OPTIMIZE

MERCURY BUSINESS AVAILABILITY CENTER™

Working with Applications

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BUSINESS TECHNOLOGY OPTIMIZATION

Mercury Business Availability Center

Working with Applications

Version 6.5

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MERCURY™

Mercury Business Availability Center, Version 6.5
Working with Applications

Mercury Interactive Corporation
379 North Whisman Road
Mountain View, CA 94043
Tel: (650) 603-5200
Fax: (650) 603-5300
http://www.mercury.com

If you have any comments or suggestions regarding this document, please send them by e-mail to documentation@mercury.com.

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Table of Contents

Welcome to Working with Applications

This guide provides information on working with features common to the Mercury Business Availability Center applications.

How This Guide Is Organized

The guide contains the following parts:

Part I Working with Reports

Describes how to work with reports, including how to generate them, select a time range, apply filters, and share and store reports.

Part II Configuring and Viewing User Reports

Describes how to create, administer, and view user reports, which enable tracking of specific performance issues relevant to your organization or business unit's performance monitoring needs.

Who Should Read This Guide

This guide is intended for the following users of Mercury Business Availability Center:

- Mercury Business Availability Center administrators
- Mercury Business Availability Center end users

Readers of this guide should be knowledgeable about navigating and using enterprise applications, and be familiar with Mercury Business Availability Center and enterprise monitoring and management concepts.

Getting More Information

For information on using and updating the Mercury Business Availability Center Documentation Library, reference information on additional documentation resources, typographical conventions used in the Documentation Library, and quick reference information on deploying, administering, and using **Mercury Product**, refer to *Getting Started with Mercury Business Availability Center*.

Part I

Working with Reports

1

Working in Reports

Mercury Business Availability Center reports consist of charts and tables that help you track and analyze the health of your monitored environment. You view and generate reports, and drill down and/or apply various filtering criteria to examine performance trends and pinpoint the cause of availability and performance issues.

About Working in Reports

Reports enable you to examine and analyze the data that Mercury Business Availability Center collects. When generating reports, you can specify various report settings, including time range and resolution, profile, grouping, and filters.

You can also customize reports by adding a header and a footer, by selecting to automatically or manually generate the report, or by customizing other display elements. For details, see "Customizing Reports" in *Platform Administration*.

For details on the navigation functions in Mercury Business Availability Center, see "Navigating Mercury Business Availability Center" in *Getting Started with Mercury Business Availability Center*.

Note: Mercury Business Availability Center presents certain reports within the context of transaction thresholds. For details on configuring transaction thresholds, see "Transaction Threshold Settings" in *End User Management Data Collector Configuration*.

Understanding Common Report Elements

The items listed in the table below are common to most report pages in Mercury Business Availability Center applications. Report elements specific to a certain application are described within that application's documentation:

Item	Description
Report generation button	In most applications, click **Generate** to generate the report (in certain applications, reports are generated automatically when the page is loaded). For details, see "Generating Reports" on page 7.

Item	Description
Report time range and granularity	Located at the top of the report area. Displays the currently selected report date and time frame. For details, see "Choosing the Tracking Range and Granularity" on page 8.
Report title bar	Located at the top of the report.
Currently selected profile(s)	Located below or beside the Profile(s) link. Click the **Profile(s)** link to open the Profiles window and select the profile (or profiles, for the Multi-Profile Summary report) for which you want to view reports. For details, see "Selecting Profiles" on page 11.
Currently selected filters	Located below or beside the Active Filters link. Click the **Active Filters** link to open the Active Filters window and select filter criteria. Active filters filter all of a profile's reports according to specific criteria, for the duration of the Web session. For details, see "Filtering Data Using Active Filters" on page 12.
Drill-down links	Located to the right of the report and/or within the report, after report generation. Click a link to drill down to a greater level of detail within a report. For details, see "Drilling Down Within Reports" on page 17.
View as Graph tab	Located just above the report. Click to display a graphical representation of the data. This is generally the default view.
View as Table tab	Located just above the report. Click to display a tabular representation of the data.

Item	Description
Print Report button	Click to open a window displaying a printer-friendly version of the report. For details, see "Printing a Report" on page 21.
Open in PDF Format button	Click to download report data to a file in .pdf format. For details, see "Producing a Printer-Friendly Report in .pdf Format" on page 21.
Format in CSV button	Click to format report data in .csv format. For details, see "Saving a Report in .csv Format" on page 22.
Format in Excel button	Click to format report data in Microsoft Excel format. For details, see "Saving a Report in Microsoft Excel Format" on page 22.
Format in XML button	Click to format report data in .xml format. For details, see "Saving a Report in .xml Format" on page 23.
E-mail Report button	Click to open a window from which you can e-mail the report to specified recipients. For details, see "Sending a Report by E-Mail" on page 24.
Publish Report button	Click to publish the report in .csv, .xml, or .pdf format. For details, see "Publishing a Report" on page 26.
Report Repository button	Click to view a list of saved reports. For details, see "Saving a Report to the Report Repository" on page 29.

Item	Description
Tab menu	Move the mouse over a tab to display a grey arrow. Click the arrow to display the list of available options for that tab. For details, see "Navigating Mercury Business Availability Center" in *Getting Started with Mercury Business Availability Center*.
Application tab overview page	Click a tab to display the application tab overview page. For details, see "Navigating Mercury Business Availability Center" in *Getting Started with Mercury Business Availability Center*.

Generating Reports

You generate reports and modify the information that Mercury Business Availability Center displays, to pinpoint problem areas. For example, you suspect that a certain location is not performing well enough, so you generate a report that is organized by location.

Certain reports are initially generated automatically, whereas for others you must specify report criteria and generate the report manually. For details on setting reports to be automatically generated, see "Configuring Report Generation Settings" in *Platform Administration*.

To generate a report manually:

1. Select a report.
2. Specify report criteria, including time range and granularity, and profile, grouping and filter settings. Note that report criteria differ for each application.
3. Click the **Generate** button.

Choosing the Tracking Range and Granularity

When generating a report, you choose the tracking range and granularity in which the report is displayed.

To choose a tracking range and granularity:

1 From the tracking range list (labeled **View**), select a tracking range. You can display reports by:

- custom range
- hour, day, week, month, quarter, year
- past hour, past day, past week, past month, past quarter, past year
- week to date, month to date, quarter to date, year to date
- previous week, previous month, previous quarter, previous year
- last <definable time period>

Note: Not all reports include all the above tracking ranges.

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2 Select:

- **Hour**, **Day**, **Week**, **Month**, **Quarter**, or **Year** to generate the report in that time range. Then choose either the start date and time or the end date and time. Mercury Business Availability Center updates the other accordingly. Continue to the next step.
- **Custom** to generate the report for a time range whose start and end date you want to manually select. Then choose both a start and end date and time. Continue to the next step.
- **Last** to generate the report for the last hour, day, week, month, quarter, or year, every hour, day, week, month, or quarter (relevant only in Service Level Management. For details, see "Filtering Results by Tracking Period" in *Using Service Level Management*).

➤ Any of the other options to view the time range relative to the current date and time. (If you select one of these options, and then make changes to the start and end dates, the View box updates the time range.) To continue, skip to step 7 on page 9.

3 To specify a starting date and time, click the start date link (labeled **From**).

To specify an ending date and time, click the end date link (labeled **To**).

Mercury Business Availability Center opens the calendar window.

4 Use the calendar to select the start or end date and time for the report. Choose a month, year, and time from the lists, and click a date in the calendar table.

Use the forward and back arrows on either side of the selected month to move the time period forward or back by a month.

5 Click **OK** to accept the date you chose.

Click **Reset** to reset the calendar to the default day, month, year, and time.

Click **Cancel** to close the calendar without changing the starting time.

6 Use the forward or back arrows as required to move the selected time period forward or back by the period of time specified in the time range list. If a custom time range is selected, Mercury Business Availability Center moves the time period forward or back by the current custom time range.

7 For reports that are divided by time units, you can select report granularity. From the granularity value and granularity unit lists (labeled **Every**), select the granularity for the report. The available granularity units (minute, hour, day, week, month, year) differ depending on the selected time range, and the granularity values differ per granularity unit.

The granularity determines how many measurement samples are displayed in the report per time interval. By default, reports are limited to a maximum of 32 samples. Thus, for example, if you select the “Day” time range and the “minutes” granularity, since there are 1,440 minutes in a day and a maximum of 32 samples on a chart, the granularity ranges from “every 45 minutes” (1440/32=45) to “every 59 minutes” (above 59 minutes, you use the “hour” granularity unit).

Additional examples:

- If you select the "Day" time range and a granularity of "every 1 hour," the report is displayed using 24 samples (1 hour x 24 = 1 day).
- If you select the "Month" time range and a granularity of "every 1 week," the report is displayed using 4 samples (1 week x 4 = 1 month).

You can modify the allowed number of samples in reports in the Infrastructure Settings Manager. To do so, select **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**, click **Applications**, select **End User/System Availability Management**, and locate the **Max Data Points in Report** parameter entry in the **Data** table. Modify the value to the required amount.

For details on using the Infrastructure Settings Manager, see "Infrastructure Settings" in *Platform Administration*.

Note:

In certain reports, the selected time range is displayed along the x-axis. Mercury Business Availability Center breaks down the time range according to segments that differ depending on the selected time range. For details on how Mercury Business Availability Center breaks down each time range in reports where time is displayed along the x-axis, see "Report Times" in *Reference Information*.

Depending on the time range you select, Mercury Business Availability Center generates reports using either raw data or aggregated data. A note is displayed in the report when aggregated data is used. For details on how Mercury Business Availability Center determines when to use aggregated data, see "Data Aggregation" in *Reference Information*.

Selecting Profiles

You select the profile (or profiles, when viewing the Multi-Profile Summary report) for which you want to view and analyze reports. The first time you log into Mercury Business Availability Center, the first profile in the list is displayed (profiles are listed alphabetically). In the Multi-Profile Summary report, Mercury Business Availability Center displays all profiles. When you log in on subsequent occasions, Mercury Business Availability Center displays the last profile (or profiles, in the Multi-Profile Summary report) that you selected.

Profiles are classified by type:

- Business Process Monitor
- Client Monitor
- SiteScope

Depending on the report you are viewing, Mercury Business Availability Center displays the appropriate profile type in the Profiles window.

To select a profile:

1. Click the **Profile(s)** link at the top of the report to open the Profiles window.
2. Select a profile.

   If you are working in the Multi-Profile Summary report, select multiple profiles up to a maximum of 10.
3. Click **OK**.

Filtering Data Using Active Filters

Active filters enable you to filter specific components from reports, for the duration of a Web session. You can then pinpoint problem areas as well as focus on specific areas that you have already determined to be problematic. Different components appear, depending on the type of report you choose to view.

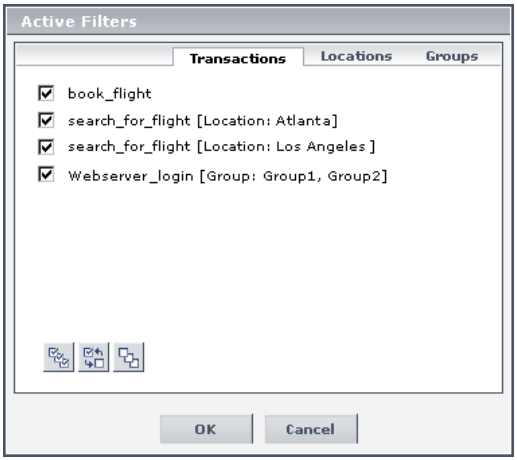
Note: Mercury Business Availability Center administrators can configure filters that apply to all users for all sessions. For details, see "Configuring Report Filters Globally" in *Platform Administration*.

Using Active Filters

Follow the procedures below to work with Active Filters.

To use Active Filters:

1 Click the **Active Filters** link at the top of a report to open the Active Filters window.



The tabs can display any of the following components, depending on the application and report:

Tab	Description
Advanced	Categories and filters defined on the Measurement Filters page for Real User Monitor. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
CIs	Configuration items appearing in Dashboard reports. For details, see "What Are Configuration Items?" in *Working with the CMDB*.
Desktops	Hosts running Client Monitor. For details, see "Desktop Performance Report" in *Using End User Management*.
Raw Data Measurements	Raw data measurement appearing in Raw Data reports. For details, see "Raw Data Over Time Reports" in *Using Dashboard*.
End Users	Specific user names, host names, or single IP addresses. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
End User Groups	End-user groups configured in Monitor Administration. In certain reports you can also filter the end-user groups according to wildcard expressions, or by entering a range of IP addresses. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
Event Source	Source of the event.
Events	Events by type. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
Groups	Groups of host machines running Business Process Monitors.

Tab	Description
KPIs	Key Performance Indicators can be filtered for the KPIs Over Time reports. For details, see "KPIs Over Time Reports" in *Using Dashboard*. Only the status-based or value-based KPIs are listed depending on your choice.
Locations	Locations of host machines running Business Process Monitors.
Monitor	SiteScope monitor types.
Pages	Pages and groups of pages configured in Monitor Administration. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
Servers	Servers displayed in the report according to the wildcard expressions you enter. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.
Severity	Severity label specified in the alert scheme.
Source	Source of alert.
Target	Name of the server machines monitored by SiteScope. Contains a Target box where you can insert a regular expression to filter the data by target. By default, the Target box contains an asterisk (*****), signifying a wildcard.
Thresholds	Reports can be filtered by the performance, or availability of the pages, transactions, end users, or servers in the report. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.

Tab	Description
Transactions	Recorded business processes run by Business Process Monitors, or transactions and groups of transactions configured in Monitor Administration for Real User Monitor. **Note:** You can choose one transaction only in the Triage Raw Data report. For details, see "Triage Raw Data Report" in *Using End User Management*.
Type	Type of alert.

2 From the appropriate tab, select the components to include in reports, or clear items to exclude them from reports.

To select all choices on a tab, click **All**. To clear all selections, click **None**. To invert your selection(s), click **Invert**.

You must select at least one item from each tab.

3 Click **OK** to save the filter settings and close the Active Filters window.

Click **Cancel** to close the Active Filters window without saving the changes.

The active filters you choose remain in effect for all reports for the duration of the Web session.

If desired, you can clear all active filters simultaneously.

To clear all active filters:

Click the **Clear All** link to regenerate the report unfiltered.

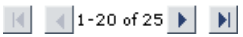
Limitations

➤ If all transactions are removed from a specific location, that location still appears in the Location tab.

- When displaying the Response Time over Time and Availability over Time charts, Mercury Business Availability Center can display up to 100 transactions simultaneously. If a profile has more than 100 transactions, Mercury Business Availability Center automatically selects the first 100 transactions listed on the Transaction Ordering page. To select different transactions to view, modify the active filters. To change the order in which transactions appear, you modify their order in the Transaction Ordering page. For details, see "Transaction Ordering" in *Application Administration*.
- If the Mercury Business Availability Center databases are installed on an Oracle Server, wildcard expressions used in active filters are case sensitive. On an MSSQL Server, wilcard expressions used in active filters are case insensitive. For further details on the Mercury Business Availability Center databases, see "Introduction to Preparing the Database Environment" in *Preparing the Database Environment*.

