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MERCURY BUSINESS AVAILABILITY CENTER™

Using Service Level Management

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Mercury Business Availability Center

Using Service Level Management

Version 6.1

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Mercury Business Availability Center, Version 6.1
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 SLA 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 3 Summary Reports

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

Chapter 4 Over Time Reports

Describes how to work with Over Time reports that enable you and your users to view information about specific CIs.

Chapter 5 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 6 User Reports

Provides a pointer to the complete documentation for user reports, which are common to the Service Level Management, End User Management, 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*.

1

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 Time Period" on page 7 and "Choosing the Time 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 9.

➤ **Add descriptions to reports.**

Use the Advanced Options link to add descriptions to the report. For details, see "Adding Descriptions to Reports" on page 12.

➤ **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 "SLA 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 two 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 28.	view a summary of data for all (or specific) SLAs
CI Summary	Drill-down from the SLA Summary report. The report displays two levels of 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 two grouping levels. For details, see "CI Summary Report" on page 29.	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 31.	compare the availability and performance of a CI across several SLAs

Report Name	Description	Use This Report To...
CI Status	Displays a CI's status in a selected SLA. This report is similar to the previous Service Status report. For details, see "CI Status Report" on page 32.	view configuration information, such as objectives, for each CI
CIs Over Time	Displays selected CI statuses over time for selected KPIs and time intervals. For details, see "CIs Over Time Report" on page 42.	follow the results of a particular CI over a time period
CI Over Time vs. Target	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. For details, see "CI Over Time vs. Target Report" on page 43.	see how well a CI has performed compared to its objectives
Time Range Comparison	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 the two time ranges. This report is similar to the previous Time Range Comparison report. For details, see "Time Range Comparison Report" on page 45.	compare two time periods to determine whether availability and performance have improved
Outage Summary	Displays a list of outages for selected CIs. For details, see "Outage Summary Report" on page 53.	view outage information for a specific SLA

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 50.	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 48.	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 6, "User Reports."

Working with Service Level Management Reports

This section 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 section contains the following topics:

- "Filtering Results by Time Period" on page 7
- "Number of Data Points" on page 8
- "Grouping Results" on page 9
- "Adding Descriptions to Reports" on page 12
- "Setting Number of Digits in Results" on page 13
- "Viewing Results in Reports" on page 14
- "Selecting Configuration Items (CIs) in the Browse Window" on page 15
- "Searching for SLAs" on page 16
- "Searching for a Configuration Item" on page 17
- "Searching for CIs" on page 18
- "Searching for KPIs" on page 19

Filtering Results by Time Period

You choose the time period for which you want to view data.

For the following time periods, you are probably interested in viewing reports showing the history of the SLAs: week to date, month to date, quarter to date, year to date.

For the following time periods, you are probably interested in viewing reports showing what is happening now or what happened at a specific time: hour, day, week, month, quarter, year.

For the **custom** time period (calendar period), you are probably interested in viewing reports for a specific time not covered by any default time period.

For the **SLA to date** time period, you are probably interested in viewing reports where the report time range begins at the start date of the SLA and continues till the current time. This time period is included in the View list only for reports that display data about single SLAs.

For the **last** time period, you can generate a report for a certain part of a tracking period. For example, you could generate a report every day for the past two weeks:



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).

Note:

The time periods that appear in these boxes 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 time 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*.

For more information on time periods, see "Choosing the Time Range and Granularity" in *Working with Applications*.

Number of Data Points

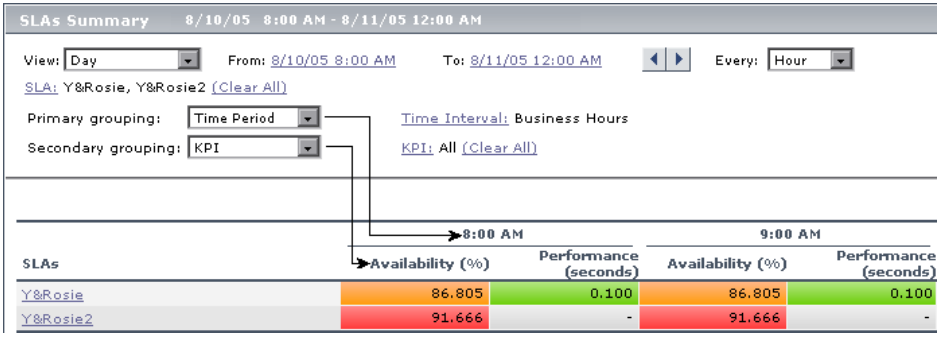
Service Level Management can display up to 60 data points in each table. For example, for a month time period, you can choose to view the data organized by weeks (four or five data points) or days (30 or 31 data points). However, you cannot choose to view by hours (~2,880 data points).

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.

