

OPTIMIZE

MERCURY BUSINESS AVAILABILITY CENTER™
Using Service Level Management

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Mercury Business Availability Center

Using Service Level Management

Version 6.7

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Mercury Business Availability Center, Version 6.7
Using Service Level Management

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Welcome to Service Level Management Reports

This guide describes the Service Level Management reports and explains how to work with them.

How This Guide Is Organized

The guide contains the following chapters:

Chapter 1 Introduction to Service Level Management Reports

Introduces you to Service Level Management reports, provides a short explanation of each report, and explains how to work with them.

Chapter 2 Working with Service Level Management Reports

Describes various report elements that are specific to Service Level Management.

Chapter 3 Status Snapshot

Describes the SLA Status Snapshot page that displays up-to-date information about SLAs that are performing badly in the current tracking period and that performed badly in previous tracking periods.

Chapter 4 SLA Management Reports

Describes the reports that enable you to manage IT services.

Chapter 5 SLA Reports

Describes how to work with the reports that provide you and your users with a bird's eye view of the whole system. Describes how to work with Over Time reports that enable you and your users to view information about specific CIs. Also describes the SLA Status Alerts report that is a log of alerts sent during a specified time period.

Chapter 6 Outage Reports

Describes how to work with Outage reports that enable you and your users to view information about periods of time during which measurements fail.

Chapter 7 User Reports

Provides a pointer to the complete documentation for user reports, which are common to the Service Level Management, End User Management, Real User Monitor, and System Availability Management applications.

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 Business Availability Center, refer to *Getting Started with Mercury Business Availability Center*.

Welcome

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Introduction to Service Level Management Reports

This chapter introduces you to the Service Level Management reports. Service Level Management reports show you how well actual service levels compare with your goals. You can view reports from a Six Sigma perspective, you can create user reports, and you can store report data and share reports.

This chapter describes:	On page:
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Workflow for Viewing Reports

Note:

- ▶ Before beginning to view reports for the first time, you or your administrator must have defined service level agreements and services. For details, see “Defining an SLA: Begin” in *Application Administration*.
 - ▶ If you have defined downtime or other events, Service Level Management reports exclude the data according to the downtime definitions. For details, see “Downtime Events” in *Application Administration*.
-

The following steps explain how to work with Service Level Management reports.

▶ **Choose the type of report.**

You choose the type of report you want to view from the Service Level Management menus. (Access the reports from the Service Level Management application in the Applications menu.) For a brief description of each report and when you would use it, see “Service Level Management Reports” on page 4.

▶ **Choose a time range.**

You choose the time range for which you want to view data. For details, see “Filtering Results by Tracking Period” on page 10 and “Choosing the Tracking Range and Granularity” in *Working with Applications*.

▶ **Group the results.**

You can group results by time period, KPI, or time interval. For details, see “Grouping Results” on page 12.

▶ **Add descriptions to reports.**

Use the Advanced Options link to add descriptions to the report. For details, see “Adding Descriptions to Reports” on page 15.

► **View the report according to a Six Sigma calculation.**

You can view results from a Six Sigma perspective. This is on condition that the SLA has been defined with a Six Sigma KPI. For details, see “Defining an SLA: KPIs” in *Application Administration*.

► **Add a header and footer to a report.**

A header or footer defined for a report in the Custom Manager takes precedence over a header or footer defined in the Infrastructure Settings Manager Reporting section. That is, the former overwrites the latter. For details on defining headers and footers in the Custom Manager, see “Defining a Header and Footer for a Custom Report” in *Working with Applications*. For details on defining headers and footers in the Infrastructure Settings Manager, see “Configuring a Report Header and Footer” in *Platform Administration*.

► **Generate a report.**

Click **Generate** to generate a report for the data you have chosen.

► **Share the report or save report data.**

You can print, format, and export reports. For details, see “Sharing and Storing Reports” in *Working with Applications*.

Service Level Management Reports

The following table summarizes the Service Level Management reports:

Report Name	Description	Use This Report To...
SLA Status Snapshot	Displays up-to-date information about SLAs that are performing badly in the current tracking periods, and that performed badly in previous, closed periods. For details, see “Status Snapshot” on page 23.	track worst-performing SLAs
SLAs Summary	Displays a list of SLAs and their status organized by: KPI/time interval/time period. This report can have up to four grouping levels and is a high level report similar to the previous Executive Scorecard, Availability Snapshot, and Performance Snapshot. For details, see “SLAs Summary Report” on page 32.	view a summary of data for all (or specific) SLAs
CI Summary	Drill-down from the SLA Summary report. The report displays configuration items (CIs): a CI’s status (can be an SLA) and a list of the child CI statuses. This report can have up to four grouping levels. For details, see “CI Summary Report” on page 33.	find CIs that did not reach their objectives
CI Impact	Displays a CI’s impact across several SLAs. The status display is similar to the SLAs Summary report. For details, see “CI Impact Report” on page 35.	compare the availability and performance of a CI across several SLAs

Report Name	Description	Use This Report To...
CI Status	<p>Displays a CI's status in a selected SLA. This report is similar to the previous Service Status report.</p> <p>For details, see "CI Status Report" on page 36.</p>	<p>view configuration information, such as objectives, for each CI</p>
CIs Over Time	<p>Displays selected CI statuses over time for selected KPIs and time intervals.</p> <p>For details, see "CIs Over Time Report" on page 39.</p>	<p>follow the results of a particular CI over a time period</p>
CI Over Time vs. Target	<p>Displays a selected CI's status over time for a selected KPI and time interval and compares them to the SLA target. This report is similar to the previous Availability Over Time vs. SLA report.</p> <p>For details, see "CI Over Time vs. Target Report" on page 40.</p>	<p>see how well a CI has performed compared to its objectives</p>
Time Range Comparison	<p>Enables you to compare eight time ranges. Displays two levels of CIs: a CI's status (can be an SLA) and a list of the child CI statuses. The data is organized by selected time range, time interval, and KPI. The added value in this report is that it displays a trend between two time ranges.</p> <p>For details, see "Time Range Comparison Report" on page 37.</p>	<p>compare time ranges to determine whether availability and performance have improved</p>
Outage Summary	<p>Displays a list of outages for selected CIs.</p> <p>For details, see "Outage Summary Report" on page 58.</p>	<p>view outage information for a specific SLA</p>

Report Name	Description	Use This Report To...
Outage Breakdown	Displays outage breakdown organized by outage KPIs and groups (CIs and categories). For details, see “Outage Breakdown Report” on page 54.	view a breakdown of all outages for certain CIs, to see to which category a CI belongs (Database, Network, Webserver, Undefined, or user-defined)
Outage Distribution	Displays outage distribution organized by outage KPIs and groups (CIs, categories, or both). For details, see “Outage Distribution Report” on page 52.	view the outage distribution of selected CIs, to see which CI or category has the most outages, or has outages with the longest duration

Furthermore, you can track specific performance issues that are relevant to your organization or business unit’s performance monitoring needs by defining user reports. For details, see Chapter 7, “User Reports.”

Aggregated Data

All reports are calculated according to aggregated data stored in the database.

Service Level Management performs aggregation retroactively on existing data only when an SLA is recalculated. If the SLA is not recalculated, previous data is displayed in the report even though it does not answer the criteria set in the new objective.

When calculating results for previously-aggregated data, Service Level Management rounds out the tracking period. The **From** time is rounded down to the nearest hour, and the **To** time is rounded up to the nearest hour.

For more information on data aggregation in Mercury Business Availability Center, see “Data Aggregation” in *Reference Information*.

The Reports Log

Mercury Business Availability Center records errors that occur when generating Service Level Management reports in a reports log. The reports log can also include the following activities: report creation, report generation, report filter(s) modification, report drill down, and so on. For details, see “Reports Log” in *Platform Administration*.

Time Zones

Service Level Management calculates reports according to an SLA’s time zone, so that data is linked to the appropriate time interval. However, Service Level Management displays dates and times according to the time zone settings of the machine on which it is installed (the user’s time zone).

Reports can contain data from different time zones: when reports include data for more than one SLA, and the SLAs are defined for different time zones, each SLA’s data is reported according to the SLA’s time zone.

For reports calculated for the **last** time period, data is displayed according to the user’s time zone.

Notes

Service Level Management:

- displays a report with the last SLA selected
- displays a report with the same filters (for example, KPI, configuration item, time period) as those chosen in a previous report, for the duration of the Web session
- displays reports with a minimum time granularity of one hour
- generates a report at the same level (for example, SLA, CI, CI's children) as that chosen in a previous report
- generates a report according to the aggregated data stored in the database
- updates the "to date" views once daily
- enables users to add any report to a custom report
- enables users to sort a report by any column
- enables users to sort summary reports by a primary and secondary grouping

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Working with Service Level Management Reports

This chapter explains report elements specific to Service Level Management. For an explanation of how to work with all Mercury Business Availability Center reports, see “Working in Reports” in *Working with Applications*.