Navigating Within Report Pages

Mercury Business Availability Center divides a table of data or a list of reports into pages. You move from page to page by clicking the relevant button:



- To view more reports, click the **Next page** or **Last page** buttons.
- To view previous reports in the list, click the **Previous page** or **First page** buttons.

When you click the **Sort** button in a report, Mercury Business Availability Center displays the first page of the report list, sorted by the column you chose.

When you click the **Generate** button in a report, Mercury Business Availability Center displays the first page of the report list.

The number of rows of table data that are displayed in a page depends on a setting in the Infrastructure Settings Manager. To customize this setting, contact Mercury Customer Support.

Drilling Down Within Reports

Within a report, you click the drill-down links to view a greater level of detail. Drilling down enables you to more pinpoint performance issues related to a specific report element, for example, a specific transaction, location, group, or time frame. The drill-down links are located within a report.

Note that clicking the drill-down links automatically updates the active filters and time range setting.

Animating Report Charts with Macromedia Flash Player

You can choose to use Macromedia Flash Player to render report charts, to control the flow of information and add interest to your reports.

Your users must have Flash Player installed on their machines. If they do not, the browser displays a message containing instructions on downloading Flash Player.

The reports that support the use of Flash Player are those that include charts (most Dashboard, Service Level Management, and Real User Monitor reports). However, scatter charts are not supported.

For details on customizing Mercury Business Availability Center charts to be displayed with Flash Player, contact Mercury Customer Support.

Understanding Color-Coding in Reports

Mercury Business Availability Center uses color coding in reports to organize data in a meaningful way, and make reports more readable.

Use the legend that appears in a report to get a basic description of the color coding used in the report. For detailed information about a specific report and how to interpret the color coding used, refer to that report's documentation.

2

Sharing and Storing Reports

Mercury Business Availability Center enables you to share and store reports using various methods, including printing, exporting to other formats, and storing in a repository for future access.

About Sharing and Storing Reports

Mercury Business Availability Center provides the following functionality for sharing and storing reports that you generate:

- sending a report to a printer
- saving a report in .pdf format
- formatting a report in .csv or .xml format
- exporting a report, by sending it by e-mail, publishing it, or saving it to the report repository

Depending on the type of report you are viewing, some or all of the following buttons are available:

Category	Click to...
	 produce a .pdf format file. For details, see "Producing a Printer-Friendly Report in .pdf Format" on page 21.
	 send a report to a printer. For details, see "Printing a Report" on page 21.
	 produce a .csv format file. For details, see "Saving a Report in .csv Format" on page 22.
	 produce an Excel format file. For details, see "Saving a Report in Microsoft Excel Format" on page 22.
	 produce an .xml format file. For details, see "Saving a Report in .xml Format" on page 23.
	 send a report by e-mail. For details, see "Sending a Report by E-Mail" on page 24.
	 publish a report with updated data. For details, see "Publishing a Report" on page 26.
	 save a report to the report repository. For details, see "Saving a Report to the Report Repository" on page 29.

Printing Reports

You can send a report directly to a printer or produce a printer-friendly report in .pdf format.

This section includes the following topics:

Printing a Report

Tip: Before printing, ensure that printer settings are set to print the selected frame, and not to print frames as laid out on screen.

To obtain optimal print results if you are using Microsoft Internet Explorer, enable the **Print background color and images** option (**Tools** > **Internet Options** > **Advanced tab** > **Printing**).

To print a report:

1. Click the **Printer-Friendly Report** button to open a window displaying the printer-friendly report.
2. To print the report, click the browser's Print button, or right-click on the page and select **Print**.

Producing a Printer-Friendly Report in .pdf Format

The following procedure explains how to produce a printer-friendly report in .pdf format.

To produce a report in .pdf format:

1. In any report, click the **Open in PDF Format** button to display the report in .pdf format in a new browser window.
2. Follow the Adobe Acrobat instructions to print or save the file in your local file system.

Formatting Reports

You can format a report in .csv, Excel, or .xml format.

This section includes the following topics:

➤ "Saving a Report in .xml Format" on page 23

Saving a Report in .csv Format

The following procedure explains how to save a report in .csv format. Only those reports that support this functionality include the CSV button.

To save a report in .csv format:

1 In a report, click the **CSV** button to open the report in a new browser window.

If your browser does not display the .csv file in a new window (for example, if you do not have Microsoft Excel installed on the machine), follow your browser's instructions to view the file or save it to disk.

2 Select **File** > **Save As**, choose a path, file name, and file format type (Microsoft Excel, .csv, and so on), and click **Save**.

Note: For the CSV formatted report to display correctly, the comma (",") must be defined as the list separator. In Windows, to verify or modify the list separator value, open Regional Options from the Control Panel, and on the Numbers tab ensure that the comma is defined as the List Separator value. In Solaris, you can specify the list separator in the application that opens the CSV file.

Saving a Report in Microsoft Excel Format

The following procedure explains how to save a report in Microsoft Excel format. Only those reports that support this functionality include the Excel button.

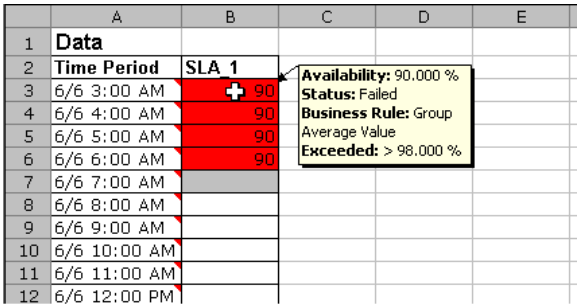
Note: Microsoft Office Excel 2002 or later must be installed on the client machine from which you are generating the report.

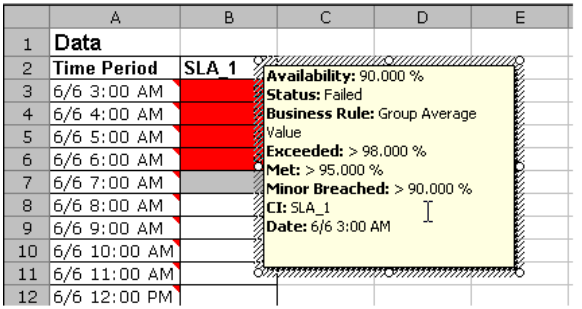
To format a report in Excel format:

1 In a report, click the **Excel** button.

2 Choose whether you want to display the report or save it. To save the file, click **Save**, and in the browser that opens, choose a path and file name and click **Save**.

Any tooltips in the report are converted to comments in Microsoft Excel. To view all the text of a large tooltip, edit the comment by right-clicking the cell and choosing **Edit Comment**. Enlarge the box by dragging a corner:





Saving a Report in .xml Format

You can save a report in .xml format to send to users, or to insert into other reports. The data in the XML file is not updated. Only those reports that support this functionality include the XML button.

To open a report in .xml format:

1 In any of the reports that support this functionality, click the **Open in XML Format** button to open the report in a new browser window.

2 Select **File** > **Save As**, choose a path, file name, and .xml file format type and click **Save**. This step is optional.

Tip: To extract HTML code from the report, save the file as HTML, open the file in an HTML editor, and copy the relevant table into the target file.

Exporting Reports

You can send a report by e-mail, publish a report with updated data, or save a report to the report repository.

This section includes the following topics:

Sending a Report by E-Mail

The following procedure explains how to send a report by e-mail.

To send a report by e-mail:

1 Click the **E-mail this Report** button to open the Mail Details window.

2 Change the default subject, if required.

3 Specify one or more e-mail addresses in the **Recipients** box. Separate multiple addresses using a semi-colon.

4 Specify a reply-to e-mail address in the **Reply-to** box.

If required, an e-mail address can be configured to appear in the **Reply-to** field by default. This is done in the Infrastructure Settings Manager. Select **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**, click **Foundations**, select **Business Availability Center**, and locate the **Default Reply-To Address** entry in the **Business Availability Center Interface - Display** table. Update the value as required.

For details on using the Infrastructure Settings Manager, see "Infrastructure Settings" in *Platform Administration*.

5 If required, type a comment in the **Comments** box.

6 Specify whether you want to send the report as:

a **HTML mail.** The report is displayed in the e-mail client (the e-mail client must support, and be configured to display, HTML).

- Select **Include Images** to include all report resources (for example, graphics) in the e-mail.
- Clear **Include Images** so the images are not included in the e-mail. In that case, all report resources (for example, graphics) are located on Mercury Business Availability Center servers. A network connection to Mercury Business Availability Center is required to view the images in the report.

b **HTML attachment.** The report is displayed in a browser (the browser must support the MHT format—Microsoft Internet Explorer supports MHT format, for example).

- Select **Send as Internet Explorer Archived HTML**. The report is displayed in a browser (the browser must support the MHT format—Microsoft Internet Explorer supports MHT format, for example). All report resources (for example, graphics) are included in the e-mail.
- Select **Zipped attachment** to send the attachment in zipped format.

c **PDF.** The report is displayed in .pdf format in a new browser window.

- Select **Zipped attachment** to send the attachment in zipped format.

Note: If you choose to use a mail option that displays the report content in the e-mail client, check that the e-mail client does not employ security restrictions which prevent the running of scripts contained in HTML mail. E-mail clients that do employ such restrictions may be unable to properly display all report content.

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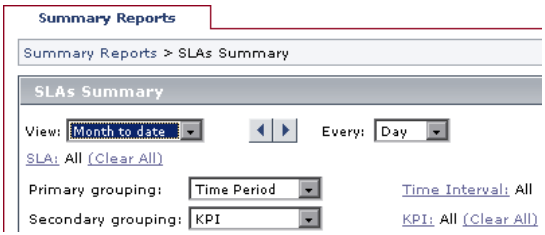
7 Click **OK** to e-mail the report.

Publishing a Report

You can generate up-to-date reports that can be viewed by users who do not usually work with Mercury Business Availability Center, and, therefore, do not know how to create reports. However, these users must have a network connection to Mercury Business Availability Center to view the report. You publish the reports in .csv format, .xml format, or printer-friendly format, and send the report (generally, by e-mail) to the user.

The report contains data that is updated when the report is accessed. For example, say you prepare a report for the past month (24 Oct 2005 8:00 AM – 21 Nov 2005 8:00 AM), publish the report, and send the URL or an HTML file of the report to a user. The user accesses the report a week later (on 28 Nov 2005), at which time the report shows the updated past month (31 Oct 2005 8:00 AM – 28 Nov 2005 8:00 AM).

You would probably publish reports that use a relative tracking period (for example, past month, month to date), as it may not be useful to publish reports that use an absolute tracking period (for example, hour, day, month). You choose the time period in the View field:



You can choose between two methods for publishing reports: URL and HTML. Use URL to submit the form with a **GET** method (recommended), and HTML to submit the form with a **POST** method.

For a list of reports that you can publish, see the list of customizable reports in "Configuring a Report Header and Footer" in *Platform Administration*. You can also view a list of these reports in the **Report Types** window accessed from the Report Repository page. For details, see "Searching for a Report in the Report Repository" on page 129.

To publish a report in .csv, .xml, or printer-friendly format:

1 Set up the report that you want to publish. Where relevant, choose the Graph or Table format.

Tip: Choose only from tracking periods that will show data when the user accesses the report. For example, say you set up the Triage report to show data for the past hour, then send the report to a user. If the monitor being tracked by the profile is going down shortly, the user's past hour will not include data.

2 Click the **Publish Report** button to open the Publish Report window.

3 Choose the format in which you want to publish the report: **CSV**, **XML**, or **Printer-Friendly**.

- **CSV.** The report is formatted as a comma-separated values (CSV) text file that can be displayed in a spreadsheet.
- **XML.** The report is formatted as an XML file that can be opened in a text or XML editor.
- **Printer-Friendly.** The report is saved in HTML format to make it easy to print.

4 Enter a login name and password which enable the user to log in to Mercury Business Availability Center, view the report, and log out.

Note:

- The default login name and password are those with which you logged in to Mercury Business Availability Center in the current session.
- Do not publish the report with administrator permissions. We recommend that you create a login name and password for the user with lower permissions than for an administrator. For details, see "User and User Group Management" in *Platform Administration*.
- If you include your own user name and password in the URL or the HTML file, when the user closes the report, you are simultaneously logged out of Mercury Business Availability Center.
- The user name and password are encrypted in the URL or the HTML file.
- The log in and log out steps are transparent to the user.

---

5 Choose whether to send the URL of the report (recommended) or to send the report as an HTML file. Click **Generate URL** or **Generate HTML**:

- **Generate URL.** Mercury Business Availability Center generates the URL and displays it in the window. Click **Copy** to select the URL, then paste the URL into an e-mail to send to the user. It is recommended that the URL does not exceed a maximum length of 2,000 characters (~2K), to ensure that the URL can be read by all systems.

  Note: Do not modify the URL string. If necessary, make changes to the report itself, then publish the report again.

- **Generate HTML.** The File Download window opens and you can choose to open or save the file. Click **Open** to open the report in a browser in the selected format. Click **Save**, and, in the **Save As** dialog box that opens, locate the directory where you want to save the file, and click **Save**.

Tip: To extract HTML code from the published report, choose the XML format and click **Generate URL** or **Generate HTML**. Continue with the relevant procedure to publish the report. Click **Open** to display the report in HTML markup in a browser. Save the file as HTML, open the file in an HTML editor, and copy the relevant table into the target file.

Saving a Report to the Report Repository

You can save the data of certain reports to a report repository, for viewing on other occasions, or for sending to other users. The report is saved with data valid at the time the report is saved. This is the case even if data subsequently changes, or more data accrues to the report. You access the report through Dashboard, Service Level Management, or End User Management (Triage report only).

For a list of reports that you can save to the repository, see the list of customizable reports in "Configuring a Report Header and Footer" in *Platform Administration*. You can also view a list of these reports in the **Report Types** window accessed from the Report Repository page. For details, see "Searching for a Report in the Report Repository" on page 129.

Note: The Report Repository icon appears only on the pages of reports that can be saved to the repository.

To save a report to the repository:

1. Click the **Save to Repository** button to open a window displaying the report in PDF format.
2. Enter a name for the report.
3. Choose whether the report should be available to all users (**Public**), or only to yourself and the administrators (**Private**).

Public: any user can view, edit, or delete the report from the repository.
Private: only the user or administrator can view, edit, or delete the report from the repository. (For Mercury Managed Services customers: **Private**: only the user, superuser, operator, customer superuser, and customer administrator can view, edit, or delete the report from the repository.)

4. Enter a description for the report.
5. Click **OK**, or click **Cancel** to close the window without saving the report.

   The report is displayed in the application page.

Part II

Configuring and Viewing User Reports

3

Introducing User Reports

This chapter introduces user reports, which enable you to track the specific performance issues that are relevant to your organization or business unit's performance monitoring needs.

About User Reports

Mercury Business Availability Center enables you to create and save user reports—customized reports containing user-defined data and formatting that can help you focus on specific aspects of your organization's application and infrastructure resource performance. For an overview of creating user reports, see "Creating User Reports" on page 35.