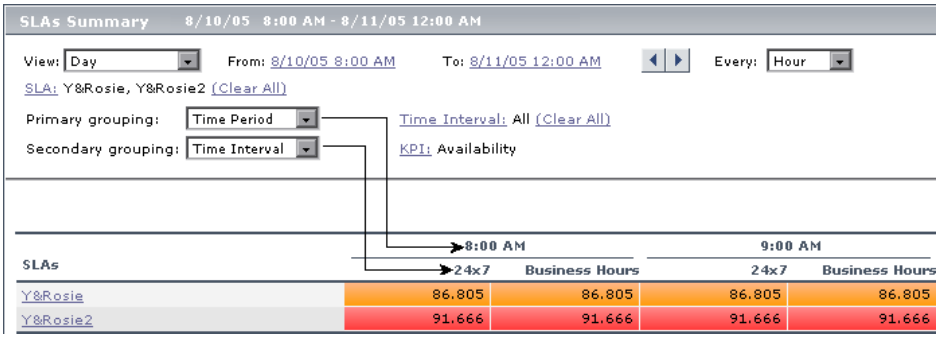
The following section shows examples of how results are displayed according to which grouping combination you choose:

Time Period – KPI



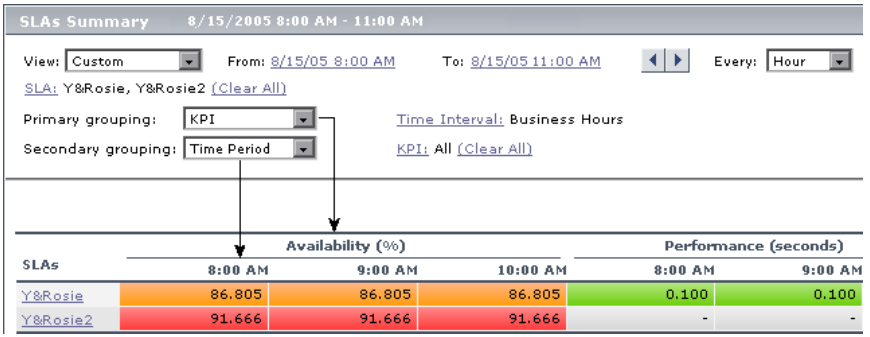
- **SLA** – click the link to select all, some, or one SLA.
- **Time Interval** – click the link to select one time interval.
- **KPI** – click the link to select all, some, or one KPI.

Time Period – Time Interval



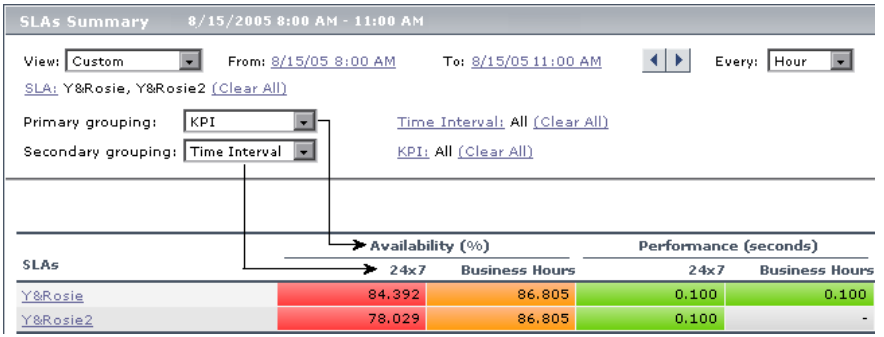
- **SLA** – click the link to select all, some, or one SLA.
- **Time Interval** – click the link to select all, some, or one time interval.
- **KPI** – click the link to select one KPI.

KPI – Time Period



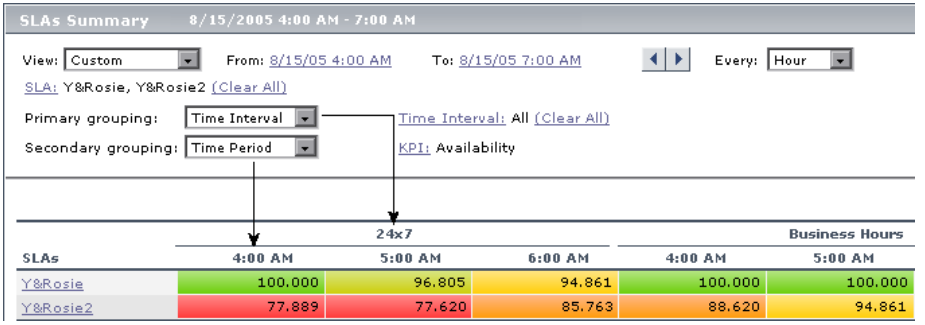
- **SLA** – click the link to select all, some, or one SLA.
- **Time Interval** – click the link to select one time interval.
- **KPI** – click the link to select all, some, or one KPI.

KPI – Time Interval



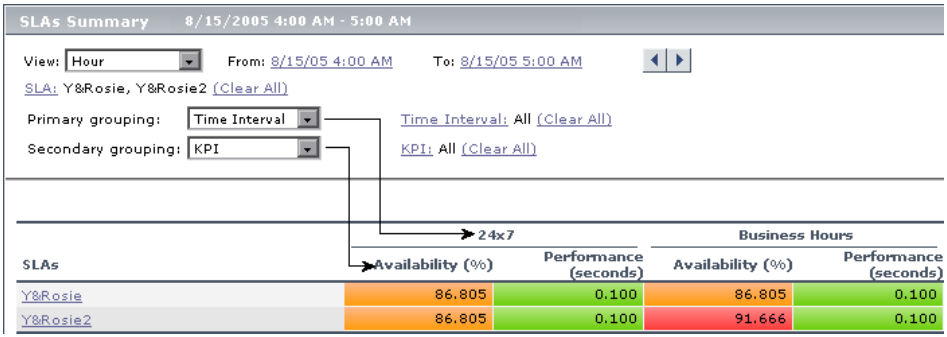
- **SLA** – click the link to select all, some, or one SLA.
- **Time Interval** – click the link to select all, some, or one time interval.
- **KPI** – click the link to select all, some, or one KPI.

