HP Service Manager

for supported Windows® and Unix® operating systems

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Service Manager Operational Reports Guide

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SLM: Summary
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1 Reporting by Using Crystal Reports

HP Service Manager reporting works with Crystal Reports to provide improved reports and Business objects for the batch scheduling of reports. To run HP Service Manager reports with Crystal Reports, you need a working knowledge of the following:

- HP Service Manager
- Crystal Reports
- The ServiceCenter ODBC driver.

To create reports you need a working knowledge of your DBMS or RDBMS, Crystal Reports, and a general understanding of HP Service Manager applications and utilities.

For additional information about any of these concepts, see the following:

- For information about a particular RDBMS, see the vendor documentation for your database type.
- For database configuration, see the *HP Service Manager Installation Guide*.
- For information about HP Service Manager administration and configuration, and customizing the HP Service Manager product, see the HP Service Manager Help.

About the Report Files

With the appropriate developer license for Crystal Reports, all report files (*.rpt) can be customized to meet the needs of your business. Non-Crystal Reports users can review the shipped report files (*.rpt) to determine which queries, joins, and filters were used for the development of the report. They

can then use these details to recreate similar reports by using their own queries, joins, and filters. Each query interacts with any application compatible with the ServiceCenter ODBC driver.

All the released operational reports are included in the HP Service Manager 9.30 DVD. You can also download the reports prior to Service Manager 9.30 from HP Live Network at:

https://hpln.hp.com/

New operational reports which are compatible with Service Manager future releases will also be delivered on HP Live Network.

2 Installing Crystal Reports

In HP Service Manager, reporting works with Crystal Reports to provide detailed reporting and analysis package that help maximize the abilities of your organization. Data monitoring and tracking, using Service Manager data from your environment, provide valuable insight to daily operations. Sample reports are provided so that you can build the reports into any reporting system.

Installation Requirements and Compatibility

Installation Requirements

The following components must be installed prior to using the HP Service Manager reporting feature:

- HP Service Manager Legacy Listener
- ServiceCenter ODBC driver
- Crystal Reports

Report Compatibility

This reporting and analysis package was developed using the following software applications and is considered compatible with these versions only.

- HP Service Manager 7.11, 9.20, 9.21, 9.30, and up to 9.34 run-time environment
- HP Service Manager 7.11, 9.20, 9.21, 9.30, and up to 9.34 Applications
- ServiceCenter 6.2 legacy ODBC Driver

• Crystal Reports 2008, 2013 SP3

Crystal Reports Compatibility

Crystal Reports 2013 are compatible with all Operation Reports versions, including $1.00,\,9.20,\,9.21,\,$ and 9.30.

Installing Crystal Reports with HP Service Manager

For information about installing and configuring the legacy listener, the ODBC driver, and installing Crystal Reports for use with HP Service Manager, see the *HP Service Manager Installation Guide*.

For ServiceCenter ODBC driver troubleshooting and best practices, see the Help topics packaged with Service Manager product.

Packaging and File Location

The HP Service Manager Operational Reports package is located in the <OperationalReports> directory on the installation image or by clicking Download Reports for HP Service Manager from the Downloads tab on the Autorun installation screen. This directory contains a set of Crystal Reports report files (*.rpt). For additional information about downloading the out-of-box reports, see the HP Service Manager Installation Guide.

Language packs

The languages supported by the language pack install are as follows:

 English

French

Japanese

- German
- Spanish
- Italian

- Korean
- Dutch

Portuguese (Brazilian)

- Swedish
- Chinese Simplified
- Chinese Traditional

The default install language for Crystal Reports is set to English; however, if the native language of your OS is listed above, Crystal Reports will run in that language. The out-of-box reports are not localized and will render in English regardless of what language your Crystal Reports application is using.

You should refer to the Crystal Reports documentation for instructions on how to change the language that Crystal Reports uses.

Time Zones Settings for Reporting

Crystal Report uses the ODBC driver to access the HP Service Manager database. When an operator creates or updates a record, the date information will be stored into the database using the coordinated universal time (UTC) scale. When an operator queries a record in the database, the ODBC driver will convert the UTC date to the operator's time zone as defined in the login profile. Hence the converted date is displayed in the Service Manager client's UI.

In case the HP Service Manager server and the Service Manager client are running in different time zones with varied operator time zone configurations, you can refer to the following table for a record's date information displayed in client's UI:

Operator Time Zone ^a	Server System Time Zone	Database Time Zone	Record Time Displayed
N/A	N/A	UTC	UTC
N/A	Defined	UTC	Server system time zone
Defined	N/A	UTC	Operator time zone
Defined	Defined	UTC	Operator time zone

a. Note the Operator refers to the operator account which is used to log in to the ODBC driver. The Operator Time Zone refers to the time zone setup in an operator's login profile.

From the table, it can be concluded that:

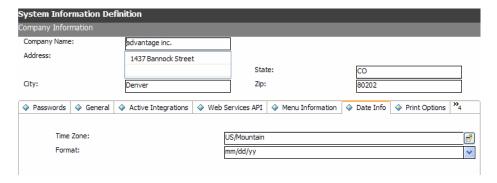
• If neither the operator time zone nor the server system time zone is defined (null value), date information will be stored in the database using the UTC scale. The date will be displayed as the UTC scale in client (including Eclipse RCP Client, Web tier Client and Crystal Reports).

- If the operator time zone is null and the server system time zone is defined, a record's date information will be stored into the database using the UTC scale. But the date will be converted and displayed as the system time zone.
- If the operator time zone is defined and the server system time zone is null, a record's date information will be stored into the database using the UTC scale. But the date will be converted and displayed as the operator time zone.
- If both the operator time zone and the server system time zone are defined, a record's date information will be stored into the database using the UTC scale. But the date will be converted and displayed as the operator time zone.

Make sure the computer on which the Crystal Reports is running has the same time zone setup with the operator time zone, or has the same time zone setup with the sever time zone in case the operator time zone is null.

To configure the system time zone for Service Manager:

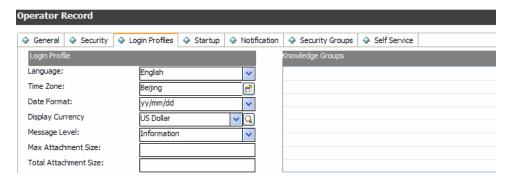
- 1 Log on to Service Manager with a system administrator account.
- 2 From the System Navigator, click **System Administraton > Base System Configuration > Miscellaneous > System Information Record.**
- 3 Click **Date Info** to open the tab.
- 4 In the **Time Zone** field, select the new time zone for the server system..



5 Click Save.

To set the time zone for an individual operator:

- 1 Log on to Service Manager with a system administrator account.
- 2 From the System Navigator, click **System Administration > Ongoing Maintenance > Operators**.
- 3 Type the login name of the specified operator in the **Login Name** field.
- 4 Click **Search**. Detailed profile of the specified operator is displayed in the Operator Record page.
- 5 Click **Login Profiles** to open the tab.
- 6 In the **Time Zone** field, select the new time zone for the operator.



7 Click Save.



To apply the updated operator login profile, you need to log off and then log on to the HP Service Manager server again by using the operator's account. There is no need to restart the Service Manager service. However, the ServiceCenter ODBC driver accesses the Service Manager database via legacy service and you must restart the ServiceCenter service manually.

For more information about how to start the ServiceCenter service, see *HP Service Manager Installation Guide*.

3 Report Descriptions and Usage

The intention of this reporting package is to provide users with realistic examples of business reporting requirements. Each report is intended to meet the analytical needs of a generic Service Manager business user. All reports in the package can be executed on an HP Service Manager 7.11, 9.20, 9.21, 9.30 and up to 9.34 out-of-box (OOB) system. The reports are intended to be used as a starting point for the development of more detailed, customer-specific reports.

The following tables describe the available application-specific reports, descriptions, and business use. The report files (*.rpt) can be opened in Crystal Reports and optionally modified to suit your needs. Detailed report descriptions can be viewed by clicking the link in the first column of the table.

Change Management Reports

Report name	Business user	Description
Open and Closed Change Requests	Service Management process managers, IT Management team	This report gives the user the ability to review, for a determined period, a breakdown of open and closed changes by category.
Percentage of Rejected Changes	Service Management process managers, IT Management team	This report provides an overview of the number of rejected changes as a percentage of the total number of closed changes in a given time period.
Percentage of Emergency Changes	Service Management process managers, IT Management team	This report provides an overview of the number of closed emergency changes as a percentage of the total number of closed changes in a given time period.
Percentage of Successful Changes	Service Management process managers, IT Management team	This report provides an overview of the number of closed changes that were successfully implemented (including with and without problems) as a percentage of the total number of closed changes in a given time period.
Changes Scheduled for This Week	Service Management process managers, IT Management team	This report provides an overview of the changes scheduled for this week.

Open and Closed Change Requests

Description

The Open and Closed Change Requests report breaks down changes by state (open or closed), by category, and then by phase. This report contains a graphical representation of the breakdown of open versus closed changes using a pie chart to display the categories. You can double-click any piece of the pie to display a detailed breakdown of that category by phase. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by category and the current phase of the change.

Customer Value

This report provides a quick view of open and closed change requests for a specified time period. The percentages and totals displayed in group headings allow for a quick, visual overview of which change categories are generating the highest number of change requests, have a large number of change requests pending, or are approving and closing change requests quickly and efficiently. This information can then be used by a Change Management administrator to determine if the workflow in place needs to be adjusted or if a particular department requires additional training or resources to efficiently manage the number of change requests in a given area.

Percentage of Rejected Changes

Description

The Percentage of Rejected Changes report breaks down all closed changes in a given time period by status (rejected and non-rejected) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of rejected versus non-rejected changes using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of rejected and non-rejected changes for a given time period. Together with rejection reasons the report provides information about the way requesters and the IT organization handle the Change Management process. Reasons for rejecting a change include the following:

- The change is a standard one and should be handled through the Request Management process.
- The change is not a valid one (logical, feasible or unnecessary).
- The change approval is not supported.

This information can be used by a group manager to make decisions and take actions for the following reasons:

- If the request fulfillment process is not satisfactory because many standard changes enter the Change Management process, the request fulfillment process needs to be reviewed for improvements.
- If the requesters use the Change Management process to drop all their functional or technical requirements without consulting the product manager or owner, it might be necessary to adjust the roles and responsibilities of some people to decrease their workload.

Percentage of Emergency Changes

Description

The Percentage of Emergency Changes report breaks down all closed changes in a given time period by change type (emergency changes and other changes) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of changes using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that change type by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by change type and service.

Customer Value

This report provides a quick view of emergency changes for a given time period. The emergency change procedure is used to repair a failure (logged as an urgent incident) that has a large negative impact on the business and therefore needs to be fixed as soon as possible, and there is no workaround available that can be used. The percentage of emergency changes compared to all the changes within an organization is a good indication for the quality of Change Management and the service delivered. A well structured and planned Change Management process should limit the number of emergency changes needed after implementation to restore the service availability.

Percentage of Successful Changes

Description

The Percentage of Successful Changes report breaks down all closed changes in a given time period by status (failed, successful and successful with problems) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of successful changes, successful changes with problems and failed changes using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of successful and failed changes for a given time period. Successful changes are changes that were implemented successfully on the first attempt with minimized exposure to risk and a limited severity on the impact and service interruption. This means that there is no fallback needed, there is no unplanned downtime and the change does not cause a failure of the service after going life. A high percentage of successful changes is an indicator for good Change Management while a low percentage is an indicator for inadequate Change Management that needs to be evaluated.

Changes Scheduled for This Week

Description

The Changes Scheduled for This Week report provides an overview of changes scheduled for this week. This report contains a graphical representation of the breakdown of changes scheduled for this week using a bar graph. You can double-click any bar to display a detailed breakdown of that changes scheduled for a specified day.

Customer Value

This reports organizes the information by weekdays and provides a quick view of the changes scheduled for this week. The report is used to communicate the planned changes with the organization and provide visibility to key stakeholders of changes being introduced into the production environment. Reduction in the number of changes from week to week is an indicator for good Change Management while a growth is an indicator for inadequate Change Management that needs to be evaluated.

Configuration Management Reports

Report name	Business user	Description
Configuration Item Relationships	Service Management process managers, IT Management team	This report provides a high level view of the configuration item relationships defined for the organization.
Configuration Item Summary	Service Management process managers, IT Management team	This report gives the user the ability to view all the configuration items within their organization grouped by type and then by status.
Percentage of Configuration Items Related to Other Configuration Items	Service Management process managers, IT Management team	This report gives the user the ability to review the number of configuration items (CIs) related to one or more other CIs as a percentage of the total number of registered CIs in the Configuration Management System (CMS).

Configuration Item Relationships

Description

The Configuration Item Relationships report breaks down the configuration items (CIs) and their downstream relationships by type and then by subtype. If a CI has more than one downstream relationship, the report displays the total count. You can double-click the count to view the full list of downstream relationships.

Customer Value

This report allows a Configuration Management administrator to evaluate the CI relationships defined in the organization and determine whether the relationship model accurately represents their business needs. The administrator can also see the outage definitions and determine whether to change them.

Configuration Item Summary

Description

The Configuration Item Summary report breaks down the configuration items by type and then by status. This report contains a pie chart displaying all configuration items (CIs) by type. You can double-click any piece of the chart to display a detailed breakdown of the CI type by its status. This report uses grouping to provide a view of total counts by type and status.

Customer Value

This report gives the Configuration Manager administrator a high level overview of all the CIs defined within their organization. The administrator can view the details of any specific CI type and make decisions about inventory based on count and status of existing CIs. The report highlights in red any CIs currently down so that the administrator quickly sees which configuration items need attention.

Percentage of Configuration Items Related to Other Configuration Items

Description

The Percentage of Configuration Items Related to Other Configuration Items report provides an overview of the number of CIs within the CMDB for which the relationship with other CIs has been defined compared to the total number of CIs within the Configuration Management System (CMS). It only shows the relationship between CIs. This report contains a graphical representation of the breakdown of all CIs by relationship with other CIs

using a pie chart. You can double-click the 'CI related to other CIs' piece of the pie to display a detailed breakdown of that CI type by its subtypes. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by type and subtype of CIs.

Customer Value

This report provides information about the maturity of the CMDB to support the service management processes. It adds value to the CMDB to register the relationships between CIs instead of only registering the elements. This report also provides insight in the service structures that is used in Problem Management (problem investigation and diagnosis) and Change Management (change assessment and planning). The results of this report can be used by Configuration Management. The maturity of the CMDB is an indicator for the maturity of all other service management processes (there is no use for a mature CMDB when the information is not used).

Incident Management Reports

Report name	Business user	Description
Open and Closed Incidents by Category	Service Management process managers, IT Management team	This report enables the user to review, for a determined period, a breakdown of open and closed incidents by categories and by their associated areas.
Open and Closed Incidents by Service	Service Management process managers, IT Management team	This report provides an overview of the number of reported incidents by service in a given time period.
Backlog of Incidents	Service Management process managers, IT Management team	This report enables the user to review the number of incidents that are not closed in a given time period.
Reopened Incidents	Service Management process managers, IT Management team	This report enables the user to review the percentage of reopened incidents by service in a given time period.
Incidents Closed Meeting SLA Target	Service Management process managers, IT Management team	This report enables the user to review the number of closed incidents that meet the SLA targets in a given time period, relative to the number of all closed incidents.
Incident Aging Report	Service Management process managers, IT Management team	This report enables the user to review the number of all closed incidents opened in the last 30 days by priority and by incident duration.

Report name	Business user	Description
Incident Reassignment Analysis	Service Management process managers, IT Management team	This report enables the user to review the count of incidents opened in the last 13 months (including the current month) by number of reassignment times and by open date.
Percentage of Incidents by Priority	Service Management process managers, IT Management team	This report enables the user to review the count of incidents submitted in the last 13 months (including the current month) by open date and by priority.
Open Incidents Monthly Analysis by Category	Service Management process managers, IT Management team	This report enables the user to review a breakdown of monthly opened incidents for a determined period by categories and by their associated areas.

Open and Closed Incidents by Category

Description

The Open and Closed Incidents by Category report breaks down incidents by state (open or closed), by category, and then by area. This report contains a graphical representation of the breakdown of open versus closed incidents using a chart to display the categories. You can click any piece of the pie to display a detailed breakdown of that category by its areas. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by category and area.

Customer Value

This report provides a quick view of open and closed incidents for a specified time period. The percentages and totals displayed in group headings allow for quick determination of which categories and areas are generating the highest number of incidents, have a large number of incidents remaining open, or are resolving issues quickly. This information can then be used by an Incident

Management administrator to determine if a particular department requires additional training or resources to efficiently manage the number of incidents in a given area.

Open and Closed Incidents by Service

Description

The Open and Closed Incidents by Service report breaks down all reported incidents in a given time period by status (open or closed) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of open versus closed incidents using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of open and closed incidents by service for a given time period. The percentages and totals displayed in group headings indicate the quality of the service delivered. An increase of incidents deviated from the trend line in a certain time period needs to be diagnosed and acted upon. This information can be used by an Incident Management administrator to determine whether a particular department requires additional training or resources to decrease the number of incidents of a given service type. Note that the report excludes interactions logged as incidents but handled by the Service Desk.

Backlog of Incidents

Description

The Backlog of Incidents report breaks down non-closed incidents by time period, and then by assignment group. This report contains a graphical representation of the breakdown of all non-closed incidents using a pie chart. You can click any piece of the pie to display a detailed breakdown of that time

period by assignment group. The backlog consists of all incidents assigned to a certain group that are not closed yet, for example, all open incidents for this week for the network support group.

Customer Value

This report provides information about the workload for an assignment group. A growing number of open backlog incidents for a group indicates that they are not able to handle the current workload which is a threat for the SLA target times. This information can be used by a group manager to make decisions about the resources needed for the Incident Management process.

Reopened Incidents

Description

The Reopened Incidents report breaks down all incidents that were ever marked closed by status (reopened and non-reopened) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). Using a pie chart, this report provides an overview of the number of incidents that were reopened because the solutions were not accepted by the customer, relative to the number of incidents closed in a given time period. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information into groups and sub-groups to provide a quick view of percentage of reopened incidents.

Customer Value

This report provides information about the quality of the Incident Management process. Reopened incidents imply extra workload for the support groups and a threat for the Service Level Target dates. Incidents reopened by the Service Desk Agent indicate that the solutions provided did not satisfy the customer, the support group did not do a good job, or the service disruption was due to incorrect diagnosis. Note that this report does not refer to incidents that were recreated, because not all interactions were closed by the solutions provided.

Incidents Closed Meeting SLA Target

Description

The Incidents Closed Meeting SLA Target report breaks down all closed incidents in a given time period by status (SLA Target Met and SLA Breached) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of all closed incidents using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of closed incidents that meet SLA targets by service for a given time period. The percentages and totals displayed in group headings indicate the performance of the support organization. When the percentage of the closed incidents that meet SLA target is low, the Incident Manager needs to find out and analyze the weakest links of the process and define actions to improve the service delivery. Some possible actions are listed below:

- Provide support employees with training to upgrade their knowledge.
- Improve the knowledge database to increase the percentage of closed incidents that are first-time-fixed.
- Activate the Problem Management process to reduce the number of incidents.
- Hire more support employees when resource capacity is an issue.

Incident Aging Report

Description

The Incident Aging report breaks down all closed incidents which have been opened in the last 30 days by priority ("1 - Critical", "2 - High", "3 - Average", "4 - Low") and then by incident duration ($t^1 <= 1$ hour, 1 < t <= 2 hours, 2 < t <= 4 hours, 4 < t <= 8 hours, 8 < t <= 1 day², 1 < t <= 2 days, 2 < t <= 3 days, 3 < t <= 7 days, 7 < t <= 15 days, 15 < t <= 30 days). This report organizes the aforementioned information using both 3D and 2D bar graphs. You can get an overview of the number of closed incidents by priority and by incident duration on the first page of this report. The Incident Count by Duration analysis is displayed in the 2D bar graph. To view detailed breakdown of incidents by open date and by duration, you can click the **Groups** tab in Crystal Preview panel and select priority group names.

Customer Value

This report provides a quick view of all closed incidents which are opened in the last 30 days by priority and by incident duration. When the incidents start backlogging faster than they can be resolved, the tendency of long incidents resolved time can be exposed in this report. This information can be used by the IT Management team to monitor and report upon the efficiency and effectiveness of the resolved incidents. Service Management process managers can also use this report to develop and follow procedures to reduce the time to resolve incidents and eliminate backlogged incidents.

Incident Reassignment Analysis

Description

The Incident Reassignment Analysis report breaks down all incidents which have been opened in the last 13 months (include the current month) by number of reassignment times and then by incident open date. This report organizes the aforementioned information using 2D and 3D bar graphs. You can get an overview of the incidents count, their open dates and how many

- 1. "t" refers to incident duration.
- 2. In this document, "days" refer to calendar days.

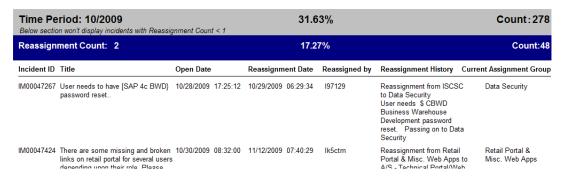
times the incidents are reassigned on the first page of this report. To display percentage and detailed breakdown of the reassigned incidents by open/close date and by assignment group, you can browse to the 2D bar graph and double-click any bar of the graph.

To generate a concise display of the reassigned incidents records list, you can press **F5** to open the filter prompt. Then you can specify the reassignment count threshold and click OK to refresh the record list. If the reassignment count of an incident is less than the specified threshold, it will be filtered out. However, the record which is filtered out from the detailed records list will still be counted in the 3D bar graph.



Note that the Incident Reassignment Analysis report only contains the incidents with reassignment activity record. The detailed breakdown of the reassigned incidents only reflects the reassignment history which is recorded in the database. If you regularly clean up the recent activity records in the activity table, the Reassignment Count and the reassignment history record count may not match.

As shown in the following example, the Reassignment Count of Incident IM00047267 is 2, but only one reassignment history record is displayed due to database cleanup.



However, if you remove the activity records which were opened 13 months ago, this report will not be affected.

Customer Value

This report provides a quick view of the number of all incidents which have been opened in the last 13 months by number of reassignment times and by open date. Incidents are reassigned when:

- Available resources are not sufficient
- Agreements in SLA contracts can not be fulfilled
- Service level cannot be fulfilled.

Frequent incident reassignment indicates that the assignment group members are lacking of knowledge or expertise, or inexplicit definition of responsibilities between the assignment groups. This information can be used by the IT Management team and the Service Management process managers to reallocate resources, organize additional tranings and improve ticket transfer decisions to achieve more efficient ticket routing.

Percentage of Incidents by Priority

Description

The Percentage of Incidents by Priority report breaks down all incidents by priority ("1 - Critical", "2 - High", "3 - Average", "4 - Low") and then by incident open date in the last 13 months (include the current month). This report contains graphical representations of the breakdown of the incidents using stacked bar graphs. You can get an overview of the percentages and totals on the first page of this report. To display the detailed breakdown of the incidents by open/close date and by priority, you can browse for a selected priority in the rest of this report and double-click any bar of the graph.