Once saved, the reports are available for viewing by all system users with appropriate permissions. For an overview of viewing user reports, see "Viewing User Reports" on page 36.

You configure and view user reports from the User Reports tab, accessed from the Service Level Management, End User Management, and System Availability Management applications. For an overview of permissions required to create and view user reports, see "Permissions in User Reports" on page 37.

For tips on working with user reports, see "Usage Tips" on page 38.

For details on working with reports (choosing the time range, selecting the profile, saving and sharing reports, and so on), see Chapter 1, "Working in Reports."

Creating User Reports

You can create user reports using the following tools, available from the User Reports tab:

- **Custom Report Manager.** Enables creating custom reports, which are made up of components that you select and define. Components are specific reports from the various Mercury Business Availability Center applications. You select the components that enable you to focus on the data you are most interested in tracking. For details, see Chapter 4, "Custom Report Manager."
- **Trend Report Manager.** Enables creating trend reports, which are made up of different measurements that you select and define, collected by Mercury Business Availability Center or third-party data collectors. Trend reports enable you to compare multiple measurements from several sources on the same graph. For details, see Chapter 6, "Trend Report Manager."
- **Custom Link Manager.** Enables creating custom link reports, which enable you to define a URL that is called via Mercury Business Availability Center and whose returned results are displayed in the browser, within the Mercury Business Availability Center interface. For details, see Chapter 7, "Custom Link Manager."
- **Excel Reports.** Enable utilization of Microsoft Excel's charting abilities to display various types of data collected by Mercury Business Availability Center data collectors. The data is extracted from the database using the Mercury Business Availability Center Open API. For details, see Chapter 8, "Integrating Microsoft Excel Reports in Mercury Business Availability Center."
- **OpenAPI Query Builder.** Enables building queries that extract data from the profile databases for use in Excel reports and/or third-party or custom reporting tools. For details, see "The OpenAPI Query Builder" in *Integrating with Third-Party Applications*.

Once defined, user reports can be further tailored with custom headers and footers. For details, see Chapter 9, "Default Header/Footer."

Viewing User Reports

You view user reports from the following contexts, accessed from the User Reports tab in Service Level Management, End User Management, and System Availability Management:

- **Reports List page.** Displays all the defined custom reports, trend reports, and custom links that have been defined in the system, that the current user has permissions to view. The name of the owner of each report (that is, the user that created the report) is also displayed.

  From the Custom Reports and Trend Reports tables, you can generate, edit (if permissions for such are granted), and schedule reports.

  From the Custom Links table, you can display a Web page in the same browser window.

  For details on using the Reports List page, see Chapter 10, "Report Lists."

- **Excel Reports page.** Displays links to Excel reports that have been uploaded to Mercury Business Availability Center. You view Excel reports in Microsoft Excel or any spreadsheet program capable of reading files of **.xls** format.

  For details on creating Excel reports, see Chapter 8, "Integrating Microsoft Excel Reports in Mercury Business Availability Center."

- **Report Repository page.** Displays reports saved to the report repository. You can search for and view reports that have been saved in the report repository. You can view saved reports in Dashboard, Service Level Management, and End User Management. For details, see Chapter 11, "Report Repository."

Permissions in User Reports

The following permission guidelines apply to creating and viewing user reports:

- All users have permissions to create custom reports, trend reports, and custom links for themselves.
- The Open Query component in custom reports can only be edited by users with Administrator or Superuser permissions (in Mercury Managed Services, Customer Administrator or Customer Superuser permissions).
- For users other than the report creator to view custom reports, trend reports, and custom links on the Reports List page (or have other permissions on the reports), such permissions must be granted by an administrator. Permissions can be granted on the report level.
- Permissions must be granted for viewing, adding, editing, or deleting Excel reports on the Excel Reports list. Permissions can only be granted on the list level.
- To access the OpenAPI Query Builder page, a user must have Administrator or Superuser permissions. The OpenAPI Query Builder page is not available to Mercury Managed Services customers.
- Permissions must be granted for defining a default header/footer.
- Permissions to view a report saved to the report repository depend on whether, while saving the report to the repository, the user selected the **Public** or **Private** flag. Reports flagged as public can be viewed by all users. Reports flagged as private can be viewed by the user who saved the report to the repository and by users with Superuser permissions.

  (For Mercury Managed Services customers: **Private**: only the user, superuser, operator, customer superuser, and customer administrator can view, edit, or delete the report from the repository.)

Usage Tips

- When naming entities in user reports, follow the guidelines for allowed names. For details, see "Allowed Names in Mercury Business Availability Center" in *Reference Information*.
- You can instruct Mercury Business Availability Center to e-mail, on a periodic basis, certain types of user reports to recipients defined in Mercury Business Availability Center. For details, see "Scheduled Reports" in *Platform Administration*.
- After creating custom or trend reports, if you then configure user- or global-level report filters to filter specific transactions, locations, or groups from reports, the filtered values still appear in the reports. To remove any newly filtered values from existing custom or trend reports, you must remove and re-add the components containing the elements for which filters have been set, and save the report.

4

Custom Report Manager

This chapter explains how to create custom reports that include components—individual application reports that enable you to focus on the data you are most interested in tracking.

Overview of Custom Reports

The Custom Report Manager is accessed from the User Reports tab in the Service Level Management, End User Management, or System Availability Management applications.

Each custom report can consist of components from different Mercury Business Availability Center applications. You select components from the relevant applications. You then configure settings for each component, including format (chart or table), layout, and time settings. You also specify active filters, which enable you to design the report to focus on the specific information that you most want to track (for example, business-critical transactions or critical alerts). In addition, you can add a custom header and footer to the report.

You generate custom reports from the Custom Reports table on the Reports List page, accessed from the User Reports tab in the Service Level Management, End User Management, or System Availability Management applications. Reports are listed in alphabetical order.

Limitations

Within any one specific component, Mercury Business Availability Center can display only those profiles that have the same settings for outlier values. In the Custom Report Manager, you should select a set of profiles that have the same setting for outlier values. For details on modifying outlier value settings for a profile, see "Transaction Threshold Settings" in *End User Management Data Collector Configuration*.

Workflow for Creating Custom Reports

Use the following workflow to create a custom report:

1. Create the custom report and give it a name. For details, see "Defining Custom Report Properties" on page 41.
2. Choose the application components to add to the report. For details, see "Adding a Component to a Report" on page 43.
3. Filter a report component to display specific objects only. This step is optional. For details, see "Filtering Report Components" on page 76.
4. Add a header and footer to the report. This step is optional. For details, see "Defining a Header and Footer for a Custom Report" on page 78.
5. Save the report.
6. View the report in the Reports List. For details, see "Report Lists" on page 119.

Defining Custom Report Properties

To define a custom report, you specify report properties.

To specify custom report properties:

1. From the User Reports tab in **Applications > Service Level Management**, **End User Management**, or **System Availability Management**, select **Custom Report Manager**.
2. In the Custom Report Manager, click **New** to open the Custom Report Properties window.
3. In the **Report title** box, enter a descriptive name for the report.
4. Click the **Report name** box. To specify a name that is different from the report title, replace the default name. This is the name that will appear in the Custom Reports section, on the Reports List page.

5 In the Time Period section, select a time period for the report. Choose one of the following options:

- **Use global settings for all components.** All components of the report use the same time period, as defined when the report is generated from the Reports List. For more information, see "Viewing Custom Reports" on page 120.
- **Enable time period per component.** Mercury Business Availability Center displays each component according to a different time period (which you define later).

6 In the Report Auto-Refresh Settings section, select a refresh rate for the report, or specify that the page should not refresh automatically.

7 Select **Insert a page break after each component when printing the report** to print a report in which each component's information starts on a new page.

Note: This feature is available when running on Microsoft Internet Explorer only.

---

8 Click **OK** to register the custom report properties. The custom report properties are not saved until after you add at least one component and click **Save**.

The next stage in the procedure is to add a component to the report. Continue to the next section.

Adding a Component to a Report

The procedure for adding a component differs depending on the component type.

This section explains how to add a component, and includes the following topics:

Reports Component

Adds the Reports component to the custom report you are creating.

To add a Reports component:

1. Select **Reports** from the **Component type** list.
2. Click **Add Component** to open the Add Component dialog box.

3 From the **Category** list, select a report category.

Category	Available Reports
Performance Update Reports (available for Business Process and Client Monitor profiles)	Performance of Transactions Transaction Availability Performance Update Summary Performance of Locations For details, see "The Performance Update Report" in *Platform Administration*.
User Experience Reports (available for Business Process and Client Monitor profiles)	"Response Time over Time Report" in *Using End User Management*
	"Response Time by Percentile Report" on page 74
	"Breakdown over Time Report" in *Using End User Management*
	"Performance Matrix Report" in *Using End User Management*
	Overall Performance of 3 Worst Locations (multi-profile). For details, see "Performance of Locations" in *Using End User Management*
	"Profile Summary Report" on page 84
	"Response Time – 90th Percentile Report" on page 85
	Overall Performance by Profiles. For details, see "Multi-Profile Summary Report" in *Using End User Management*.
	"Availability over Time Report" in *Using End User Management*
	"Breakdown Summary Report" in *Using End User Management*
	"Min./Max. Response Time Report" in *Using End User Management*
	Overall Performance of 3 Worst Profiles (multi-profile). For details, see "Multi-Profile Summary Report" in *Using End User Management*

Category	Available Reports
Alert Reports (available for all profiles)	"Alert Log" in *Using End User Management*
	"Alert Count over Time Report" in *Using End User Management*
	"Alert Count by Severity Report" in *Using End User Management*
SiteScope Reports (available for SiteScope profiles)	"SiteScope Data over Time" in *Using System Availability Management*
	SiteScope Profile Summary. For details, see "Group Performance Report" in *Using System Availability Management*
	"Overall Performance Report" in *Using System Availability Management*

4 From the **Type** list, select a report that you want to appear in the custom report. The available reports differ, depending on the selected category.

5 From the **View as** list, select **Graph** or **Table**, depending on the format in which you want Mercury Business Availability Center to display the report. These options are not available for all reports.

6 From the **Profile** list, select the profile on which you want the custom report data to be based. For certain reports you can select multiple profiles.

Mercury Business Availability Center displays different types of profiles (Business Process, Client Monitor, SiteScope), depending on the report category you select.

7 In the **Title** box, type the descriptive title that you want to appear above the component in the custom report, or accept the default name.

It is recommended that you use a title that describes the specific elements upon which the component will focus (for example, a particular transaction from a particular location).

8 If you selected **Enable time period per component** when defining the report properties, select the default time period for which Mercury Business Availability Center initially generates the report in the **Interval** list. For details, see "Defining Custom Report Properties" on page 41.

In the **Start** list, select a starting time for the component.

9 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

10 In the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, you must select **1**).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

11 Click **OK** to save the component settings.

12 Repeat steps 1 on page 43-11 on page 46 for each Reports component you want to add to the report.

13 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Real User Monitor Component

Adds the Real User Monitor component to the custom report you are creating.

To add a Real User Monitor component:

1 Select **Real User Monitor** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Report** list, select a report.

Category	Available Reports
Page Summary	"Page Summary Report" in *Using End User Management*
End User Summary	"End User Summary Report" in *Using End User Management*
Transaction Summary	"Transaction Summary Report" in *Using End User Management*
Server Summary	"Server Summary Report" in *Using End User Management*
Most Popular Pages	"Global Statistics Report" in *Using End User Management*
Most Active End Users	
Slowest End Users	
Pages with Slowest Server Time	
Broken Links	

4 In the **Title** box, type the descriptive title that you want to appear above the component in the custom report, or accept the default name.

It is recommended that you use a title that describes the specific elements upon which the component will focus (for example, a particular transaction from a particular location).

5 When one of the selected reports is one of the global statistics reports: **Most Popular Pages**, **Most Active End Users**, **Slowest End Users**, **Slowest Pages**, or **Broken Links**, you must select one engine from the defined End User Management engines in the **Engine** list.

6 In the **Tab** list, select the tab that you want to appear in the custom report. The available reports differ, depending on the selected category:

Category	Available Tab
Pages	➤ General (default) ➤ Availability ➤ Performance ➤ Server Performance
Transactions	➤ General (default) ➤ Availability ➤ Total Performance ➤ Net Performance ➤ Server Performance

7 From the **Sorting Column** list, select the column by which to sort the report. The default is the first column. The **Sorting Column** list includes all the table columns.

In some cases, in the displayed report, you may select a tab where the sorting column does not appear. Nevertheless, the displayed report is still sorted by that column.

8 Select the **Ascending** or **Descending** direction in the **Sorting Direction** radio buttons.

9 In the **Number of Rows** list, select the number of rows to display in the report.

10 In the **Start** list, select a starting time for the component.

11 In the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top of the page (for the first component, there is no choice).

12 Click **OK** to save the component settings.

13 If necessary, click the **Component Filter** button to specify the component active filters. For details, see "Using the Real User Monitor Active Filters" in *Using End User Management*.

14 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Real User Events Component

Adds the Real User Events component to the custom report you are creating.

Note: To see data in the report, after adding Real User Events report components, you must select CIs and KPIs in the filter.

To add a Real User Events component:

1 Select **Real User Events** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Report** list, select a report.

Category	Available Reports
Event Count over Time	"Event Count Over Time Report" in *Using End User Management*
Event Summary	"Event Summary Report" in *Using End User Management*

4 In the **Title** box, type the descriptive title to appear above the component in the custom report, or accept the default name.

Tip: It is recommended that you use a title that describes the specific elements upon which the component will focus (for example, a particular transaction from a particular location).

---

5 If you selected **Enable time period per component** when defining the report properties, select the default start time from which Mercury Business Availability Center initially calculates the report. For details, see "Defining Custom Report Properties" on page 41.

6 Select the required **Size** option:

- **Wide** to display the report across the whole page
- **Narrow** to display the report across half the page.

7 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

8 Click **OK** to save the component settings.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Service Level Management Component

Adds the Service Level Management component to the custom report you are creating. For details on Service Level Management reports, see "Introduction to Service Level Management Reports" in *Using Service Level Management*.

Note: When the custom report is set to **Use global settings for all components**, and a global time range is selected (at report generation) that does not match the time ranges used by the Service Level Management component, then the following message is displayed upon report generation: "No associated tracking periods exist."

To add a Service Level Management report component:

1 Select **Service Level Management** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Report** list, select the specific report that you want to appear in the custom report.

Category	Available Reports
CI Impact	"CI Impact Report" in *Using Service Level Management*
CIs Over Time vs. Target	"CI Over Time vs. Target Report" in *Using Service Level Management*
CI Status	"CI Status Report" in *Using Service Level Management*
CI Summary	"CI Summary Report" in *Using Service Level Management*
CIs Over Time	"CIs Over Time Report" in *Using Service Level Management*
Outage Breakdown	"Outage Breakdown Report" in *Using Service Level Management*
Outage Distribution	"Outage Distribution Report" in *Using Service Level Management*
Outages Summary	"Outage Summary Report" in *Using Service Level Management*
SLA Status Alert	"SLA Status Alerts" in *Using Service Level Management*
SLAs Summary	"SLAs Summary Report" in *Using Service Level Management*
Time Range Comparison	"Time Range Comparison Report" in *Using Service Level Management*

4 In the **Title** box, type the descriptive title that you want to appear above the component in the custom report, or accept the default name.