This chapter describes:	On page:
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Filtering Results by Tracking Period

You choose the tracking period in the View box, for which you want to view data.

SLAs Summary 7/4/06 12:00 AM - 7/5/06 12:00 AM
 View: From: 7/4/06 12:00 AM To: 7/4/06 1:00 AM

Tracking Period	For Viewing Reports...
week to date month to date quarter to date year to date	showing the history of the SLAs.
hour day week month quarter year	showing what is happening now or what happened at a specific time.
custom (calendar period)	for a specific time not covered by any default tracking period.
SLA to date (included in the View list only for reports that display data about single SLAs)	where the report time range begins at the start date of the SLA and continues till the current time.
Last	for a certain part of a tracking period. For example, you could generate a report every day for the past two weeks. View: <input type="button" value="Last"/> <input type="button" value="2"/> <input type="button" value="Week"/> Every: <input type="button" value="Day"/> <p>Date and time are displayed according to the user time zone (whereas in all other views they are displayed according to the SLA time zone).</p>

Note the following:

- ▶ The tracking periods that appear in the View box depend on the tracking periods defined for the SLA. That is, if the SLA includes only Day and Week, you cannot generate a report to show results by quarter. For details on setting tracking periods, see “Defining an SLA: Properties” in *Application Administration*.
- ▶ For reports that are based on a weekly tracking period, calculations depend on which day is selected as the first day of the week. You define the first day of the week in the Infrastructure Settings Manager. For details, see “Editing Settings with the Infrastructure Settings Manager” in *Application Administration* and “Infrastructure Settings” in *Platform Administration*.
- ▶ Data for SLA reports is calculated at midnight (12:00 AM). When the tracking range for a report is set “to date,” then the data is shown for up to the previous midnight. For example, if you select the tracking range **Month to date** on Wednesday May 14th, the report shows data for the month up to midnight on Tuesday May 13th (12:00 am on May 14th).

This means that for a report generated for **Month to date** on the first day of a new month, for example, May 1st, there is no available calculated data for that month, and the report will instead show the data up to the previous midnight, meaning the data for April. The same principle applies for reports for **Week to date**, **Quarter to date**, and **Year to date**. The actual time range of the data presented in the report is shown in the report header.

- ▶ For more information on tracking periods, see “Choosing the Tracking Range and Granularity” in *Working with Applications*.

Number of Data Points

Service Level Management can display up to 60 data points in each table. For example, for a month time period, you can choose to view the data organized by weeks (four or five data points) or days (30 or 31 data points). However, you cannot choose to view by hours (~2,880 data points).

Grouping Results

In the SLAs Summary, CI Summary, and CI Status reports, you can group results by time period (tracking period), KPI, and time interval. Service Level Management sorts results by the primary grouping selection. To enable sorting by the secondary grouping, select an entry, or select **None** to sort by the primary grouping only.

The following section shows examples of how results are displayed according to which grouping combination you choose:

Time Period – KPI

The screenshot shows the 'SLAs Summary' report for the period 8/15/2005 4:00 AM - 5:00 AM. The 'View' is set to 'Hour'. The 'From' and 'To' dates are 8/15/05 4:00 AM and 8/15/05 5:00 AM respectively. The 'SLA' is 'Y&Rosie, Y&Rosie2'. The 'Primary grouping' is 'Time Interval' and the 'Secondary grouping' is 'KPI'. The table below shows performance metrics for two SLAs: Y&Rosie and Y&Rosie2. The table is split into '24x7' and 'Business Hours' sections. The '24x7' section shows availability of 86.805% and performance of 0.100 seconds for both SLAs. The 'Business Hours' section shows availability of 86.805% and performance of 0.100 seconds for Y&Rosie, and availability of 91.666% and performance of 0.100 seconds for Y&Rosie2.

SLAs	24x7		Business Hours	
	Availability (%)	Performance (seconds)	Availability (%)	Performance (seconds)
Y&Rosie	86.805	0.100	86.805	0.100
Y&Rosie2	86.805	0.100	91.666	0.100

- ▶ **SLA.** Click the link to select all, some, or one SLA.
- ▶ **Time Interval.** Click the link to select one time interval.
- ▶ **KPI.** Click the link to select all, some, or one KPI.

Time Period – Time Interval

SLAs Summary 8/10/05 8:00 AM - 8/11/05 12:00 AM

View: From: 8/10/05 8:00 AM To: 8/11/05 12:00 AM Every:

SLA: [Y&Rosie, Y&Rosie2 \(Clear All\)](#)

Primary grouping: Time Interval: [All \(Clear All\)](#)

Secondary grouping: KPI: [Availability](#)

SLAs	8:00 AM		9:00 AM	
	24x7	Business Hours	24x7	Business Hours
Y&Rosie	86.805	86.805	86.805	86.805
Y&Rosie2	91.666	91.666	91.666	91.666

- **SLA.** Click the link to select all, some, or one SLA.
- **Time Interval.** Click the link to select all, some, or one time interval.
- **KPI.** Click the link to select one KPI.

KPI – Time Period

SLAs Summary 8/15/2005 8:00 AM - 11:00 AM

View: From: 8/15/05 8:00 AM To: 8/15/05 11:00 AM Every:

SLA: [Y&Rosie, Y&Rosie2 \(Clear All\)](#)

Primary grouping: Time Interval: [Business Hours](#)

Secondary grouping: KPI: [All \(Clear All\)](#)

SLAs	Availability (%)			Performance (seconds)	
	8:00 AM	9:00 AM	10:00 AM	8:00 AM	9:00 AM
Y&Rosie	86.805	86.805	86.805	0.100	0.100
Y&Rosie2	91.666	91.666	91.666	-	-

- **SLA.** Click the link to select all, some, or one SLA.
- **Time Interval.** Click the link to select one time interval.
- **KPI.** Click the link to select all, some, or one KPI.

KPI – Time Interval

SLAs Summary 8/15/2005 8:00 AM - 11:00 AM

View: Custom From: 8/15/05 8:00 AM To: 8/15/05 11:00 AM Every: Hour

SLA: [Y&Rosie, Y&Rosie2 \(Clear All\)](#)

Primary grouping: KPI Time Interval: All (Clear All)

Secondary grouping: Time Interval KPI: All (Clear All)

SLAs	Availability (%)		Performance (seconds)	
	24x7	Business Hours	24x7	Business Hours
Y&Rosie	84.392	86.805	0.100	0.100
Y&Rosie2	78.029	86.805	0.100	-

- **SLA.** Click the link to select all, some, or one SLA.
- **Time Interval.** Click the link to select all, some, or one time interval.
- **KPI.** Click the link to select all, some, or one KPI.

Time Interval – Time Period

SLAs Summary 8/15/2005 4:00 AM - 7:00 AM

View: Custom From: 8/15/05 4:00 AM To: 8/15/05 7:00 AM Every: Hour

SLA: [Y&Rosie, Y&Rosie2 \(Clear All\)](#)

Primary grouping: Time Interval Time Interval: All (Clear All)

Secondary grouping: Time Period KPI: Availability

SLAs	24x7			Business Hours	
	4:00 AM	5:00 AM	6:00 AM	4:00 AM	5:00 AM
Y&Rosie	100.000	96.805	94.861	100.000	100.000
Y&Rosie2	77.889	77.620	85.763	88.620	94.861

- **SLA.** Click the link to select all, some, or one SLA.
- **Time Interval.** Click the link to select all, some, or one time interval.
- **KPI.** Click the link to select one KPI.

Time Interval – KPI

SLAs	24x7		Business Hours	
	Availability (%)	Performance (seconds)	Availability (%)	Performance (seconds)
Y&Rosie	86.805	0.100	86.805	0.100
Y&Rosie2	86.805	0.100	91.666	0.100

- ▶ **SLA.** Click the link to select all, some, or one SLA.
- ▶ **Time Interval.** Click the link to select all, some, or one time interval.
- ▶ **KPI.** Click the link to select all, some, or one KPI.

Adding Descriptions to Reports

You can add descriptions to reports to appear below the report data. Descriptions are displayed in all reports. Each description is organized alphabetically and includes the name and description of the SLA, time interval, configuration item (CI), or downtime event.

You can also choose to display objectives in a report, and to change the number of CI levels that are displayed in a report.