Customer Value

This report provides a quick view of the number and percentage of all incidents by priority and by open date in the last 13 months. The percentages and totals displayed on the first page of this report allow for a quick, visual overview of which incident priority is generating the highest percentage, or which month has the largest number of incidents. This information can be used by the IT Management team and the Service Management process managers to determine if the workflow in place needs to be adjusted or to reallocate resources.

Open Incidents Monthly Analysis by Category

Description

The Open Incidents Monthly Analysis by Category report breaks down the monthly opened incidents by category and then by area for a specified time period. This report organizes the aforementioned information using 2D bar graphs. You can get an overview of the top 5 categories of incidents opened each month on the first page of this report. To view detailed breakdown of these incidents by category and by area, you can click the **Groups** tab in Crystal Preview panel and select the category you are interested in.



This report calculates the incoming incidents in the specified period regardless of the incidents' status (solved or closed) at the query time.

Customer Value

This report provides a quick view of monthly opened incidents by category and by area for a specified time period. It provides you a quick determination of which categories and months have a large number of incidents opened. This information can then be used by an Incident Management administrator to determine if a particular department requires additional training or resources to efficiently manage the number of incidents in a given area.

Knowledge Management Reports

Report name	Business user	Description
Knowledge Management Activity	Service Management process managers, IT Management team	This report gives the user a breakdown of administrative document activities within Knowledge Management, for a given period of time.
Knowledge Management Documents Summary	Service Management process managers, IT Management team	This report gives the user an overview of all knowledge documents broken down by document type.
Knowledge Management: User Demand	Service Management process managers, IT Management team	This report gives the user an overview of knowledge document usage highlighting documents that were viewed and documents that were used as solutions, broken down by source.
Knowledge Management Usage by Department (for SD Interactions)	Service Management process managers, IT Management team	This report gives the user the ability to review, for a determined period, a breakdown by department of closed Service Desk interactions that used a Knowledge Management document for a solution.
Self-Service Knowledge Search History	Service Management process managers, IT Management team	This report gives the user the ability to view the number of Employee Self-Service (ESS) searches for a given time period.
Self-Service Escalated Knowledge Management Search Escalation	Service Management process managers, IT Management team	This report enables the user to view, for a given time period, the number of ESS searches that result in opening interactions.

Knowledge Management Activity

Description

The Knowledge Management Activity report breaks down the Knowledge Management (KM) documents by administrative activity type. This report contains a graphical representation of the document activity using a pie chart. You can double-click any piece of the pie to display the details of the documents for that activity type. The activity types of View and Used Solution are not included as these are specific to the User Demand report and do not reflect administrative activity.

Customer Value

This report gives a KM administrator the ability to get a very high level overview of the activity occurring against the KM documents. The administrator can use this information to evaluate the KM document workflow and verify that the management of the resources is adequate. The information can be used to determine the volume of documents that are being created, modified, retired and approved. If there are several documents being created but none are being approved this might indicate that there are not enough approvers or that the approver process is inefficient.

Knowledge Management Documents Summary

Description

The Knowledge Management Documents Summary report breaks down Knowledge Management (KM) documents by type using a bar graph to display the totals. You can double-click any bar to display a detailed list of the documents within that document type.

Customer Value

This report gives the KM administrator an overview of the breakdown of KM documents by type allowing the administrator to evaluate the status of the KM database.

Knowledge Management: User Demand

Description

The Knowledge Management: User Demand report breaks down Knowledge Management (KM) documents by source and then by their usage. This report contains a graphical representation of the breakdown of documents using a bar graph to display the number of documents viewed and the number of documents used as a solution per source. You can double-click any bar of the chart to display the detailed usage counts within a source by document ID.

Customer Value

This report provides a quick view of documents within a source that were viewed or used as a solution. This information can be used by a KM administrator to evaluate the content of the KM documents. An administrator can view the detailed information for a particular document within a source and see the total times a document was viewed compared to the total times the document was used as a solution. If the document was viewed several times but not used as a solution this might indicate that the content of the document needs to be updated. An administrator may also determine that the document is invalid and should be retired or that the title and keywords need to be updated in order to better facilitate user searches.

Knowledge Management Usage by Department (for SD Interactions)

Description

The Knowledge Management usage by department (for SD Interactions) report breaks down closed Service Desk (SD) interactions by department that use Knowledge Management (KM) documents as solutions to close an interaction. This report contains a bar graph of the ten departments that used the most documents as solutions. Additionally, there is a bar for the other departments with closed interactions. You can double-click any bar to display a detailed breakdown of that department's closed interactions using KM documents. This report organizes the information using groups to help users quickly view total counts by department.

Customer Value

This report provides a quick view of closed interactions for a specified time period where KM documents contributed to the resolution. The totals displayed in group headings allow for quick determination of which departments are generating SD interactions being closed using KM documents. This information can then be used to determine if the KM document content for a particular area needs to be increased or updated. This provides the KM Manager with a comprehensive overview of whether or not there are enough documents to solve issues coming from a certain department.

Self-Service Knowledge Search History

Description

The Self-Service Knowledge Search History report breaks down all Knowledge Management (KM) searches by two search types: ESS search and non-ESS search. This report contains a graphical representation of the search numbers using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that search type by user ID and search date, etc.

Customer Value

This report provides a comprehensive overview of the number of Knowledge Management searches. The process managers and the IT management team can use the information of the report to identify knowledge articles for ESS and non-ESS searches. This information can then be used by the KM Manager to determine if extra resources and additional trainings are needed by certain departments.

Self-Service Escalated Knowledge Management Search Escalation

Description

The Self-Service Escalated Knowledge Management Search Escalation report breaks down the ESS searches by two states: Escalated search and Non-Escalated search. This report contains a graphical representation of the

breakdown of escalated versus non-escalated ESS searches using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that state by user ID and search date, etc.

Customer Value

This report provides a a comprehensive overview of the number of escalated ESS searches for a specified time period. If the number of escalated ESS searches is high, it indicates that the number of interactions these searches result in could be high. This information can then be used by the KM Manager to identify areas in which the Knowledge Management database can be enhanced with knowledge articles for end users to solve issues.

Problem Management Reports

Report name	Business user	Description
Open and Closed Problems by Area	Service Management process managers, IT Management team	This report enables the user to review, for a determined period, a breakdown of open and closed problems by area.
Open and Closed Problems by Service	Service Management process managers, IT Management team	This report provides an overview of the number of reported problems by service in a given time period.
Problems Closed Meeting SLA Target	Service Management process managers, IT Management team	This report enables the user to review, in a given time period, the number of closed problems that meet the SLA targets, relative to the number of all closed problems.
Average Time to Diagnose Problems	Service Management process managers, IT Management team	This report enables the user to review, in a given time period, the average time to diagnose problems, pinpoint the root cause, and identify known errors.

Open and Closed Problems by Area

Description

The Open and Closed Problems by Area report breaks down problems by state (open or closed), by area, and then by phase. This report contains a graphical representation of the breakdown of open versus closed problems using a pie chart to display the areas. You can double-click any piece of the pie to display a

detailed breakdown of that area by phase. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by area and the current phase of the problem.

Customer Value

This report provides a quick view of open and closed problems for a specified time period. The percentages and totals displayed in group headings allow for quick determination of which areas are generating the highest number of problems, have a large number of problems remaining open, or are resolving issues quickly. This information can then be used by a Problem Management administrator to determine if the workflow in place needs to be adjusted or if a particular department requires additional training or resources to efficiently manage the number of problems in a given area.

Open and Closed Problems by Service

Description

The Open and Closed Problems by Service report breaks down all problems in a given time period by status (open and closed) and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of open versus closed problems using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of open versus closed problems for a given time period. The total number of the problems indicates the availability and quality of the service delivery. After a problem is detected and accepted, it should be recorded in HP Service Manager. Based on the information of the report, the Problem Coordinators can be aware of their workload and make decisions about the resources needed for the Problem Management process.

Problems Closed Meeting SLA Target

Description

The Problems Closed Meeting SLA Target report breaks down all closed problems in a given time period by status (SLA Target Met and SLA Breached) and then by service type (Applications, E-mail/Webmail, Intranet/ Internet, My Devices, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of all closed problems using a pie chart. You can double-click any piece of the pie to display a detailed breakdown of that status by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by status and service.

Customer Value

This report provides a quick view of closed problems that meet SLA targets by service for a given time period. The percentages and totals displayed in group headings indicate the performance of the responsible support organization. When the percentage of the closed problems that meet SLA target is low, the Problem Manager needs to find and analyze the weakest links of the process and define actions to improve the service delivery.

Average Time to Diagnose Problems

Description

The Average Time to Diagnose Problems report breaks down all open problems in a given time period by priority ("1 - Critical", "2 - High", "3 - Average", "4 - Low") and then by service (Applications, E-mail/Webmail, Intranet/Internet, Printing, Service Management, etc.). This report contains a graphical representation of the breakdown of all open problems using a bar graph. You can double-click any bar to display a detailed breakdown of that priority by service. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by priority and service of the open problems.

Customer Value

This report provides an insight into the average time to diagnose problems, pinpoint the root cause of incidents and to determine the resolution for a time period. The percentages and totals displayed in group headings indicate the focus of an organization on the Problem Management process and the extent in which problem analysts are equipped to do their job. A high percentage of the average turnaround time means that there is not enough focus on problem diagnosis. This information can be used by the Problem Manager to adjust the focus on problem diagnosis within different support groups and determine whether extra resources are needed.

Request Management Reports

Report name	Business user	Description
Request Aging Report	Service Management process managers, IT Management team	This report enables the user to review the top 20 categories of requests which are included the highest 90th percentile for requests duration submitted in the last 30 days. It also enables the user to review the distribution of requests for each category by request duration and by request submit date.

Request Aging Report

Description

The Request Aging report provides an overview of the top 20 categories of requests which are submitted in the last 30 days and are included in the highest 90th percentile for request duration. It also enables the user to review, for each category, the distribution of requests by request duration and by request submission date. In addition, detailed breakdown of overall requests count by duration ($t^1 <= 1 \text{ day}^2$, 1 < t <= 3 days, 3 < t <= 7 days, 7 < t <= 15 days, 15 < t <= 30 days, 30 < t <= 60 days, 60 < t <= 90 days, 90 < t <= 120 days) is also provided by this report.

This report organizes the aforementioned information using both 3D and 2D bar graphs. You can get an overview of the top 20 categories of requests which have the highest 90th percentile for requests duration on the first page of this report. On the second page, the Request Count by Duration analysis is displayed in 2D bar graph. To view detailed breakdown of the requests, you can click the **Groups** tab in Crystal Preview panel and select the categories you are interested in.

- "t" refers to request duration.
- 2. In this document, "days" refer to calendar days.

Customer Value

This report provides a quick view of the top 20 categories of requests which have the highest 90th percentile for requests duration. It also displays request median duration and 90th percentile duration for each category. This report can be used by the IT Management team to get a general impression on request handling overall performance. Also, it can help management team identify the most chanllenging area of requests handling.

Service Desk Reports

Report name	Business user	Description
Escalated Interactions	Management Administrators, Staff	This report provides the breakdown of interactions that have been escalated to change requests, incidents, known errors, and quotes.
Open and Closed Service Desk Interactions	Management Administrators, Staff	This report gives the user the ability to review, for a determined period, a breakdown of open and closed Service Desk interactions by categories and their associated areas.
First Time Fixed Interactions	Management Administrators, Staff	This report enables the user to review, for a given time period, the percentage of interactions closed by the Service Desk upon the first contact without reference to other levels of support.
Interactions Resulting in Related Issues	Management Administrators, Staff	This report enables the user to review interactions which result in related issues for a given time period.
Top 20 Operators by Average Interaction Time in Last 90 Days	Management Administrators, Staff	This report enables the user to review the analysis of how long, on average, the top 20 operators take to handle an interaction in past 90 days.
Interactions Closed in a Given Year	Management Administrators, Staff	This report enables the user to review the interactions closed in a given year by months.
Number of Service Desk Requests by Department	Management Administrators, Staff	This report enables the user to review the top ten departments which utilize the help desk in a given time period.

Escalated Interactions

Description

The Escalated Interactions report breaks down the interactions by the type of related record (change requests, incidents, known errors, quotes). This report uses a bar graph to provide a representation of the breakdown of interactions by related record type. You can double-click any bar of the graph to display a detailed breakdown of the related record type. To help users view totals quickly, the report organizes the information into groups of related record types.

Customer Value

This report provides a quick view of escalated interactions opened during a specified period of time. The Service Desk administrator can see a high-level view of the activity originating from the Service Desk and the effect of this activity on the overall system workflows. This enables the administrator to determine what changes may be necessary in order to better support the Service Desk.

Open and Closed Service Desk Interactions

Description

The Open and Closed Service Desk Interactions report breaks down interactions by state (open or closed), by category, and then by area. This report contains a graphical representation of the breakdown of open versus closed interactions using a pie chart to display the categories. You can double-click any piece of the pie to display a detailed breakdown of that category by its areas. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by category and area.

Customer Value

This report provides a quick view of for a specified time period. The percentages and totals displayed in group headings allow for quick determination of which categories and areas are generating the highest

number of interactions, have a large number of interactions remaining open, or are resolving issues quickly. This information can then be used by a Service Desk administrator to determine if a particular help desk requires additional training or resources to efficiently manage the number of calls in a given area.

First Time Fixed Interactions

Description

The First Time Fixed Interactions report breaks down all closed interactions in a given time period by status (first-time-fixed or non-first-time-fixed), and then by service type (Applications, E-mail/Webmail, Intranet/Internet, My Devices, Printing, Service Management, etc.). Using a pie chart, this report contains a graphical representation of the breakdown of first-time-fixed versus non-first-time-fixed interactions the Service Desk deals with upon the first contact without support from other levels. You can double-click any piece of the pie to display a detailed breakdown of the category by service. This report organizes the information using groups and sub-groups to provide a quick view of percentages and total counts by status and service.

Customer Value

This report provides information about the knowledge of the Service Desk and the workload handled by the Service Desk for a specified time period. A high first-time-fixed rate indicates that the Service Desk is skillful, knowledgeable, and familiar with using the right tools to help end-users resolve their issues at the initial contact. In addition, the first-time-fixed rate is high only when all Service Desk staff can efficiently use their knowledge and tools. Therefore, sharing knowledge within the whole ICT department, for instance within Problem Management, takes a big part in optimizing the rate. A high first-time-fixed rate also boosts the customer satisfaction rate as end-users like to be helped directly when contacting the Service Desk. This will also improve efficiency at the Service Desk and for the entire IT support organization, as only few actions are needed if an interaction is closed by the Service Desk.

Interactions Resulting in Related Issues

Description

The Interactions Resulting in Related Issues report breaks down all closed interactions category 'incident' in a given time period by area (access, data, failure, hardware, performance, security) and then by sub-area (authorization error, login failure, data or file corrupted, system down, etc.). This report contains a graphical representation of the breakdown of all closed interactions using a bar graph. You can double-click any bar to display a detailed breakdown of that area by sub-area. This report organizes the information using groups and sub-groups to help users quickly view percentages and total counts by area and sub-area of the closed interactions.

Customer Value

This report enables the user to review Service Desk interactions which were not solved by the Service Desk and resulted in related Incidents for a given time period. This information can be used by service management process managers and the IT management team to identify areas in which the Service Desk does not have the knowledge to solve the issue. And the knowledge may be provided by the Service Desk.

Top 20 Operators by Average Interaction Time in Last 90 Days

Description

The Top 20 Operators by Average Interaction Time in Last 90 Days report provides an overview of the average interaction handle time by top 20 operators in the past three months. This report contains a graphical representation of the breakdown of the top 20 operators with the longest average interaction handle time using a bar graph. This report also provides a detailed list so that the users can quickly view the average handle time by two different display formats.

Customer Value

This report shows the amount of conversation time and call wrap-up time for Service Desk Agents. It is useful in calculating and judging the average time to close an Interaction for a given Service Desk Agent. This information can be used by service management process managers and the IT management team to identify areas in which the Service Desk can be improved to speed up the average interaction handle time.

Interactions Closed in a Given Year

Description

The Interactions Closed in a Given Year report provides an overview of the interactions closed in a given year. This report contains a graphical representation of the breakdown of all interactions closed in a given year using a bar graph. This report also provides a detailed list so that the users can quickly view the numbers of closed interactions by two different display formats.

Customer Value

This report provides the value of the Service Desk by showing the number of calls closed for a given year. It shows the volume of interactions closed and this information can be used by service management process managers and the IT management team for trending purposes.

Number of Service Desk Requests by Department

Description

The Number of Service Desk Requests by Department report provides an overview of the top ten departments which utilize the help desk in a given time period. This report contains a graphical representation of the breakdown of top ten departments utilizing the help desk using a bar graph. This report also provides a detailed list so that the users can quickly view the departments and the numbers of Service Desk requests by two different display formats.

Customer Value

This reports shows the top ten departments which utilize the help desk in a given time period. The service management process managers and the IT management team can use this report to determine the number of Interactions when negotiating inter-department service level agreements.

Service Level Management Reports

Report name	Business user	Description
SLM: Response SLO Metrics	Management Administrators	This report gives the user the ability to review the target response metrics for the ten lowest performing Service Level Agreements (SLAs) in the specified month.
SLM: Summary	Management Administrators	This report gives the user the ability to review the target response and availability metrics for a single Service Level Agreement (SLA) within a given month.
SLM: Availability-Duration Metrics	Management Administrators	This report gives the user the ability to review the availability-duration metrics for the ten lowest performing Service Level Objectives (SLOs) per Service Level Agreement (SLA) in the specified month.
SLM: Availability-Uptime Metrics	Management Administrators	This report gives the user the ability to review the availability-uptime metrics for the ten lowest performing Service Level Objectives (SLOs) per Service Level Agreement (SLA) in the specified month.

SLM: Response SLO Metrics

Description

The SLM: Response SLO Metrics report breaks down the target response objectives by Service Level Agreement (SLA) and then by Service Level Objective (SLO). This report contains a graphical representation of the ten SLAs with the lowest response results ordered from lowest to highest. You can double-click any bar to display a detailed breakdown of that SLA by its SLOs. In the detailed breakdown you can see another chart representing the ten

SLOs with the lowest percentage of response results also ordered from lowest to highest. For cases with more than ten SLAs/SLOs, the charts display an extra bar that can be clicked to display the remaining detailed information.

Customer Value

This report provides a quick analysis of the response objectives achieved for a given month, with a special emphasis in areas within Service Management that need improvement due to the lack of adequate response within the time frame specified in the agreement. Based on this data, management can take actions such as redefining contracts, providing additional training to enhance the response times of the service desks, and restructuring the organization so that each area has sufficient resources to meet the response objectives.

SLM: Summary

Description

The SLM: Summary report displays all the response and availability data for a single Service Level Agreement (SLA) for a specified month. The data is grouped by Service Level Objective (SLO) response and then by SLO availability data. The SLO availability data is then grouped by SLO type (duration and uptime).

Customer Value

This report provides an overview of the performance for an SLA within a given month. This information can be used by management to quickly understand how successful their organization has been in fulfilling the SLA requirements. For example, if the SLA requirements are not being met, this might indicate that the helpdesk needs additional training or resources to fulfill the requirements outlined in the SLA definition, or that the SLA needs to be redefined with more realistic requirements.

SLM: Availability-Duration Metrics

Description

The SLM: Availability-Duration Metrics report breaks down the target availability-duration objectives by Service Level Agreement (SLA) and then by Service Level Objective (SLO). This report contains a graphical representation of the ten SLAs with the lowest availability-duration metrics ordered from lowest to highest. You can double-click any bar to display a detailed breakdown of that SLA by its SLOs. In the detailed breakdown, you can see another chart that represents the ten SLOs with the lowest percentage of availability-duration metrics also ordered from lowest to highest. For cases with more than ten SLAs/SLOs, the charts display an extra bar that can be clicked to display the remaining detailed information.

Customer Value

This report provides a quick analysis of the availability-duration objectives achieved for a given month. This information can be used by management to quickly assess the status of the Configuration Items (CIs) within their organization. For example, the data might indicate that a particular CI is frequently unavailable within the given month and fails to meet the target availability-duration defined within its SLO. Management can then investigate and determine whether the CI needs to be replaced or serviced. Management can also determine that more resources need to be added to the IT department in order to better maintain the availability of the organization's assets. Management can then use this information to prevent future outages which can affect overall productivity and ROI.

SLM: Availability-Uptime Metrics

Description

The SLM: Availability-Uptime Metrics report breaks down the target availability-uptime objectives by Service Level Agreement (SLA) and then by Service Level Objective (SLO). This report contains a graphical representation of the ten SLAs with the lowest availability-uptime metrics ordered from lowest to highest. You can double-click any bar to display a detailed breakdown of that SLA by its SLOs. In the detailed breakdown, you can see

another chart that represents the ten SLOs with the lowest percentage of availability-uptime metrics also ordered from lowest to highest. For cases with more than ten SLAs/SLOs, the charts display an extra bar that can be clicked to display the remaining detailed information.

Customer Value

This report provides a quick analysis of the availability-uptime objectives achieved for a given month. This information can be used by management to quickly assess the status of the Configuration Items (CIs) within their organization. For example, the data might indicate that a particular CI is frequently unavailable within the given month and fails to meet the target uptime defined within its SLO. Management can then investigate and determine whether the CI needs to be replaced or serviced. Management can also determine that more resources need to be added to the IT department in order to better maintain the availability of the organization's assets. Management can then use this information to prevent future outages which can affect overall productivity and ROI.

4 Create and Edit Your Own Reports

Out-of-box reports can meet most of your reporting needs. However, as you customize Service Manager, you may want to redesign existing reports and create new reports to suit your specific business requirements. This chapter describes how to use Crystal Reports to report on your Service Manager database.



This chapter helps you get started using Crystal Reports. For more information, see related Service Manager documentation such as *Processes and Best Practices Guide* and *Installation Guide*.

This chapter includes the following topics:

- Software Requirements
- Important Crystal Report Notes
- Create SM Operational Reports

Software Requirements

Before you start editing or creating Crystal Reports from Service Manager, you need a working knowledge of the following:

- Crystal Reports: You need to have the basic knowledge about how to maintain and design reports using Crystal Reports.
- HP Service Manager Operational Reports: All reports shipped with Service Manager.
- ServiceCenter ODBC Driver: Shipped with Service Manager installation package. You must have ODBC Driver installed and configured.

Important Crystal Report Notes

This section contains important information you must be aware of when using Crystal Reports.

ODBC Driver

You must install and configure ODBC Driver before using Crystal Reports for the following reasons:

- Some reports require the use of certain fields that are not mapped to the database such as sysmodtime, etc. These fields get mapped as a blob so they cannot be seen directly from Crystal Reports.
- ODBC Driver is used to keep consistency with reports created in earlier versions of Crystal Reports.
- Not all the users have SQL and sometimes there are issues refreshing the report with an ODBC pointing to a different database.

For steps of installing and configuring ODBC Driver, see *HP Service Manager Installation Guide*.

Joining Multiple Tables

You can combine the data from multiple tables into a single report. For example, you might want to write a report that displays the details of all open incident tickets, and also the contact information of the contacts who reported the incidents. The probsummarym1 table contains all the incident details, but contains only the name and phone number of the contact. Additional information about the contact is in the contactsm1 table. A join between the two tables allows you to create a report containing information about the tickets from probsummarym1 and the detailed contact information from contactsm1 in a single report.