5 From the **View as** list, select **Graph** or **Table**, depending on the format in which you want Mercury Business Availability Center to display the report. These options are not available for all reports.

6 To determine how the report is displayed, choose between **Wide** and **Narrow**.

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

7 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

8 Click **OK** to save the component settings.

9 Repeat steps 1 on page 51-8 on page 52 for each component you want to add to the report.

10 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Note: For a Time Range Comparison component, the Component Filters window includes a **Time Ranges** option where you set the time ranges to be compared in the report.

When the custom report is set to **Use global settings for all components**, then the available time ranges include **Global Time**. The global time range is determined by the time range selected when the report is generated, or by the time range set by the report schedule (see "Viewing Custom Reports" on page 120).

Dashboard Component

Adds the Dashboard component to the custom report you are creating.

Note: To see data in the report, after adding Dashboard components, you must select CIs and KPIs in the filter.

To add a Dashboard component:

1 Select **Dashboard** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Report** list, select a report.

Category	Available Reports
Configuration Item Status Alerts	"Configuration Item Status Alerts Report" in *Using Dashboard*
KPIs over Time	"KPIs Over Time Reports" in *Using Dashboard*
Raw Data Over Time	"Raw Data Over Time Reports" in *Using Dashboard*

4 In the **Title** box, type the descriptive title that you want to appear above the component in the custom report, or accept the default name.

It is recommended that you use a title that describes the specific elements upon which the component will focus (for example, a particular transaction from a particular location).

5 If you selected **Enable time period per component** when defining the report properties, select the default start time from which Mercury Business Availability Center initially calculates the report. For details, see "Defining Custom Report Properties" on page 41.

6 Select the required **Size** option:

- **Wide** to display the report across the whole page
- **Narrow** to display the report across half the page.

7 In the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, you must select **1**).

8 Click **OK** to save the component settings.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

URL Component

Select the URL component to create a report that calls a specified URL. For example, you can integrate links to external charts generated by third-party EMS software into the custom report. You specify the URL as well as any parameters that you want the URL to process at runtime.

Mercury Business Availability Center provides two templates that you can use as the arguments for parameters that process report times:

- **Start time.** Uses the argument **$$startTime$$** to return the start time for the report.
- **End time.** Uses the argument **$$endTime$$** to return the end time for the report.

The following example shows a URL that uses parameters to return the chart type and start time of a report:

```
http://www.myapp.com?graph=responsetime;starttime=$$startTime$$
```

Note: If the specified Web page includes JavaScript code that attempts to access the top frame, the browser will display an "access denied" error. To avoid this issue, set the browser to ignore JavaScript errors.

To add a URL component:

1. Select **URL** from the **Component type** list.
2. Click **Add Component** to open the Add Component dialog box.
3. In the **Title** box, type the descriptive title that you want to appear above the component in the custom report.
4. In the **URL** box, type the URL of the Web page you want Mercury Business Availability Center to display in the report. If the URL includes parameters, specify them as required.
5. To use one of the predefined arguments with a parameter in the URL, place the insertion point in the URL where you want to add the argument, select the required argument from the **URL runtime templates** list, and click **Add Template**.
6. If you selected **Enable time period per component** when defining the report properties, select the default time period for which Mercury Business Availability Center initially generates the report in the **Interval** list. For details, see "Defining Custom Report Properties" on page 41.

   In the **Start** list, select a starting time for the component.
7. In the **Width** and **Height** boxes, select the frame size for the component. When doing so, keep in mind the required frame size for correctly viewing the Web page content being accessed.
8. In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

   When selecting the component size, keep in mind the frame size you specified in step 7 on page 55.
9. From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

   For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.
10. Click **OK** to save the component settings.

11 Repeat steps 1 on page 55-10 on page 55 for each URL component you want to add to the report.

12 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Desktop Performance Component

Select the Desktop Performance component to add the Desktop Performance report to the custom report you are creating. The Desktop Performance report enables you to view the least available, worst performing, or least active desktops for which the Client Monitor has collected data. A desktop is the end-user's machine on which Client Monitor runs.

For details on the Desktop Performance report, see "Desktop Performance Report" in *Using End User Management*.

To add a Desktop Performance component:

1 Select **Desktop Performance** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Profile** list, select the Client Monitor profile on which you want the custom report data to be based.

4 In the **Title** box, type the descriptive title that you want to appear above the component in the custom report, or accept the default name.

5 If you selected **Enable time period per component** when defining the report properties, from the **Interval** list, select the default time period for which Mercury Business Availability Center initially generates the report. For details, see "Defining Custom Report Properties" on page 41.

In the **Start** list, select a starting time for the component.

6 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

7 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

8 Select the type of data you want the report to display. Choose from:

- least/most available desktops (transaction success)

  The list is sorted by availability.

- worst/best-performing desktops (transaction response time)

  The list is sorted by response time.

- least/most active desktops (number of transactions)

  The list is sorted according to the number of transactions that ran during the specified time period.

9 Click **OK** to save the component settings.

10 Repeat steps 1 on page 56-9 on page 57 for each Desktop Performance component you want to add to the report.

11 To save the custom report, click **Save**.

The next stage in the procedure is to add another component (“Adding a Component to a Report” on page 43) or to filter report components (“Filtering Report Components” on page 76).

Triage Report Component

Adds the Triage Report component to the custom report you are creating.

To add a Triage Report component:

1 Select **Triage Report** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 In the **Title** box, type the descriptive title to appear above the component in the custom report, or accept the default name.

4 The start time is defined in the report's filter. For details, see "Filtering Report Components" on page 76.

5 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

6 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

7 To save the component settings, click **OK**.

8 To save the custom report, click **Save**.

The next stage in the procedure is to add another component to the report ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

SiteScope Monitor Performance Component

Select the SiteScope Monitor Performance component to add the Monitor Performance report to the custom report you are creating. The Monitor Performance report enables you to view the best- or worst-performing SiteScope monitors across various SiteScope categories, such as monitor type, monitored server, or monitor title.

For details on the Monitor Performance report, see "Monitor Performance Report" in *Using System Availability Management*.

To add a SiteScope Monitor Performance component:

1 Select **SiteScope Monitor Performance** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 From the **Profile** list, select the SiteScope profile(s) on which you want the custom report data to be based.

4 From the **Monitor type** list, select the monitor on which you want the custom report data to be based. To base the report on all monitors, choose **All types**.

5 In the **Monitor title** and **Server name** boxes, specify the monitors (by their title, as defined in SiteScope) and/or servers on which you want the custom report data to be based.

Leave a box empty to instruct Mercury Business Availability Center to base the report on all values.

You can use the asterisk symbol (*) as a wildcard to instruct Mercury Business Availability Center to base the report on a subset of all values. For example, to name all CPU monitors in SiteScope with the naming convention cpu_<servername>, specify cpu* to instruct Mercury Business Availability Center to include all CPU monitors in the custom report.

Note: It is not recommended to enter a wildcard as the first character in a string because Mercury Business Availability Center is unable to use the Index tables when querying the database, thus slowing report generation times.

---

6 In the **Display** list, select whether you want Mercury Business Availability Center to display the best- or worst-performing monitors, and choose the number of monitors to be displayed in the report in the **Monitors** list.

7 In the **Title** box, type the descriptive title to appear above the component in the custom report, or accept the default name.

8 If you selected **Enable time period per component** when defining the report properties, select the default time period for which Mercury Business Availability Center initially generates the report in the **Interval** list. For details, see "Defining Custom Report Properties" on page 41.

In the **Start** list, select a starting time for the component.

9 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

10 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

11 Click **OK** to save the component settings.

12 Repeat steps 1 on page 58-11 on page 60 for each SiteScope Monitor Performance component you want to add to the report.

13 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

SiteScope Cross-Performance Component

Select the SiteScope Cross-Performance component to add the SiteScope Cross-Performance reports to the custom report that you are creating. The SiteScope Cross-Performance reports display the behavior of the same measurement in different monitored servers, or the behavior of different measurements from different types of monitor on the same monitored server.

They also display a summary table for each monitor type. The summary table displays the percentage of uptime, warning, and failure measurements out of the total number of measurements for each selected server. Each summary table includes a summary row that indicates the uptime, warning, and error percentage for all servers for that type of monitor. The report can be re-scaled to make it more relevant to what you are measuring.

For details on the Cross-Performance report, see "Cross-Performance Report" in *Using System Availability Management*.

To add a SiteScope Cross-Performance component:

1 Select **SiteScope Cross-Performance** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 Choose whether to display the monitor type or title when selecting the component to add to the report:

- **Monitor type.** The type of monitor is displayed, for example, Ping, CPU.
- **Monitor title.** The name given to the specific monitor, for example, ping: myserver, CPU finance_server.

4 From the **Profile** list, select the SiteScope profile(s) on which you want the custom report data to be based.

5 From the **Server** list, select the SiteScope server(s) on which you want the custom report data to be based.

6 Depending on whether you chose **Filter by Monitor Type** or **Filter by Monitor**, the **Monitor Types/Monitor Titles** list displays monitor types or monitor names, associated with the selected profiles and servers, in alphabetical order. Select one or more monitors.

7 From the **Measurement** list, select the measurement(s) on which you want the custom report data to be based.

Note: If a box is empty, you will not be able to generate the report.

Enter a string in one of the **Contains** boxes and click on the filter button , to list all the elements whose name includes the string.

---

8 Select **Consolidate data per measurement** if you want the report to group data per measurement, for all the selected servers. If you clear **Consolidate data per measurement,** the report groups data per server. For details, see "Consolidated Over Time Graphs" and "Non-Consolidated Over Time Graphs" in *Using System Availability Management*.

9 Select **Show status summary tables** if you want the report to display uptime, warning, and error summary tables.

10 If required, enter scale information in the **Scale Min** and **Max** boxes. For details, see "Rescaling a Cross-Performance Report" in *Using System Availability Management*.

11 If you selected **Enable time period per component** when defining the report properties, select the default time period for which Mercury Business Availability Center initially generates the report in the **Interval** list. For details, see "Defining Custom Report Properties" on page 41.

In the **Start** list, select a starting time for the component.

12 In the **Title** box, type the descriptive title to appear above the component in the custom report.

13 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

14 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (this is the default for the first component).

For a component to appear in the Narrow format, you must position two Narrow components consecutively.

15 Click **OK** to save the component settings.

16 To save the custom report, click **Save**.

The next stage in the procedure is to add another component ("Adding a Component to a Report" on page 43) or to filter report components ("Filtering Report Components" on page 76).

Adding an Open Query Component to a Report

Select the Open Query component to build a Generic Data Engine API query that returns a tabular or graphical representation of the data retrieved from the database. The Open Query component user interface is similar to that of the OpenAPI Query Builder. For details on the OpenAPI Query Builder and on the Generic Data Engine API in general, see "Working with Data APIs" in *Integrating with Third-Party Applications*.

To add an Open Query component:

1 Select **Open Query** from the **Component type** list.

2 Click **Add Component** to open the Add Component dialog box.

3 In the **Title** box, type the descriptive title to appear above the component in the custom report, or accept the default name.

4 If you selected **Enable time period per component** when defining the report properties, select the default start time from which Mercury Business Availability Center initially calculates the report. For details, see "Defining Custom Report Properties" on page 41.

5 In the **Size** section, select the size for the component. Select **Wide** to display the report across the whole page. Select **Narrow** to display the report across half the page.

6 From the **Position** list, select the position for the component within the custom report, relative to the other components. Selecting **1** instructs Mercury Business Availability Center to place the component at the top (for the first component, there is no choice).

For a component to appear in the Narrow format, you must have two Narrow components positioned consecutively.

7 Click **OK** to save the component settings.

To define the Open Query call to the database:

1 Click the **Component Filter** button to define the query parameters using the OpenAPI Query Builder interface. For detailed information on creating Generic Data Engine API queries with the OpenAPI Query Builder interface, including query limitations, see "The OpenAPI Query Builder" in *Integrating with Third-Party Applications*.

a From the **Sample type** list, select a data sample type. For a description of the available sample types, see "Samples" in *Reference Information*.

b To group returned data according to a specific granularity setting, which you select when generating the report, (for example, if you want data for the past day grouped per hour), select **Return data per specified granularity**.

Note:

- If you modify this setting after configuring presentation settings, the presentation settings will be lost. For details on presentation settings, see "Configuring Presentation Settings" on page 73.
- If you select **Return data per specified granularity**, it is recommended not to select the time_stamp field in the query. This is because, if **Return data per specified granularity** is selected, Mercury Business Availability Center automatically adds a time dimension to the report.

---

c Select the data fields of the chosen sample type that you want to extract from the database and the operations to perform on the data. For details on selecting data fields and operations, see "Creating Queries Using the OpenAPI Query Builder" in *Integrating with Third-Party Applications*. For detailed descriptions of the available data fields per sample type, see "Samples" in *Reference Information*.

d If required, modify the field alias or field formula. For details, see "Creating Queries Using the OpenAPI Query Builder" in *Integrating with Third-Party Applications*.

Tip: To display returned response time in seconds rather than milliseconds, edit the field formula for Response Time, **dResponseTime**, as follows: dResponseTime/1000. This can be done for any value displayed by default in milliseconds, for example, thresholds.

e If required, modify the field properties. For details, see "Modifying Field Properties" on page 65.

f Apply filters to the extracted data. For details on applying filters, see "Creating Queries Using the OpenAPI Query Builder" in *Integrating with Third-Party Applications*. For a list of query limitations, see "Query Limitations" in *Integrating with Third-Party Applications*.

g Configure presentation settings to instruct Mercury Business Availability Center how to present the data in the custom report. For details, see "Configuring Presentation Settings" on page 73. If you do not configure presentation settings, the data is returned in standard table format. The order of the columns in the standard table is determined by the order of the fields in the Fields to Return list.

2 Click **OK** to save the settings.

3 Click **Save** to save the report.

This section includes the following topics:

Modifying Field Properties

Each field has default properties defined by the field metadata. The Field Properties dialog box enables you to modify the default field properties and define custom properties for the field.

To modify field properties:

1 Click the Field Properties button beside the field whose properties you want to edit. The Field Properties dialog box opens.

2 Modify the properties as required:

➤ **Type.** The default type for the field is initially displayed. This can be modified if required.

Example: By changing a field type from Double to Integer, you can display the returned data without the decimal point, if you use a function to modify a field formula in a way that results in a numerical value becoming a string. For example, if you change **(dResponseTime)** to **IF(dResponseTime,>,5000,pass,fail)**, you must change the type to String to enable the returned result to display correctly in a table.

The following field types exist:

➤ **String.** Used for textual expressions.

➤ **Date.** Used for date fields.

- **Double.** Used for numerical fields.
- **Integer.** Used for numerical fields.