Time Interval – Time Period



- **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



- **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.

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**:

- The 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*.
- The time interval name and description are defined during time interval creation. For details, see "Time Intervals" in *Application Administration*.
- The CI description includes the name and description of all CIs that are included in the report.

- The 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*.

Setting Number of Digits in Results

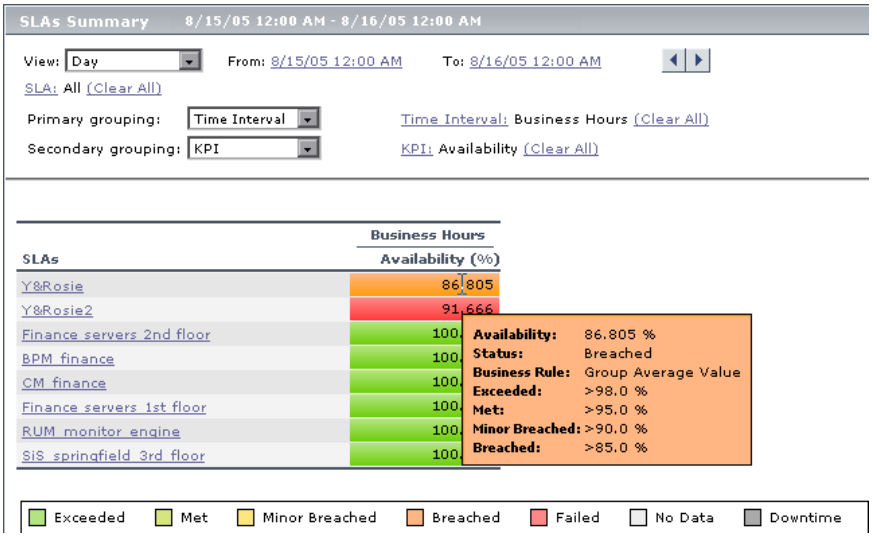
You can select the number of digits after the decimal point (up to three) to be displayed in reports. Note, however, that even if you choose to change the default (three figures after the digit), Service Level Management calculates objectives using this default value.

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 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 186 in *Application Administration*.

Selecting Configuration Items (CIs) in the Browse Window

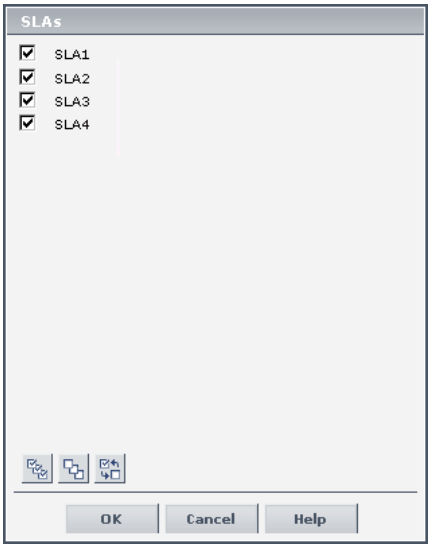
For reports where you can choose to display several levels of the hierarchy (for example, the Outage Summary and CIs Over Time reports), the Browse window includes a check box next to each CI's name.



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.

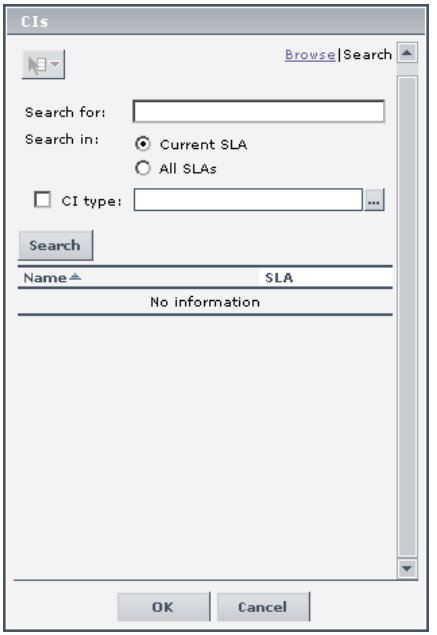


To select all choices, click **All**. To clear all selections, click **None**. To invert your selection(s), click **Invert**.

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.



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**.)

Searching for CIs

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 "Filtering Data Using Active Filters" in *Working with Applications*.

3 Select the relevant CIs.

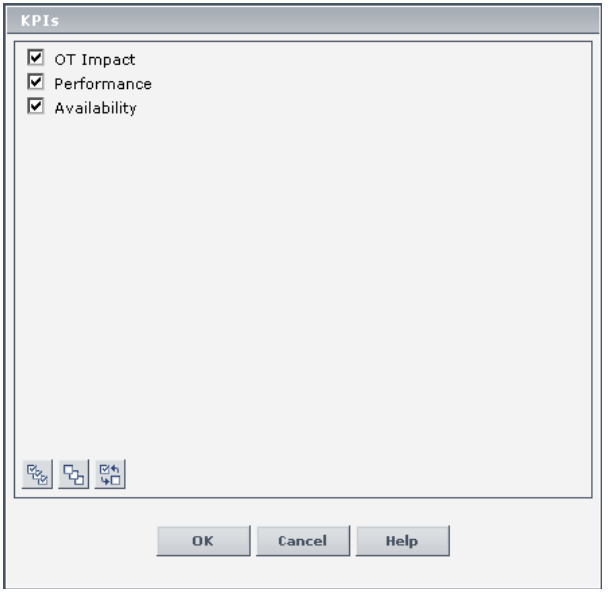
4 Click **OK** to save the selection. You are returned to the report page with the CI selected.