Create a Join in Service Manager

Before creating a join, search the database to see if the join already exists.

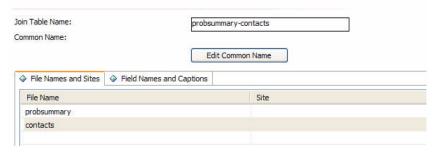
Search the Database

- 1 Start your Service Manager client.
- 2 Type **db** in the HP Service Manager Command Line, and then press **ENTER**. The Database Manager utility opens.
- 3 Type joindef in the Form field, and then click Search.
- 4 Type the name of the join you want to create, and then click **Search** on the toolbar. Join Definition files are typically named for the tables being joined. In this example, you are looking for a join called probsummary-contacts or contacts-probsummary.

You can create a join if no records are found in the search result.

Create a Join if It does not Exist

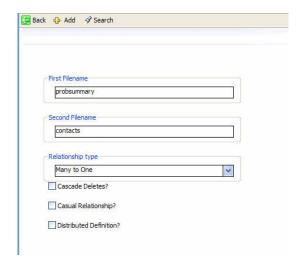
- 1 Enter a name for the join in the Join Table Name field (keep with the common naming convention).
- 2 Add the names of the tables to be joined in the fields, starting with the upper-left field and working down in columns.
 - Under the File Names and Sites tab, add tables of probsummary and contacts.
 - b Click **Add** on the toolbar. The join is created.



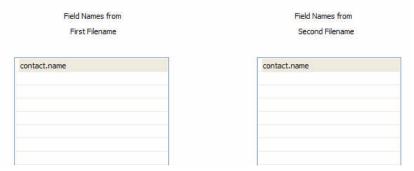
- 3 Type **db** in the HP Service Manager Command Line and press **ENTER**. The main Database Manager window opens.
- 4 Type erddef in the Form field, and then click Search.

5 Search for the Entity Relationship Diagram (ERD) Definition you are about to make. In this case, you might want to search based on the First Filename, Second Filename, and Relationship Type. See the table below for descriptions of these fields.

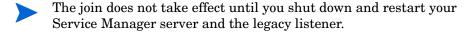
Field	Description
First Filename	Name of the table you want as the parent table in this join. This table shows all of its records. In the example, this is probsummary because the primary goal is to show all open incidents.
Second Filename	Name of the dependent table. This table only shows records related to each record of the parent table. In the example, the name is contacts because the contact name determines the contact information for each individual incident record.
Relationship Type	One-To-Many, Many-To-One, or One-To-One. This refers to the number of times the record of one table can be connected to records from another table. Use the Many-To-One relationship in this example because a single contact can occur in multiple incident records, but an incident summary can contain only one contact name.



- 6 If no match occurs, create an ERD definition by filling in the First Filename, Second Filename, and Relationship Type described in Step 5.
 - a Type **probsummary** in the First Filename field, **contacts** in the Second Filename field and select **Many to One** from the Relationship type drop-down box.
 - b In the Field Names from First Filename box, enter the fields where you want to create the join (that is, the field in the first table that is equivalent to the field in the second table).
 - c Do the same for the Field Names from Second Filename box. In this example, the contact.name field in the probsummary table contains the same data as the contact.name field in the contacts table.
 - d Click Add.



7 Restart your Service Manager server and the legacy listener.



The join results in the following:

- Your report prints every record in the probsummary table that meets your selection criteria.
- For each record, the system looks in the contacts table for a record containing the same name in the contacts.contact.name field as contained in the probsummary.contact.name field. All requested contact information for that record is printed.

OOB Reports Dependency

Some OOB reports depend on the Join (table joindefs) and ERD (table erddef) definitions. If the definitions do not exist, you must define them so that you can preview these OOB reports successfully. See the tables below for a summary of the reports and their dependency on the Join and ERD definitions.

Reports Requiring ERD Definition

Report Name	First Filename	Second Filename	Relationship type	Field Names from First Filename	Field Names from Second Filename
Escalated Interactions	incidents	screlation	One to One	incident.id	source
Knowledge Management Activity	kmdocument	kmusagehistory	One to Many	id	kmid
Knowledge Management Summary	kmdoctype	kmdocument	One to Many	name	doctype
SLM: Response SLO Metrics	sla	slaresponse	One to Many	agreement.id	agreement.id
SLM: Summary					
SLM: Availability-Duration Metrics	sla	alamanthly	One to Many	agreement.id	agreement.id
SLM: Availability-Uptime Metrics	i sia	slamonthly	One to Many	agreement.IU	agreement.iu

Reports Requiring Join Definition

Report Name	Join Table Name	File Names	
Escalated Interactions	incidents-screlation	incidents screlation	
Knowledge Management Activity	kmdocument-kmusagehistory	kmdocument kmusagehistory	
Knowledge Management Summary	kmdoctype-kmdocument	kmdoctype kmdocument	
SLM: Response SLO Metrics	ala alamanana	sla	
SLM: Summary	- sla-slaresponse	slaresponse	
SLM: Availability-Duration Metrics	joinslamonth	sla slamonthly	
SLM: Availability-Uptime Metrics	Joinstanionen		

Create SM Operational Reports

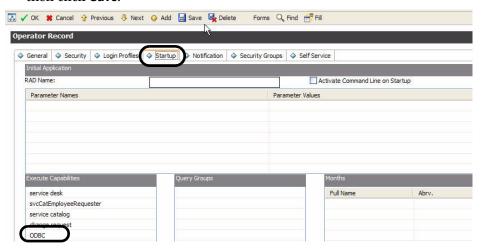
Suppose you might want to create a report that displays the details of all open incident tickets, and also the contact information of the contacts who reported the incidents. Complete the following tasks to create a report with data extracted from the probsummarym1 table and the contactsm1 table:

- Add an ODBC capability word
- Start the legacy listener
- Create an operational report
- Design layout of the report

Task 1: Add an ODBC capability word

- 1 Start the Service Manager server.
 - Open a command prompt and navigate to <Service Manager installation path>\Server\RUN.

- b Type sm.exe, and then press ENTER. The Service Manager server is started.
- 2 Start the Service Manager client.
 - o Open a command prompt and navigate to <Service Manager installation path>\Client.
 - b Type ServiceManager.exe, and then press ENTER. The Service Manager client is started.
 - c Log on to Service Manager with a system administrator account.
- 3 Type operator in the Service Manager Command Line, and then press ENTER. The Operator utility opens.
- 4 Type the login name of the specified operator in the Login Name field, and then click **Search**.
- 5 Click the **Startup** tab, type **ODBC** in the Execute Capabilities table, and then click **Save**.



Task 2: Start the legacy listener

- Open a command prompt and navigate to <**Service Manager** installation path>\Server\legacyintegration\RUN.
- 2 Type Scenter.exe -listener:12670 -RPCReadOnly.

- 3 Press ENTER. Scenter. exe is started.
- For more information about starting the legacy listener, see *HP Service Manager Installation Guide*.

Task 3: Create an operational report

- 1 Start Crystal Reports, and then click New Report on the Standard toolbar. The Standard Report Creation Wizard opens.
- 2 Expand the Create New Connection folder, and then double-click ODBC (RDO).
- 3 Select sc_report_odbc from Data Source Name, and then click Next.
 - If sc_report_odbc is not available in the list of Data Source Name, check whether ODBC Driver is correctly installed and configured.
- 4 In the User ID field, type the login name of the specified operator with ODBC Execute Capability as specified in Task 1, and then click Finish.
 - User ID is case sensitive.
- 5 In the Standard Report Creation Wizard, expand the sc_report_odbc folder and select tables that may be used in your report from the Available Data Sources box to the Selected Tables box using the left (corresponds to left on the screen) and right arrows (corresponds to right on the screen). In this example, select tables of probsummarym1 and contactsm1.
- 6 Click **Next** to go to the Link page of the wizard.
- 7 Click Clear Links to remove all the default links between the two tables.
 - The default links between the fields of the tables you selected indicate that the data of the fields are the same in these tables. For example, the contact.name field in the probsummarym1 table contains the same data as the contact.name field in the contactsm1 table. You need to clear all links before establishing new links.

8 Select contact.name from the probsummarym1 table, drag and drop to the contact.name in the contactsm1 table. A new link is set up.



- If you want to modify the Join Type, Enforce Join and Link Type of a link, click the link you create, click **Link Options**, and then select options as needed.
- 9 Click **Next** to go to the Fields page of the wizard.
- 10 Select fields you want to display in the report using the left (corresponds to left on the screen) and right arrow (corresponds to right on the screen), and then click **Next**.
- Optional step: customize your report on the next three pages of the wizard (you can also skip any of the pages).
 - a Group the data in the report on the Grouping page.
 - b Select a subset of information to display on the Record Selection page.
 - c Choose a template for your report on the Template page.
- 12 Click Finish. The Crystal Reports Preview page opens.

Task 4: Design layout of the report

1 Click the Design tab to switch to the Crystal Reports Design page.

- 2 On the Crystal Reports Design page, adjust the size and position of fields and rename the field headers (also as column headers in the report).
 - For advanced report designing, see Crystal Reports online help.
- 3 Go to **File**→**Save** to save all modifications that you have made.

Editing Reports Created in Earlier Versions

If you attempt to edit an out-of-box report created with a version of Crystal Reports that is older than the version you are using, the system will notify you and request that you save the report in the newer Crystal Reports format. This can change the way the report functions and requires additional modifications to the Report to conform to the newer version of Crystal Reports. For information on modifying reports created in an earlier version of Crystal Reports, see *Crystal Reports Help*.

5 Customizing Report Settings

Crystal Reports enables you to customize report settings such as the time range of the report and how the report is run against a reference date. This section explains how to customize all report settings.



You cannot customize out-of-box reports that have no Start Date parameter.

Specifying a Time Range

You have the ability to run a report within a time range by selecting DateTime or entering DateTime in format of "mm/dd/yyyy hh:mm:ss".

You can specify a time range for a report by completing the following tasks:

- Rename the Start Date parameter
- Modify formulas
- Run a customized report

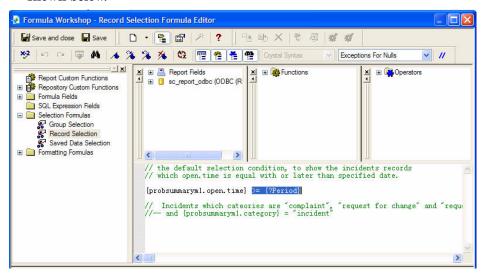
Task 1: Rename the Start Date parameter

- 1 Open a report to be customized using Crystal Reports. The Design page opens.
- 2 From the View menu, click Field Explorer. The Field Explorer panel opens.
- 3 Expand Parameter Fields, right-click Start Date and select Rename.
- 4 Type **Period** as the new name for the parameter.
- 5 Double-click **Period**. The Edit Parameter window opens.
- 6 Select **Static** from the List of Values drop-down menu.

- 7 In the Value Options section, locate "Allow range values", and then select **True**.
- 8 Click OK.

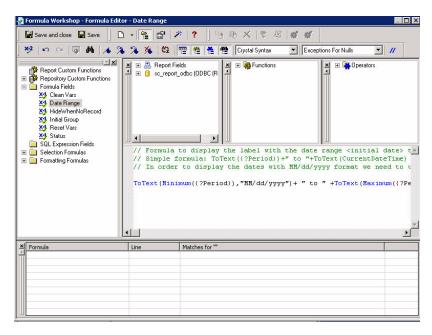
Task 2: Modify formulas

- 1 From the Report menu, click **Formula Workshop**. The Formula Workshop window opens.
- 2 Expand Selection Formulas, and then click Record Selection. The Formula Editor window opens.
- 3 Replace all the >= {?Period} with in {?Period} in the editor area as shown below.



- Click **Check** on the toolbar to look for any possible errors in the code. You must fix all errors to proceed.
- Use the search and replace feature to change all instances of >= {?Period} in the editor area.
- 4 Click Save.
- 5 Expand Formula Fields and click Date Range. The Formula Editor window opens.

6 In the editor area, replace ToText({?Period}, "MM/dd/yyyy")+ " to "
+ToText(CurrentDateTime, "MM/dd/yyyy") with ToText(Minimum({?Period}), "MM/dd/yyyy")+ " to " +ToText(Maximum({?Period}), "MM/dd/yyyy").



- 7 Click **Save and close**. The Formula Editor window closes.
- 8 Click **Save** on the Standard toolbar to save all modifications that you have made.

Task 3: Run a customized report

- 1 Start the legacy listener. See Start the legacy listener.
- 2 Click **Print Preview** on the Standard toolbar. The Enter Values window opens.
- 3 Select the date range by doing one of the following:
 - Enter dates in the "mm/dd/yyyy hh:mm:ss" format in the text box provided.
 - Click the calendar icon sand select a date.
- 4 Click **OK** to run the report.

Customizing Against a Reference Date

You can easily run a report against a reference date by completing the following tasks:

- Add the Reference Date parameter
- Add the Reference Condition parameter
- Define the cdFormatDateRange function (Crystal Syntax)
- Define the cdSpecialDateRange function (Basic Syntax)
- Modify formulas
- Run a Customized Report

Task 1: Add the Reference Date parameter

- 1 Open a report to be customized using Crystal Reports. The Design page of the report opens.
- 2 From the View menu, click **Field Explorer**. The Field Explorer panel opens.
- On the panel, right-click **Parameter Fields** and select **New**. The Create New Parameter window opens.
- 4 Configure the following:

Name: Reference Date

Type: **Date**

List of Values: Static

5 In the Value Options section, select **Read only** for Show on (Viewer) Panel option, and then click **OK**. The Reference Date parameter is added into the Parameter Fields.

Task 2: Add the Reference Condition parameter

- Right-click **Parameter Fields**, and then select **New**. The Create New Parameter window opens.
- 2 Configure the following:

Name: Reference Condition

Type: String

List of Values: Static

- 3 Import values to the parameter.
 - a Create a .txt file with the following content:

```
%%%ShowDescOnly0
Aged 0 to 30 days
Aged 31 to 60 days
Aged 61 to 90 days
All dates from today
All dates from tomorrow
All dates to today
All dates to yesterday
Calendar 1st half
Calendar 2nd half
Calendar 1st quarter
Calendar 2nd quarter
Calendar 3rd quarter
Calendar 4th quarter
Last 1 day
Last 7 days
Last 4 weeks to Sunday
Last full week
Last full month
Last year month to date
Last year to date
Month to date
Quarter to date
Next 30 days
Next 31 to 60 days
Next 61 to 90 days
Next 91 to 365 days
Over 90 days
Week to date from Sunday
Year to date
```

- b In the Create New Parameter window, click **Actions**—**Import** and select the .txt file. The values are imported to the Reference Condition parameter.
- For more information about the definition of these date ranges, see Appendix A.
- 4 In the Value Options section, do the following:
 - Select Read only for Show on (Viewer) Panel.
 - Select a setting option, for example Month to date for Default Value.
 - Select False for "Allow custom values".

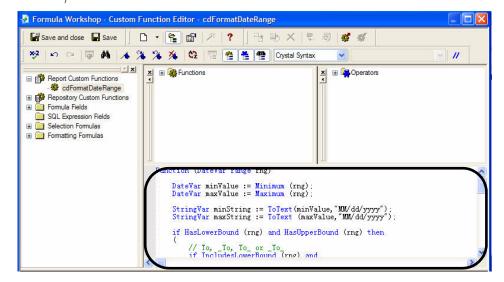
5 Click **OK**. The Reference Condition parameter is added into the Parameter Fields.

Task 3: Define the cdFormatDateRange function (Crystal Syntax)

- 1 From the Report menu, click **Formula Workshop**. The Formula Workshop window opens.
- 2 Click the down arrow next to **New** , and then select **Custom Function**. The Custom Function Name dialog opens.
- 3 Type cdFormatDateRange in the Name text box, and then click Use Editor. The Custom Function Editor window opens.
- 4 Select **Crystal Syntax** from the drop-down list on the toolbar.
- 5 Copy the following to replace the existing information in the editor area:

```
Function (DateVar range rng)
    DateVar minValue := Minimum (rng);
    DateVar maxValue := Maximum (rng);
    StringVar minString := ToText(minValue, "MM/dd/yyyy");
    StringVar maxString := ToText (maxValue, "MM/dd/yyyy");
    if HasLowerBound (rng) and HasUpperBound (rng) then
        // To, _To, To_ or _To_
        if IncludesLowerBound (rng) and
           IncludesUpperBound (rng) then
            if minValue = maxValue then
                minString
            else
                "between " + minString + " and " + maxString
        )
        else if IncludesLowerBound (rng) then
            "between " + minString + " and " + maxString
            + " not including right endpoint"
        else if IncludesUpperBound (rng) then
            "between " + minString + " and " + maxString
             + " not including left endpoint"
            "between " + minString + " and " + maxString
            + " not including endpoints"
    else if HasLowerBound (rng) then
        // Is > or Is >=
```

```
if IncludesLowerBound (rng) then
    "greater than or equal to " + minString
  else
    "greater than " + minString
)
else if HasUpperBound (rng) then
(
    // Is < or Is <=
    if IncludesUpperBound (rng) then
        "less than or equal to " + maxString
    else
        "less than " + maxString</pre>
```



- 6 Click **Save and close**. The function is now defined.
 - Click **Check** on the toolbar to look for any possible errors in the code. You must fix all errors to proceed.

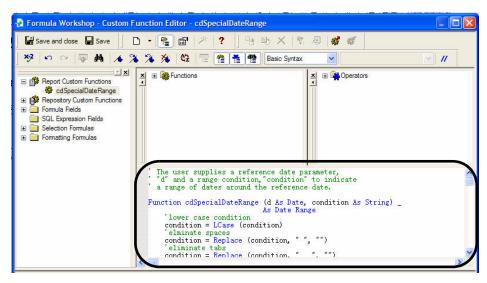
Task 4: Define the cdSpecialDateRange function (Basic Syntax)

- 1 From the Report menu, click **Formula Workshop**. The Formula Workshop window opens.
- 2 Click the down arrow next to **New**, and then select **Custom Function** as shown below. The Custom Function Name dialog opens.
- 3 Type cdSpecialDateRange in the Name text box, and then click Use Editor. The Custom Function Editor window opens.

- 4 Select **Basic Syntax** from the drop-down list on the toolbar.
- 5 Copy the following to replace the existing information in the editor area:

```
' The user supplies a reference date parameter,
' "d" and a range condition, "condition" to indicate
' a range of dates around the reference date.
Function cdSpecialDateRange (d As Date, condition As String) _
                            As Date Range
    'lower case condition
    condition = LCase (condition)
    'elminate spaces
   condition = Replace (condition, " ", "")
    'eliminate tabs
   condition = Replace (condition, " ", "")
   Select Case condition
   Case LCase ("Aged0To30Days")
        cdSpecialDateRange = (d - 30) To d
   Case LCase("Aged31To60Days")
        cdSpecialDateRange = (d - 60) To (d - 31)
   Case LCase("Aged61To90Days")
       cdSpecialDateRange = (d - 90) To (d - 61)
   Case LCase("AllDatesFromToday")
        cdSpecialDateRange = Is >= d
   Case LCase("AllDatesFromTomorrow")
        cdSpecialDateRange = Is >= (d + 1)
   Case LCase("AllDatesToToday")
       cdSpecialDateRange = Is <= d
   Case LCase("AllDatesToYesterday")
        cdSpecialDateRange = Is <= (d - 1)
    Case LCase("Calender1stHalf")
        cdSpecialDateRange = CDate(Year(d), 1, 1) _
            To CDate (Year (d), 6, 30)
    Case LCase("Calendar2ndHalf")
        cdSpecialDateRange = CDate(Year(d), 7, 1) _
            To CDate (Year (d), 12, 31)
   Case LCase("Calendar1stQtr"), LCase("Calendar1stQuarter")
        cdSpecialDateRange = CDate(Year(d), 1, 1) _
            To CDate (Year(d), 3, 31)
   Case LCase("Calendar2ndQtr"), LCase("Calendar2ndQuarter")
        cdSpecialDateRange = CDate(Year(d), 4, 1) _
            To CDate (Year (d), 6, 30)
   Case LCase("Calendar3rdQtr"), LCase("Calendar3rdQuarter")
        cdSpecialDateRange = CDate(Year(d), 7, 1) _
            To CDate (Year (d), 9, 30)
   Case LCase("Calendar4thQtr"), LCase("Calendar4thQuarter")
        cdSpecialDateRange = CDate(Year(d), 10, 1) _
            To CDate(Year(d), 12, 31)
   Case LCase("Last4WeeksToSun"), LCase("Last4WeeksToSunday")
```

```
cdSpecialDateRange = (d - 27 - (Weekday(d) - 1)) _
        To (d - (Weekday(d) - 1))
Case LCase("Last1Day")
    cdSpecialDateRange = (d - 1) To d
Case LCase("Last7Days")
    cdSpecialDateRange = (d - 6) To d
Case LCase("LastFullMonth")
    cdSpecialDateRange = DateSerial(Year(d), Month(d) - 1, 1) _
        To DateSerial(Year(d), Month(d), 1 - 1)
Case LCase("QuarterToDate")
   Dim m as Number
   m = ToNumber (Month(d))
    if (m >= 1 \text{ and } m <= 3)
    then cdSpecialDateRange = CDate(Year(d), 1, 1) To d _
    else if (m>=4 \text{ and } m<=6)
        then cdSpecialDateRange = CDate(Year(d), 4, 1) To d _
    else if (m>=7 \text{ and } m<=9) _
        then cdSpecialDateRange = CDate(Year(d), 7, 1) To d _
    else if (m>=10 \text{ and } m<=12)
        then cdSpecialDateRange = CDate(Year(d), 10, 1) To d
Case LCase("LastFullWeek")
    cdSpecialDateRange = (d - 6 - Weekday(d)) _
        To (d - Weekday(d))
Case LCase("LastYearMTD"), LCase("LastYearMonthToDate")
    cdSpecialDateRange = CDate(Year(d) - 1, Month(d), 1) _
        To CDate(DateAdd("yyyy", -1, d))
Case LCase("LastYearYTD"), LCase("LastYearToDate")
    cdSpecialDateRange = CDate(Year(d) - 1, 1, 1) _
        To CDate(DateAdd("yyyy", -1, d))
Case LCase("MonthToDate")
    cdSpecialDateRange = CDate(Year(d), Month(d), 1) To d
Case LCase ("Next30Days")
    cdSpecialDateRange = d To (d + 30)
Case LCase("Next31To60Days")
    cdSpecialDateRange = (d + 31) To (d + 60)
Case LCase("Next61To90Days")
    cdSpecialDateRange = (d + 61) To (d + 90)
Case LCase("Next91To365Days")
    cdSpecialDateRange = (d + 91) To (d + 365)
Case LCase("Over90Days")
    cdSpecialDateRange = Is <= (d - 91)
Case LCase("WeekToDateFromSun"), LCase("WeekToDateFromSunday")
    cdSpecialDateRange = (d- (Weekday(d) - 1)) To d
Case LCase("YearToDate")
    cdSpecialDateRange = CDate(Year(d), 1, 1) To d
Case Else
    'provide default handling and specify a valid range
    cdSpecialDateRange = CDate(1899, 12, 30) _
    To CDate(1899, 12, 30)
End Select
```

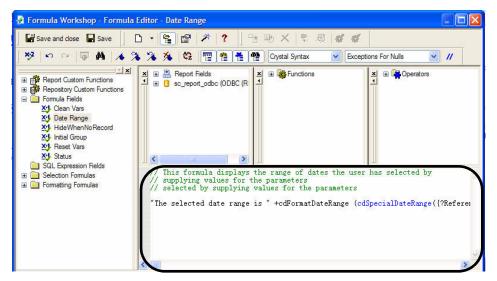


- 6 Click **Save and close**. The function is now defined.
 - Click **Check** on the toolbar to look for any possible errors in the code. You must fix all errors to proceed.