To add descriptions to reports:

Click the **Advanced Options** link, select the check boxes of those objects that you want to display in reports, and click **OK**.

Note: Not all options are available for all reports.

- ▶ **SLA Description.** Includes all details that are displayed in the summary page upon completion of the SLA definition. For details, see “Defining an SLA: Finish” in *Application Administration*.
- ▶ **Time Interval Description.** Defined during time interval creation. For details, see “Time Intervals” in *Application Administration*.
- ▶ **CI Description.** Includes the name and description of all CIs that are included in the report.
- ▶ **Downtime Event Description.** Includes details of all events that meet the following criteria:
 - ▶ the event falls within the report’s time period
 - ▶ the event action affects a CI that is included in the report

The **Impact** column displays the name of the CI that is affected by the downtime event.

The **Excluded from Reports** column takes its information from the **Exclude data reported during event** check box in the Downtime/Event Schedule window. For details, see “Defining a BPM or SLA Event” in *Application Administration*.

- ▶ **Show objective details as columns.** Select this check box to add objectives to a Time Range Comparison report. For details, see “Time Range Comparison Report” on page 37.
- ▶ **Show SLA details as columns.** Select this check box so that the SLAs Summary report shows SLA details in the table, and not in a tooltip. For details, see “SLAs Summary Report” on page 32.
- ▶ **Hierarchy Depth.** Choose the number of CI levels that Service Level Management should display in a report.

Setting Number of Digits in Results

You can select the number of digits after the decimal point (up to three) to be displayed in reports. Note, however, that even if you choose to change the default (three figures after the digit), Service Level Management calculates objectives using this default value.

To change the number of digits to be displayed in reports:

Click the **Advanced Options** link, choose the number of digits from the list, and click **OK**.

Viewing Results in Reports

Hold the pointer over a result to view information about the KPI:

The screenshot shows the 'SLAs Summary' report for the period 8/15/05 12:00 AM - 8/16/05 12:00 AM. The report is filtered by 'Day' and shows 'Business Hours' availability. A tooltip is displayed over the 'Y&Rosie' SLA, showing the following details:

SLAs	Business Hours Availability (%)	Details
Y&Rosie	86.805	Availability: 86.805 % Status: Breached
Y&Rosie2	91.666	Business Rule: Group Average Value
Finance_servers_2nd_floor	100	Exceeded: >98.0 %
BPM_finance	100	Met: >95.0 %
CM_finance	100	Minor Breached: >90.0 %
Finance_servers_1st_floor	100	Breached: >85.0 %
RUM_monitor_engine	100	
SIS_springfield_3rd_floor	100	

Legend: Exceeded (Green), Met (Light Green), Minor Breached (Yellow), Breached (Orange), Failed (Red), No Data (White), Downtime (Grey).

The tooltip displays information about the KPI, according to what is defined in the SLA (for details, see “Defining an SLA: Properties” in *Application Administration*):

- **Availability.** The KPI attached to the SLA.
- **Status.** The target result. In this case, the target is breached because availability does not reach an average value of 90%.

- ▶ **Business Rule.** The rule by which the KPI measures the objectives. In this case, the KPI measures the average weighted value of the CIs, of a Business Process Monitor, SiteScope, Real User Monitor, or external source type.
- ▶ **Exceeded, Met, Minor Breached, Breached.** Target objectives defined in the SLA and displayed here for informational purposes. For details on defining objective targets, see page 184 in *Application Administration*.

Selecting Configuration Items (CIs) in the Browse Window

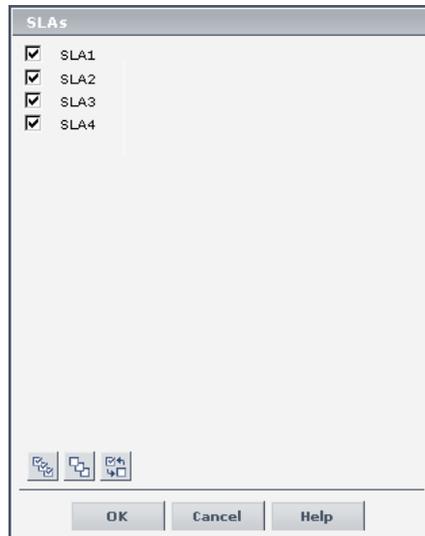
For reports where you can choose to display several levels of the hierarchy (for example, the Outage Summary and CIs Over Time reports), the Browse window includes a check box next to each CI's name.



To select all choices, click the **Select All** button. To clear all selections, click **Clear All**. To invert your selection(s), click **Invert Selection**.

Searching for SLAs

To search for an SLA, click the SLA link to display the SLAs in a window.



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

Click **OK**, or click **Cancel** to close the window without selecting an SLA.

Searching for a Configuration Item

- ▶ To search for a CI, click the CI link to display the CIs in the Browse window, and click the **Search** link.

The screenshot shows a dialog box titled "CIs" with a "Browse|Search" link in the top right. Below the link is a "Search for:" text input field. Underneath is the "Search in:" section with two radio buttons: "Current SLA" (which is selected) and "All SLAs". Below that is a "CI type:" section with a checkbox and a text input field followed by a three-dot menu icon. A "Search" button is located below the search fields. The main area of the dialog is a table with two columns: "Name" and "SLA". The table contains one row with the text "No information". At the bottom of the dialog are "OK" and "Cancel" buttons.

Enter the name of the CI in the **Search for** field, and choose whether to search for the CI in the selected SLA or in all SLAs. (**Current SLA** is enabled after you have drilled down in a specific SLA.) Click the **Search** button to display the results below.



- ▶ To search for a CI according to its type, select the CI type check box and enter the CI name, or click the button to open the Select Configuration Item Type window. Select the CIT to which the CI belongs and click **OK**. In the Search pane, click the **Search** button to display the results below.
- ▶ To locate the CI that you want to display, right-click the name, and select **Locate CI in SLA**. You are returned to the Browse window with the CI selected. Click **OK** to return to the report. (You must select a CI before you click **OK**.)

Filtering Configuration Items

You can select specific CIs to filter reports for the duration of a Web session.

To search for a CI:

- 1 In the relevant reports, click **CI** to open the Configuration Items Filter window.



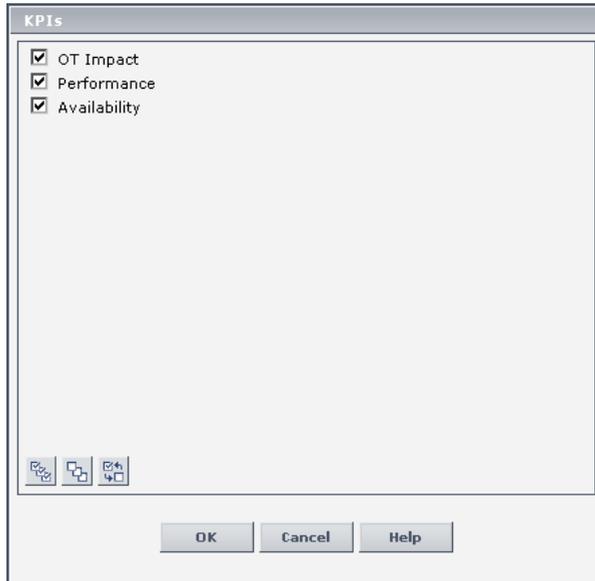
- 2 Select the appropriate view in the **View** list. For additional information, see “” in *Working with Applications*.
- 3 Select the relevant CIs.
- 4 Click **OK** to save the selection. You are returned to the report page with the CI selected.

Searching for KPIs

You can select specific KPIs to filter reports for the duration of a Web session.

To search for a KPI:

- 1 In the relevant reports, click **KPI** to open the KPIs window.



- 2 Select the appropriate KPI(s). For additional information, see "" in *Working with Applications*.
- 3 Click **OK** to save the selection. You are returned to the report page with the KPI selected.

3

Status Snapshot

This chapter describes the SLA Status Snapshot that provides you with a high level view of SLAs.

This chapter describes:	On page:
SLA Status Snapshot Overview	23
Worst-Performing SLAs – Current Periods	24
Worst-Performing SLAs – Previous Periods	25

SLA Status Snapshot Overview

SLA Status Snapshot displays two types of information:

- ▶ Up-to-date information about SLAs that are performing badly in the current tracking periods (for example, week to date, month to date). For details, see the next section.
- ▶ Information about SLAs that performed badly in previous, closed tracking periods (periods that have passed their end date). For details, see “Worst-Performing SLAs – Previous Periods” on page 25.