- **Max. Length.** Displayed only for String field type. Used to set a maximum length, in characters, for the displayed string. In cases where the string exceeds the defined length, a tooltip is shown with the complete string.
- **Format.** Displayed for Date, Double, and Integer field types. Used to customize the format of the displayed date or numerical data in data tables, as well as in graphs (x-axis, tooltips, legend). For a list of possible formats and syntax examples, see "Field Formats" on page 66.
- **OK/Critical Threshold.** Displayed for Double and Integer field types. Used to add color coding in tables and graphs to data for which thresholds in the system have been defined—for example, to display transaction response time data with color coding corresponding to the OK, Warning, and Critical thresholds defined in Monitor Administration. In tables, the color coding is in the form of colored cells. In graphs, the color coding is in the form of a colored line. For details on working with OK/Critical Threshold settings, see "OK/Critical Thresholds" on page 69.

3. To revert all properties to their default settings, click **Reset**.
4. Click **OK** to save the settings.

This section includes the following topics:

Field Formats

You enter values in the Formats box to modify the default format for a field, as defined in the field's metadata. For example, the default date format is **M/dd/yy hh:mm:a**, which displays the date_stamp data as **5/22/06 11:25 AM**. By changing the date format, you can modify the way the date_stamp data is displayed.

You can also add a string beside the returned data, for example, the literal string “ms” after returned response time data. The allowed formats are based on Java formatting classes.

Some typical date/time formats include:

Symbol	Meaning	Type	Examples
y	Year	Number	yy > 06 yyyy > 2006
M	Month	Text or Number	M > 7 M > 12 MM > 07 MMM > Jul MMMM > December
d	Day in month	Number	d > 3 d > 14 dd > 03
h	Hour (1-12, AM/PM)	Number	h > 3 h > 11 hh > 03
H	Hour (0-23)	Number	H > 15 HH > 15
m	Minute	Number	m > 7 m > 15 mm > 15
s	Second	Number	s > 15 ss > 15
S	Millisecond (0-999)	Number	SSS > 007

Symbol	Meaning	Type	Examples
E	Day in week	Text	EEE > Tue EEEE" > Tuesday
a	AM/PM	Text	a > AM aa > AM
z	Time zone	Text	z > EST zzz > EST zzzz > Eastern Standard Time
'	Escape for text	Delimiter	'hour' h > hour 9

Some typical decimal formats include:

Symbol	Meaning	Examples
0	Shows a digit or 0 if no digit present	Value: 123.78 Pattern: 000000.000 Output: 000123.780
#	Shows a digit or nothing if no digit present	Value: 123.78 Pattern: #.### Output: 123.78
.	Indicates the decimal point	Value: 123.78 Pattern: #.## Output: 123.78
,	Used to group numbers	Value: 4123.78 Pattern: ,###.## Output: 4,123.78

Symbol	Meaning	Examples
'	Used to quote a literal symbol	Value: 123.78 Pattern: '#'###.## Output: #123.78
%	Multiplies by 100 and shows as percentage	Value: 123.78 Pattern: #% Output: 12378%

A complete reference to these classes is located on the Sun Web site, at the following URLs:

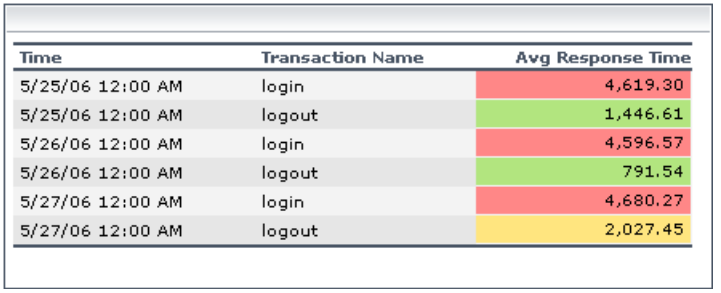
- **Date and Time Patterns.**
http://java.sun.com/j2se/1.4.2/docs/api/java/text/SimpleDateFormat.html
- **Decimal Format Patterns.**
http://java.sun.com/j2se/1.4.2/docs/api/java/text/DecimalFormat.html

OK/Critical Thresholds

You enter values in the OK Threshold and Critical Threshold boxes to add color coding to your reports. Colors are added to the reports as follows:

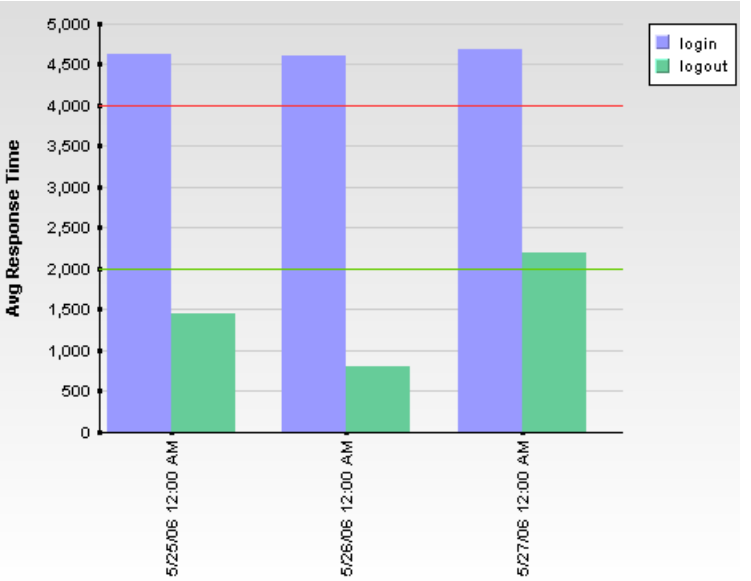
- **Green.** For values corresponding to the specified OK Threshold value.
- **Red.** For values corresponding to the specified Critical Threshold value.
- **Yellow.** For values in between the specified OK Threshold and Critical Threshold values.

Example 1: Assuming your report is in table format, if you edit the field properties for transaction response time and specify 2000 ms for the OK Threshold and 4000 ms for the Critical threshold, all returned transaction response time values that are less than or equal to 2000 ms are colored green, all returned transaction response time values that are greater than or equal to 4000 ms are colored red, and all in-between values are colored yellow. This is the case even if, in Monitor Administration, thresholds are defined differently.



Time	Transaction Name	Avg Response Time
5/25/06 12:00 AM	login	4,619.30
5/25/06 12:00 AM	logout	1,446.61
5/26/06 12:00 AM	login	4,596.57
5/26/06 12:00 AM	logout	791.54
5/27/06 12:00 AM	login	4,680.27
5/27/06 12:00 AM	logout	2,027.45

Example 2: Assuming your report is in graph format and average response time is selected for the y-axis, if you edit the field properties for transaction response time and specify 2000 ms for the OK Threshold and 4000 ms for the Critical threshold, a green line is drawn on the graph at the 2000 point and a red line is drawn on the graph at the 4000 point.



Two types of values can be entered in the OK Threshold and Critical Threshold boxes:

- **Numerical values.** You enter the actual values according to which you want data colored. Numerical values entered in the OK/Critical Threshold boxes will color code both data tables (cells whose values are within a specific threshold range are colored accordingly) and graphs (a colored line representing the specified value is added to the graph). The values that you enter override any actual set threshold values.

Note: When editing the query presentation format to return a graph, if you configure multiple y-axes on the same graph, no colored line is displayed. For details on editing presentation see "Configuring Presentation Settings" on page 73.

➤ **Referenced fields.** You enter the exact field alias of two other fields that have been added to the query. The values of the referenced fields must be numerical. Typically you add threshold fields such as Green Threshold and Red Threshold. Referenced fields entered in the OK/Critical Threshold boxes will color code only data tables (cells whose values are within a specific threshold range are colored accordingly). Graphs will not be color coded.

The following logic is used when determining how to interpret the values placed in the OK Threshold and Critical Threshold boxes to correctly apply color to the reports:

➤ If the numerical value or value of the referenced field entered in the OK Threshold box is lower than the numerical value or value of the referenced field entered in the Critical Threshold box, Mercury Business Availability Center assumes that lower values are OK and higher values are Critical (for example, response time). Data is colored accordingly.

For example, under this assumption, values returned for the field whose properties you are editing that were less than or equal to the numerical value or value of the referenced field specified in the Green Threshold box would be colored green.

➤ If the numerical value or value of the referenced field entered in the OK Threshold box is higher than the numerical value or value of the referenced field entered in the Critical Threshold box, Mercury Business Availability Center assumes that higher values are OK and lower values are Critical (for example, measurement of disk space). Data is colored accordingly.

For example, under this assumption, values returned for the field whose properties you are editing that were less than or equal to the numerical value or value of the referenced field specified in the Red Threshold box would be colored red.

Configuring Presentation Settings

You can configure whether the data returned by the query is displayed as a table or graph. You can further configure table type (regular or pivot) or graph type (bar or line).

Note: If you modify the **Return data per specified granularity** setting after configuring presentation settings, the presentation settings will be lost.

To configure presentation settings:

1. Click the **Edit Presentation** button to open the Presentation Settings dialog box.
2. On the Choose Presentation View page, select either **Table** or **Graph** and click **Next**.

   If you selected **Table**, continue to step 3. If you selected **Graph**, jump to step 7.
3. On the Choose Table Type page, select **Regular** or **Pivot** and click **Next**.
   - **Regular.** Displays a standard table with a column for each field in the query.
   - **Pivot.** Displays a table that can include multiple fields in a spreadsheet type of matrix.
4. If you selected a regular table, follow the below steps. If you selected a pivot table, jump to step 5.
   a. On the Select Field Order page, use the arrows to specify the order in the table (from left to right) that the columns appear. Click **Next**.
   b. On the Sort Field Order page, use the left/right arrows to specify the fields by which you want to sort the table. Select one or more of the fields you move to the Sorted Fields box, and click the left-hand set of up/down arrows to specify an ascending or descending sort. Use the right-hand set of up/down arrows to specify the sort hierarchy (fields are first sorted by the topmost field, then by the next, and so on.

Data is sorted, by default, as follows:

- **String.** Ascending, alphabetically.
- **Date.** Ascending, oldest to newest.
- **Double/Integer.** Ascending, numerically.

c Click **OK** to save the settings and close the Presentation Settings wizard.

5 If you select a pivot table, follow the below steps on the Table Definition page.

Note: If **Return data per specified granularity** is selected for the query, Mercury Business Availability Center adds **Time** to the list of available fields in the pivot table definition page.

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a Select a field from the Across Column list. You can select only one field for the across column. Each unique value returned for that field will be displayed in a separate column in the table. Examples of useful fields to select for the across column include time, location, or any other field that returns a relatively small number of data points that are useful to compare one to another.

b Select a field from the Value Field list. You can select only one value field. It is recommended that you select a field that returns a meaningful numerical value, for example response time. Do not select date-related fields such as Time or time_stamp.

c Select one or more fields from the Available Key Columns list and move them to the Selected Key Columns list. Each selected field will be displayed in the table, to the left of the field selected for the Across Column. Consider selecting fields for the key columns that contain data that you want to compare against the field selected in the across column. For example, in a query filtered to one specific transaction, if you selected time for the across column and average response time for the value column, you could select location and host fields as key columns; this would enable you to directly compare average response time of a transaction for various hosts at different locations at specific points in time.

Note: The fields that remain in the Available Key Columns box still exist in the query, but are hidden in the report table returned by the query.

d Use the up and down arrows below the Selected Key Columns list to specify the order in the table (from left to right) that the columns appear.

6 Click **OK** to save the settings and close the Presentation Settings wizard.

7 If you selected **Graph**, on the Choose Graph Type page, select **Bar** or **Line** and click **Next**.

8 On the Define Graph page, specify graph settings as follows:

a Select one or more numerical fields to display on the y-axis (only numerical fields are supported). Fields selected for the y-axis are removed from the Dimensions list.

- ➤ If multiple y-axis fields are selected but no dimensions are selected, one single graph is displayed with all the fields on the same y-axis. For the graph with multiple y-axis fields to be meaningful, consider selecting fields whose values are comparable.
- ➤ If multiple y-axis fields are selected and one or more dimensions are selected, a separate graph is displayed for each separate y-axis.

b Select a field to display on the x-axis. Both numerical fields and strings are supported.

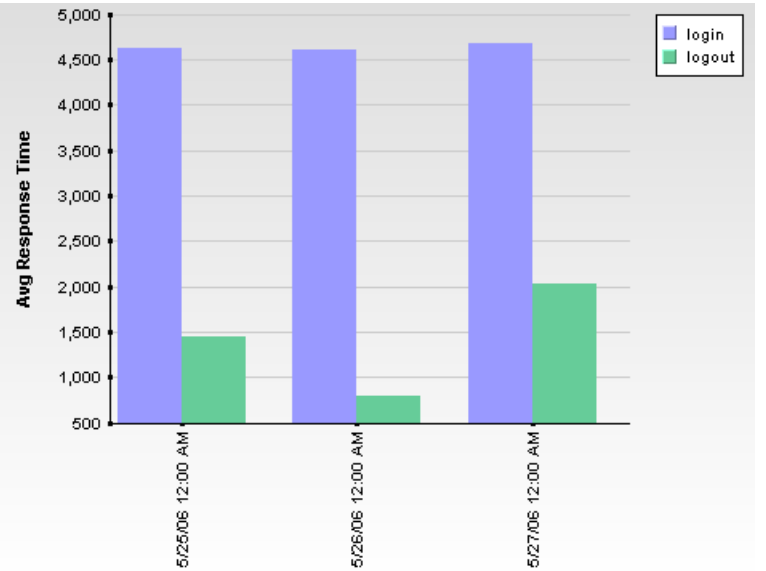
Note: If **Return data per specified granularity** is selected for the query, Mercury Business Availability Center defines the x-axis as **Time**. This cannot be modified.

c Optionally, in the Min. Scale and Max. Scale boxes, specify both a minimum and maximum value for the y-axis scale.

d Optionally, select one or more dimensions for the graph. The data for a field selected as a dimension is displayed on the graph separately, differentiated using a color coding. If no dimensions are selected, the y-axis value is used as the single dimension.

Note: The fields that remained in the Available Dimensions box are not sent as part of the query and do not appear in the report.

For example, if you configure a graph with time along the x-axis and average response time along the y-axis, and select transaction name as a dimension, each returned transaction appears as one dimension of the graph, color coded as per the legend.



9 Click **Finish** to save the settings and close the Presentation Settings wizard.

Filtering Report Components

You can filter reports so that they display certain objects only (for example, certain transactions, locations, or groups).

To set a component's active filter settings:

1 In the Custom Report Manager page, click the **Component Filters** button. Mercury Business Availability Center opens the Component Filters window or the Active Filters window, depending on the type of report.

Active filters are only available for certain component types. Note, too, that you can filter a Service Level Management report so that it includes transactions for specific locations and groups.

If a component is one of the five Global Statistics reports in Real User Monitor, the **Component Filter** button does not appear in the report.

For details on filtering Open Query components, see "Creating Queries Using the OpenAPI Query Builder" in *Integrating with Third-Party Applications*.

2 If available, select the profile whose active filters you want to modify.

The Component Filters window does not display:

- transactions, locations, or groups that are excluded in the Report Filters or Global Report Filters pages for the current user
- measurements in SiteScope groups that the current user does not have permissions to view

For details on setting report filters, see "Configuring Report Filters Globally" in *Platform Administration*, "Report Filters" in *Application Administration*, and "Using the Real User Monitor Active Filters" in *Using End User Management*.