Task 5: Modify formulas

- On the Field Explorer panel, expand Formula Fields, and double-click Date Range. The Formula Editor window opens.
- 2 Copy the following to replace the existing information in the editor area:

```
// This formula displays the range of dates the user has selected by
// supplying values for the parameters
// selected by supplying values for the parameters
"The selected date range is " +cdFormatDateRange
(cdSpecialDateRange({?Reference Date},{?Reference Condition}))
```

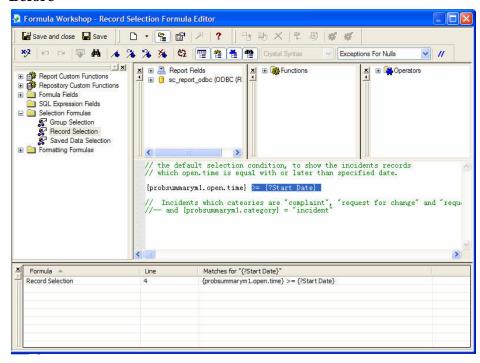


- 3 Click **Save and close** to save the modification. The Formula Workshop window is closed.
- 4 On the Field Explorer panel, expand Parameter Fields, right-click Start Date and select Find in Formulas. The Formula Editor window opens.
- In the editor area, replace all instances of >= {?Start Date} with in cdSpecialDateRange({?Reference Date}, {?Reference Condition}).

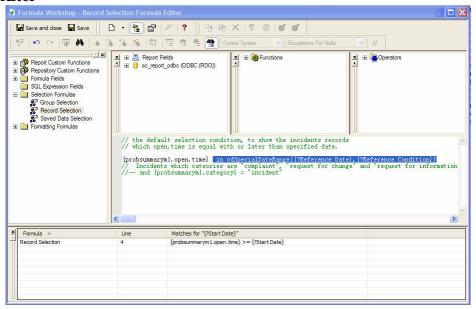


- Click **Check** on the toolbar to look for any possible errors in the code. You must fix all errors to proceed.
- Use the search and replace feature to change all instances of >= {?Start Date}.
- Make sure the code in cdspecialDateRange({?Reference Date}, {?Reference Condition}) in the same line in case of errors.

Before



After



- 6 Click **Save and close** to save this modification.
- 7 Optional step: Right-click Start Date on the Field Explorer panel and select Delete.
- 8 Click **Save** on the Standard toolbar to save all modifications that you have made.

Task 6: Run a Customized Report

- 1 Start the legacy listener. See Start the legacy listener.
- 2 Click **Print Preview** on the Standard toolbar. The Enter Values window opens.
- 3 Enter the date in "mm/dd/yyyy" format in the Reference Date text box.

 Or click the calendar icon
 and select a date.
 - To modify a customized reference date, click the drop-down list below the Enter Reference Condition text and select the option you need.

4 To run the report, click **OK**.



To modify the prompt text displayed in Enter Values window, double-click a parameter on the Field Explorer panel and modify the content for Prompt Text. For example, to modify Enter Reference Date:, double-click Reference Date parameter on the Field Explorer panel, locate the Prompt Text row in the Value Options section, and replace the text as needed.

A Date Range Definition

You are required to import predefined date range values to the Reference Condition Parameter in Task 2 on page 76. The table below provides the description and formulas of the imported date ranges.



The description in the table is based on the assumption that today is the reference date.

Date Range Function	Function Definition	Pseudo Formula
Aged 0 to 30 days	30 days ago to today	(d - 30) To d
Aged 31 to 60 days	60 days ago to 31 days ago	(d - 60) To (d - 31)
Aged 61 to 90 days	90 days ago to 61 days ago	(d - 90) To (d - 61)
All dates from today	Starting from today	>= d
All dates from tomorrow	Starting from tomorrow	>= (d + 1)
All dates to today	All days prior to today (included)	<= d
All dates to yesterday	All days prior to yesterday (included)	<= (d - 1)
Calendar 1st half	The first half of the year	(Year(d), 1, 1) To (Year(d), 6, 30)
Calendar 2nd half	The second half of the year	(Year(d), 7, 1) To (Year(d), 12, 31)
Calendar 1st quarter	The first quarter of the year	(Year(d), 1, 1) To (Year(d), 3, 31)
Calendar 2nd quarter	The second quarter of the year	(Year(d), 4, 1) To (Year(d), 6, 30)

Date Range Function	Function Definition	Pseudo Formula
Calendar 3rd quarter	The third quarter of the year	(Year(d), 7, 1) To (Year(d), 9, 30)
Calendar 4th quarter	The fourth quarter of the year	(Year(d), 10, 1) To (Year(d), 12, 31)
Last 1 day	One day ago to today	(d - 1) To d
Last 7 days	Seven days ago to today	(d - 6) To d
Last 4 weeks to Sunday	The Monday four weeks ago to Sunday of this week	(d - 27 - (Weekday(d) - 1)) To (d - (Weekday(d) - 1))
Last full month	The first day of last month to the last day of last month	DateSerial (Year(d), Month(d) - 1, 1) To DateSerial (Year(d), Month(d), 1 - 1)
Last full week	Sunday to Saturday of last week	(d - 6 - Weekday(d)) To (d - Weekday(d))
Last year month to date	The first day of the same month but last year to the same day of last year	Year(d) - 1, Month(d), 1) To DateAdd("yyyy", -1, d)
Last year to date	January 1 of last year to the same day of last year	(Year(d) - 1, 1, 1) To DateAdd("yyyy", -1, d)
Month to date	The first day of this month to today	(Year(d), Month(d), 1) To d
Quarter to date	The first day of this quarter to today	m = Month(d) 1<= m <=3 (Year(d), 1, 1) To d 4<= m <=6 (Year(d), 4, 1) To d 7<= m <=9 (Year(d), 7, 1) To d 10<= m <=12 (Year(d), 10, 1) To d
Next 30 days	Today to the next 30th day	d To (d + 30)
Next 31 to 60 days	The next 31st day to the next 60th day	(d + 31) To (d + 60)

88 Appendix A

Date Range Function	Function Definition	Pseudo Formula
Next 61 to 91 days	The next 61st day to the next 91st day	(d + 61) To (d + 90)
Next 91 to 365 days	The next 91st day to the next 365th day	(d + 91) To (d + 365)
Over 90 days	All days prior to 90 days ago	<= (d - 91)
Week to date from Sunday	Sunday of this week to today	(d- (Weekday(d) - 1)) To d
Year to date	January 1 of this year to today	(Year(d), 1, 1) To d

Date Range Definition 89

90 Appendix A

B Report Examples

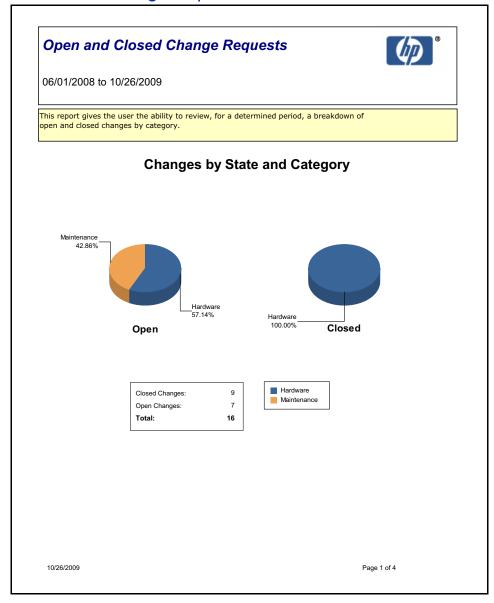
This chapter shows 39 samples of different types of reports in PDF format. Click the report links below to view the examples. Note that limitation of document pages forbid full publishment of the reports with asterisks (*).

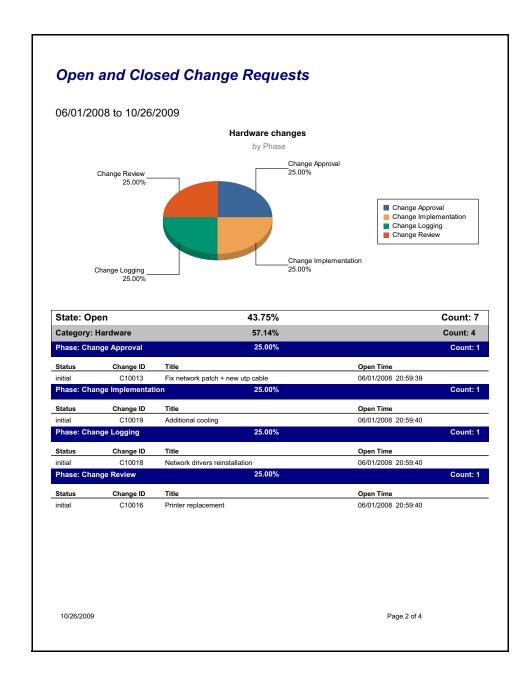
- Change Management Reports
 - Open and Closed Change Requests
 - Percentage of Rejected Changes
 - Percentage of Emergency Changes
 - Percentage of Successful Changes
 - Changes Scheduled for This Week
- Configuration Management Reports
 - Configuration Item Relationships
 - Configuration Item Summary
 - Percentage of Configuration Items Related to Other Configuration Items
- Incident Management Reports
 - Open and Closed Incidents by Category
 - Open and Closed Incidents by Service
 - Backlog of Incidents
 - Reopened Incidents
 - Incidents Closed Meeting SLA Target
 - Incident Aging Report *
 - Incident Reassignment Analysis *
 - Percentage of Incidents by Priority *

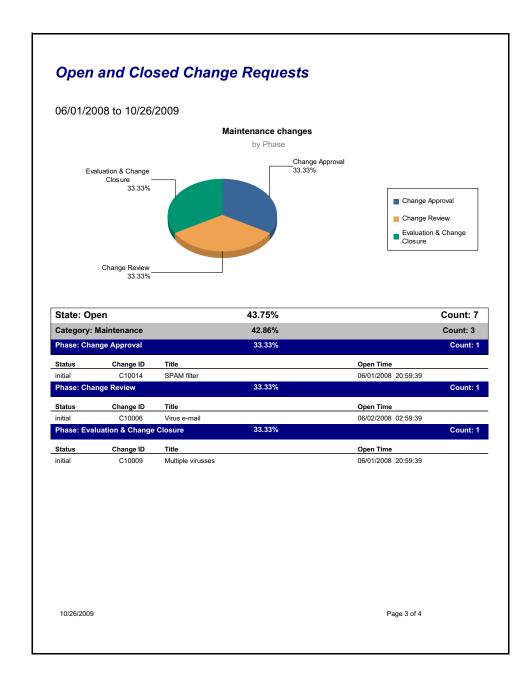
- Open Incidents Monthly Analysis by Category *
- Knowledge Management Reports
 - Knowledge Management Activity
 - Knowledge Management Documents Summary
 - Knowledge Management: User Demand
 - Knowledge Management Usage by Department (for SD Interactions)
 - Self-Service Knowledge Search History
 - Self-Service Escalated Knowledge Management Search Escalation
- Problem Management Reports
 - Open and Closed Problems by Area
 - Open and Closed Problems by Service
 - Problems Closed Meeting SLA Target
 - Average Time to Dignose Problems
- Request Management Reports
 - Request Aging Report *
- Service Desk Reports
 - Escalated Interactions
 - Open and Closed Service Desk Interactions
 - First Time Fixed Interactions
 - Interactions Resulting in Related Issues
 - Top 20 Operators by Average Interaction Time in Last 90 Days
 - Interactions Closed in a Given Year
 - Number of Service Desk Requests by Department
- Service Level Management Reports
 - SLM: Response SLO Metrics
 - SLM: Summary
 - SLM: Availability-Duration Metrics
 - SLM: Availability-Uptime Metrics

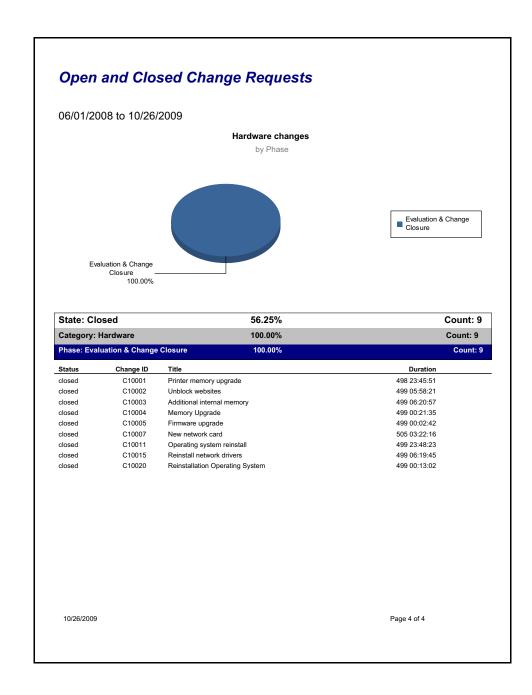
Change Management Reports

Open and Closed Change Requests

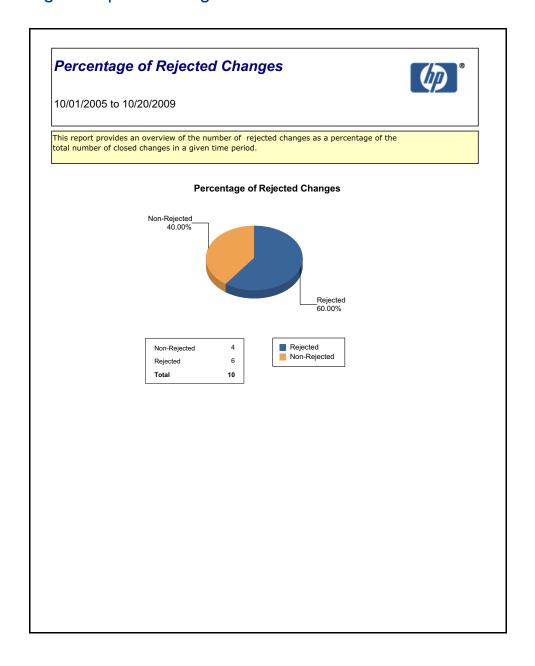




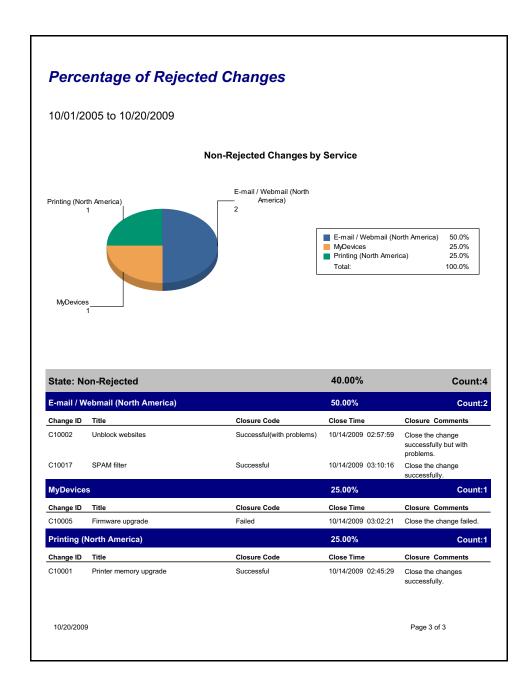




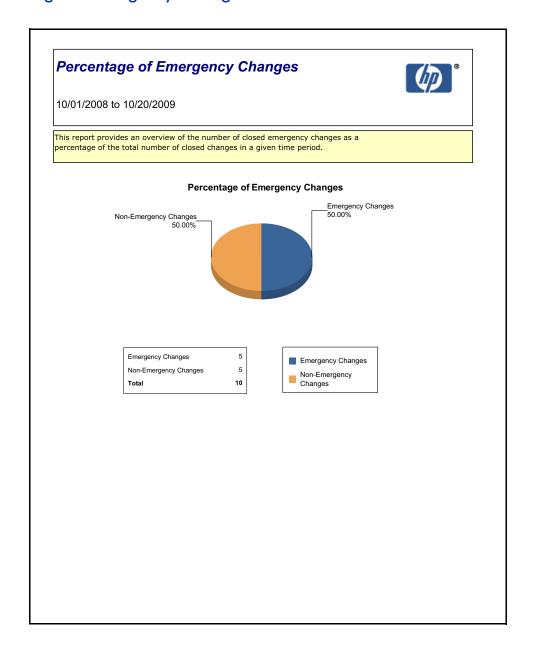
Percentage of Rejected Changes

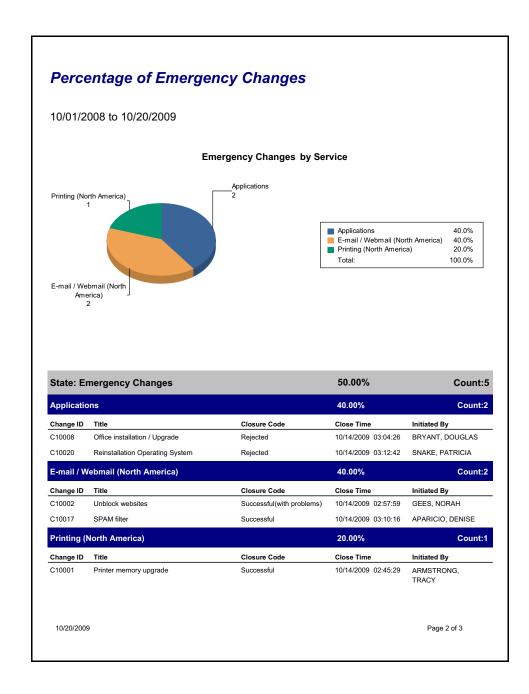


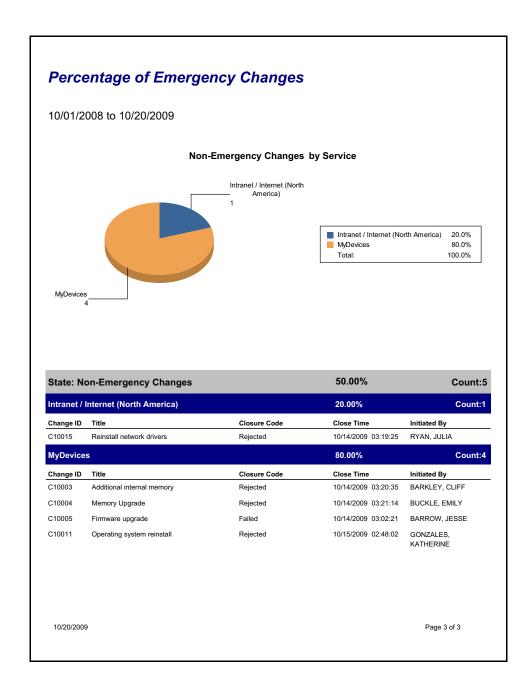
Percentage of Rejected Changes 10/01/2005 to 10/20/2009 Rejected Changes by Service Applications MyDevices 33.3% Applications 16.7% Intranet / Internet (North America) MyDevices 50.0% Total: 100.0% Intranet / Internet (North America) State: Rejected 60.00% Count:6 **Applications** 33.00% Count:2 Change ID Title Closure Code Close Time Closure Comments C10008 Office installation / Upgrade Rejected 10/14/2009 03:04:26 Rejected Changes. Reinstallation Operating System C10020 Rejected 10/14/2009 03:12:42 Rejected Change. 17.00% Intranet / Internet (North America) Count:1 Change ID Title Closure Code Close Time Closure Comments C10015 10/14/2009 03:19:25 Reinstall network drivers Rejected Rejected Change. **MyDevices** 50.00% Count:3 Title Closure Code Closure Comments Change ID Close Time C10003 Additional internal memory Rejected 10/14/2009 03:20:35 Here is the rejection C10004 Memory Upgrade Rejected 10/14/2009 03:21:14 Here is the reason for the rejection. C10011 Operating system reinstall Rejected 10/15/2009 02:48:02 Reject change with closure comments. 10/20/2009 Page 2 of 3



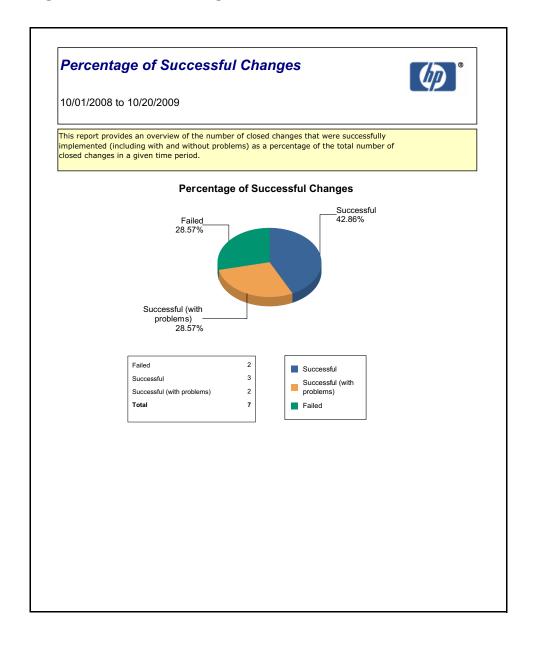
Percentage of Emergency Changes

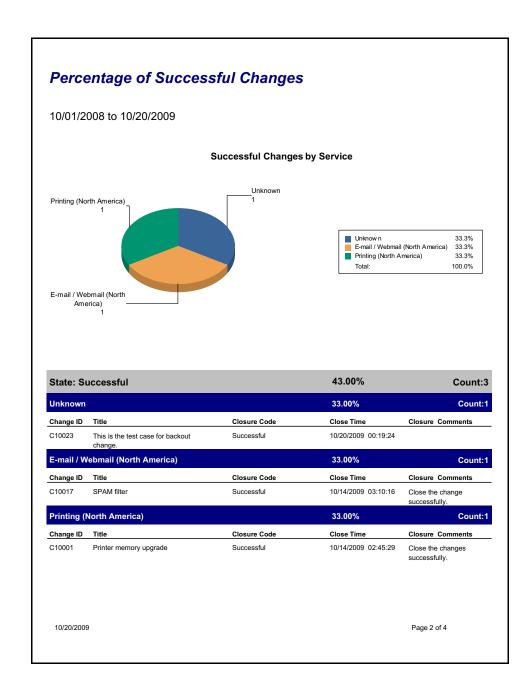






Percentage of Successful Changes

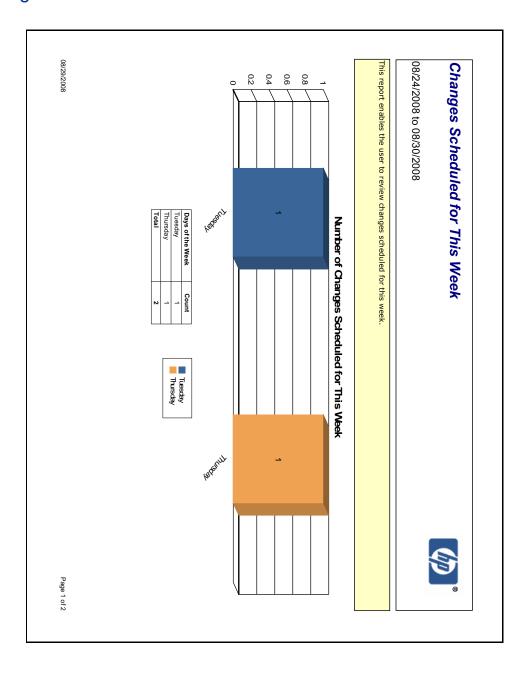




Percentage of Successful Changes 10/01/2008 to 10/20/2009 Successful (with problems) Changes by Service E-mail / Webmail (North Intranet / Internet (North America) America) E-mail / Webmail (North America) Intranet / Internet (North America) Total: 100.0% State: Successful (with problems) 29.00% Count:2 E-mail / Webmail (North America) 50.00% Count:1 Change ID Title Closure Code Close Time Closure Comments C10002 Unblock websites Successful (with problems) 10/14/2009 02:57:59 Close the change successfully but with problems. Intranet / Internet (North America) 50.00% Count:1 Change ID Title Closure Code Close Time Closure Comments C10007 New network card Successful (with problems) 10/20/2009 00:21:55 Close the change successfully but with problems. 10/20/2009 Page 3 of 4