SLA statuses are the results of the targets defined during SLA creation. For details, see “Defining an SLA: Properties” in *Application Administration*.

SLA Status Snapshot is refreshed every five minutes.

Worst-Performing SLAs – Current Periods

In the left pane, Service Level Management shows the latest status of the ten worst-performing SLAs. For each SLA, a gauge shows the status for the worst period (for example, Day or Week).

- Hold the pointer over the gauge to view a tooltip showing the worst tracking period:



If two periods have the same worst status, the gauge shows the status of the longer period. In this example, Week and Month have the same status (failed) and the gauge shows the longer period (Month).

- Hold the pointer over a tracking period to see its status.
- Hold the pointer over a long SLA name to view it in full.

Statuses (targets) are color coded as follows:

Status	Color
Exceeded	Green
Met	Olive green
Minor Breached	Yellow
Breached	Orange
Failed	Red

Worst-Performing SLAs – Previous Periods

In the right pane, Service Level Management shows the worst-performing SLAs for the past six months. Bars show the status of week, month, and quarter periods:

SLA	Periods	Q1 2006	Q2 2006
SLA for Service C...	Weeks		
	Months		
	Quarters		
Copy of Copy of s...	Weeks		
	Months		
	Quarters		
TCS	Weeks		
	Months		
	Quarters		

If a period is gray, either the period has not yet finished, or no data exists for that period.

- Hold the pointer over a week to view a tooltip with information about the SLA, such as period, status, and dates.

Worst-Performing SLAs - Previous Periods			
SLA	Periods	Q1 2006	Q2 2006
Criticards	Weeks		
	Months		
	Quarters		

SLA for Service Catalog

Status: Failed
Period: Week
From: 5/8/2006
To: 5/15/2006

- Hold the pointer over a long SLA name to view it in full.

4

SLA Management Reports

This chapter describes how SLA Management enables you to manage department services by organizing the services into reports.

This chapter describes:	On page:
SLA Management Overview	27
Using the Business Units and Service Providers Views to Display the SLAs Summary Report	28
Using the Services View to Display the CI Impact Report	29

SLA Management Overview

SLA Management enables you to view services provided by your department. You use the three default views shown in the View Explorer in the left pane to view services and their CIs. You can view data and SLA information about configuration items (CIs) that represent the business process, hardware, or software services.

To view data in reports, choose between the following views:

- ▶ **Business Units.** To view the SLAs Summary report for all SLAs related to the selected business unit (for a provider or a customer).
- ▶ **Service Providers.** To view business units (providers) together with their services.
- ▶ **Services.** To view the CI Impact report for the selected service.

For details on defining configuration items (CIs) that represent the department services, see “SLA Management Administration” in *Application Administration*.

Using the Business Units and Service Providers Views to Display the SLAs Summary Report

You can view details about the services of a business unit or service provider before opening the SLAs Summary report, or you can open the SLAs Summary report directly.

Note: The SLAs Summary report enables you to choose to group results by SLA, Provider, or Customer.

Furthermore, you can choose to display SLA information in the table, instead of in a tooltip.

To view details of a business unit’s services and display the SLAs Summary report:

- 1** In View Explorer, select **Business Units** or **Service Providers**.
- 2** Select the business unit or service provider whose services you want to view.
If services have been defined for the business unit or service provider, SLA Management displays them in a table that includes the service name, provider, customer, and description.
- 3** Click **SLAs Summary Report** to access the report for these services. The SLAs Summary report opens in a new window. For details, see “SLAs Summary Report” on page 32.

To display the SLAs Summary report directly:

- 1** In View Explorer, select **Business Units** or **Service Providers**.
- 2** To display a menu of actions, right-click the business unit or service provider:
 - **SLAs Summary Report.** Select **Provider** or **Customer** to display the CIs that have been defined as providers or customers. For details on defining business units, see “Defining a Business Unit” in *Application Administration*.

The SLAs Summary report opens in a new window. For details, see “SLAs Summary Report” on page 32.
 - **Show Related CIs.** Displays related CIs in the View Explorer search pane. For details, see “Searching for Configuration Items” in *Working with the CMDB*.
 - **Properties.** Displays the General Properties window. For details, see “Configuration Item Properties” in *Working with the CMDB*.

Using the Services View to Display the CI Impact Report

You can view details about a service, then open the CI Impact report to compare the availability and performance of a CI across several SLAs.

Note: The CI Impact report now enables you to choose to group results by SLAs or business units (SLA Management).

To view details of a business service and display the CI Impact report:

- 1** In View Explorer, select **Services**.
- 2** Select the business service that you want to view.

If services have been defined for the business service, SLA Management displays them in a table that includes the SLA name, provider, customer, and description.

- 3 Click **CI Impact Report** to access the report for these services. The CI Impact report opens in a new window. For details, see “CI Impact Report” on page 35.

To display the CI Impact report directly:

- 1 In View Explorer, select **Services**.
- 2 Select the business service you want to view.
- 3 To display a menu of actions, right-click the service:
 - **CI Impact Report**. Displays the CI Impact report in a new window. For details, see “CI Impact Report” on page 35.
 - **Show Related CIs**. Displays related CIs in the View Explorer search pane. For details, see “Searching for Configuration Items” in *Working with the CMDB*.
 - **Properties**. Displays the General Properties window. For details, see “Configuration Item Properties” in *Working with the CMDB*.

5

SLA Reports

SLA reports provide you and your users with a bird's eye view of the whole system, and enable you to get an early warning of potential problems, before SLA violations occur.

For details on working with Service Level Management reports, see “Workflow for Viewing Reports” on page 2. For details on working with all reports, see “Working in Reports” in *Working with Applications*.

This chapter describes:	On page:
SLAs Summary Report	32
CI Summary Report	33
CI Impact Report	35
CI Status Report	36
Time Range Comparison Report	37
CI Over Time Report	39
CI Over Time vs. Target Report	40
SLA Status Alerts	42
Working with SLA Reports: Examples	44

SLAs Summary Report

The SLAs Summary report displays a list of SLAs and their status for two levels, for example, SLA and configuration items (CIs), or CIs and child CIs. You can filter the list by KPI, time interval, and time period.

You would use this report when you want to view a summary of data for all (or specific) SLAs. For an example of an SLAs Summary report, see “Sending an SLAs Summary Report Each Month” on page 45.

To generate an SLAs Summary report:

- 1** Access the SLAs Summary report: **Applications > Service Level Management > SLA Reports > SLAs Summary.**
- 2** Choose the view (the time granularity) and filter the report. For details, see “Grouping Results” on page 12.

To select an SLA, click the SLA link and select the SLAs you want to display. To select all choices, click the **Select All** button. To clear all selections, click **Clear All**. To invert your selection(s), click **Invert Selection**.

Note: You can choose to group results by SLAs, Providers, or Customers. For details on SLA Management, see Chapter 4, “SLA Management Reports.”

- 3** Click **Generate**.
- 4** To view the configuration items (CIs) of an SLA in the CI Summary report, click the SLA name. Continue to click the links to view more information, and to discover the measurement that has caused the problem.
To return to a previous level, click the link at the top of the page.
- 5** Hold the pointer over a CI to view information in a tooltip. To display the information in the table, instead of in the tooltip, click **Advanced Options**, and select **Show SLA details as columns**.
- 6** Hold the pointer over a result to view information about the KPI. For an explanation, see “Viewing Results in Reports” on page 17.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

CI Summary Report

The CI Summary report displays a summary of all configuration items (CIs) of a specific SLA. You can view four levels of the hierarchy, for example, SLA and CIs or CI and child CIs. The upper level displays an average value of all the level's children and is calculated according to the business rule that has been defined for that SLA or CI.

In the following example, the SLA **Y&Rosie** has an availability of 86.805% at 8:00 AM, calculated from the average of all its CIs (a CI that has no data is not included in the calculation):

CI ▲	Availability (%)		
	8:00 AM	9:00 AM	10:00 AM
Y&Rosie	86.805	86.805	86.805
... % packets good	100.000	100.000	100.000
... Log File: \...p\ron.txt	100.000		
... Rosie&Y Group	60.000		
... tx-90passed from Or2			
... NEWYAK	81.66		
... utilization	100.000		
... Or Test SIS	100.000		
... GOOO	100.000	100.000	100.000
... tx-60passed	-	-	-
... percent full	100.000	100.000	100.000
... tx-20passed from TestPkg1	-	-	-
... MB free	100.000	100.000	100.000
... tx-20passed from Or2	-	-	-
... tx-60passed from Or2	100.000	100.000	100.000
... utilization	0.000	0.000	0.000
... tx-60passed from TestPkg1	100.000	100.000	100.000

Availability: 86.805 %
 Status: Breached
 Business Rule: Group Average Value
 Exceeded: >98.0 %
 Met: >95.0 %
 Minor Breached: >90.0 %
 Breached: >85.0 %

You can filter the report by KPI, time interval, and time period.