Note: For a Time Range Comparison (Service Level Management) component, the Component Filters window includes a **Time Ranges** option where you set the time ranges to be compared in the report.

When the custom report is set to **Use global settings for all components**, then the available time ranges include **Global Time**. The global time range is determined by the time range selected when the report is generated, or by the time range set by the report schedule (see "Viewing Custom Reports" on page 120).

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3 If available, select a default view from the **View by** list.

For the Triage report, select the day for which you want to display data.

4 Select or clear the active filter check boxes as required.

To include all items, select **Include all**. When **Include all** is selected, you cannot select or clear individual items.

5 Click **OK** to save the settings.

6 Click **Save** to save the report.

Tip: To create meaningful custom reports, add a component for each critical element that you want to appear in the report, and then use active filters to focus on that element. For example, to focus on two business-critical transactions from two separate locations, create four components, and set the active filters to focus on each transaction from each location.

Note: If the current user does not have access permissions to the profile in the component (or to at least one of the profiles in a multi-profile component), or if the profile has been removed from the database, the user cannot edit component filters.

The next stage in the procedure is to define a header and footer. This step is optional. Continue to the next section.

Defining a Header and Footer for a Custom Report

You can add a custom header or footer to custom reports that you create. A custom header or footer overrides any default header or footer defined on the Default Header/Footer page. For details, see Chapter 9, "Default Header/Footer."

The custom header and footer can include free text, HTML tags used to mark up the text, hypertext links, JavaScript, as well as references to external resources such as images, Flash files, and so on. If you do not mark up the text, it is formatted according to the browser defaults.

Mercury Business Availability Center adds the HTML header to the report below the report title. Mercury Business Availability Center adds the HTML footer at the end of the report, immediately before closing the **body** tag.

Note: Use caution when marking up the header and footer fields, as some HTML code may affect the behavior of Mercury Business Availability Center. For example, a linked URL may contain JavaScript that causes the URL to "break out" of frames. Make sure you use valid HTML.
It is recommended that you perform an external check of the HTML code used in the header and footer, as Mercury Business Availability Center does not perform any validity checks on the header and footer content.

To define a custom header or footer:

1. In the Custom Report Manager, select **Header/Footer** to open the Report Header and Footer window.
2. To define a custom header, type the required text and HTML code into the **Header HTML** box.
3. To define a custom footer, type the required text and HTML code into the **Footer HTML** box.
4. Click **OK** to save the header and/or footer.
5. Click **Save** to save the settings.

To remove a custom header or footer:

1. In the Custom Report Manager, select **Header/Footer** to open the Report Header and Footer window.
2. To remove a custom header, delete the contents of the **Header HTML** box.
3. To remove a custom footer, delete the contents of the **Footer HTML** box.
4. Click **OK**.
5. Click **Save** to save the settings.

Modifying a Custom Report

You can modify components for which you have relevant permissions, using the Custom Report Manager.

Note: Permissions are granted by system administrators and can be enabled or revoked at any time. Thus, permissions to modify a custom report that you create could be removed by the administrator at a later time.

To edit a component:

1. Click the **Edit Component** button to open the Edit Component window. Modify the settings as required, and click **OK**. For details on the Edit Component window, see "Adding a Component to a Report" on page 43.
2. Click **Save** to save the settings.

To delete a component:

1. Click the **Delete Component** button, and confirm that you want to delete the component.
2. Click **Save** to save the settings.

To modify a report:

1. From the **Report** list, select the report to edit.
2. Click the **Edit** button beside the report name to open the Custom Report Properties window.
3. Modify the **Report title**, **Menu name**, **Time Period**, or **Report Auto-Refresh Settings** as required.
4. Select **Insert a page break after each component when printing the report** when you want to print reports where each component information starts on a new page.

Note: This feature is only available on Internet Explorer (and not on other Web browsers such as Firefox or Mozilla).

To delete a report:

1. In the Custom Report Manager, select the report to delete from the **Report name** list.
2. Click the **Delete** button beside the report name and confirm that you want to delete the report.

5

Additional Custom Reports

This chapter describes reports that cannot be accessed directly from any application but that can be added to custom reports to provide additional information.

Overview of Additional Custom Reports

The additional custom reports display information about transaction response times and availability for Business Process Monitor and Client Monitor profiles.

For details on working with reports (choosing the time range, selecting the profile, saving and sharing reports, and so on), see Chapter 1, "Working in Reports."

The following reports are available:

Category	Description	For Details, See...
Profile Summary Report	Displays an overview of the transaction response time and availability for each Business Process or Client Monitor profile in the report.	page 84
Response Time – 90th Percentile Report	Displays, for each indicated point in time, the response time value that 90% of all measured response time values are equal to or below.	page 85

Profile Summary Report

The Profile Summary displays an overview of the transaction response time and availability for each Business Process or Client Monitor profile that you add to the report. For details, see "Workflow for Creating Custom Reports" on page 41.

If you apply active filters, only the selected transactions, locations, and groups are included.

Click the profile name to generate a Transaction Analysis report for the profile. For details, see "Transaction Analysis Report" in *Using End User Management*.

The Profile Summary uses the following color coding:

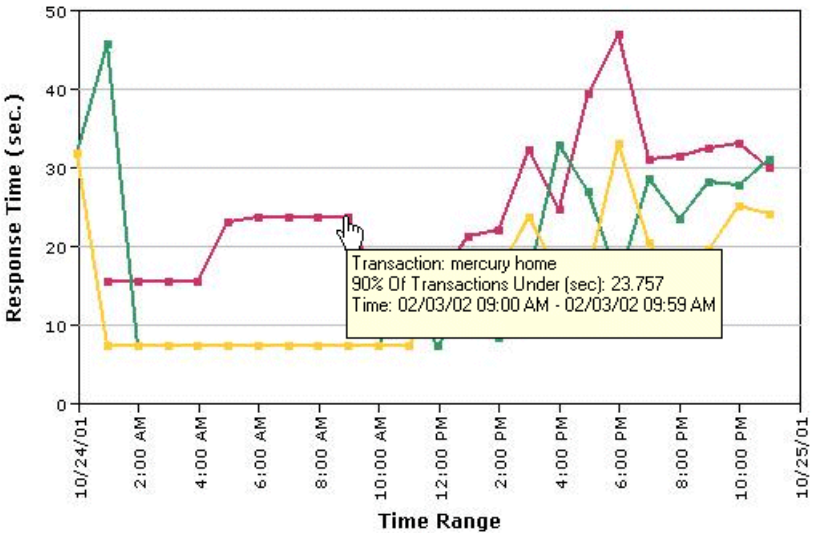
Color	Performance	Transaction Availability
Green	Each transaction's average response time fell within the OK threshold level.	No transactions failed.
Yellow	At least one transaction's average response time fell within the Minor threshold level, but no transaction's average response time fell within the Critical threshold level.	Not applicable.
Red	At least one transaction's average response time fell within the Critical threshold level.	At least one transaction failed.
Gray	No transaction data is defined.	Not applicable.

Response Time – 90th Percentile Report

The Response Time – 90th Percentile report does not appear in any application and can be added only to custom reports to provide additional information. For details, see "Workflow for Creating Custom Reports" on page 41.

The Response Time – 90th Percentile displays, for each indicated point in time, the specific response time value that 90 percent of all measured response time values are equal to or below. You can view the data in either chart or table format.

When calculating each point along the chart (or value in the table), Mercury Business Availability Center considers all transaction instances between the given point in time and the following point. For example, when displaying the report in the "Day" resolution, Mercury Business Availability Center divides the x-axis (or table) per hour. The value at each point along the chart (or in each cell in the table) represents the 90th percentile for the following hour.



In the above chart, 90% of the transactions that ran between 9:00 AM and 9:59 AM had response times equal to or below 23.757.

You add the Response Time – 90th Percentile report to custom reports using the Custom Report Manager. For details, see "Workflow for Creating Custom Reports" on page 41.

The Response Time – 90th Percentile data helps you identify response time problems and pinpoint their source. Because the data excludes response times above the 90th percentile (the highest 10 percent of response times), non-representative or non-typical transaction instances (for example, transactions that run during a server reboot) are eliminated. Thus, the data provides a more accurate picture of transaction performance over the defined time period.

By breaking down the data by transaction, location, or group across different time frames, you can identify exactly where and when transaction response times are too slow. For example, you might determine that response times in the 90th percentile for transactions from a specific location are consistently high over the course of several hours. This might indicate a problem somewhere along the network between that location and the monitored Web site.

You can further analyze the Response Time – 90th Percentile data as described below:

- place your cursor over any small square along the chart to view a tooltip containing details about the specific response time value that 90 percent of all response time values were equal to or below.
- modify the report time frame and click **Generate** to generate the modified report.
- drill down in the chart view. Click any time point in the chart to increase the time resolution for the selected transaction, location, or group. Click any drill down link to the right of the report, to focus on that transaction, location, or group.
- drill down in the table view. Click any link in a column or row header to focus on a specific time frame, transaction, location or group.
- select the table view in the Custom Report Manager to display the report in table format.

  The table displays, for each point in time, the specific response time value that 90 percent of all response time values were equal to or below. You can view the table broken down by transaction, location, or group.
- apply component filters in the Custom Report Manager. Click the **Component Filters** button, and select or clear check boxes to view the report filtered by specific transactions, locations, or groups.

6

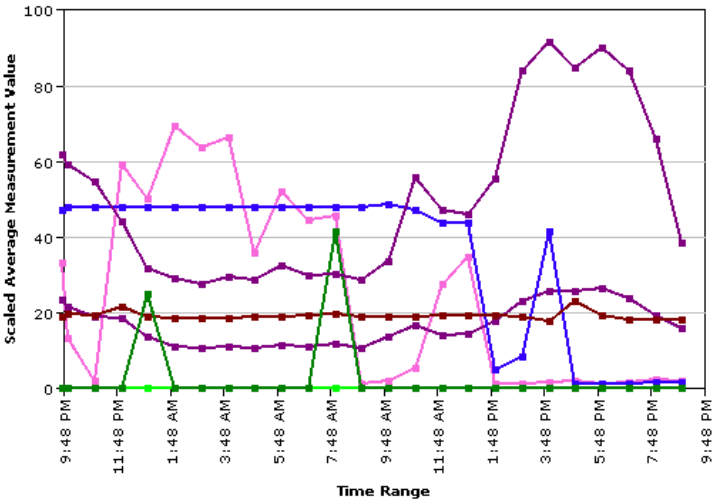
Trend Report Manager

This chapter explains how to create trend reports. Trend reports enable you to compare multiple measurements from several profiles.

Overview of Trend Reports

Trend reports enable you to compare multiple measurements from several profiles collected by Business Process Monitor, Client Monitor, and SiteScope, including transaction response time and availability data, WebTrace data (traceroute data for Client Monitor), and SiteScope data. In addition, you can add custom monitor data—including Real User Monitor data—to trend reports.

By combining measurements for several monitors on the same chart, you can analyze the relationship between transaction response time and availability, network and server health, and infrastructure machine performance over a selected time range.



The Trend Report Manager also enables you to compare the same set of measurements over two time periods (for example, you can compare measurements for the past hour and the hour before that).

You can also display data using different data aggregation methods and according to different groupings, and adjust the scale used when displaying a measurement. In addition, you can add a custom header and footer to the trend report.

You access the Trend Report Manager from the User Reports tab in the Service Level Management, End User Management, or System Availability Management applications.

You generate trend reports from the Trend Reports table on the Reports List page, accessed from the User Reports tab in the Service Level Management, End User Management, or System Availability Management applications. For details, see "Viewing Trend Reports" on page 122.

When Mercury Business Availability Center generates the trend report, it displays data in time segments that differ depending on the time granularity you select in the time range bar. For details on using the time range bar, see "Choosing the Tracking Range and Granularity" on page 8.

Reports are listed in alphabetical order.

Workflow for Creating Trend Reports

Use the following procedure to create a trend report:

1. Create the trend report and give it a name. For details, see "Defining Trend Report Properties" on page 92.
2. Select measurements to add to the report. For details, see "Selecting Trend Report Measurements" on page 93.
3. This stage is optional. You can modify a measurement's name, color or scale. For details, see "Modifying Trend Report Measurements" on page 97.
4. Save the report. For details, see "Saving the Trend Report" on page 98.

Defining Trend Report Properties

You select multiple measurements to display in the trend report. You can add up to 20 measurements to a trend report.

Administrators can modify the maximum number of measurements displayed in a report. To modify this setting, select **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**. Select the **Applications** context and choose **End User Management/System Availability Management** from the list. Locate the **End User Management/System Availability Management - Data** table. Make the change to the value in the **Max Trend Report Measurements** setting. For details on the Infrastructure Settings Manager, see "Infrastructure Settings" in *Platform Administration*.

To define a trend report:

1. From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Trend Report Manager**.
2. Click **New** to open the Trend Report Properties window.
3. In the **Report title** box, type a descriptive name for the report.
4. Click the **Menu name** box. By default, the report title appears in this box too. To specify a menu name that is different from the report title, enter it in the Menu name box. This is the menu name that appears in the Trend Reports list.
5. To modify the title of the y-axis, specify the required value in the **Y-axis title** box. The text in this box is used for the Y-axis in report charts.

   By default, the trend report chart's y-axis uses a normalized scale to combine the different types of measurements. You can manually adjust the scale for individual measurements. For details, see "Adjusting the Trend Report Scale" on page 102.
6. Click **OK** to register the trend report properties. The trend report properties are not saved until after you add at least one measurement to the report and click **Save**.

   The next stage in the procedure is to select measurements. Continue to the next section.

Selecting Trend Report Measurements

When you create a trend report, you use a set of filters to select the measurements to display in the merged chart. These filters differ per monitor category.

To select measurements:

1 Click **Add Measurements** to add measurements to the trend report. Mercury Business Availability Center opens the Measurement Selection page.

2 Select a monitor type from the **Monitor type** list:

- **Business Process Monitor/Client Monitor.** Transaction-related data collected by the Business Process Monitor/Client Monitor.
- **WebTrace.** WebTrace or traceroute data collected by the Business Process Monitor or Client Monitor.
- **SiteScope.** Infrastructure machine-related data collected by SiteScope.
- **Real User Monitor.** Network and server performance and availability data in real time collected by the Real User Monitor.

  Note that the data types listed under Real User Monitor (Pages, Transactions, End Users) are the same as the RUM Pages, RUM Transactions, and RUM End Users data types listed in the Custom monitor type list. Selecting them from the Real User Monitor monitor type list saves having to define measurement filters for them in the Measurement Filters page.
- **Custom.** Custom monitor data for which a filter has been defined in the Measurement Filters page.

Depending on the monitor type you choose, Mercury Business Availability Center displays the filters listed in the table below to determine which measurements are to appear in the trend report. You must select an entry from each list.

To reduce the number of objects that are displayed in any list, enter a search string in the **Contains** box, and click the **Filter** button. Mercury Business Availability Center displays only those entries that contain the string.