Percentage of Successful Changes 10/01/2008 to 10/20/2009 **Failed Changes by Service** E-mail / Webmail (North MyDevices_ America) E-mail / Webmail (North America) MyDevices 50.0% Total: 100.0% 29.00% State: Failed Count:2 E-mail / Webmail (North America) 50.00% Count:1 Change ID Title **Closure Code** Close Time Closure Comments C10010 Allow bigger mails to be sent Failed 10/20/2009 00:23:59 Close the change failed. **MyDevices** 50.00% Count:1 Change ID Title Closure Code Close Time Closure Comments C10005 Firmware upgrade Failed 10/14/2009 03:02:21 Close the change failed. 10/20/2009 Page 4 of 4

Changes Scheduled for This Week



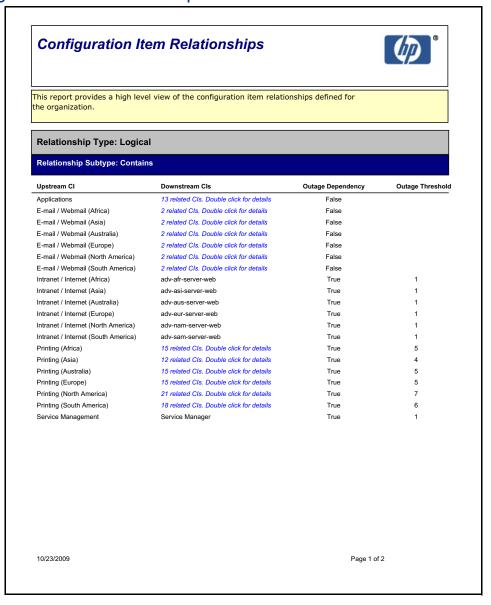
Changes Scheduled for This Week

08/24/2008 to 08/30/2008

□ lay	Description Replace utp cable + fix network patch	Category	Current Phase	Priority 3	_	.00%		Initiated by	initiated by Assignment Group BENDER, PETE Network
C10013 F	Replace utp cable + fix network patch	Hardware	Change Approval	ဒ	pending		BENDER, PETE	BENDER, PETE Network	
Thursday					50.00%	%	%	%	%
Change ID Description	Description	Category	Current Phase	Priority	Approval Status	=	ıl Initiated by		Initiated by
C100 14	Reconfigure spain filter	Maintenance	Maintenance Change Approval	N	pending	ő.	COOK, SOPHIE		соок, ѕорніє

Configuration Management Reports

Configuration Item Relationships



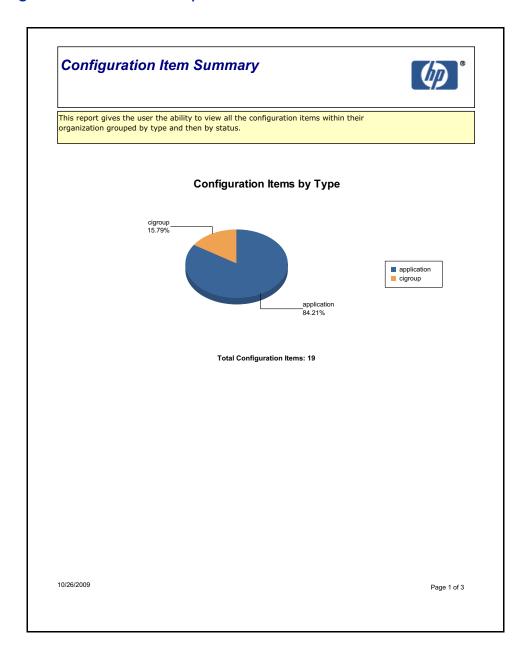
Configuration Item Relationships

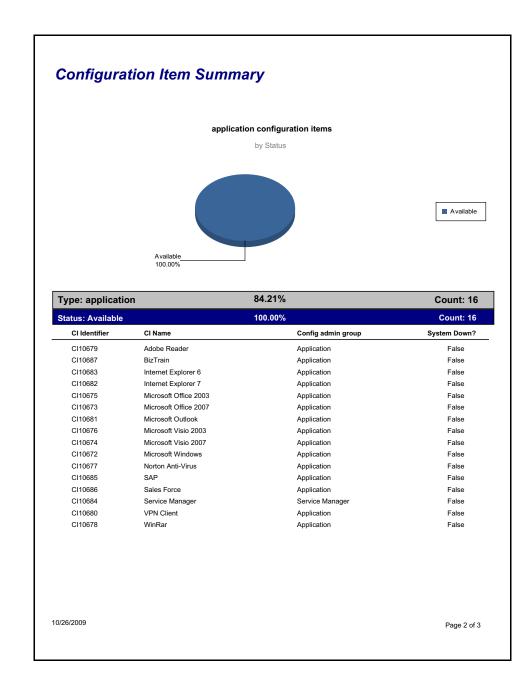
Relationship Subtype: Connects

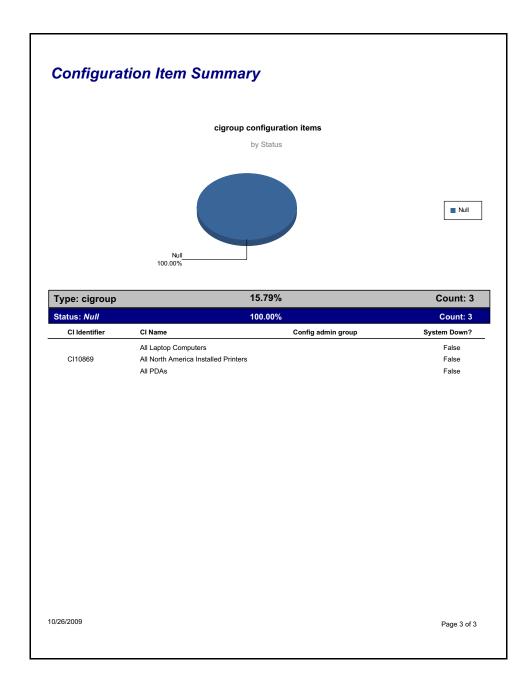
Upstream CI	Downstream CIs	Outage Dependency	Outage Threshold
adv-nam-modem	adv-nam-router	False	
adv-nam-router	adv-nam-switch	False	
adv-nam-server-db	4 related Cls. Double click for details	False	
adv-nam-switch	11 related CIs. Double click for details	False	
adv-nam-switch-fin	28 related Cls. Double click for details	False	
adv-nam-switch-hr	28 related Cls. Double click for details	False	
adv-nam-switch-it	18 related Cls. Double click for details	False	
adv-nam-switch-mar	33 related Cls. Double click for details	False	
adv-nam-switch-sal	33 related Cls. Double click for details	False	
adv-nam-switch-sd	13 related Cls. Double click for details	False	
adv-nam-switch-war	18 related Cls. Double click for details	False	

10/23/2009 Page 2 of 2

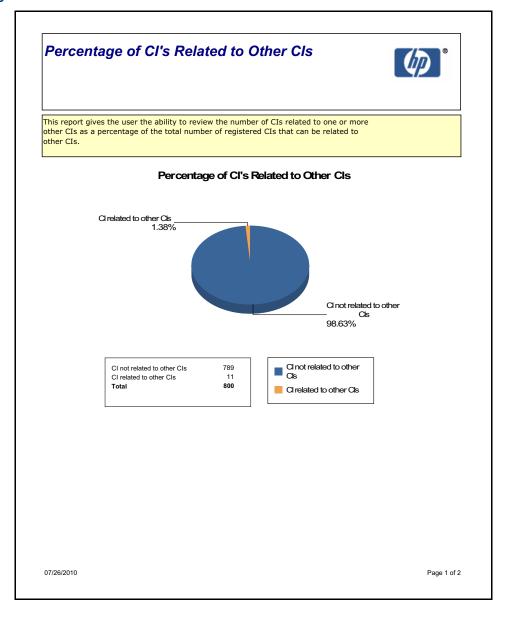
Configuration Item Summary







Percentage of Configuration Items Related to Other Configuration Items

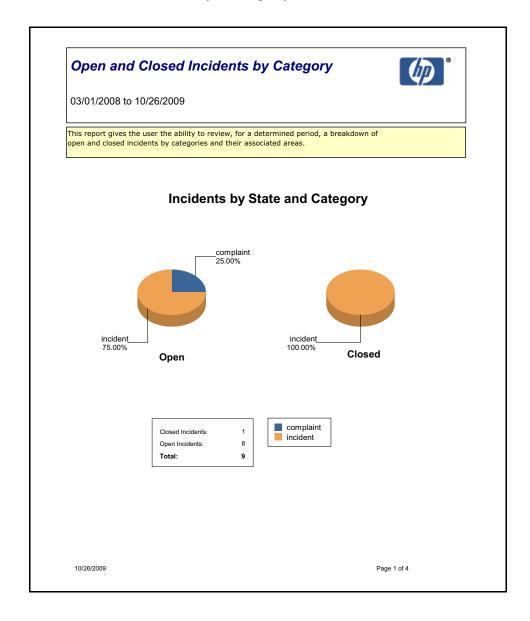


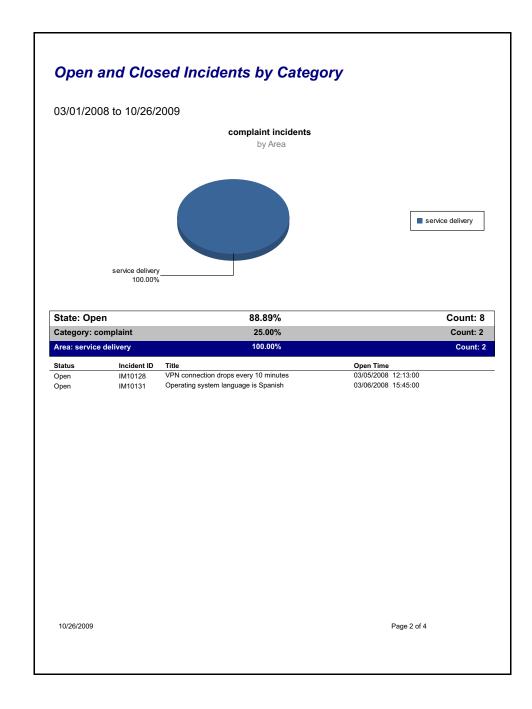
Percentage of CI's Related to Other CIs

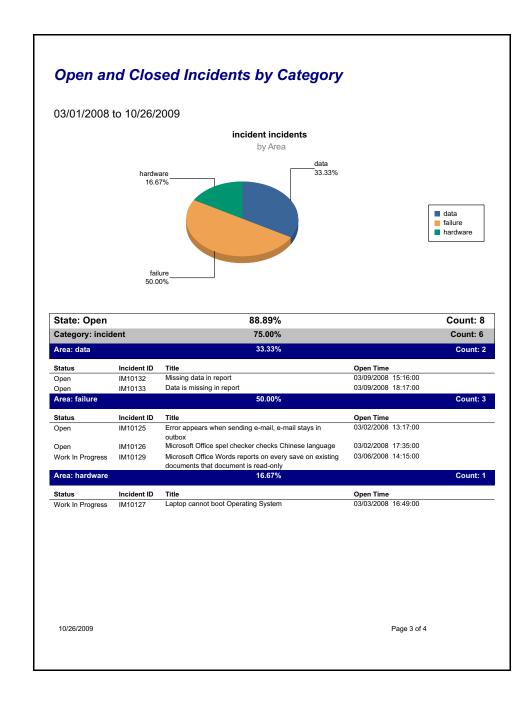
Subtype: Server			100.00%		Count:
CI Name	Status	Relationship Name	Relationship Type	Relationship Subtype	Downstream CIs
adv-nam-server-db	In Use	adv-nam-server-db	Physical	Connects	4 related Cls. Double click for details
Type: networkcor	nponents		90.91%		Count: 10
Subtype: Modem			10.00%		Count:
CI Name	Status	Relationship Name	Relationship Type	Relationship Subtype	Downstream CIs
adv-nam-modem	In Use	adv-nam-modem	Physical	Connects	adv-nam-router
Subtype: Router			10.00%		Count:
CI Name	Status	Relationship Name	Relationship Type	Relationship Subtype	Downstream CIs
adv-nam-router	In Use	adv-nam-router	Physical	Connects	adv-nam-switch
Subtype: Switch			80.00%		Count:
CI Name	Status	Relationship Name	Relationship Type	Relationship Subtype	Downstream CIs
adv-nam-switch	In Use	adv-nam-switch	Physical	Connects	11 related CIs. Double click for details
adv-nam-switch-fin	In Use	adv-nam-switch-fin	Physical	Connects	28 related Cls. Double click for details
adv-nam-switch-hr	In Use	adv-nam-switch-hr	Physical	Connects	28 related CIs. Double click for details
adv-nam-switch-it	In Use	adv-nam-switch-it	Physical	Connects	18 related CIs. Double click for details
adv-nam-switch-mar	In Use	adv-nam-switch-mar	Physical	Connects	33 related CIs. Double click for details
adv-nam-switch-sal	In Use	adv-nam-switch-sal	Physical	Connects	33 related CIs. Double click for details
adv-nam-switch-sd	In Use	adv-nam-switch-sd	Physical	Connects	13 related Cls. Double click for details
adv-nam-switch-war	In Use	adv-nam-switch-war	Physical	Connects	18 related Cls. Double click for details

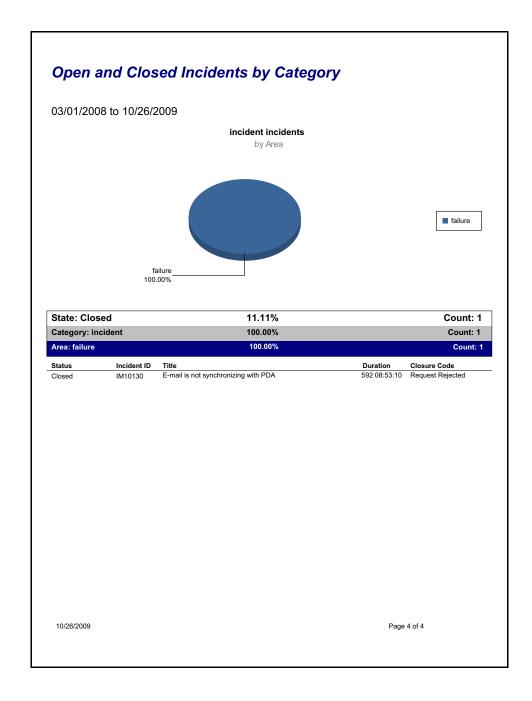
Incident Management Reports

Open and Closed Incidents by Category

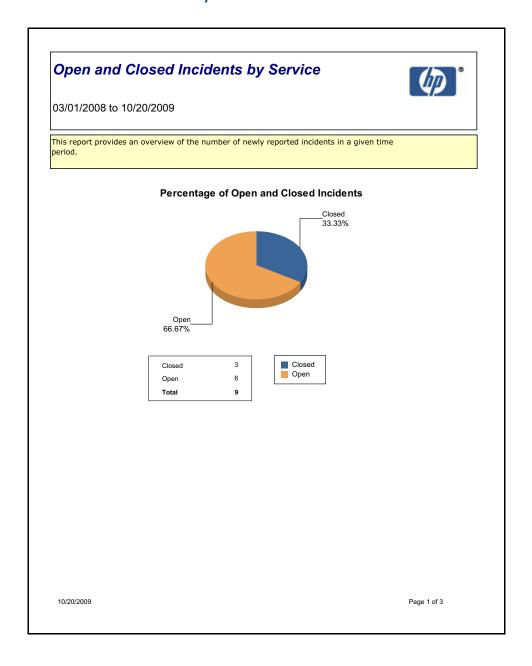


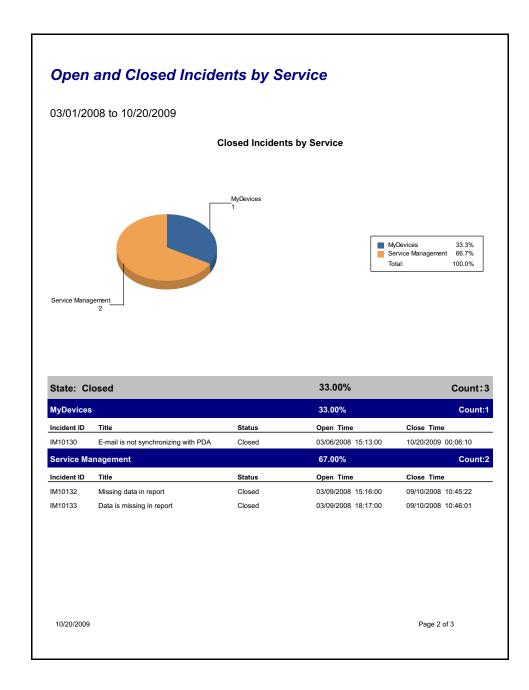


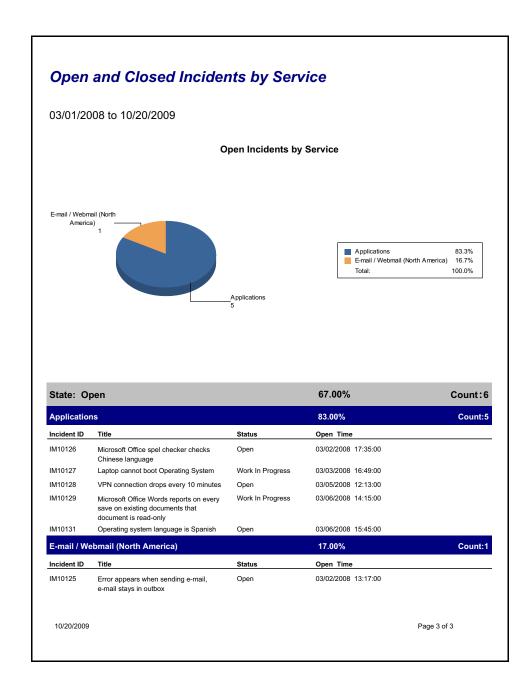




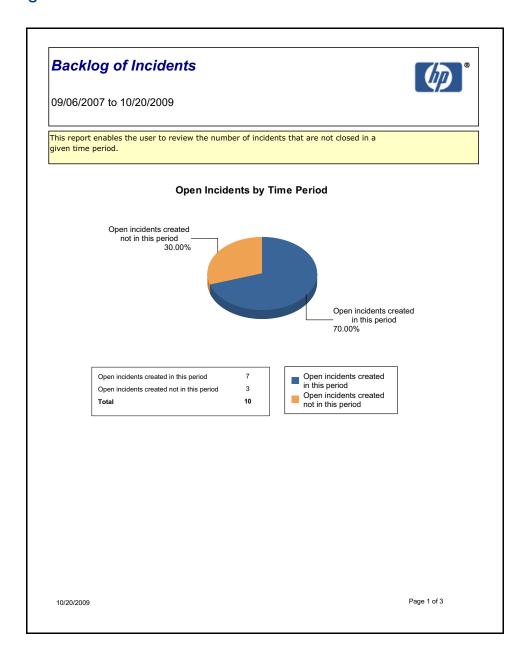
Open and Closed Incidents by Service







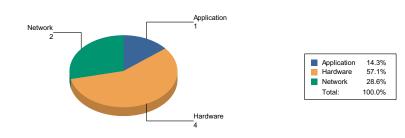
Backlog of Incidents



Backlog of Incidents

09/06/2007 to 10/20/2009

Incidents supported by Assignment group



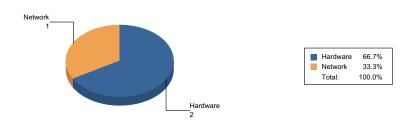
Application	h		14.29%	Count:1
Incident ID	Title	Open Time	Assignee	Status
IM10005	Microsoft Office keeps asking to install Language packs	09/06/2007 15:57:00	Incident.Manager	Work In Progress
Hardware			57.14%	Count:4
Incident ID	Title	Open Time	Assignee	Status
IM10006	Pop-up appears while working with Office, Office needs installation of additional components	09/06/2007 16:05:00	Incident.Coordinator	Work In Progress
IM10008	Desktop DVD-drive makes strange noices	09/06/2007 18:14:00	Incident.Coordinator	Work In Progress
IM10009	Desktop screen out of order	09/06/2007 18:37:00	Incident.Coordinator	Work In Progress
IM10011	Virus scan notification: Multiple Virusses found	09/10/2007 17:19:00	Incident.Manager	Work In Progress
Network			28.57%	Count:2
Incident ID	Title	Open Time	Assignee	Status
IM10007	E-mail in outbox isn't beeing sent	09/06/2007 17:05:00	Incident.Manager	Open
10/20/2009				Page 2 of 3

Backlog of Incidents

09/06/2007 to 10/20/2009

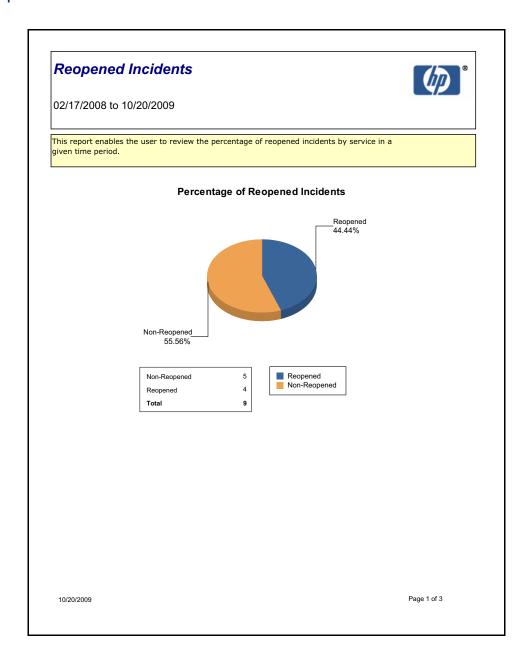
State: Open incidents created in this period			70.00%	Count:7
Network			28.57%	Count:2
Incident ID	Title	Open Time	Assignee	Status
IM10010	Network logon failure	09/06/2007 19:52:00	Incident.Manager	Accepted