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 "Filtering Data Using Active Filters" in *Working with Applications*.

3 Click **OK** to save the selection. You are returned to the report page with the KPI selected.

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 forth. 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

2

SLA Status Snapshot

This chapter describes the SLA Status Snapshot.

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.

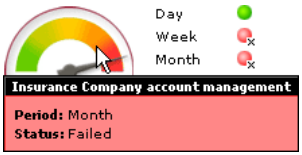
SLA statuses are the results of the targets defined during SLA creation. For details, see "Defining an SLA: Properties" in *Application Administration*.

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.

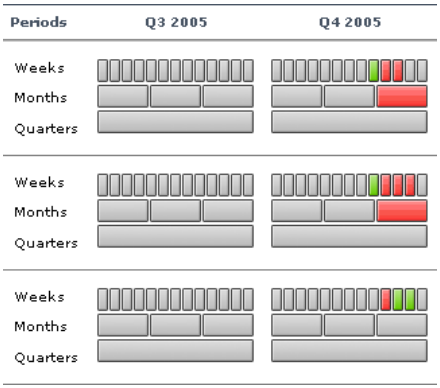
Hold the pointer over a long SLA name to view it in full.

Statuses (targets) are color coded as follows:

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

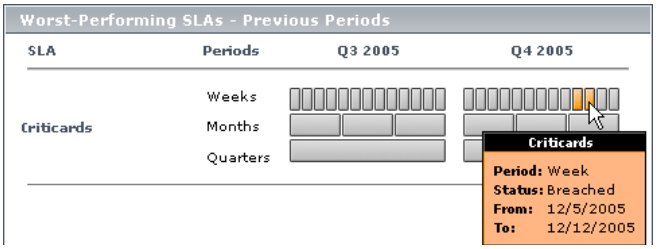
Worst-Performing SLAs – Previous Periods

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:



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.



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

3

Summary Reports

Summary 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	28
CI Summary Report	29
CI Impact Report	31
CI Status Report	32
SLA Status Alerts	33
Working with Summary Reports: Examples	35

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 35.

To generate an SLAs Summary report:

1. Access the SLAs Summary report: **Applications** > **Service Level Management** > **Summary Reports** > **SLAs Summary**.
2. Choose the view (the time granularity) and filter the report (for details, see "Grouping Results" on page 9).

   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**.
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.

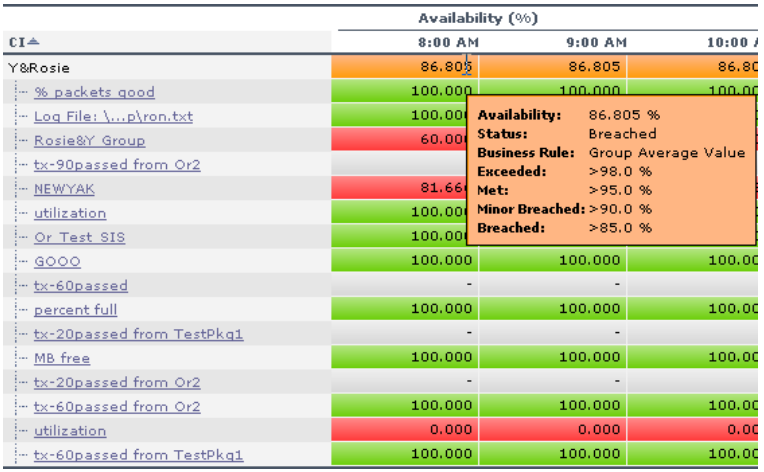
   To return to a previous level, click the link at the top of the page.
5. Hold the pointer over a result to view information about the KPI. For an explanation, see "Viewing Results in Reports" on page 14.

   For details on working with Service Level Management reports, see "Working with Service Level Management Reports" on page 7.

CI Summary Report

The CI Summary report displays a summary of all configuration items (CIs) of a specific SLA. You can view two levels of the hierarchy, for example, SLA and CI or CI and child CI. 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):



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 39.

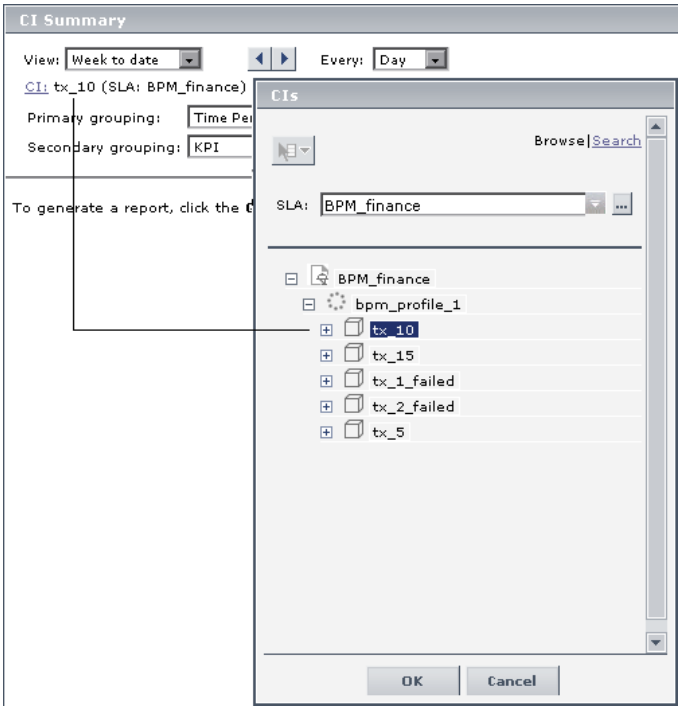
To generate a CI Summary report:

1 Access the CI Summary report: **Applications** > **Service Level Management** > **Summary Reports** > **CI Summary**.

2 Choose the view (the time granularity) and filter the report. For details, see "Grouping Results" on page 9.

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 Choose

5 Click **Generate**.

6 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.

7 Hold the pointer over a result to view information about the KPI. For an explanation, see “Viewing Results in Reports” on page 14.

For details on working with Service Level Management reports, see “Working with Service Level Management Reports” on page 7.

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 40.

To generate a CI Impact report:

1. Access the CI Impact report: **Applications** > **Service Level Management** > **Summary Reports** > **CI Impact**.
2. Choose the view (the time granularity) and filter the report. For details, see "Grouping Results" on page 9.

   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 17.
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 14.
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 "Working with Service Level Management Reports" on page 7.

CI Status Report

The CI Status report displays the results for a configuration item (CI) and its descendants. 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** > **Summary 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 17.
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 14.
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 "Working with Service Level Management Reports" on page 7.

SLA Status Alerts

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

Users with appropriate permissions can attach alerts to an SLA – for details, see "SLA Status Alerts" in *Application Administration*.

To view an SLA Status Alert report:

1. Access the SLA Status Alert report: **Applications** > **Service Level Management** > **Summary 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 33.
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 34.

This section includes the following topics:

- "The SLA Status Alerts Page" on page 33
- "The SLA Status Alert Notifications Page" on page 34

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 34.

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 Summary 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

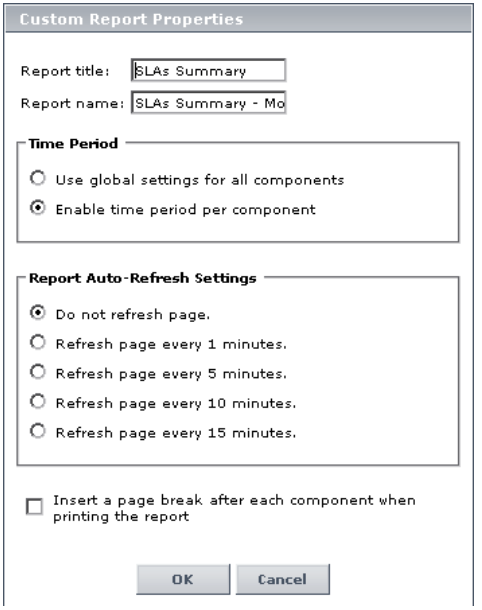
Sending an SLAs Summary Report Each Month

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.

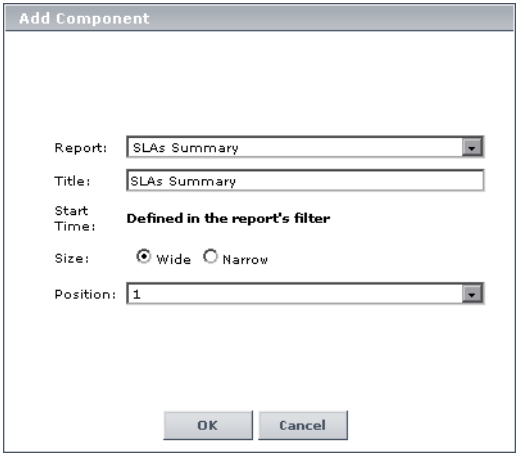
To set up Service Level Management to send the VP a monthly report:

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

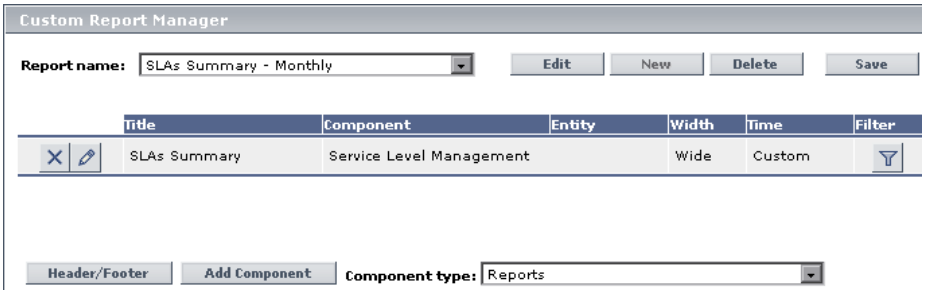
To access the Manager: **Applications** > **Service Level Management** > **User Reports** > **Custom Report Manager**. For details, see "Custom Report Manager" in *Working with Applications*.