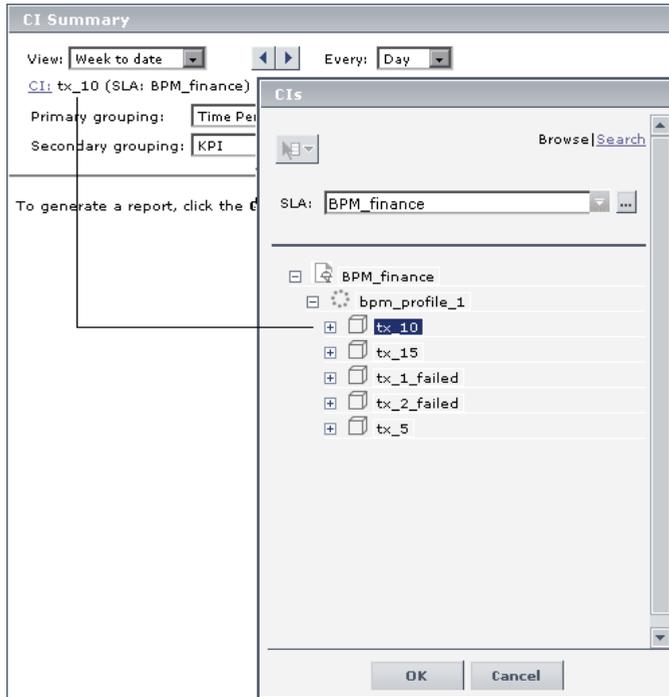
You would use this report when you want to find the CIs that did not reach their objectives. For an example of working with a CI Summary report, see “Preventing Breaches of Contract with the CI Summary Report” on page 48.

To generate a CI Summary report:

- 1 Access the CI Summary report: **Applications > Service Level Management > SLA Reports > CI Summary**.
- 2 Choose the view (the time granularity) and filter the report. For details, see “Grouping Results” on page 12.

- 3 Choose the SLA or CI. Click the **CI** link and select the SLA or CI you want to display.

The level at which you select the CI is the level at which Service Level Management displays the CI summaries:



- 4 Click **Generate**.
- 5 Continue navigating along the CI paths by clicking the CI name to view results for successive levels until you reach the terminating level (that is, the leaf node).

To return to a previous level, click the link at the top of the page.

- 6 Hold the pointer over a result to view information about the KPI. For an explanation, see “Viewing Results in Reports” on page 17.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

CI Impact Report

The CI Impact report displays the results for a configuration item (CI) across all the SLAs in which it is defined. You can filter the report by KPI, time interval, and time period.

You would use this report when you want to compare the availability and performance of a CI across several SLAs. For an example of working with a CI Impact report, see “Comparing Services in the CI Impact Report” on page 49.

You can drill down from this report to view Systinet reports.

To generate a CI Impact report:

- 1** Access the CI Impact report: **Applications > Service Level Management > SLA Reports > CI Impact**.
- 2** Choose the view (the time granularity) and filter the report. For details, see “Grouping Results” on page 12.

You can choose the CI from any of the SLAs in which it is defined. To search for a CI, click the **CI** link to display the CIs, and click the **Search** link. For details, see “Searching for a Configuration Item” on page 20.

Note: You can choose to group results by SLAs or business units (SLA Management). For details on SLA Management, see Chapter 4, “SLA Management Reports.”

- 3** Click **Generate**.

Service Level Management displays the results for all SLAs that include the CI. The name of the SLA appears in brackets after the name of the CI.

- 4** Hold the pointer over a result to view information about the KPI. For an explanation, see “Viewing Results in Reports” on page 17.
- 5** Continue navigating along the CI paths by clicking the CI name to view results for successive levels until you reach the terminating level (that is, the leaf node).

To return to a previous level, click the link at the top of the page.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

CI Status Report

The CI Status report displays the results for a configuration item (CI) and its descendants. You can view four levels of the CI hierarchy. You would use this report when you want to view configuration information, such as objectives, for each CI.

To generate a CI Status report:

- 1** Access the CI Status report: **Applications > Service Level Management > SLA Reports > CI Status.**
- 2** Choose the view (the time granularity).
- 3** Click the CI link to display the CIs and select the CI.

To search for a CI, click the **Search** link. For details, see “Searching for a Configuration Item” on page 20.

- 4** Choose the KPI and time interval.

Service Level Management displays only those KPIs and time intervals that have been assigned to the SLA.

- 5** Click **Generate.**

Service Level Management displays the results for the SLA and its CIs.

- 6** Hold the pointer over a result to view information about the KPI. For an explanation, see “Viewing Results in Reports” on page 17.
- 7** Continue navigating along the CI paths by clicking the CI name, to view results for successive levels until you reach the terminating level (that is, the leaf node).

To return to a previous level, click the link at the top of the page.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

Time Range Comparison Report

The Time Range Comparison report compares all KPIs of a CI for several tracking periods. You can view four levels of the CI hierarchy in a report. You would use this report when you want to compare tracking periods for a KPI.

To generate a Time Range Comparison report:

- 1 Access the Time Range Comparison report: **Applications > Service Level Management > SLA Reports > Time Range Comparison.**

By default, Service Level Management displays two time ranges and shows the trend between them. (The trend column is shown only when two ranges are selected.)

- 2 To choose the time ranges that you want to compare, click the **Time Ranges** link.

Label	Time Range	From	To	Trend
<input checked="" type="checkbox"/> Week to date	Week to date			<input type="checkbox"/>
<input checked="" type="checkbox"/> Quarter to date	Quarter to date			<input type="checkbox"/>
<input type="checkbox"/> Year to date	Year to date			<input type="checkbox"/>
<input type="checkbox"/> Hour	Hour	From: 18:29 8/6/06	To: 19:29 8/6/06	<input type="checkbox"/>
<input type="checkbox"/> Week	Week	From: 18:29 8/6/06	To: 18:29 15/6/06	<input type="checkbox"/>
<input type="checkbox"/> Quarter	Quarter	From: 18:29 8/6/06	To: 18:29 8/9/06	<input type="checkbox"/>
<input type="checkbox"/> Year	Year	From: 18:29 8/6/06	To: 18:29 8/6/07	<input type="checkbox"/>
<input type="checkbox"/> Year	Year	From: 18:29 8/6/06	To: 18:29 8/6/07	<input type="checkbox"/>

Note: Trend will be shown only when exactly two time ranges are selected.

OK Cancel

- 3 Select the check box for each time range you want to display. Select the time range for each row.

By default, the label takes the same name. If you change the time range, the label is updated too.

You can replace the label name with another name. However, if you do so, the label's name does not change when the time range changes.

You make changes to the dates and calendars, as described in “Choosing the Tracking Range and Granularity” in *Working with Applications*.

- 4 Click the **CI** link and select the SLA or CI you want to display.
- 5 Filter the report by KPI and time interval.
- 6 Click **Generate**.

Service Level Management displays the results for the CIs.

The root level displays a value that is calculated from the child CIs and is according to the business rule that has been defined for that SLA or CI.

- 7 Hold the cursor over a value to view details on the KPI.
- 8 Continue navigating along the CI paths by clicking the CI name to view results for successive levels until you reach the terminating level (that is, the leaf node).

To return to a previous level, click the link at the top of the page.

To add objectives to the report:

Click the **Advanced Options** link. Select the check box for **Show Objectives in Column**. Click **OK**.

The objective for each CI is displayed at the end of the row.

For details on the Advanced Options dialog box, see “Adding Descriptions to Reports” on page 15.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

CI Over Time Report

The CI Over Time report displays configuration items (CIs) over a time period, for a selected SLA. You can choose which CIs you want to display, you can filter the results by KPI and time interval, and you can display the results in a graph or in a table.

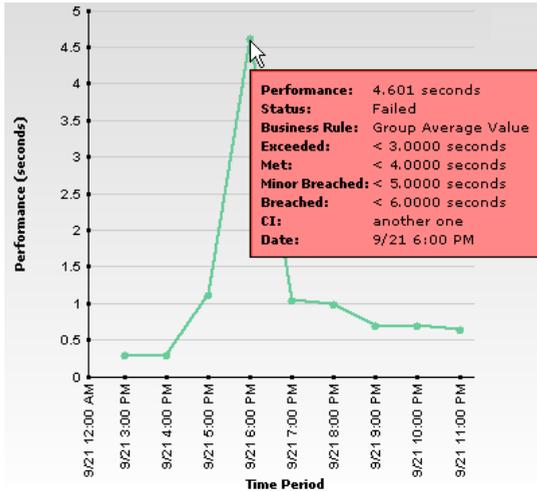
You would use this report when you want to follow the results of a particular CI along a time line.