Incidents supported by Assignment group



Handman			CC C70/	Countra
Hardware			66.67%	Count:2
Incident ID	Title	Open Time	Assignee	Status
IM10003	System crashes with message "not enough memory" while opening multiple applications	09/02/2007 21:49:00	Incident.Coordinator	Work In Progress
IM10004	Wireless doesn't connect	09/06/2007 14:02:00	Incident.Analyst	test
Network			33.33%	Count:1
Incident ID	Title	Open Time	Assignee	Status
IM10002	Webmail login failure	09/02/2007 01:51:00	Incident.Analyst	Work In Progress
10/20/2009				Page 3 of 3

Reopened Incidents

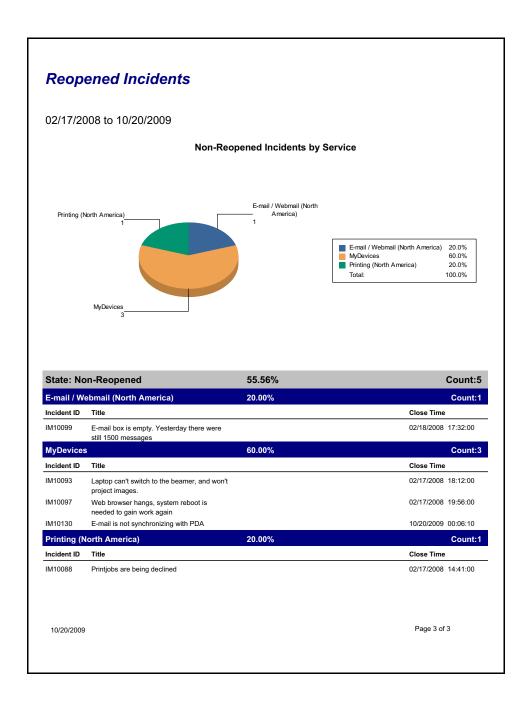


Reopened Incidents 02/17/2008 to 10/20/2009 Reopened Incidents by Service Intranet / Internet (North Service Management America) Intranet / Internet (North America) 50.0% Service Management 100.0% Total: State: Reopened 44.44% Count:4 Intranet / Internet (North America) Count:2 50.00% Incident ID Reopened Time Reopened By Close Time IM10050 Cannot login to network 09/10/2008 10:42:01 09/10/2008 10:43:39 IM10052 Wireless network connection is lost all of the 09/10/2008 10:43:56 falcon 09/10/2008 10:44:22 Service Management 50.00% Count:2 Incident ID Reopened Time Reopened By Close Time IM10132 10/20/2009 00:31:39 Missing data in report falcon IM10133 10/20/2009 00:31:26 Data is missing in report falcon

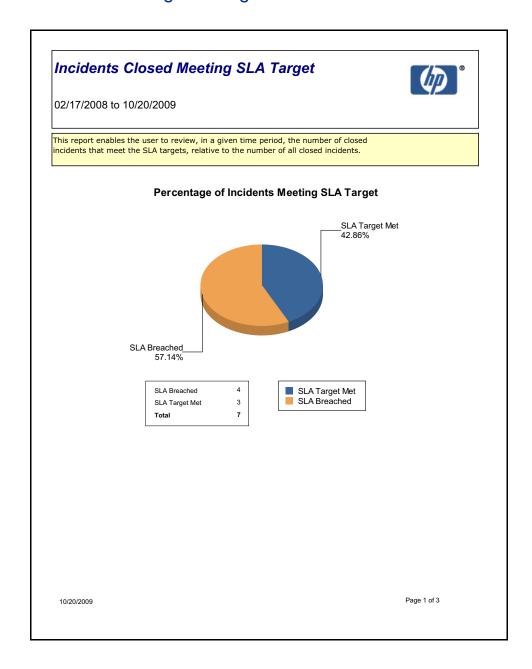
Page 2 of 3

Report Examples 127

10/20/2009



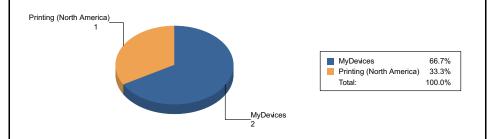
Incidents Closed Meeting SLA Target



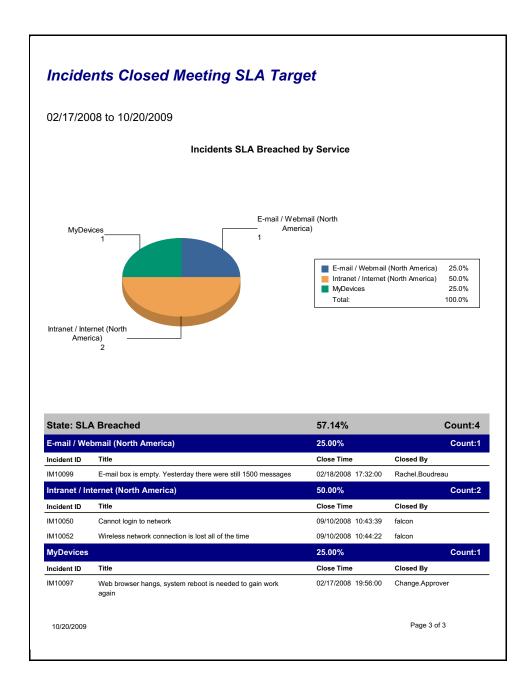
Incidents Closed Meeting SLA Target

02/17/2008 to 10/20/2009

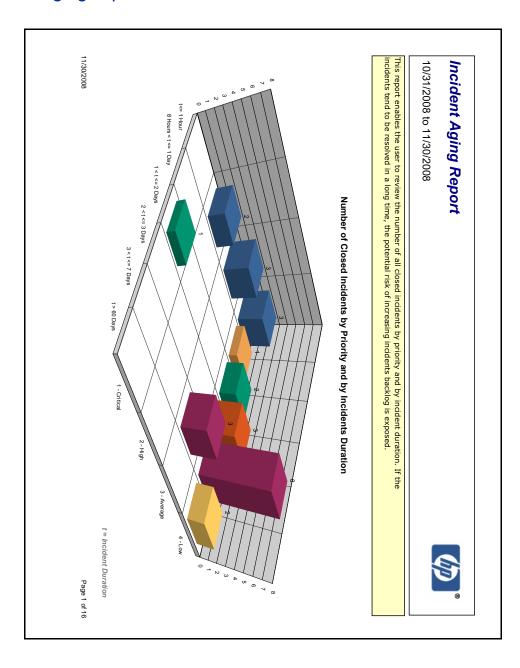
Incidents SLA Target Met by Service

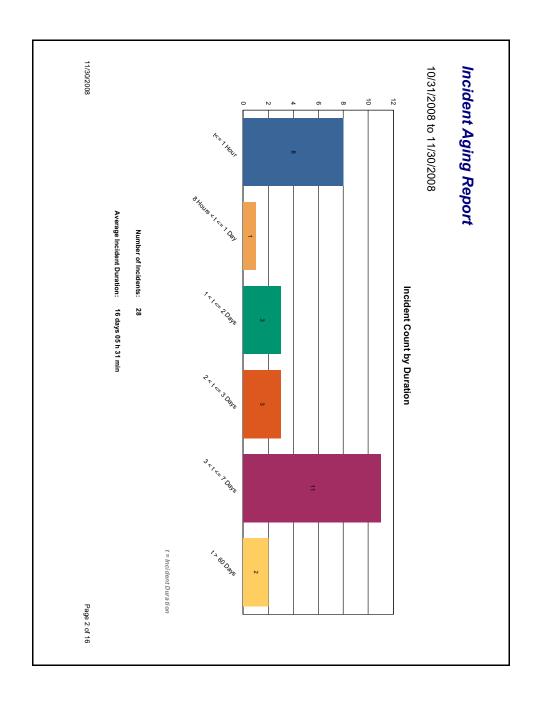


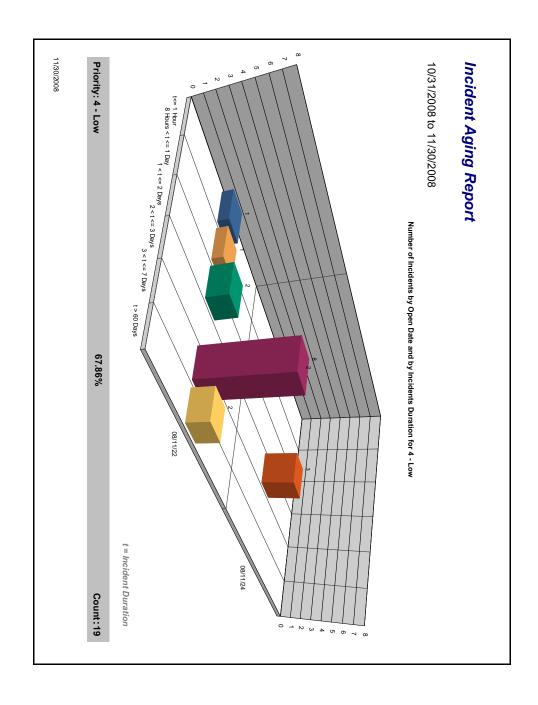
State: SL	A Target Met	42.86%	Count:3
MyDevices		66.67%	Count:2
Incident ID	Title	Close Time	Closed By
IM10093	Laptop can't switch to the beamer, and won't project images.	02/17/2008 18:12:00	Incident.Analyst
IM10130	E-mail is not synchronizing with PDA	10/20/2009 00:06:10	falcon
Printing (No	orth America)	33.33%	Count:1
Incident ID	Title	Close Time	Closed By
IM10088	Printjobs are being declined	02/17/2008 14:41:00	Rachel.Boudreau
10/20/2009			Page 2 of 3



Incident Aging Report

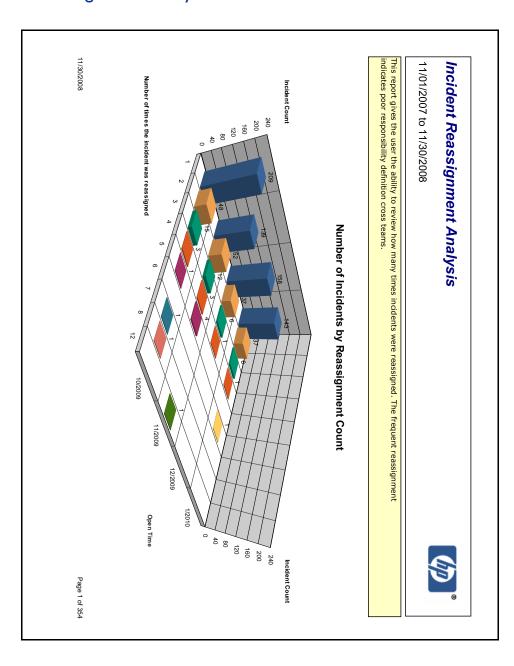


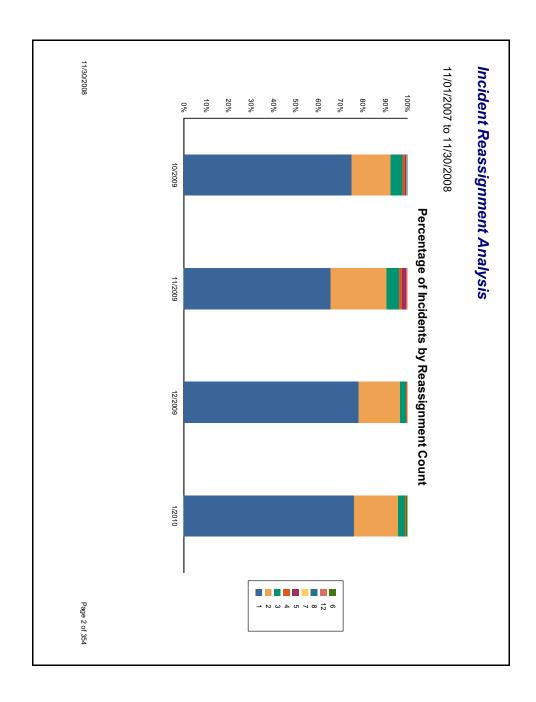




Priority: 4 - Low 67.86%	Count:19
	Count: 3
Incidents Duration: <= 1 Hour 15.79%	Closed By
Open Time	0 day 00 h 06 min falcon
Duration: t<= 1 Hour	0 day 00 h 06 min falcon
Duration: t<= 1 Hour	0 day 00 h 01 min falcon
	06 min 06 min 01 min

Incident Reassignment Analysis



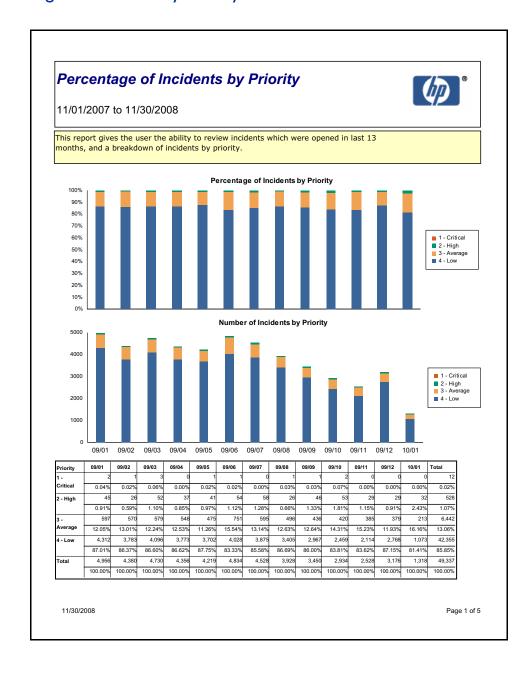


Incident Reassignment Analysis

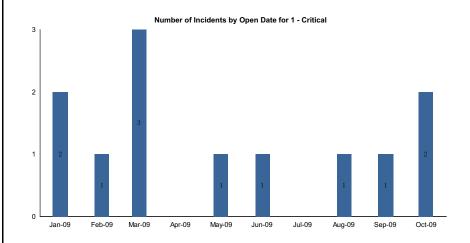
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120000010	IM10002 Webmail login failure	Incident ID Title	Reassignment Count: 1	Time Period: 9/2007 Below section worlt display incidents with Reassignment Count < 1
		Open Date		ents with Reassignment Count
	09/02/2007 15:51:00	ate		<1
	10/08/2010 11:00:06	Reassignment Date	100.00%	100.00%
	falcon	Reassigned by	00%	00%
	Reassignment from Network to E-mail /Webmail (Europe)	Reassignment History		
	E-mail / Webmail (Europe)	Current Assignment Group	Count:1	Count: 1

Percentage of Incidents by Priority



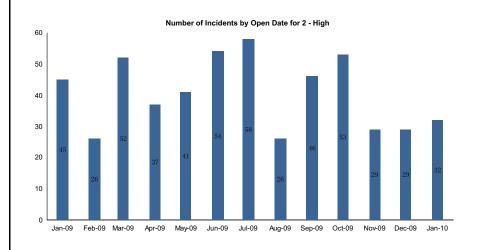
Percentage of Incidents by Priority 11/01/2007 to 11/30/2008



11/30/2008 Page 2 of 5

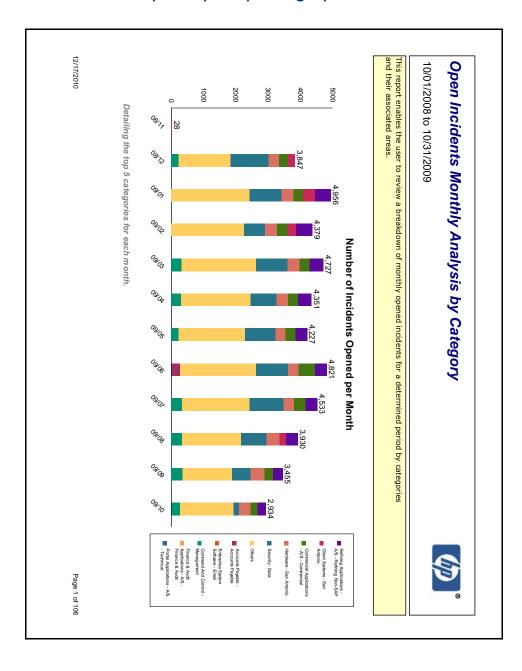
Percentage of Incidents by Priority

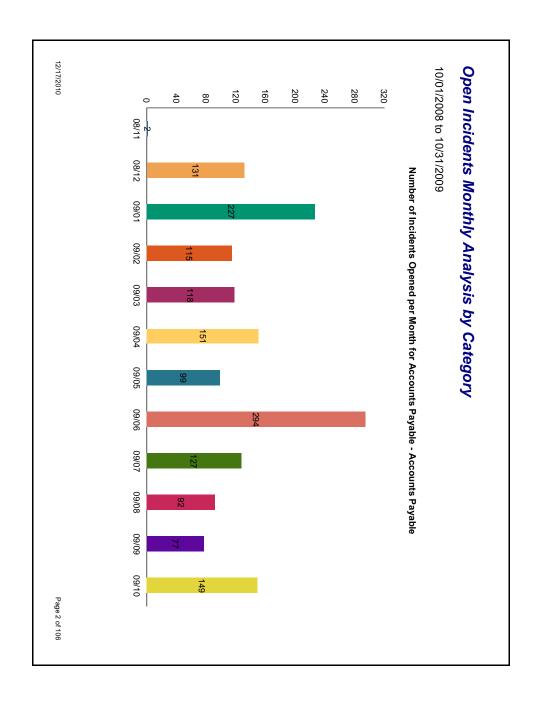
11/01/2007 to 11/30/2008



11/30/2008 Page 3 of 5

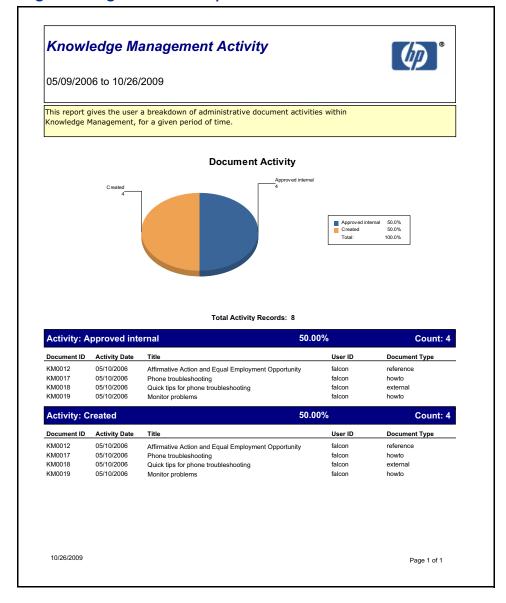
Open Incidents Monthly Analysis by Category



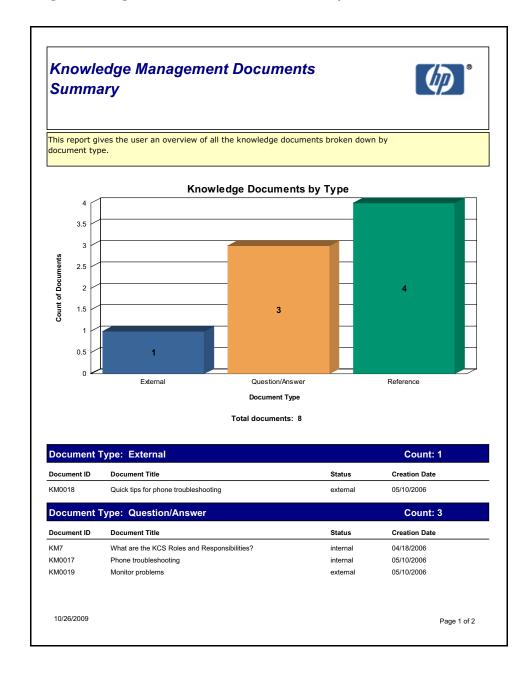


Knowledge Management Reports

Knowledge Management Activity



Knowledge Management Documents Summary

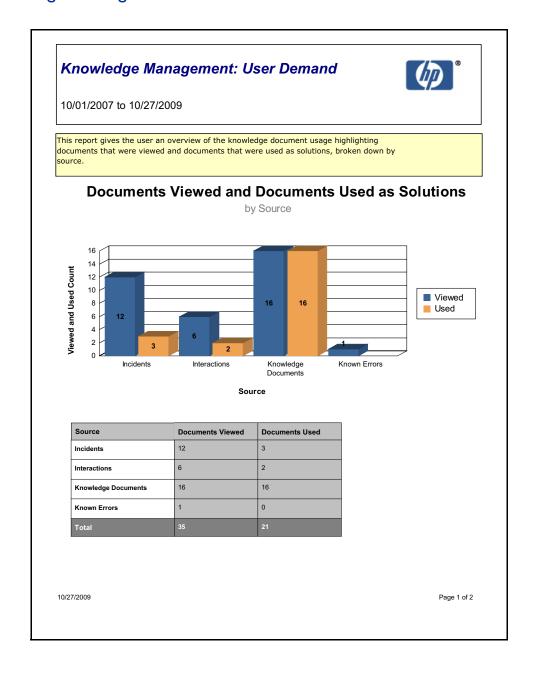


Knowledge Management Documents Summary

Document '	Type: Reference		Count: 4
Document ID	Document Title	Status	Creation Date
KM0013R	Sexual Harassment	workingcopy	05/10/2006
KM6	The UFFA Model and Quality Solutions	internal	04/18/2006
KM8	Searching in Knowledge Management	external	04/18/2006
KM0012	Affirmative Action and Equal Employment Opportunity	internal	05/10/2006

10/26/2009 Page 2 of 2

Knowledge Management: User Demand



Knowledge Management: User Demand

10/01/2007 to 10/27/2009

ource: Incidents			
ID	Total Viewed	Total Used	
IM10001	1	1	
IM10018	1	0	
IM10026	1	0	
IM10028	1	1	
IM10033	2	0	
IM10080	1	1	
IM10086	1	0	
IM10150	1	0	
IM10153	3	0	

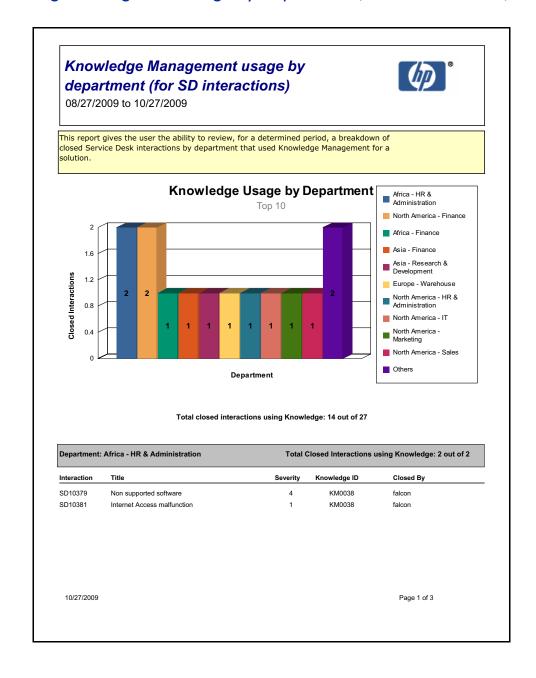
Source: Interactions			
ID	Total Viewed	Total Used	
SD10041	3	2	
SD10224	2	0	
SD10254	1	0	