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

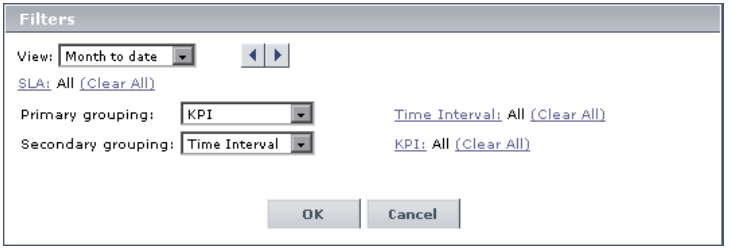


The report details appear in the Custom Report Manager page:



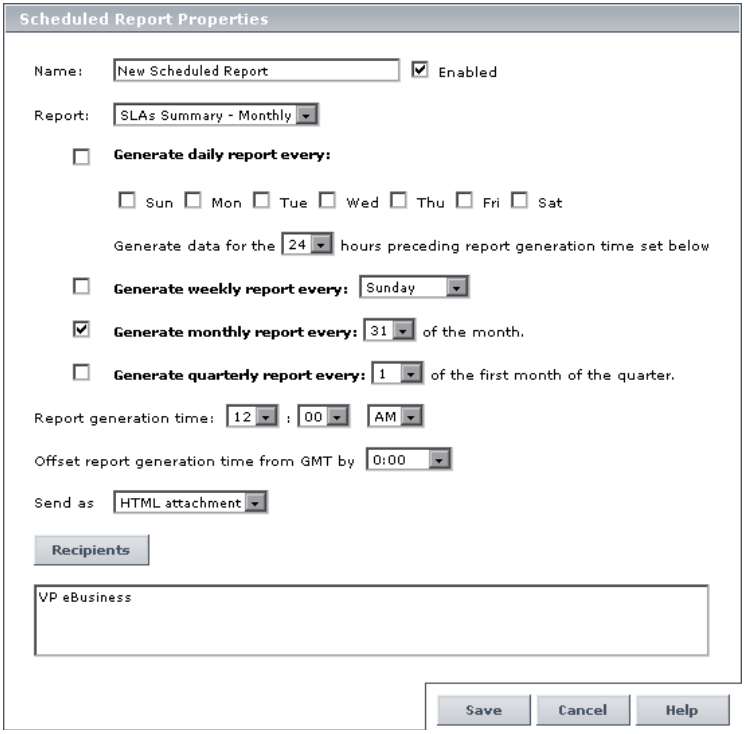
3 Filter the report (by clicking the **Filter** button to open the Filters window) to show:

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



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



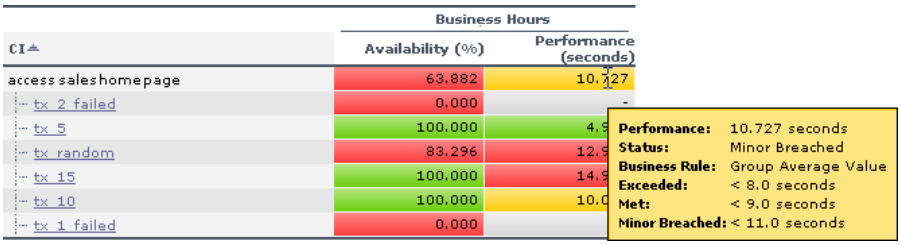
6 Save the schedule.

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:



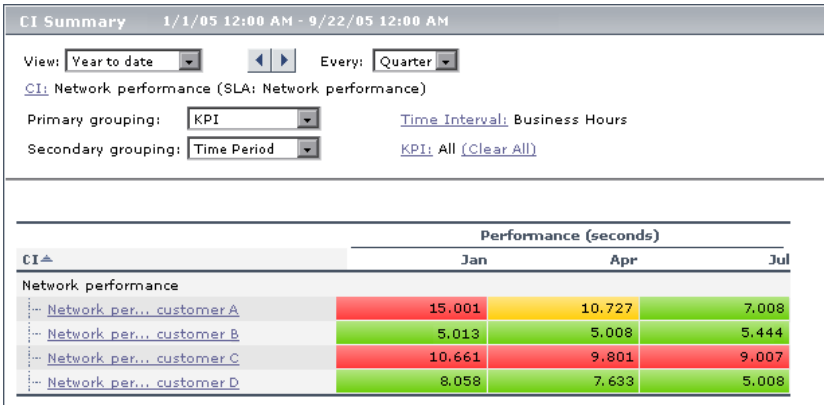
- He continues to navigate through the CI hierarchy following the trail of the minor breached measurement. He reaches the leaf node CI, which is a Business Process Monitor transaction script that monitors a database server.
- He sends the report by e-mail to the DBAs with a request for them to investigate 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:



- 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.

4

Over Time Reports

Over Time reports enable you and your users to compare configuration items (CIs) over different time periods.

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:
CIs Over Time Report	42
CI Over Time vs. Target Report	43
Time Range Comparison Report	45

CIs Over Time Report

The CIs Over Time report displays configuration items (CIs) over a time period, from 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.