Monitor Category	Filters
Business Process Monitor/Client Monitor	➤ **Profile.** Business Process/Client Monitor profiles. ➤ **Transaction.** Defined transactions in scripts assigned to profiles. ➤ **Location.** Defined host locations (machines on which Mercury Business Availability Center Business Process Monitor/Client Monitor Agent is running). ➤ **Group.** Defined groups to which hosts were assigned during profile creation. ➤ **Counter.** Transaction response time, transaction breakdown, and transaction availability data collected by Business Process Monitor/Client Monitor.
WebTrace	➤ **Profile.** Business Process/Client Monitor profiles. ➤ **Location.** Defined host locations (machines on which Mercury Business Availability Center Business Process Monitor/Client Monitor Agent is running). ➤ **Counter.** WebTrace/traceroute data collected by Business Process Monitor/Client Monitor.
SiteScope	➤ **Profile.** SiteScope profiles (one per SiteScope). ➤ **Top Groups.** Defined top-level SiteScope groups for the profile. ➤ **Group Tree.** Defined SiteScope groups and subgroups for the profile ➤ **Measurement.** SiteScope monitor and measurement information, displayed using the following syntax: monitor title | monitored server | counter.

Monitor Category	Filters
Real User Monitor	➤ **Data Type.** The type of data: ➤ **Pages.** The pages that have been configured for monitoring by Real User Monitor. ➤ **Transactions.** The transactions that have been configured for monitoring by Real User Monitor. ➤ **End Users.** The end users that have been configured for monitoring by Real User Monitor. ➤ **Groups.** Groups of pages/transactions/end users as defined in Monitor Administration. For details, see "Configuring the Real User Monitor" in *End User Management Data Collector Configuration*. ➤ **Items.** The pages/transactions/end users of the selected groups; this is the actual filter that is to be used. ➤ **Measurements.** All measurements defined for the selected data type. Real User Monitor trend reports analyze the trend of performance and availability data for the servers, pages, transactions, and end users that you configure for monitoring.

Monitor Category	Filters
Custom	➤ **Filter Category.** Defined groups, created in the Measurement Filters page in Platform Administration, that help organize measurement filters into manageable groupings. ➤ **Data Type.** The type of data for which the measurement filter is created. ➤ **Filter Name.** The name of the measurement filter, created in the Measurement Filters page in Platform Administration, used to filter incoming custom data. ➤ **Dimension.** The name of a specific filter field. ➤ **Dimension Values.** A specific instance of a field in custom data chosen when defining a measurement filter. You use dimension values to group data in a trend report. ➤ **Measurement.** The available measurements for the selected data type.

3 For each monitor category, Mercury Business Availability Center displays the counters (measurements) that are relevant to the selected groups or data types. Select the relevant counter (measurement).

4 Select a data aggregation method from the **Data aggregation method** list.

Mercury Business Availability Center calculates the data to display for each time segment based on the data aggregation method you choose:

- **Average.** For each time segment, calculates and displays the average of all data collected during that segment.
- **Maximum.** For each time segment, displays the single highest data value that occurred during that segment.
- **Minimum.** For each time segment, displays the single lowest data value that occurred during that segment.
- **Count.** For each time segment, displays the number (count) of data values that occurred during that segment.
- **Sum.** For each time segment, displays the sum of data values that occurred during that segment.

5 If you chose the Business Process Monitor/Client Monitor monitor type, select a **Group by** setting. You can choose to group results by:

- **Transaction.** Results are shown per transaction.
- **Location.** Results are shown per host machine location.
- **Group.** Results are shown per group, as defined in the host properties.

6 Click **Add Measurements**. Mercury Business Availability Center closes the Measurement Selection page and adds your selection(s) to the Selected Measurements table.

7 Repeat the procedure to add measurements to the trend report.

The next stage in the procedure is to save the report. Continue to the next section.

Modifying Trend Report Measurements

You can change the name of the measurement, the measurement's color, and its scale. You can also delete measurements from a report.

To change the measurement name

1 Select the name in the Name box, and replace it with a more significant name.

2 Click **Save** to save the trend report.

After a trend report is saved, you access it from the Trend Reports table in the Reports List page. For details, see "Viewing Trend Reports" on page 122.

To change a measurement's color:

By default, Mercury Business Availability Center assigns a unique color to each measurement you add to the trend report. Mercury Business Availability Center uses these colors when displaying the measurements in the trend report chart. If required, you can customize the color of any measurement.

1 Click the color swatch beside the measurement whose color you want to customize. Mercury Business Availability Center opens the Color Picker window.

2 Select a color from the palette, or specify a color according to its hexadecimal value.

3 Click **OK**. Mercury Business Availability Center updates the color swatch for the measurement.

4 Click **Save** to save the trend report.

To change a measurement's scale:

For details on adjusting scales, see "Adjusting the Trend Report Scale" on page 102.

1 In the Scale list, select the required scale setting.

2 Click **Save** to save the trend report.

To delete a measurement:

1 Locate the measurement you want to delete and click the **Delete** button.

2 Click **Save** to save the trend report.

Saving the Trend Report

The next stage in the procedure is to save the trend report.

To save the report:

1 Verify that all the measurements you want to include are correct.

2 Click **Save** to save the trend report.

Editing a Trend Report

Use the following procedure to edit a trend report.

To modify report properties:

1. From the **Report name** list, select the report to modify.
2. Click the **Edit** button beside the report name to open the Trend Report Properties window.
3. Modify the report title, menu name, or y-axis title settings as required.
4. Click **OK**.
5. Click **Save** to save the trend report.

Deleting a Trend Report

Use the following procedure to delete a trend report.

To delete a trend report:

1. In the Trend Report Manager, select the report to delete from the **Report name** list.
2. Click the **Delete** button beside the report name and confirm that you want to delete the report.

Previewing the Trend Report

You can preview the trend report chart directly from the Trend Report Manager (either before or after saving the report).

To preview a trend report:

1. In the Trend Report Manager, click **Preview**. Mercury Business Availability Center generates the trend report and displays it in a new window.

   Chart generation can take several minutes.
2. You can change the report time range in the preview window. For details, see "Choosing the Tracking Range and Granularity" on page 8.

Setting Up Time Comparisons

You can compare the measurements in a trend report for the selected time range to the same set of measurements over a similar time period, but for a different start date.

For example, to compare performance over two consecutive days, you could generate a trend report for one day starting Dec. 12 at midnight, and then generate the comparison data for one day starting Dec. 11 at midnight.

To generate comparison data:

1. In the Trend Report Manager, click **Set Time Comparison**. Mercury Business Availability Center opens a calendar.
2. Select the starting date and time for the comparison data, and click **OK**.

   Mercury Business Availability Center displays the specified comparison time at the top of the Selected Measurements table.
3. Click **Save** to save the settings.

   When you view the trend report with a time comparison activated, Mercury Business Availability Center displays the original data and the comparison data on two charts.

To adjust the comparison time:

1. Click **Set Time Comparison** and select a different start date and time in the calendar.
2. Click **Save** to save the settings.

To remove comparison data:

1. Click **Remove Time Comparison**. Mercury Business Availability Center removes the time comparison information from the Selected Measurements table.
2. Click **Save** to save the settings.

Defining a Header and Footer for a Trend Report

You can add a header or footer to a trend report. This header or footer overrides any default header or footer defined for all reports. For details on adding a header and footer to all reports, see Chapter 9, "Default Header/Footer."

For additional details on customizing headers and footers, see "Configuring a Report Header and Footer" in *Platform Administration*.

To define a header or footer:

1. Select **Header/Footer** to open the Report Header and Footer window.
2. To define a header, type the required text and HTML code into the **Header HTML** box.

   To define a footer, type the required text and HTML code into the **Footer HTML** box.
3. Click **OK** to save the header and/or footer.
4. Click **Save** to save the trend report.

   To view the defined header and footer in the report, click **Preview**, or select the report from the reports list.

To remove a header or footer:

1. In the Trend Report Manager, select **Header/Footer** to open the Report Header and Footer window.
2. To remove a header, delete the contents of the **Header HTML** box.

   To remove a footer, delete the contents of the **Footer HTML** box.
3. Click **OK**.
4. Click **Save** to save the trend report.

Adjusting the Trend Report Scale

Measurement values in the trend report are displayed along the y-axis using a normalized scale. By default, Mercury Business Availability Center automatically sets the scale factor for each measurement. If required, you can manually modify the scale factor for any measurement in the Selected Measurements table, for example, to better view multiple measurements whose data values span a wide range. For details, see "Modifying Trend Report Measurements" on page 97.

When you manually modify the scale factor, Mercury Business Availability Center scales measurement values by dividing the actual value by the value chosen in the scale list. Thus, a value of 100 with a scale setting of 0.1 is shown as 1000 along the y-axis. A value of 100 with a scale setting of 10 is shown as 10 along the y-axis.

For example, if at a given point in time Measurement A (whose scale value is set to "Auto") has a value of 10 and Measurement B (whose scale value is set to 0.1) has a value of 90, the y-axis displays a range from 0-1000 to accommodate both values. If both measurements' scale settings are set to "Auto," the y-axis values ranges from 0-100.

Limitations

- Permissions are granted by system administrators and can be enabled or revoked at any time. Thus, permissions to modify a trend report that you create could be removed by the administrator at a later time.
- If the total number of characters of all measurement names in the trend report is larger than the maximum length of the URL configured in the server, the trend report may not be generated or previewed. If this happens, reduce the number of measurements in the trend report or shorten the measurement names.
- Transactions whose response times exceed their outlier value (set in Transaction Threshold settings in Monitor Administration) are always displayed in trend reports as failed transactions, even if the **Ignore outlier data in reports** setting is selected for the profile to which the transactions belong.

7

Custom Link Manager

You can add custom links to the Reports List page using the Custom Link Manager. Custom links enable you to open a Web page in the same browser window.

Defining a Custom Link

Use the following procedure to define a custom link.

To define a custom link:

1 From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Custom Link Manager**.

In the **Menu name** box, type a descriptive name for the link. After saving the link, Mercury Business Availability Center displays this name in the Custom Links table.

2 In the **Target URL** box, specify the URL of the site to which you want to link.

Note: When entering the **Target URL**, do not enter a URL that is redirected. If the link is accessed, a redirection may cause a runtime error or the application to log out. Enter only URLs that are accessed directly upon linking.

3 Click the **Save** button. Mercury Business Availability Center adds the saved link to the Custom Links table on the Custom Link Manager page and to the Custom Links table on the Reports List page.

Links are sorted alphabetically in the Custom Links table, according to the defined menu name.

Note: If the specified Web page includes JavaScript code that attempts to access the top frame, the browser displays an "access denied" error. To avoid this issue, set the browser to ignore JavaScript errors.

Viewing the Linked Site

Use the following procedure to view the linked site.

To view the linked site:

Select one of the following:

- in the Custom Link Manager, click the link to open the defined Web page in a new browser window
- from the Custom Links table on the Reports List page, click the link to open the defined Web page in the same window

Deleting a Custom Link

Use the following procedure to delete a custom link.

To delete a custom link:

In the Custom Link Manager, click the **Delete** button beside the link you want to delete, and confirm that you want to delete the link.

Note: You cannot modify a custom link. To modify a custom link name or URL, recreate it with the modified information and delete the old link.

8

Integrating Microsoft Excel Reports in Mercury Business Availability Center

You can build and view customized reports in Mercury Business Availability Center that take advantage of the charting abilities of Microsoft Excel, to display various types of data collected by Mercury Business Availability Center data collectors. The reports can be viewed with Microsoft Excel or any spreadsheet program capable of reading files with the **.xls** format.

Note to Mercury Managed Services customers: Contact Mercury Managed Services Support for details on implementing Microsoft Excel reports in Mercury Managed Services.

Workflow for Creating Microsoft Excel Reports

Use the following procedure to create Microsoft Excel reports that include Mercury Business Availability Center data:

1. Write a query that retrieves data from the Mercury Business Availability Center profile database. For details, see "Working with Data APIs" in *Integrating with Third-Party Applications*.
2. Save the query in a Web Query file. For details, see "Create a Microsoft Excel Web Query File" on page 109.
3. Create a Microsoft Excel report. For details, see "Create a Report with Microsoft Excel" on page 110.
4. Upload the report to Mercury Business Availability Center. For details, see "Upload the Microsoft Excel Report to Mercury Business Availability Center" on page 111.
5. View Microsoft Excel reports in Mercury Business Availability Center. For details, see "View the Microsoft Excel Report in the Excel Report Page" on page 111.

Create a Microsoft Excel Web Query File

You create a text file with an .iqy (IQY) extension that you then import into Excel.

To create an .iqy file:

1 Open an empty file in a text editor and copy the following content into the file:

```
WEB
1
<query_url_goes_here>

Selection=EntirePage
Formatting=None
PreFormattedTextToColumns=True
ConsecutiveDelimitersAsOne=False
SingleBlockTextImport=False
DisableDateRecognition=False
DisableRedirections=False
```

2 Locate the query you created and place it in the file instead of the line <query_url_goes_here>.

3 Save the text file with an .iqy (IQY) extension.

For an example of a query that extracts data from the profile database, see "Example of Web Query" on page 113.

The next stage of the procedure is to create a Microsoft Excel report. For details, see the next section.

Create a Report with Microsoft Excel

The next stage of the procedure is to create a Microsoft Excel report.

To create a Microsoft Excel report:

1. Open a new Microsoft Excel file.
2. Select cell **A1**.
3. In Microsoft Excel 2002 or 2003, select **Data** > **Import External Data** > **Import Data**. Microsoft Excel opens the Select Data Source dialog box. Select the **.iqy** file you created ("Create a Microsoft Excel Web Query File" on page 109) and click **Open**. Excel opens the Import Data dialog box.

   In Microsoft Excel 2000, select **Data** > **Get External Data** > **Run Saved Query**. Microsoft Excel opens the Run Query dialog box. Select the **.iqy** file and click **Get Data**. Excel opens the Returning External Data to Microsoft Excel dialog box.
4. Select **Existing worksheet**, and check that the value **=A1** is selected.
5. Click **Properties**. Microsoft Excel opens the External Data Range Properties dialog box.
6. Make sure the following settings are configured:
   - ➤ refresh data on file open
   - ➤ remove external data from worksheet before saving
   - ➤ overwrite existing cells with new data, clear unused cells
7. Click **OK**. Microsoft Excel closes the External Data Range Properties dialog box and displays the Import Data dialog box (Returning External Data to Microsoft Excel dialog box in Excel 2000).
8. Click **OK** to retrieve the data.
9. Use Microsoft Excel's charting features to format the report, as required.
10. Name the file and save the Microsoft Excel workbook to a temporary location.

    The next stage of the procedure is to upload the Microsoft Excel file to Mercury Business Availability Center. For details, see the next section.

Upload the Microsoft Excel Report to Mercury Business Availability Center

The next stage of the procedure is to upload the Microsoft Excel file to Mercury Business Availability Center.

To upload a Microsoft Excel report:

1. From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Excel Reports**.
2. Click **New Excel Report** to open the Excel Report Properties window.
3. In the **Report name** box, type the name for the report as you want it to appear in the Reports table on the Excel Reports page.
4. In the **Description** box, type the description for the report as you want it to appear in the Reports table on the Excel Reports page.
5. In the **Excel file** box type the path to the saved Excel file you want to add, or use the Browse function to browse to the file.
6. Click **Save** to upload the file to Mercury Business Availability Center.