Source: Knowledge	Documents		
ID	Total Viewed	Total Used	
KM0015	1	1	
KM0018	3	3	
KM0038	12	12	

Source: Known Errors			
ID	Total Viewed	Total Used	
KE10005	1	0	

10/27/2009 Page 2 of 2

Knowledge Management Usage by Department (for SD Interactions)



Knowledge Management usage by department (for SD interactions)

08/27/2009 to 10/27/2009

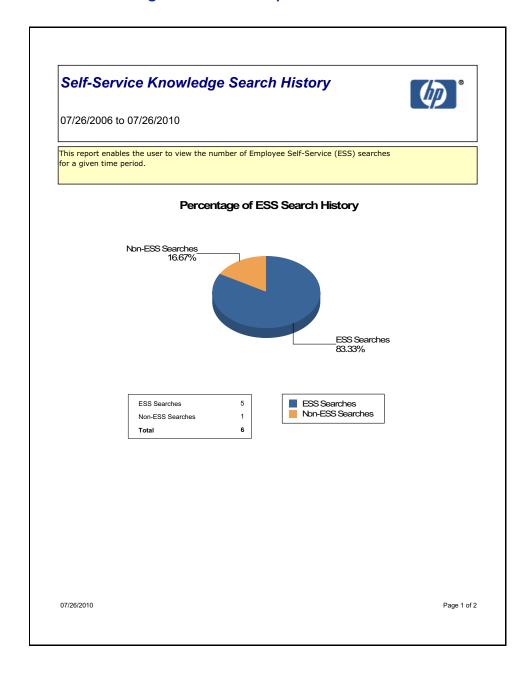
Department:	North America - Finance	Total Closed Interactions using Knowledge: 2 out of 3				
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10374	email	2	SD10041	falcon		
SD10395	Internet Access malfunction	1	KM0018	falcon		
Department:	Africa - Finance	Total (Closed Interactions	using Knowledge: 1 out of 1		
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10380	System Virus	1	KM0018	falcon		
Department:	Asia - Finance	Total (Closed Interactions	using Knowledge: 1 out of 2		
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10389	Internet Access malfunction	1	KM0038	falcon		
Department:	Asia - Research & Development	Total (Closed Interactions	using Knowledge: 1 out of 1		
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10382	Internet Access malfunction	1	KM0038	falcon		
Department:	Europe - Warehouse	Total (Closed Interactions	using Knowledge: 1 out of 1		
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10378	Printer malfunction	2	IM10001	falcon		
Department: Administrati	North America - HR &	Total C	losed Interactions u	sing Knowledge: 1 out of 11		
Interaction	Title	Severity	Knowledge ID	Closed By		
SD10376	System Virus	1	KM0015	falcon		
		-				
10/27/2009				Page 2 of 3		

Knowledge Management usage by department (for SD interactions)

08/27/2009 to 10/27/2009

	T.4.	2	K	Ol I D	
Interaction	Title	Severity	Knowledge ID	Closed By	
SD10388	Internet Access malfunction	1	KM0038	falcon	
Department:	North America - Marketing	Total (Total Closed Interactions using Knowledge: 1 ou		
Interaction	Title	Severity	Knowledge ID	Closed By	
SD10386	Internet Access malfunction	1	KM0038	falcon	
Department: North America - Sales		Total C	Closed Interactions	using Knowledge: 1 out of 1	
Interaction	Title	Severity	Knowledge ID	Closed By	
SD10384	Internet Access malfunction	1	KM0038	falcon	
Department: North America - Service Desk		Total (Closed Interactions	using Knowledge: 1 out of 2	
Interaction	Title	Severity	Knowledge ID	Closed By	
SD10385	Internet Access malfunction	1	KM0038	falcon	
	North America - Warehouse	Total (Closed Interactions	using Knowledge: 1 out of 1	
Department:	Horti America - Warehouse				
Department:	Title	Severity	Knowledge ID	Closed By	
			Knowledge ID KM0038	Closed By	
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			
Interaction	Title	Severity			

Self-Service Knowledge Search History



Self-Service Knowledge Search History

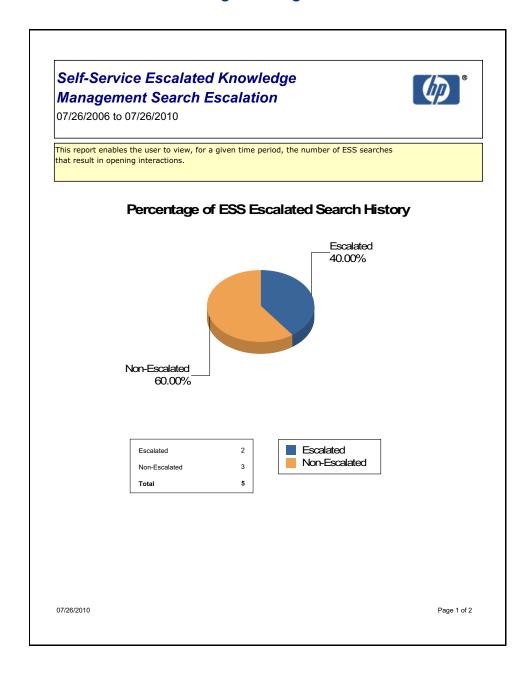
07/26/2006 to 07/26/2010

Status: ESS Searche	es	83.33%	Count:5
User ID	Search Date	Escalated	Interaction ID
falcon	06/12/2010 13:35:49	Non-Escalated	
falcon	06/12/2010 13:36:04	Escalated	SD10317
falcon	06/12/2010 13:48:14	Non-Escalated	
falcon	06/12/2010 13:48:36	Escalated	SD10319
falcon	06/29/2010 18:24:51	Non-Escalated	
falcon	06/12/2010 13:48:36	Escalated	SD10319

Status: Non-ESS Searches		16.67%	Count:1
User ID	Search Date	Escalated	Interaction ID
falcon	07/26/2010 15:19:22	Non-Escalated	

07/26/2010 Page 2 of 2

Self-Service Escalated Knowledge Management Search Escalation



Self-Service Escalated Knowledge Management Search Escalation

07/26/2006 to 07/26/2010

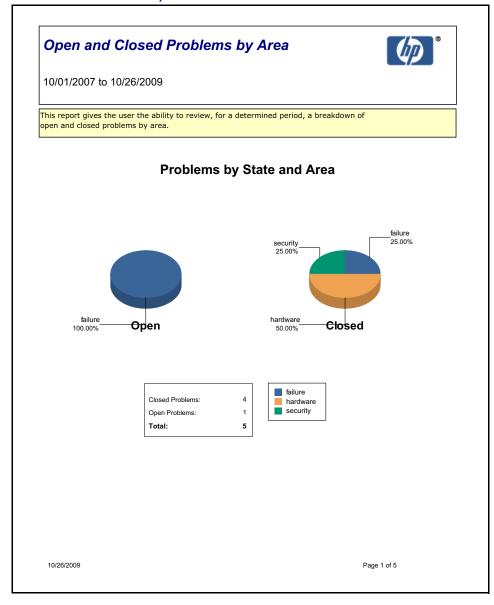
07/26/2010

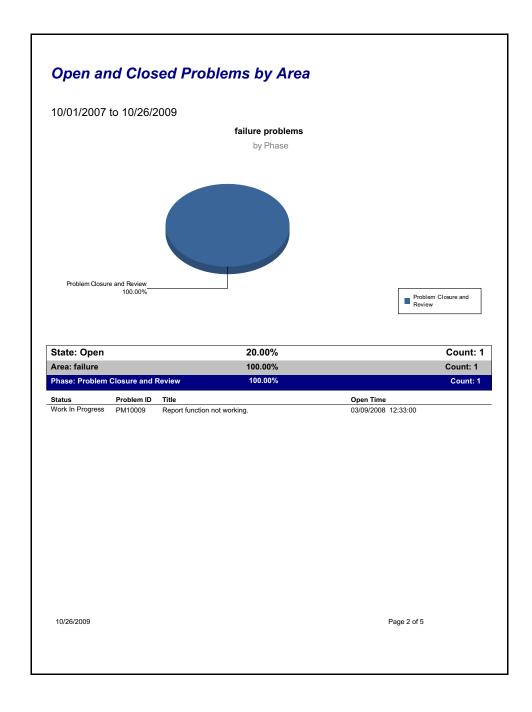
Status: Es	calated		40.00%	Count:
Jser ID	Search Date	Interaction ID	Title	Status
alcon	06/12/2010 13:36:04	SD10317	my laptop can't access internet	Open - Idle
alcon	06/12/2010 13:48:36	SD10319	release nt account lock for me	Open - Idle
Status: No	n-Escalated		60.00%	Count
lser ID	Search Date	Interaction ID	Title	Status
alcon	06/12/2010 13:35:49			
alcon	06/12/2010 13:48:14			
alcon	06/29/2010 18:24:51			

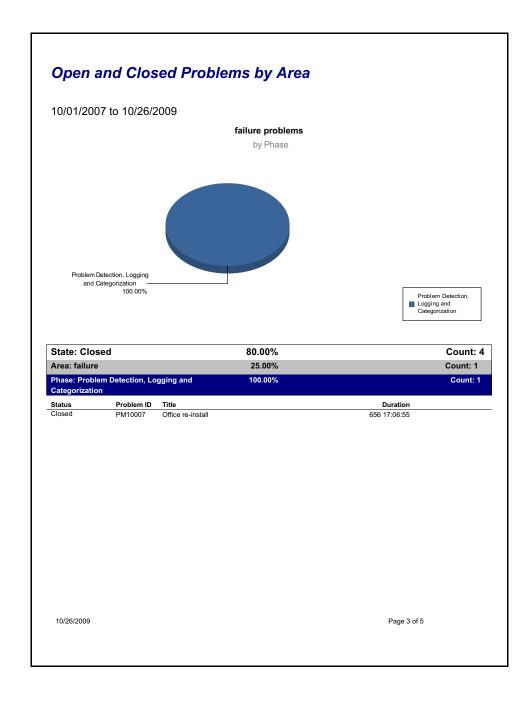
Page 2 of 2

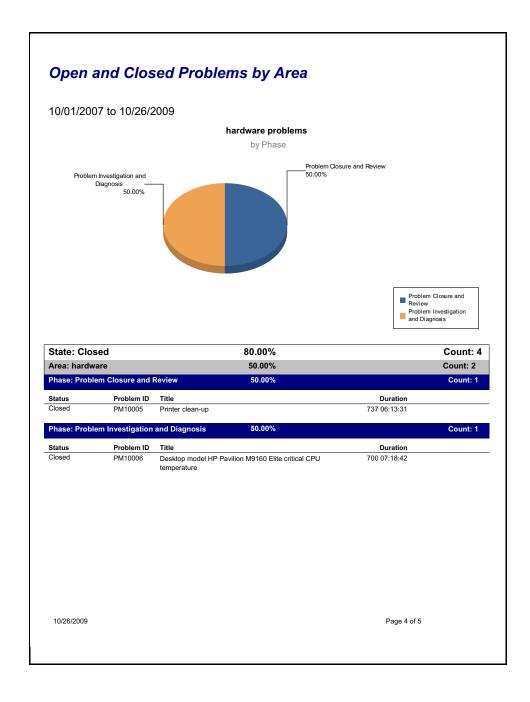
Problem Management Reports

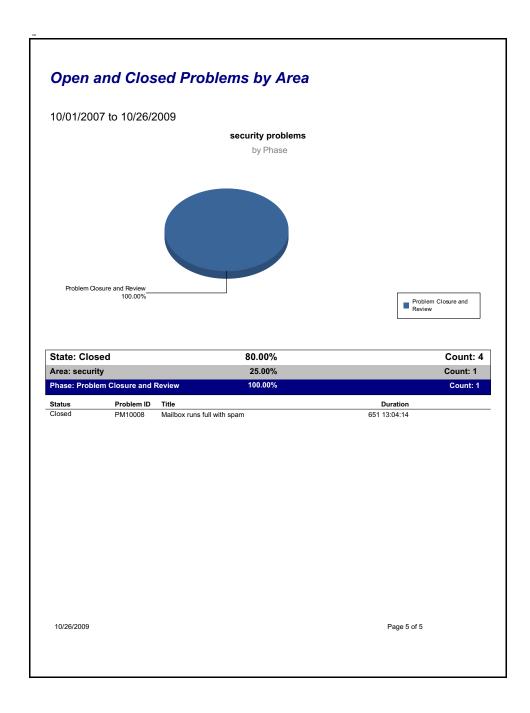
Open and Closed Problems by Area



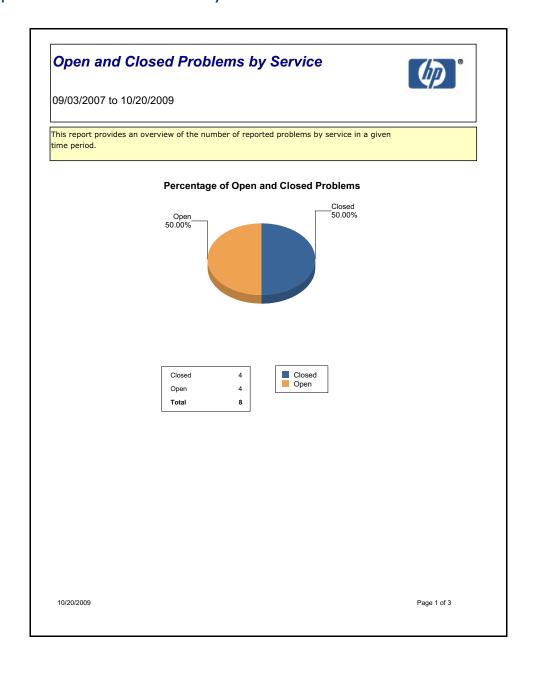


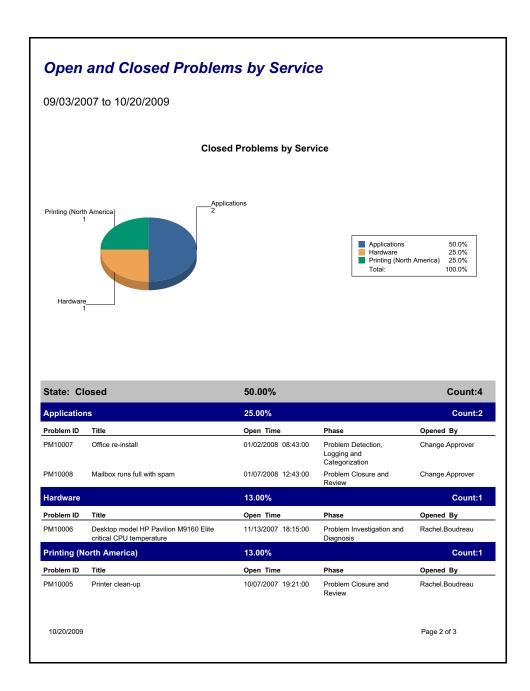


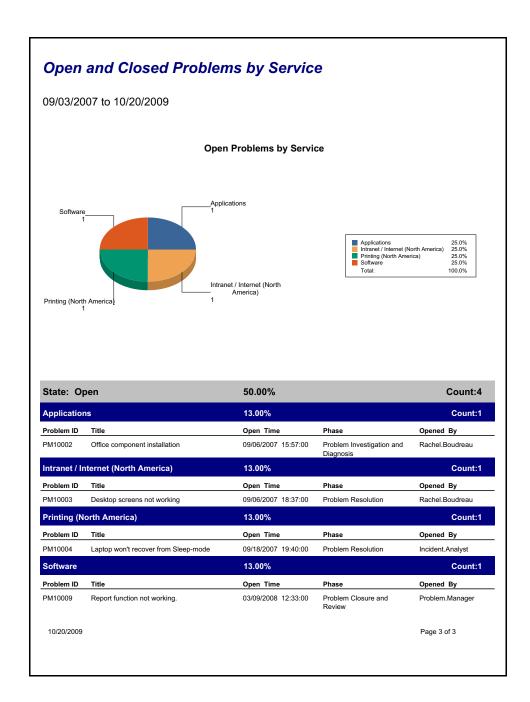




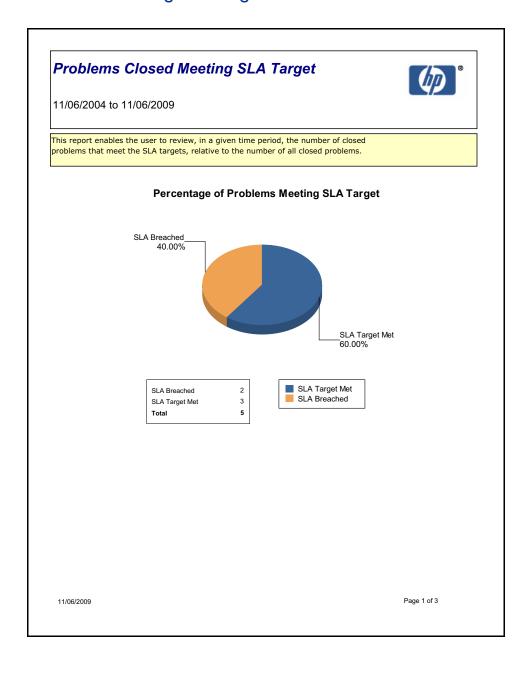
Open and Closed Problems by Service







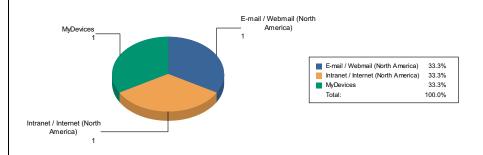
Problems Closed Meeting SLA Target



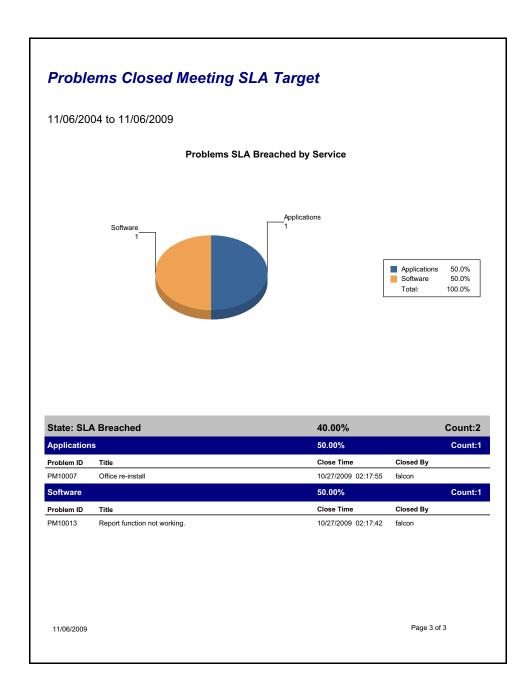


11/06/2004 to 11/06/2009

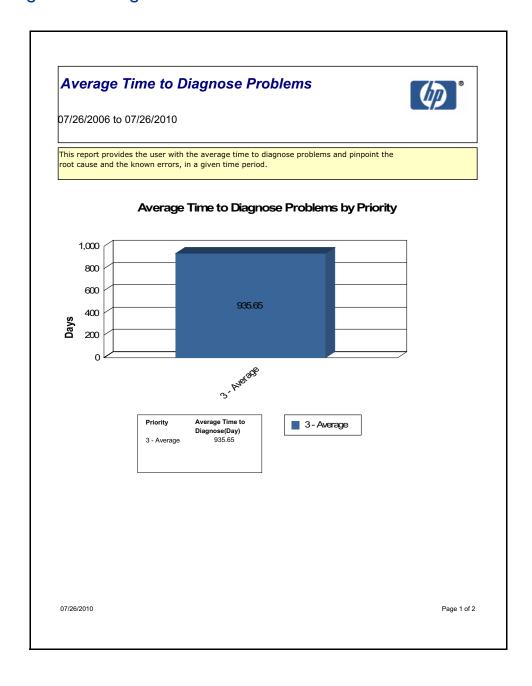
Problems SLA Target Met by Service



State: SLA	A Target Met	60.00%	Cour	Count:3	
E-mail / We	bmail (North America)	33.33%	Cou	nt:1	
Problem ID	Title	Close Time	Closed By		
PM10001	Not enough internal memory	09/07/2009 20:36:57	falcon		
Intranet / In	ternet (North America)	33.33%	Cou	nt:1	
Problem ID	Title	Close Time	Closed By		
PM10003	Desktop screens not working	10/26/2009 22:24:44	falcon		
MyDevices		33.33%	Cou	nt:1	
Problem ID	Title	Close Time	Closed By		
PM10015	another	11/02/2009 23:06:02	falcon		
			Page 2 of 3		



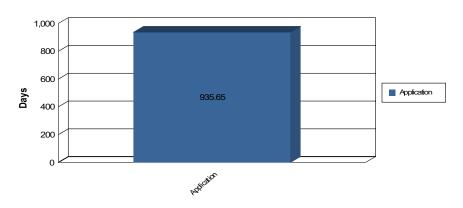
Average Time to Dignose Problems



Average Time to Diagnose Problems

07/26/2006 to 07/26/2010

Average Time to Diagnose Problems of 3 - Average Priority by Assignment

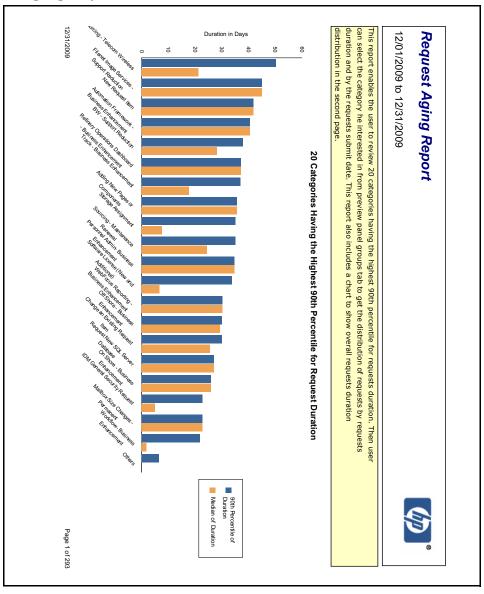


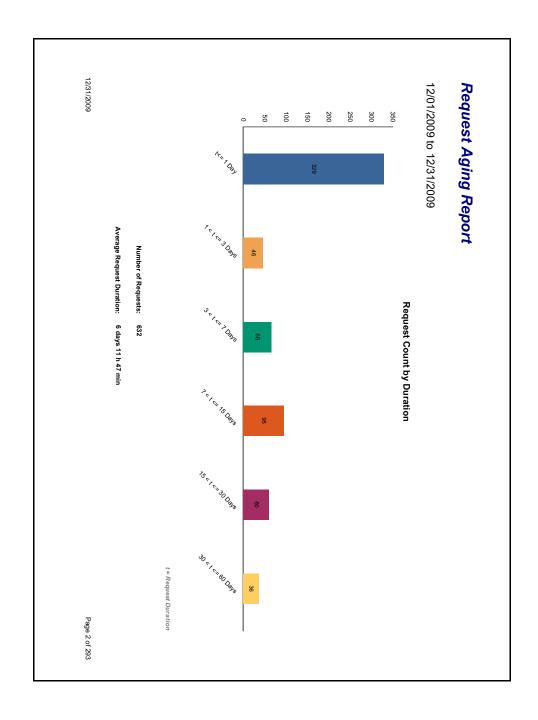
Priority:	3 - Average		100.00%			Count:1
Applicatio	n		100.00%			Count:1
Problem ID	Title	Open Time	Service	Related Incident Count	Average Time To Diagnose	Root Cause Target Date
PM10007	Office re-install	01/02/2008 23:43:00	Applications	4	935 15:42:34	08/20/2008 08:00:00

