help topic,.

Deleting a Custom Report Template

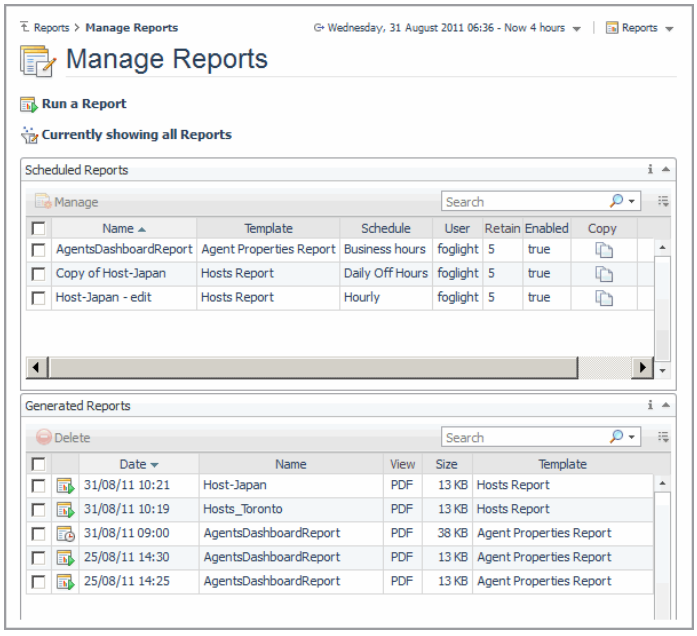
Delete custom report template by selecting the template under My Dashboards and clicking **Delete this Report** form **General > Actions** in the action panel. Quest Foglight removes the report from My Dashboards and the report template list.

NOTE: Users with the Administrators role can remove unwanted scheduled reports created by other users. Users with this role also have access to all of the available report templates. A user who does not have the Administrator role can only see report templates that have the role that matches their user role.

Managing Reports

Click **Manage Reports** on the Reports dashboard to access the Manage Reports dashboard.

Figure 2. The Manage Reports dashboard.



Use this dashboard to filter, download, delete, and view details about scheduled and generated reports. If you have the Advanced Operator role, you can also use this dashboard to:

- Delete scheduled reports. For example, you no longer require a specific scheduled report because you removed the service on which it reports.
- Enable/disable scheduled reports. For example, you are performing system maintenance and you do not want Quest Foglight to run scheduled reports during that time.
- Edit scheduled reports. For example, you want to change the maximum number of hosts included in a scheduled report.
- Select a template and run a report.
- Filter the reports list that is displayed in the view.

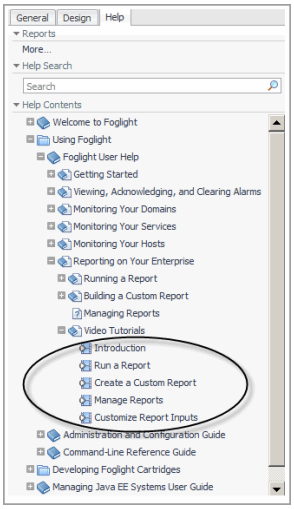
You can also use the Manage Reports dashboard to generate and schedule reports from the context of your existing set of reports. For example, you view a one-time report and decide that it should be generated automatically at the end of each month.

If the out-of-box schedules available in the Schedule Report wizard do not meet your requirements, your Administrator can define a new schedule using the Simple New Schedule wizard. This is the same wizard that Administrators use to create new blackout schedules. Ask your Administrator for assistance if you need a new schedule.

Video Tutorials

There are a number of Quest Foglight learning videos available. To view a video, on the action panel, select the **Help** tab, expand **Using Foglight > Foglight User Help > Reporting on Your Enterprise > Video Tutorials,** and then click the title of the video you wish to view.

Figure 3. The Foglight help menu, displaying the video tutorials.



About Us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation™.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece—you—to the community, to the new Quest.

Contacting Quest

For sales or other inquiries, visit https://www.quest.com/company/contact-us.aspx.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request.
- View Knowledge Base articles.
- Sign up for product notifications.
- Download software and technical documentation.
- View how-to-videos.
- Engage in community discussions.
- Chat with support engineers online.
- View services to assist you with your product.