To generate a CI Over Time report:

- 1** Access the CI Over Time report: **Applications > Service Level Management > SLA Reports > CI Over Time**.
- 2** Choose the view (the time granularity).

Note that if you select a month time period, you cannot view the report with an hourly granularity. This is because Service Level Management can display up to 60 data points in one report and there are more than 60 hours in a month.
- 3** To choose which levels in the hierarchy are to be included in the report, click the **CI** link. For details, see “Selecting Configuration Items (CIs) in the Browse Window” on page 18.
- 4** To search for a CI, click the **CI** link to display the CIs, and click the **Search** link. For details, see “Searching for a Configuration Item” on page 20.
- 5** Filter the report by KPI and time interval.
- 6** Click **Generate**.

Service Level Management displays the results for the CIs.



- To view the data in graph form, click the **View as Graph** tab and hold the pointer over a node.
- To view the data in table form, click the **View as Table** tab and hold the pointer over a result.

For details on the information displayed about the KPI, see “Viewing Results in Reports” on page 17.

For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

CI Over Time vs. Target Report

The CI Over Time vs. Target report displays defined targets superimposed on the data of configuration items (CIs) for a selected SLA. You can filter the results by KPI and time interval and you can display the results in a graph or in a table.

You would use this report when you want to see how well a CI has performed compared to its objectives.

To generate a CI Over Time vs. Target report:

- 1 Access the CI Over Time vs. Target report: **Applications > Service Level Management > SLA Reports > CI Over Time vs. Target.**
- 2 Choose the view (the time granularity).
- 3 To choose which levels in the hierarchy are to be included in the report, click the **CI** link. For details, see “Selecting Configuration Items (CIs) in the Browse Window” on page 18.
- 4 To search for a CI, click the **CI** link to display the CIs, and click the **Search** link. For details, see “Searching for a Configuration Item” on page 20.
- 5 Filter the report by KPI and time interval.
- 6 Click **Generate.**

Service Level Management displays the results for the CIs. To compare a CI’s results with its objectives, display the **View as Graph** tab. The target objectives are superimposed on the graph.



For details on working with Service Level Management reports, see Chapter 2, “Working with Service Level Management Reports.”

SLA Status Alerts

The SLA Status Alerts report is a log of alerts that are triggered during a specified time period. Service Level Management alerts proactively inform you when an SLA's KPI status changes, by sending alerts to predefined users.

To view an SLA Status Alert report:

- 1** Access the SLA Status Alert report: **Applications > Service Level Management > SLA Reports > SLA Status Alerts.**
- 2** Choose the view (the time granularity) and filter the report by choosing specific SLAs and tracking periods. (Tracking periods are defined during SLA creation. For details, see “Defining an SLA: Properties” in *Application Administration*.)
- 3** Click the **Generate** button. Service Level Management displays all alerts answering to the criteria you selected, organized alphabetically.

For a description of this page, see “The SLA Status Alerts Page” on page 43.

- 4** Locate the alert you want to view, and click the **Details** button to open the SLA Status Alert Notifications window.

For a description of this page, see “The SLA Status Alert Notifications Page” on page 43.

Note: Users with appropriate permissions can attach alerts to an SLA. For details, see “SLA Status Alerts” in *Application Administration*.

This section includes the following topics:

- “The SLA Status Alerts Page” on page 43
- “The SLA Status Alert Notifications Page” on page 43

The SLA Status Alerts Page

The SLA Status Alerts page lists all the alerts that occurred in the selected period of time, and displays the following information:

- ▶ **Status.** The current status of the SLA. The status change (from previous status to current status) triggers the alert.
- ▶ **Time.** The time and date when the status changed.
- ▶ **Alert Name.** The name of the alert.
- ▶ **SLA.** The name of the SLA that the alert is attached to.
- ▶ **Tracking Period.** The time periods selected during SLA creation. The tracking periods that you select here define which granularities are to be displayed in the alert.
- ▶ **Alert Action.** The action that is triggered by the alert. For a long name, hold the pointer over the name to view it in full in a tooltip.
- ▶ **Details.** You view details of an SLA status alert by clicking the **Details** button. For a description of this page, see “The SLA Status Alert Notifications Page” on page 43.

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

You can print, format, and export these alerts. For details, see “Sharing and Storing Reports” in *Working with Applications*.

The SLA Status Alert Notifications Page

The SLA Status Alert Notifications report displays the following information about the selected alert:

- ▶ the **Alert Details** area displays the following information:
 - Time.** The time of the SLA’s change of status.
 - Status.** The previous status of the SLA.
 - Alert Name.** The name of the alert.
 - SLA.** The name of the SLA whose change of status triggered the alert.

Tracking Period. The time period that defines which granularities are to be displayed in the alert.

Alert Action. The action that has been assigned to the alert.

- ▶ the **Message Notifications** area displays the following information:

Type. The type of message notification: e-mail, SMS message, or pager message.

Recipients. The names of the recipients who receive the notification that the alert has been triggered and that the alert scheme has been executed.

Status. The status of the message: **Pass:** the message has been sent; **Fail:** the message has not been sent.

- ▶ the **Notification Messages** area displays the type of message followed by the text of the message.

The text of the e-mail messages has different formats depending on the e-mail format selected by the sender.

HTML is encoded in the report. The text of the e-mail received by the recipient is decoded and is similar to the Pager message text. For details on the available formats, see “Defining an Alert: Actions” in *Application Administration*.

Working with SLA Reports: Examples

The following scenarios suggest ways that you can use Service Level Management summary reports.

This section contains the following topics:

- ▶ Sending an SLAs Summary Report Each Month
- ▶ Preventing Breaches of Contract with the CI Summary Report
- ▶ Comparing Services in the CI Impact Report

Sending an SLAs Summary Report Each Month

Every month, the VP of eBusiness wants to know how well the department met its SLAs. On the last day of each month she wants to see the SLAs Summary report in her e-mail inbox.

To set up Service Level Management to send the VP a monthly report:

- 1 Access the Custom Report Manager, and create a new report.

To access the Manager: **Applications > Service Level Management > User Reports > Custom Report Manager**. For details, see “Custom Report Manager” in *Working with Applications*.

Custom Report Properties

Report title:

Report name:

Time Period

Use global settings for all components
 Enable time period per component

Report Auto-Refresh Settings

Do not refresh page.
 Refresh page every 1 minutes.
 Refresh page every 5 minutes.
 Refresh page every 10 minutes.
 Refresh page every 15 minutes.

Insert a page break after each component when printing the report

2 Add the SLAs Summary report as a component to this report:

The 'Add Component' dialog box has the following fields and values:

- Report: SLAs Summary
- Title: SLAs Summary
- Start Time: Defined in the report's filter
- Size: Wide Narrow
- Position: 1

Buttons: OK, Cancel

The report details appear in the Custom Report Manager page:

The 'Custom Report Manager' page displays the following details:

- Report name: SLAs Summary - Monthly
- Buttons: Edit, New, Delete, Save

	title	Component	Entity	Width	Time	Filter
 	SLAs Summary	Service Level Management		Wide	Custom	

Buttons: Header/Footer, Add Component

Component type: Reports

3 Filter the report (by clicking the **Filter** button to open the Filters window) to show:

- **View:** Month to date
- **CI:** All
- **Primary grouping:** KPI
- **Secondary grouping:** Time Interval
- **Time Interval:** All

► **KPI: All**

Filters

View: Month to date ◀ ▶

SLA: All [\(Clear All\)](#)

Primary grouping: KPI Time Interval: All [\(Clear All\)](#)

Secondary grouping: Time Interval KPI: All [\(Clear All\)](#)

OK Cancel

4 Save the report.

5 Access the Scheduled Reports page (**Admin > Platform > Scheduled Reports**), and create a new schedule (click **New Scheduled Report**), adding the VP as the recipient of the e-mail.

Scheduled Report Properties

Name: Enabled

Report: SLAs Summary - Monthly

Generate daily report every:

Sun Mon Tue Wed Thu Fri Sat

Generate data for the 24 hours preceding report generation time set below

Generate weekly report every: Sunday

Generate monthly report every: 31 of the month.

Generate quarterly report every: 1 of the first month of the quarter.