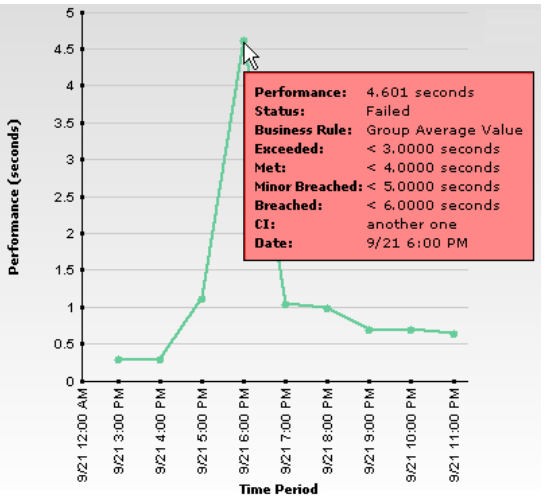
You would use this report when you want to follow the results of a particular CI along a time line.

To generate a CIs Over Time report:

1. Access the CIs Over Time report: **Applications** > **Service Level Management** > **Over Time Reports** > **CIs 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 15.
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 17.
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 14.

For details on working with Service Level Management reports, see “Working with Service Level Management Reports” on page 7.

CI Over Time vs. Target Report

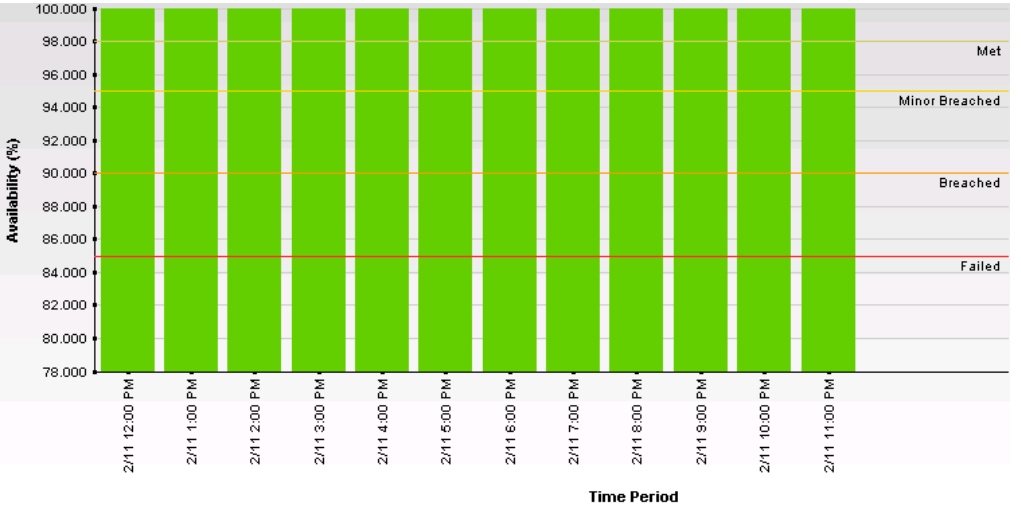
The CI Over Time vs. Target report displays defined targets superimposed on the data of configuration items (CIs) from a selected SLA. You can filter the results by KPI and time interval and you can display the results in a graph or in a table.

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** > **Over Time 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 15.
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 17.
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 "Working with Service Level Management Reports" on page 7.

Time Range Comparison Report

The Time Range Comparison report compares the availability percentage and performance time for one time interval with another, showing the trends for a selected KPI.

You would use this report when you want to compare two tracking periods for a KPI.

To generate a Time Range Comparison report:

1. Access the Time Range Comparison report: **Applications** > **Service Level Management** > **Over Time Reports** > **Time Range Comparison**.
2. Choose the two time ranges that you want to compare.
3. Choose the SLA or CI. Click the **CI** link and select the SLA or CI you want to display.
4. Filter the report by KPI and time interval.
5. Click **Generate**.

   Service Level Management displays the results for the CIs.

   The root level displays an average value of the child level and is calculated according to the business rule that has been defined for that SLA or CI.
6. 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 "Working with Service Level Management Reports" on page 7.

5

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.

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*. You define outages during SLA creation. For details, see "Defining an SLA: Outages" in *Application Administration*.

This chapter describes:	On page:
Outage Distribution Report	48
Outage Breakdown Report	50
Outage Summary Report	53

Outage Distribution Report

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

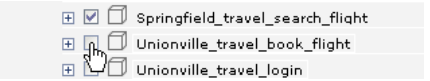
You would use the Outage Distribution report when you want to view the outage distribution of selected CIs, to see which CI or category has the most outages, or has outages with the longest duration.

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*.

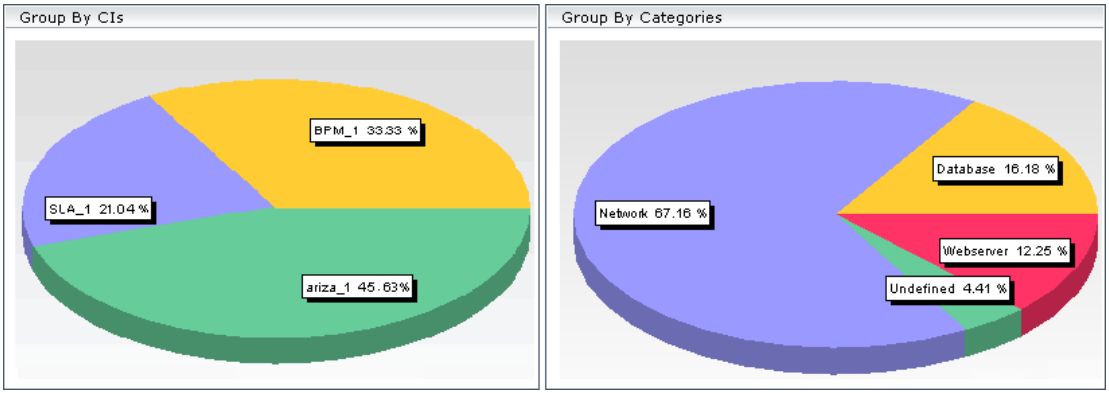
6 Choose the outage KPI to be used in the outage calculation.