   The report is now ready to be viewed by you or your users. For details, see the next section.

View the Microsoft Excel Report in the Excel Report Page

You or your users can view Excel reports in Microsoft Excel or any spreadsheet program capable of reading files with an **.xls** format.

To view an Excel report:

1. From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Excel Reports**.
2. Click the report you want to view. Mercury Business Availability Center opens the report in Microsoft Excel. You must have Microsoft Excel installed on the machine on which you are viewing Mercury Business Availability Center.

Managing Excel Reports

You can edit properties for, as well as delete, Excel reports listed in the Excel Reports page.

To edit Excel report properties:

1 From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Excel Reports**.

2 Click the **Edit** button beside the Excel report you want to edit, to open the Excel Report Properties window.

3 Modify the name and description properties as required.

4 To upload an updated version of the Excel file (and overwrite the existing file on the Mercury Business Availability Center server), specify the file to upload.

5 Click **Save** to save the settings.

To delete an Excel report:

1 From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Excel Reports**.

2 Click the **Delete** button beside the Excel report you want to delete, and confirm that you want to delete the Excel report.

Example of Web Query

The following is an example of a typical Web query file. This example illustrates the retrieval of a list of **rum_server_t** samples that failed in any given day:

```
WEB
1
http://myServer/topaz/gdeopenapi/GdeOpenApi?method=getData&user=a
dmin&password=admin&query=select time_stamp, engine_name,
server_name from rum_server_t where availability=0 and total_hits > 0
and time_stamp>1041379200 and time_stamp<1136197020

Selection=EntirePage
Formatting=None
PreFormattedTextToColumns=True
ConsecutiveDelimitersAsOne=False
SingleBlockTextImport=False
DisableDateRecognition=False
DisableRedirections=False
```

To use this example:

1. Type or copy the text from the above example into a text editor.
2. Edit the URL beginning on the third line of the file as required. Leave all other values as shown.
3. Save the file with an **.iqy** extension.

Excel Report Limitations

- Users who have permissions to view Microsoft Excel reports but who do not have permissions on specific profiles are able to view data from those profiles if they are included in an Excel report.
- Microsoft Excel reports cannot return more than 10,000 records due to an Microsoft Excel limitation when using Web queries. Possible workarounds include:
  - split request to several consecutive queries
  - group data using larger time range chunks
  - use filter parameters to fetch specific data

9

Default Header/Footer

This chapter explains how to add a header and footer to user reports (custom and trend reports), for example, to add a corporate logo and address.

Format of Default Headers and Footers

Headers and footers can include free text, HTML tags used to mark up the text, hypertext links, JavaScript, as well as references to external resources such as images, Flash files, and so on. If you do not mark up the text, it is formatted according to the browser defaults.

Mercury Business Availability Center adds the header to the report below the report title and the footer at the end of the report. (In the HTML file, the footer is inserted immediately before the </body> tag).

Which Header or Footer is Displayed in Reports

Mercury Business Availability Center displays the header and footer you define here in all custom and trend reports, on condition that these reports do not already include a header and footer. When a header and footer is defined for a specific report, Mercury Business Availability Center displays that header and footer, and not the header and footer defined here. For details, see "Defining a Header and Footer for a Custom Report" on page 78 and "Defining a Header and Footer for a Trend Report" on page 101.

You can also add a header and footer to all reports through the Infrastructure Settings Manager. To change the headers or footers, select **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**, click **Foundations,** select **Reporting** and locate the **Display Header** and **Display Footer** in the **Reporting – Display** entry in the table. For details on editing infrastructure settings, see "Editing Infrastructure Settings" in *Platform Administration*.

Defining a Default Header and Footer

Note: Use caution when marking up the header and footer fields, as some HTML code may affect the behavior of Mercury Business Availability Center. For example, a linked URL may contain JavaScript that causes the URL to "break out" of frames. Make sure you use valid HTML.

It is recommended that you perform an external check of the HTML code used in the header and footer, as Mercury Business Availability Center does not perform any validity checks on the header and footer content.

To define a header or footer:

1. From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Default Header/Footer**.
2. To define a header, type the required text and HTML code in the **Header HTML** box.

   To define a footer, type the required text and HTML code in the **Footer HTML** box.

   The total number of characters entered into the header or footer definition cannot exceed 2000 (or 4000 when using ASCII VARCHAR data types in the Mercury Business Availability Center management database).
3. Click **Preview** to preview the header and/or footer. The preview renders the HTML code only, and does not run any JavaScript, if included.
4. Click **Save** to save the header and/or footer.

   To test the header and footer in a report, preview an existing custom or trend report that does not include a header or footer, or create a new custom or trend report.

Removing a Default Header or Footer

Use the following procedure to remove a header or footer.

To remove a header or footer:

1. From the User Reports tab in **Applications** > **Service Level Management**, **End User Management**, or **System Availability Management**, select **Default Header/Footer**.
2. To remove a header, delete the contents of the **Header HTML** box.

   To remove a footer, delete the contents of the **Footer HTML** box.
3. Click **Save**.

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Report Lists

This chapter explains how to use the Reports List page to view user reports.

Accessing User Reports on the Reports List Page

The Reports List page displays all the defined custom reports, trend reports, and custom links that have been defined in the system, that the current user has permissions to view. The name of the owner of each report (that is, the user that created the report) is also displayed.

For details on working with reports (choosing the time range, selecting the profile, saving and sharing reports, and so on), see "Working in Reports" on page 3.

This section includes the following topics:

Viewing Custom Reports

From the Custom Reports table, you can generate and edit custom reports. Custom reports include components—individual application reports that enable you to focus on the data you are most interested in tracking.

For details on creating custom reports, see "Custom Report Manager" on page 39.

Tip: You can build a URL that enables you to view a custom report without having to access the Reports List page. For details, see "Accessing User Reports Using a URL" on page 124.

To generate a custom report:

In the Custom Reports table, click the **Generate** button beside the report you want to generate. The report is generated for the default time range.

You can regenerate the report for a different time range, by modifying the time range settings as required and clicking **Generate**.

To edit a custom report:

1. Click the **Edit** button beside the report you want to edit to open the Custom Report Manager. For details, see "Custom Report Manager" on page 39.
2. Make the required changes and save the report.

To schedule a custom report:

1. Click the **Schedule** button beside the report you want to schedule. Mercury Business Availability Center opens the Scheduled Report page.
2. Create a scheduled report. For details, see "Scheduled Reports" in *Platform Administration*.
3. Return to the Reports list by clicking the link at the top of the page.

Note: For Service Level Management "Over Time" scheduled reports, a default time breakdown is used with each time range:

- **For a day.** Breakdown is by every hour.
- **For a week.** Breakdown is by every day.
- **For a month.** Breakdown is by every week.
- **For a quarter.** Breakdown is by every month.

Viewing Trend Reports

From the Trend Reports table, you can generate and edit trend reports. Trend reports enable you to compare multiple measurements from several profiles. For details on creating trend reports, see "Trend Report Manager" on page 89.

Tip: You can build a URL that enables you to view a trend report without having to access the Reports List page. For details, see "Accessing User Reports Using a URL" on page 124.

To generate a trend report:

1. In the Trend Reports table, click the **Generate** button beside the report you want to generate. The report is generated for the default time range.
2. To regenerate the report for a different time range, modify the time range settings as required and click **Generate**.

Note: When viewing a trend report for a profile whose name was changed, if no data is displayed in the report, try logging in to Mercury Business Availability Center again.

To open a trend report for editing:

1. Click the **Edit** button beside the report you want to edit to open the Trend Report Manager. For details, see "Trend Report Manager" on page 89.
2. Make the required changes and save the report.

To schedule a trend report:

1. Click the **Schedule** button beside the report you want to schedule. Mercury Business Availability Center opens the Scheduled Report page.
2. Create a scheduled report. For details, see "Scheduled Reports" in *Platform Administration*.
3. Return to the Reports list by clicking the link at the top of the page.

Viewing Custom Links

From the Custom Links table, you can display a Web page in the same browser window. For details on creating custom links, see "Custom Link Manager" on page 103.

To open a custom link:

In the Custom Links table, click the link you want to open. The Web page opens in the page.

Accessing User Reports Using a URL

You can build a URL that opens a defined user report directly in the browser, without being located in the Mercury Business Availability Center context.

Build the URL using the following syntax:

```
http://<ServerName>/topaz/OfflineReportsServlet?createSession=true
&filterProfileId=<filterProfileId>
&actionForward=report
&timeFrame=<timeFrame>
&stepUnit=<stepUnit>
&stepValue=<stepValue>
&requestType=offline
&userlogin=<login_name>
&userpassword=<login_password>
&session_id=<session_id>
&autoUpdatePastTime=true
&gmtOffset=<gmtOffset>
&useVIP=true
&startTime=<startTime>
&endTime=<endTime>
&skipNavBar=true
&reportName=Report_<report_ID>
```

The parameters whose values must be provided are described below:

- **<ServerName>.** The name of the Mercury Business Availability Center server (Centers Server in a distributed architecture).
- **<filterProfileId>.** Any valid profile ID listed in the SESSION_ID column in the SESSIONS table of the management database.
- **<timeFrame>.** Any one of: Hour/Day/Week/Month/LastHour/LastDay/LastWeek/LastMonth.
- **<stepUnit>.** Any one of: Minute/Hour/Day/Month.
- **<stepValue>.** Value of stepUnit (for example, if timeframe of every 1 day is required, and stepUnit=Day, set stepValue=1).
- **<login_name>.** Valid user login name.
- **<login_password>.** Password for specified login name.

- **<session_id>.** Same as filterProfileId.
- **<gmtOffset>.** GMT offset in minutes.
- **<startTime>.** Start time for the report in format YYYYMMDDHHmm (not needed if using timeFrame=LastHour/LastDay/LastWeek/LastMonth). Note that months are numbered starting from 0, so January is 00 and December is 11.
- **<endTime>.** End time for the report (same details as start time).
- **<report_ID>.** The CR_CUSTOM_REPORT_ID value for the report, as specified in the CUSTOM_REPORTS table in the management database.

  For example:

```
http://myserver/topaz/OfflineReportsServlet?createSession=true
&filterProfileId=1
&actionForward=report
&timeFrame=Week
&stepUnit=Day
&stepValue=1
&requestType=offline
&userlogin=admin
&userpassword=admin
&session_id=1
&autoUpdatePastTime=true
&gmtOffset=120
&useVIP=true
&startTime=200600010100
&endTime=200601010100
&skipNavBar=true
&reportName=Report_1
```

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Report Repository

This chapter explains how to search for and view reports in the report repository. You can view saved reports in Dashboard, Service Level Management, and End User Management (Triage report only). For details on saving reports to the report repository, see “Saving a Report to the Report Repository” on page 29.

The Report Repository Page

The Report Repository page displays all reports previously saved in Dashboard, Service Level Management, and End User Management (Triage report only). For details on searching for a report, see "Searching for a Report in the Report Repository" on page 129.

To access the report repository:

- In Dashboard: **Applications** > **Dashboard** > **Reports** > **Report Repository**.
- In Service Level Management: **Applications** > **Service Level Management** > **Report Repository**.
- In End User Management: **Applications** > **End User Management** > **Report Repository**.

The Report Repository page:

The Report Repository page includes the following components:

- **Report Name.** The name given to the report when it was saved to the repository. For details on editing the name, see "Editing Report Details" on page 130.
  - To view the report in PDF format, click the report name.
  - To view the report's name and description in full, hold the cursor over the report name.
- **Report Type.** The name of the report type.
- **Private.**
  - **No**: the report is public and any user can view, edit, or delete the report from the repository.
  - **Yes**: only the user or Superuser-level administrator can view, edit, or delete the report from the repository.

    (For Mercury Managed Services customers: **Yes**: only the user, superuser, operator, customer superuser, and customer administrator can view, edit, or delete the report from the repository.)
- **Report Creation Time.** The time at which the report was saved to the repository.

➤ **Actions.** You can edit or delete a report by clicking the appropriate button. For details, see "Editing Report Details" on page 130 and "Deleting a Report from the Repository" on page 130. You can use the buttons at the bottom of the window for **Select All**, **Clear All**, and **Invert Selection**.

You can sort the list by any column: An arrow next to a title shows by which column the reports are sorted, and also the direction in which the column has been sorted (that is, ascending or descending).

➤ To view more reports, click the **Next page** or **Last page** buttons.

➤ To view previous reports in the list, click the **Previous page** or **First page** buttons.

Searching for a Report in the Report Repository

Reports previously saved to the repository can be viewed in Dashboard, Service Level Management, or End User Management, no matter in which application they were created.

To search for a report:

1 Access the report repository:

➤ In Dashboard: **Applications** > **Dashboard** > **Reports** > **Report Repository**.

➤ In Service Level Management: **Applications** > **Service Level Management** > **Report Repository**.

➤ In End User Management: **Applications** > **End User Management** > **Report Repository**.

2 Locate the report directly in the list, or search for the report, either by its report type or by its name.

➤ To search for a report by its report type, click the **Report Types** link. In the window that opens, select the report. To make your selection, you can also use the buttons at the bottom of the window for **Select All**, **Clear All**, and **Invert Selection**. Click **OK**, or click **Cancel** to close the window without choosing a report.

➤ To search for a report by its name, enter the name in the **Search by name** field, and click **Search Repository**. You can type an asterisk (*****) to replace characters.

All reports answering the search criteria are displayed in the list. For details, see “The Report Repository Page” on page 128.

3 To view the report in PDF format, click the report name.

Editing Report Details

You can change several properties of the report in the repository (for example, the report’s name), but not the data itself.

To edit a report:

1 Locate the report in the report repository and click its **Edit** button to open the Report Repository window.

2 Make changes to the name and description. Choose whether the report is to be private or public (for details, see page 128). Click **OK**, or click **Cancel** to close the window without saving the changes.

Deleting a Report from the Repository

You can delete a saved version of a report, but not the data itself.

To delete a report:

1 Locate the report in the report repository and click its **Delete** button.

2 Click **OK** to the message, or click **Cancel** to close the message without deleting the report.

Editing Settings with the Infrastructure Settings Manager

Caution: Many of the settings in the Infrastructure Settings Manager should not be modified without first consulting Mercury Customer Support or your Mercury Services representative. Modifying certain settings can adversely affect the performance of Mercury Business Availability Center.

Administrators with an advanced knowledge of Mercury Business Availability Center can customize certain report repository settings, such as the maximum number of reports that can be saved to the repository, the maximum number of rows that are retrieved from the database when the user clicks the **Search Repository** button, and the number of reports to display in one page.

To access the Infrastructure Settings Manager, select **Admin** > **Platform** > **Setup and Maintenance** > **Infrastructure Settings**. Select the Foundations context and choose **Reporting** from the list.

For details on editing infrastructure settings, see "Editing Infrastructure Settings" in *Platform Administration*. For details on using the page toolbar, see "Navigating Within Report Pages" on page 17.

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