Report generation time: 12 : 00 AM

Offset report generation time from GMT by 0:00

Send as: HTML attachment

Recipients

VP eBusiness

Save Cancel Help

6 Save the schedule.

On the last day of the month, the VP receives the SLAs Summary report. She is pleased to note that most of the objectives have been met.

Preventing Breaches of Contract with the CI Summary Report

Every morning the Director of Applications generates reports for the previous day. In the case of any problems, he analyzes them, and acts accordingly.

- ▶ This morning he accesses Service Level Management and generates an SLAs Summary report from the previous day (**Applications > Service Level Management > Summary Reports > SLAs Summary**). He sees that yesterday afternoon the sales SLA was about to be breached (the Performance KPI has a yellow status).
- ▶ He clicks a configuration item (CI) to navigate to the CI Summary report. He notices that performance of the Sales home page was poor during business hours for a specific transaction:

CI▲	Business Hours	
	Availability (%)	Performance (seconds)
access saleshomepage	63.882	10.727
... tx 2 failed	0.000	-
... tx 5	100.000	4.9
... tx_random	83.296	12.9
... tx_15	100.000	14.9
... tx_10	100.000	10.0
... tx_1 failed	0.000	-

Performance: 10.727 seconds
Status: Minor Breached
Business Rule: Group Average Value
Exceeded: < 8.0 seconds
Met: < 9.0 seconds
Minor Breached: < 11.0 seconds

- ▶ He continues to navigate through the CI hierarchy following the trail of the minor breached measurement. He reaches the leaf node CI, which is a Business Process Monitor transaction script that monitors a database server.
- ▶ He sends the report by e-mail to the DBAs with a request for them to investigate and let him know what action they have taken. Shortly after, he receives a phone call to say the database server had slowed down while new software was being installed on it.
- ▶ He fills out a Business Process Monitor events form (**Admin > Service Level Management > Downtime Events**), and adds a comment about the server slow down.

- He returns to the Summary Reports tab and selects the CI Summary report.
- He clicks the **Advanced Options** link and selects the **Downtime Event Description** check box. He generates the report again and verifies that the report includes the reason for the downtime.

Comparing Services in the CI Impact Report

A lawyer for a well-known ISP writes the service level agreements. During negotiations over a new network contract with an important Gold customer, she requests a report from IT to show whether the ISP is meeting its obligations for network speeds for all Gold customers. This report will help her calculate prices and conditions for the new contract.

IT gives the task to the Mercury Business Availability Center admin who rolls up his sleeves and gets to work.

- He verifies the names of the CIs that measure network performance for each Gold customer (he had previously created a view, to which he had added a network CI, for each customer).
- He creates an SLA and adds the network CIs for all Gold customers to it.
- He generates the CI Impact report (with a Year to Date and Quarter view), and chooses the SLA.
- He drills down to the CI Summary report to view performance data for the network CIs for the past year:

CI Summary 1/1/05 12:00 AM - 9/22/05 12:00 AM				
View:	Year to date	◀ ▶	Every: Quarter	
CI:	Network performance (SLA: Network performance)			
Primary grouping:	KPI	Time Interval:	Business Hours	
Secondary grouping:	Time Period	KPI:	All (Clear All)	
		Performance (seconds)		
CI ▲		Jan	Apr	Jul
Network performance				
... Network per... customer A		15.001	10.727	7.008
... Network per... customer B		5.013	5.008	5.444
... Network per... customer C		10.661	9.801	9.007
... Network per... customer D		8.058	7.633	5.008

- He creates a custom report, and sends it by e-mail to the lawyer, explaining to her how she can get more information by accessing the CI Impact and CI Summary reports.

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Outage Reports

Outage reports enable you and your users to manage and control outages (periods of time during which measurements fail), thus improving service levels. This chapter describes outage reports and explains how to work with them.

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Outage Calculation

When you generate a report, Service Level Management calculates (on the fly) whether there have been any outages in the time period you chose, by running the outage business rules associated with the CI. The Minimum duration set in the outage rule determines the length of time considered an outage.

You define outages during SLA creation. For details, see “Defining an SLA: Outages” in *Application Administration*. For details on the Outage KPI, see “Outages” in *Repositories Administration*. For details on the outage rules, see “Outage Business Rules” in *Repositories Administration*.

For details on working with Service Level Management reports, see “Workflow for Viewing Reports” on page 2. For details on working with all reports, see “Working in Reports” in *Working with Applications*.

Outage Distribution Report

The Outage Distribution report shows a distribution of outages for selected CIs.

You would use the Outage Distribution report when you want to view the outage distribution of selected CIs, to see which CI or category has the most outages, or has outages with the longest duration.

To generate an Outage Distribution report:

- 1** Access the Outage Distribution report: **Applications > Service Level Management > Outage Reports > Outage Distribution**.
- 2** Choose the view (the tracking period).

Service Level Management displays only those tracking periods that have been assigned to the SLA. For details on defining tracking periods, see “Defining an SLA: Properties” in *Application Administration*.

- 3** To choose which CIs are to be included in the report, click the **CI** link to display the CIs window.

Select the SLA whose CIs you want to display. Service Level Management displays the SLA. Click the expand (+) symbol to display the CIs. Continue to expand levels in the hierarchy to locate the CIs you want to view. Select each CI by clicking its check box:



To select all choices, click **All**. To clear all selections, click **None**. To invert your selection(s), click **Invert**. You can select only those CIs that are displayed in the list. Any other CIs of the SLA are not included in the calculations.

Click **OK**, or click **Cancel** to close the window without selecting a CI.

4 Choose the time interval.

Service Level Management displays only those time intervals that have been assigned to the SLA.

5 To choose outages from specific categories only to be included in the report, click the **Categories** link. Select the categories and click **OK**.

Categories are defined during SLA creation. For details, see “Defining an SLA: Outages” in *Application Administration*.

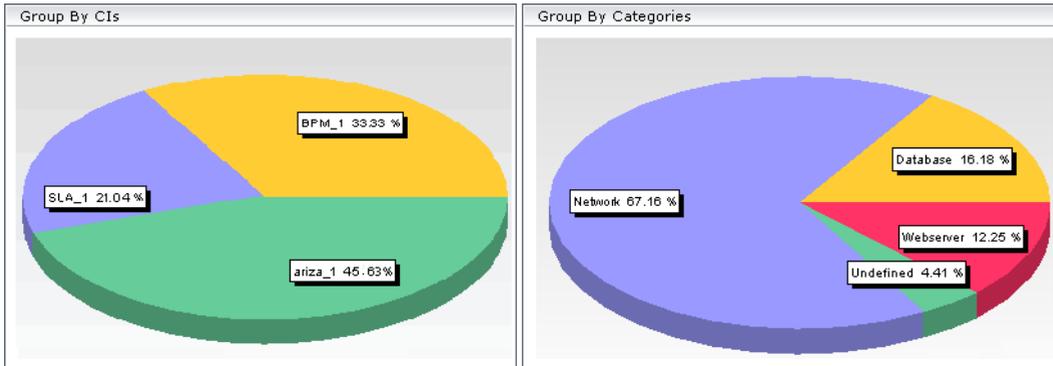
6 Choose the outage KPI to be used in the outage calculation.

7 Choose whether you want the results to be organized by CI, by category, or by both CI and category.

8 To display descriptions in the report, click the **Advanced Options** link. For details, see “Adding Descriptions to Reports” on page 15.

9 Click **Generate**.

Service Level Management displays the report:



To work with the Outage Distribution report:

Service Level Management calculates the total number of outages and the total duration of outages. The Group by CIs graph shows how the outages are distributed among the CIs. The Group by Categories graph shows how the outages are distributed among the categories.

- ▶ To drill down to the Outage Summary report from the data of a specific CI and category, click a pie segment. The Outage Summary report shows data for the CI and category you clicked in this report. To return to this report from the Outage Summary report, click the link at the top of the page.
- ▶ To view the data in table format, click the **View as Table** tab.

Outage Breakdown Report

The Outage Breakdown report shows a breakdown of all outages for selected CIs, belonging to one SLA. You view the report for a specific time interval, organized by outage duration or number of outages.

You would use the Outage Breakdown report when you want to view a breakdown of all outages for certain CIs, to see to which category a CI belongs (Database, Network, Webservice, Undefined, or user-defined).

To generate an Outage Breakdown report:

- 1 Access the Outage Breakdown report: **Applications > Service Level Management > Outage Reports > Outage Breakdown.**

- 2 Choose the view (the tracking period).

Service Level Management displays only those tracking periods that have been assigned to the SLA. For details on defining tracking periods, see “Defining an SLA: Properties” in *Application Administration*.