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 12.

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, Webserver, Undefined, or user-defined).

To generate an Outage Breakdown report:

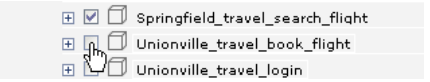
1 Access the Outage Breakdown report: **Applications** > **Service Level Management** > **Outage Reports** > **Outage Breakdown**.

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 12.

9 Click **Generate**.

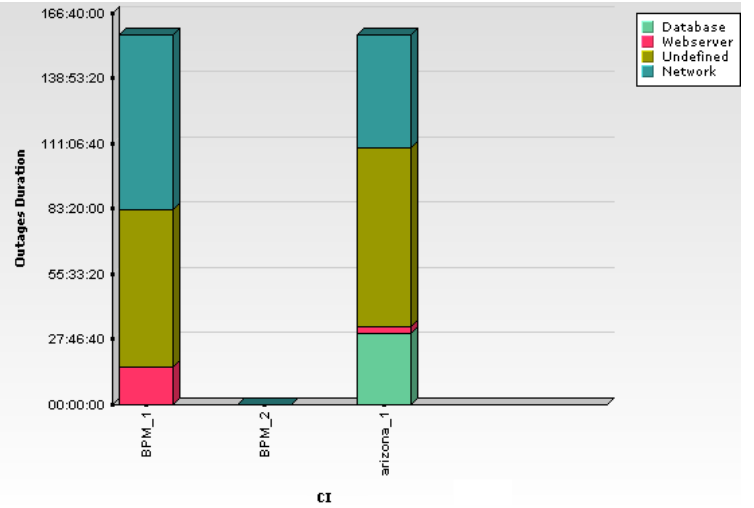
Service Level Management displays the report.

To work with the Outage Breakdown report:

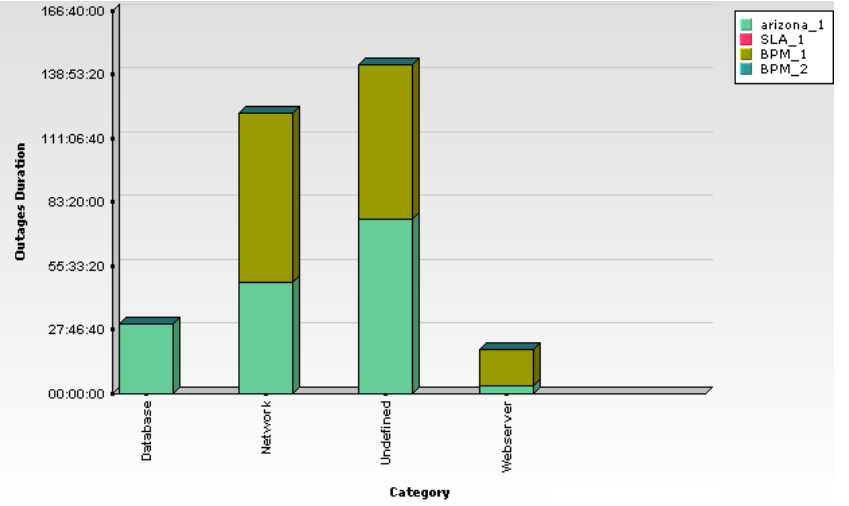
Service Level Management shows the outage duration or number of outages for each selected CI and for the SLA itself (if that is also selected).

➤ The outage duration scale shows hours, minutes, and seconds.

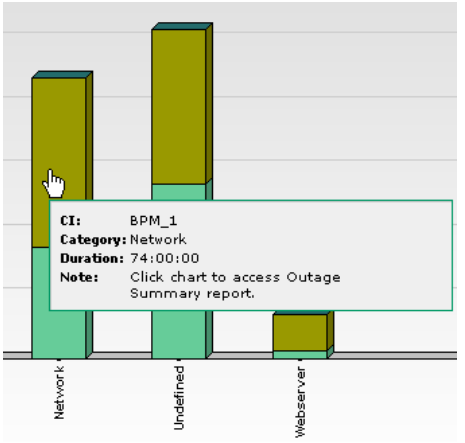
➤ If you select **CI** when generating the report, outages are displayed by CI and divided by category:



➤ 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 15.
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 17.
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

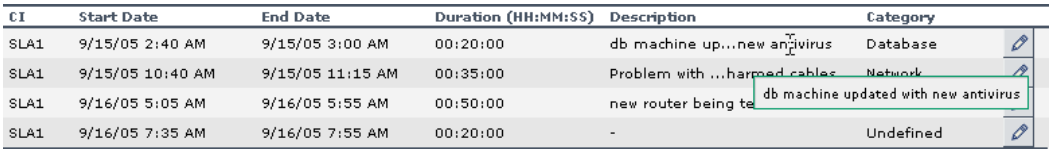
Start Date – the start date and time of the outage

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:



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.

6

User Reports

User reports is a feature common to the Service Level Management, End User Management, and System Availability Management 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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