- 3 To choose which CIs are to be included in the report, click the **CI** link to display the CIs window.

Select the SLA whose CIs you want to display. Service Level Management displays the SLA. Click the expand (+) symbol to display the CIs. Continue to expand levels in the hierarchy to locate the CIs you want to view. Select each CI by clicking its check box:



To select all choices, click **All**. To clear all selections, click **None**. To invert your selection(s), click **Invert**. You can select only those CIs that are displayed in the list. Any other CIs of the SLA are not included in the calculations.

Click **OK**, or click **Cancel** to close the window without selecting a CI.

- 4 Choose the time interval.

Service Level Management displays only those time intervals that have been assigned to the SLA.

- 5 To choose outages from specific categories to be included in the report, click the **Categories** link. Select the categories and click **OK**.

Categories are defined during SLA creation. For details, see “Defining an SLA: Outages” in *Application Administration*.

- 6 Choose the outage KPI to be used in the outage calculation.

Outage rules are defined during SLA creation. For details, see “Number of Outages” and “Outage Duration” in *Application Administration*.

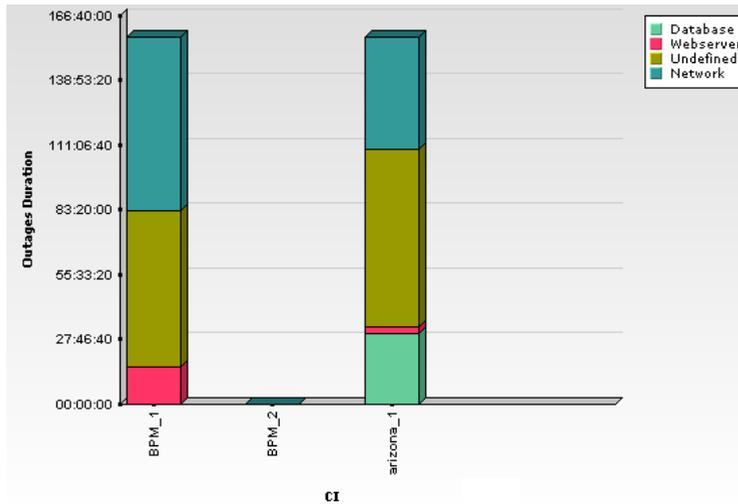
- 7 Choose whether you want the results to be organized by CI or by category. (If you are interested in checking to which category a specific CI belongs, choose **CI**.)
- 8 To display descriptions in the report, click the **Advanced Options** link. For details, see “Adding Descriptions to Reports” on page 15.
- 9 Click **Generate**.

Service Level Management displays the report.

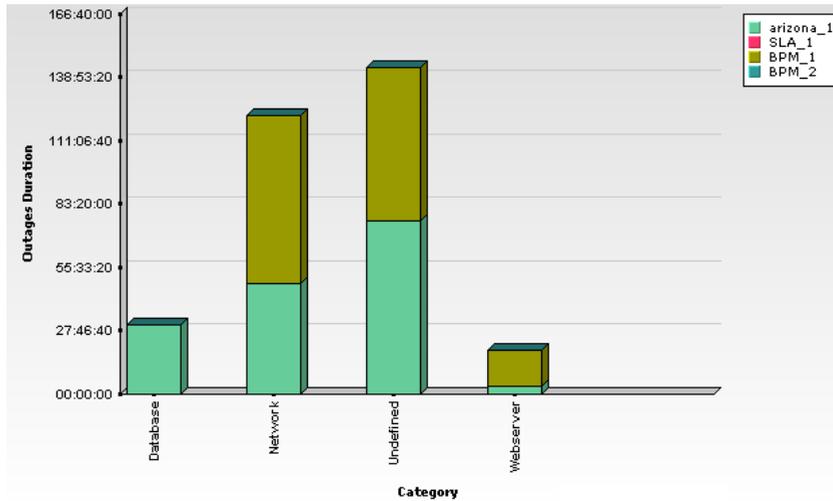
To work with the Outage Breakdown report:

Service Level Management shows the outage duration or number of outages for each selected CI and for the SLA itself (if that is also selected).

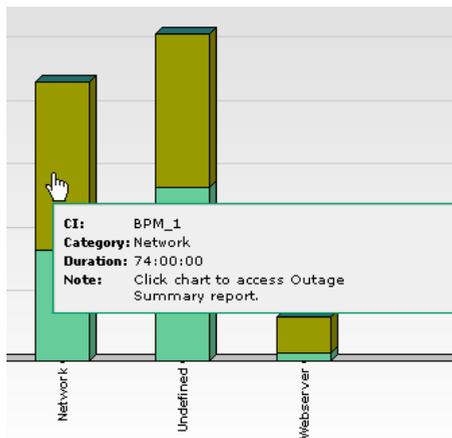
- ▶ The outage duration scale shows hours, minutes, and seconds.
- ▶ If you select **CI** when generating the report, outages are displayed by CI and divided by category:



- If you select **Category** when generating the report, outages are displayed by category and divided by CI:



- To view a tooltip showing the CI name, its category, and the total outage duration for the category, hold the pointer over a bar in the graph.



- ▶ To drill down to the Outage Summary report from the data of a specific CI and category, click a bar. The Outage Summary report shows data for the CI and category you clicked in this report. To return to this report from the Outage Summary report, click the link at the top of the page.
- ▶ To view the data in table format, click the **View as Table** tab.

Outage Summary Report

The Outage Summary report shows the periods of time during which measurements failed. Service Level Management considers a transaction, monitor, or sample to have failed if it does not meet the criteria defined in the KPI's business rule. For details, see “Defining an SLA: KPIs” in *Application Administration*.

You would use this report when you want to view outage information for a specific SLA, to see the reason for the breach of contract.

Once a report is generated, you can add a comment to each outage explaining the reason for the outage, and you can categorize the outages, so that you or your users can sort the report by category. For details on defining categories, see “Outage Categories” in *Application Administration*.

To generate an Outage Summary report:

- 1** Access the Outage Summary report: **Applications > Service Level Management > Outage Reports > Outage Summary**.
- 2** Choose the view (the tracking period).
Service Level Management displays only those tracking periods that have been assigned to the SLA. For details on defining tracking periods, see “Defining an SLA: Properties” in *Application Administration*.
- 3** To choose which levels in the hierarchy are to be included in the report, click the **CI** link. For details, see “Selecting Configuration Items (CIs) in the Browse Window” on page 18.
- 4** To search for a CI, click the **CI** link to display the CIs, and click the **Search** link. For details, see “Searching for a Configuration Item” on page 20.

5 Choose the time interval.

Service Level Management displays only those time intervals that have been assigned to the SLA.

6 Choose the categories.**7** Click **Generate**.

Service Level Management displays the results for the CIs.

To work with the Outage Summary report:

The Outage Summary report includes the following information:

- **CI.** The name of the CI.
- **Start Date.** The start date and time of the outage.
- **End Date.** The end date and time of the outage.
- **Duration.** The duration in hours, minutes, and seconds.
- **Description.** The description of the outage. You can add a description to an outage while defining the SLA (for details, see “Defining an SLA: Outages” in *Application Administration*) or in this report (for details, see below).

To view the description in full, if it is concatenated, hold the pointer over the Description field:

CI	Start Date	End Date	Duration (HH:MM:SS)	Description	Category
SLA1	9/15/05 2:40 AM	9/15/05 3:00 AM	00:20:00	db machine up...new antivirus	Database
SLA1	9/15/05 10:40 AM	9/15/05 11:15 AM	00:35:00	Problem with ...harmful cables	Network
SLA1	9/16/05 5:05 AM	9/16/05 5:55 AM	00:50:00	new router being ta	db machine updated with new antivirus
SLA1	9/16/05 7:35 AM	9/16/05 7:55 AM	00:20:00	-	Undefined

- **Category.** The category of the outage. You can categorize the outage while defining the SLA or in this report.

To add a description and category to an Outage Summary report:

You can edit a report to include details about the outage. You can also add a category to an outage during outage definition. For details, see “Defining an SLA: Outages” in *Application Administration*.

- 1** In the generated Outage Summary report page, click the **Edit** button to open the Outage Details window.
- 2** Choose a category for the outage and add a description.

Tip: It is recommended to categorize each outage to make outage reports more meaningful.

- 3** Click **OK**.

The change takes effect the next time the report is generated.

7

User Reports

User reports is a feature common to the Mercury Business Availability Center applications. You configure and view user reports from the User Reports tab.

For complete details on creating, viewing, and administering user reports, see “Configuring and Viewing User Reports” in *Working with Applications*.

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