07/26/2010 Page 2 of 2

Request Management Reports

Request Aging Report

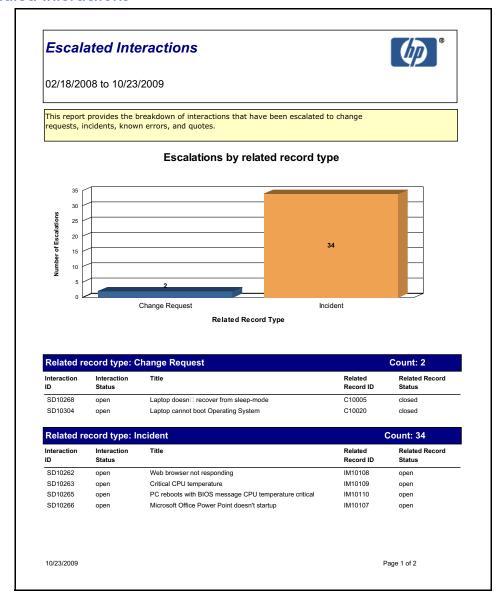




i < t <= 30 Days		50.00%			
	Priority	Submit Date	Requested Date	Close Date	Duration
w printer and toner.	medium	12/10/2009 21:48:22	12/11/2009 15:00:00	12/30/2009 19:36:29	19 days 21 h 48 min
≔ 1 Day		50.00%			
	,				
	Priority	Submit Date	Requested Date	Close Date	Duration
	12/01/2009 to 12/31/2009 Category: Device Requirements Requests Duration: 15 < t <= 30 Days Request ID Title Q00004402 Need a new printer and toner. Requests Duration: t <= 1 Day	ments 0 Days	ments O Days Priority Submit Date and toner: medium 12/10/2009 21:	0.32% O Days Priority Submit Date nedium 12/10/2009 21:48:22 50.00%	0.32% 0.32

Service Desk Reports

Escalated Interactions

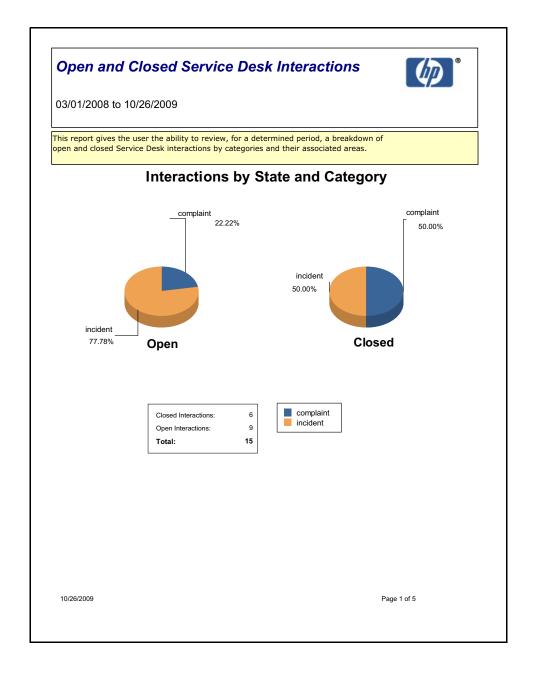


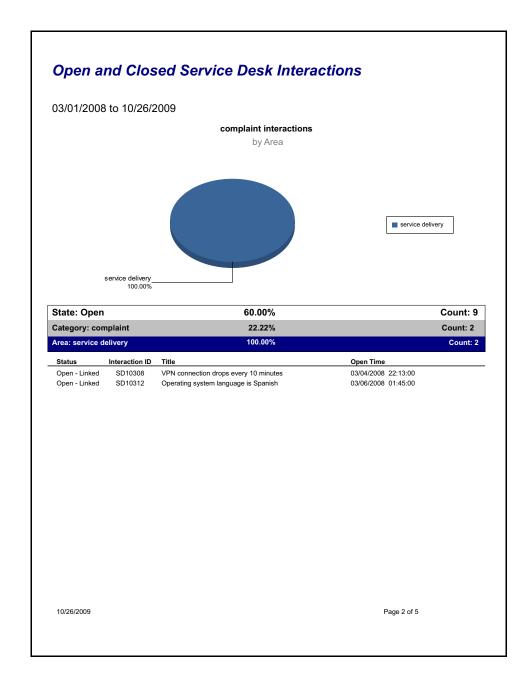
Escalated Interactions

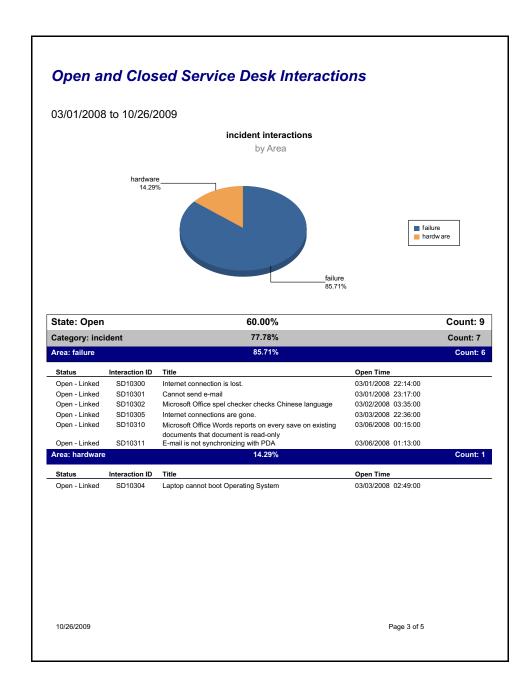
02/18/2008 to 10/23/2009

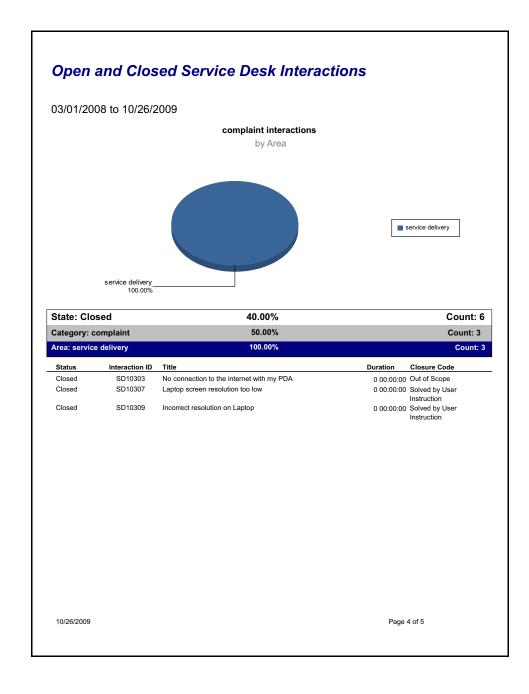
rtolatea re	ecord type: Incident		Count: 34	
Interaction ID	Interaction Status	Title	Related Record ID	Related Record Status
SD10268	open	Laptop doesn□ recover from sleep-mode	IM10015	open
SD10269	open	Not enough network patches	IM10111	open
SD10271	open	Network connection issue	IM10112	open
SD10272	open	Microsoft Office Power Point won't startup, error on startup	IM10107	open
SD10275	open	Microsoft Office Power Point can't startup, error on startup	IM10107	open
SD10276	open	BIOS message CPU temperature critical	IM10113	open
SD10278	open	Desktop reboots with BIOS message CPU temperature critical	IM10114	open
SD10279	open	Desktop can't boot from harddrive	IM10115	open
SD10281	open	Laptop keyboard out of order	IM10116	open
SD10283	open	Mail stays in outbox	IM10117	open
SD10284	open	Microsoft Office Words can't startup, error on startup	IM10118	open
SD10286	open	Unstable internet connection	IM10119	open
SD10289	open	Windows language keeps changing back to Japanese	IM10120	open
SD10290	open	Desktop screen out of order	IM10121	open
SD10292	open	Internet connection can't be made	IM10122	open
SD10293	open	Internet connection is lost all of the time	IM10123	open
SD10295	open	No connection to Internet availible	IM10122	open
SD10297	open	Microsoft Office Excel startup failure	IM10124	open
SD10298	open	No connection to Internet	IM10122	open
SD10300	open	Internet connection is lost.	IM10122	open
SD10301	open	Cannot send e-mail	IM10125	open
SD10302	open	Microsoft Office spel checker checks Chinese language	IM10126	open
SD10304	open	Laptop cannot boot Operating System	IM10127	open
SD10305	open	Internet connections are gone.	IM10122	open
SD10308	open	VPN connection drops every 10 minutes	IM10128	open
SD10310	open	Microsoft Office Words reports on every save on existing documents that document is read-only	IM10129	open
SD10311	open	E-mail is not synchronizing with PDA	IM10130	closed
SD10312	open 	Operating system language is Spanish	IM10131	open
SD10314	closed	Missing data in report	IM10132	open
SD10315	closed	Data is missing in report	IM10133	open
10/23/2009			F	Page 2 of 2

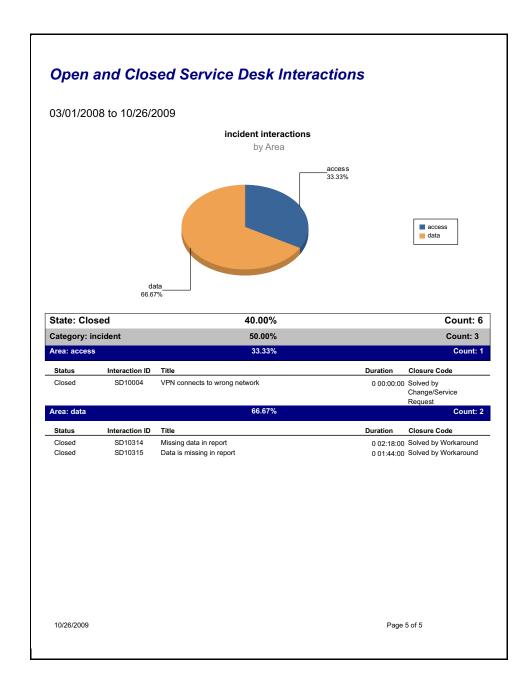
Open and Closed Service Desk Interactions



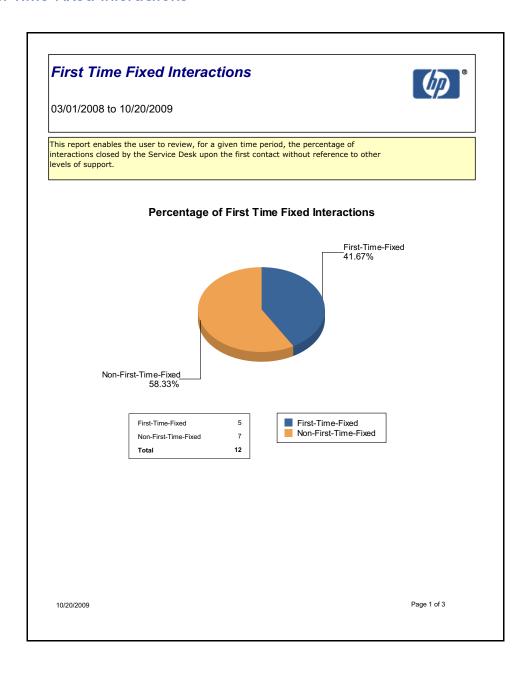


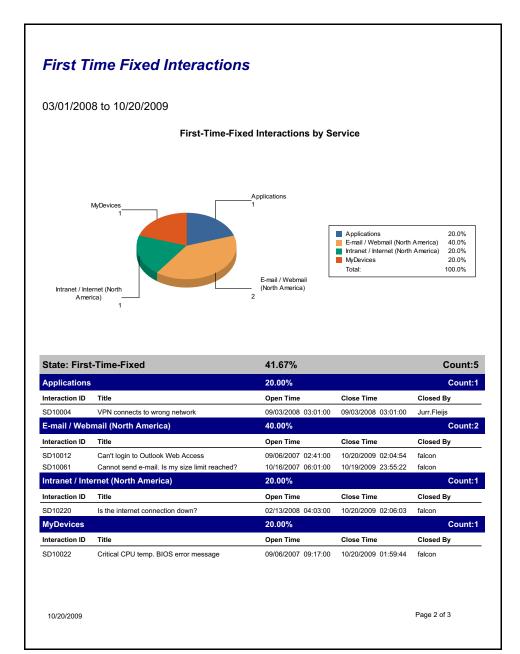






First Time Fixed Interactions

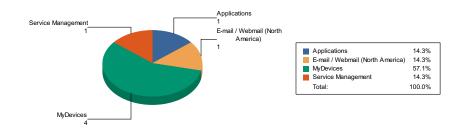




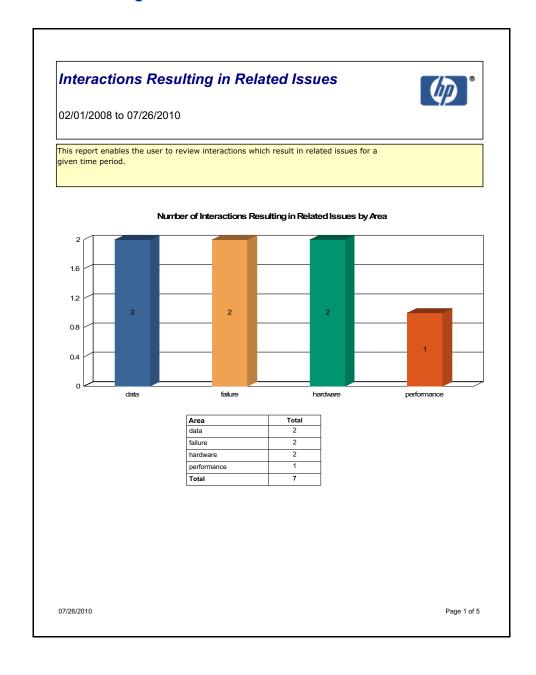
First Time Fixed Interactions

03/01/2008 to 10/20/2009

Non-First-Time-Fixed Interactions by Service

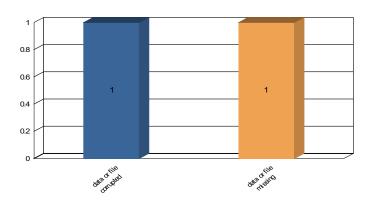


State: Non	-First-Time-Fixed	58.33%		Count:7
Applications		14.29%		Count:1
Interaction ID	Title	Open Time	Close Time	Closed By
SD10315	Data is missing in report	03/09/2008 12:17:00	03/09/2008 14:01:00	Sandra.Jans
E-mail / Web	mail (North America)	14.29%		Count:1
Interaction ID	Title	Open Time	Close Time	Closed By
SD10184	My new mails are not coming in	01/13/2008 01:13:00	10/20/2009 02:02:51	falcon
MyDevices		57.14%		Count:4
Interaction ID	Title	Open Time	Close Time	Closed By
SD10003	Not enough memory	09/02/2007 09:49:00	10/19/2009 23:51:14	falcon
		03/02/2008 22:44:00	03/02/2008 22:44:00	Jaco.Staple
SD10303	No connection to the internet with my PDA	00/02/2000 22.44.00		
SD10303 SD10307	No connection to the internet with my PDA Laptop screen resolution too low	03/04/2008 03:15:00	03/04/2008 03:15:00	New.Jelle
	•		03/04/2008 03:15:00 03/05/2008 23:07:00	New.Jelle New.Jelle
SD10307	Laptop screen resolution too low Incorrect resolution on Laptop	03/04/2008 03:15:00		
SD10307 SD10309	Laptop screen resolution too low Incorrect resolution on Laptop	03/04/2008 03:15:00 03/05/2008 23:07:00		New.Jelle



02/01/2008 to 07/26/2010

Interactions of data Area by Sub-area

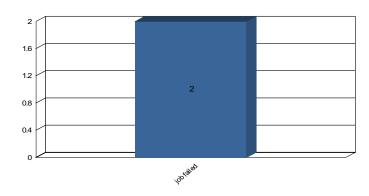


Sub-area: data or file corrupted 50.00% Interaction ID Title Open Time Close Time SD10314 Missing data in report 03/09/2008 17:16:00 03/09/2008 19:34:00 Sub-area: data or file missing 50.00% Interaction ID Title Open Time Close Time SD10315 Data is missing in report 03/10/2008 02:17:00 03/10/2008 04:01:00	Area: data		28.57%		Count:2	
SD10314 Missing data in report 03/09/2008 17:16:00 03/09/2008 19:34:00 Sub-area: data or file missing 50.00% Interaction ID Title Open Time Close Time	Sub-area: data	or file corrupted	50.00%		Count:1	
Sub-area: data or file missing 50.00% Interaction ID Title Open Time Close Time	Interaction ID	Title	Open Time	Close Time	Related Records	
Interaction ID Title Open Time Close Time	SD10314	Missing data in report	03/09/2008 17:16:00	03/09/2008 19:34:00	IM10132	
	Sub-area: data	or file missing	50.00%		Count:1	
SD10315 Data is missing in report 03/10/2008 02:17:00 03/10/2008 04:01:00	Interaction ID	Title	Open Time	Close Time	Related Records	
3 4,	SD10315	Data is missing in report	03/10/2008 02:17:00	03/10/2008 04:01:00	IM10133	

07/26/2010 Page 2 of 5

02/01/2008 to 07/26/2010

Interactions of failure Area by Sub-area

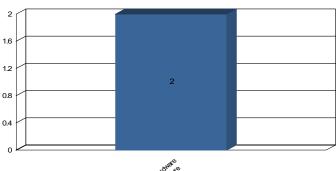


Sub-area: job failed		100.00%		Count:2	
SD10231	Printjobs are being declined	02/17/2008 06:04:00	02/17/2008 06:04:00	IM10087	
SD10253	Cannot send any e-mail anymore. Yesterday it worked fine	02/18/2008 09:12:00	02/18/2008 09:12:00	IM10098	

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02/01/2008 to 07/26/2010

Interactions of hardware Area by Sub-area



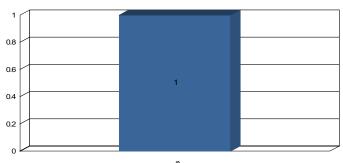
<	ordinature.	

Area: hardware Sub-area: hardware failure		28.57% 100.00%		Count:2	
SD10207	Printjob is not printed	02/06/2008 07:56:00	02/06/2008 07:56:00	IM10079	
SD10246	Desktop reboots with error message CPU temperature critical	02/17/2008 11:51:00	02/17/2008 11:51:00	IM10096	

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02/01/2008 to 07/26/2010

Interactions of performance Area by Sub-area

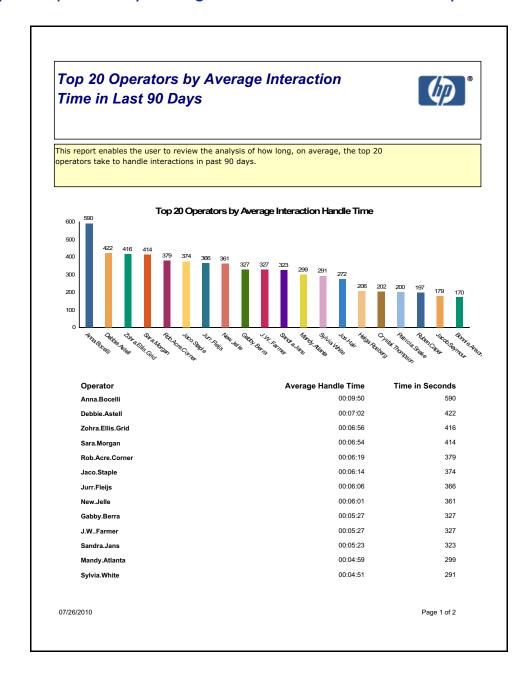


Performand Lor

Area: performance Sub-area: performance degradation		14.29% 100.00%		Count:1	
SD10241	High CPU temperature	02/17/2008 09:33:00	02/17/2008 09:33:00	IM10092	

07/26/2010 Page 5 of 5

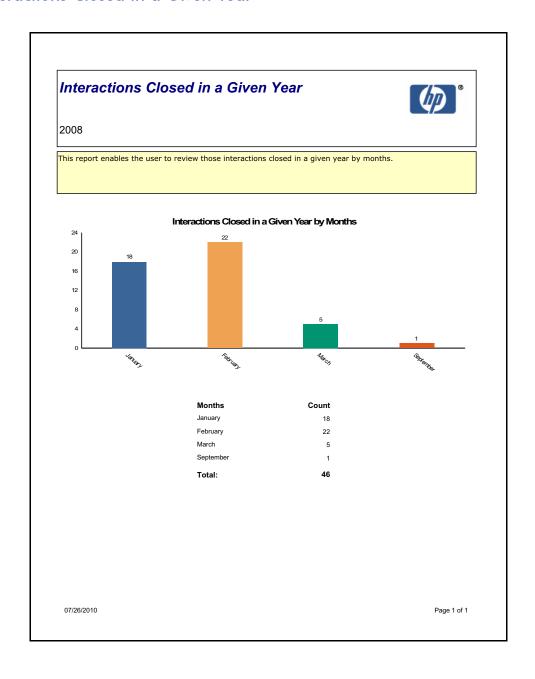
Top 20 Operators by Average Interaction Time in Last 90 Days



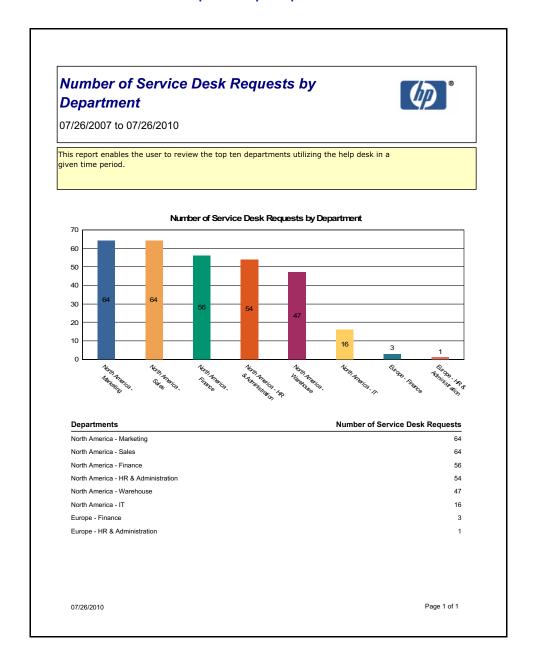
Overall Average:	00:05:51	35
Bonnie.Anson	00:02:50	170
Jacob.Seymour	00:02:59	179
Ruben.Caper	00:03:17	197
Patricia.Snake	00:03:20	200
Crystal.Thompson	00:03:22	202
Helga.Rosberg	00:03:26	20
Jos.Hair	00:04:32	27
Operator	Average Handle Time	Time in Second

07/26/2010 Page 2 of 2

Interactions Closed in a Given Year

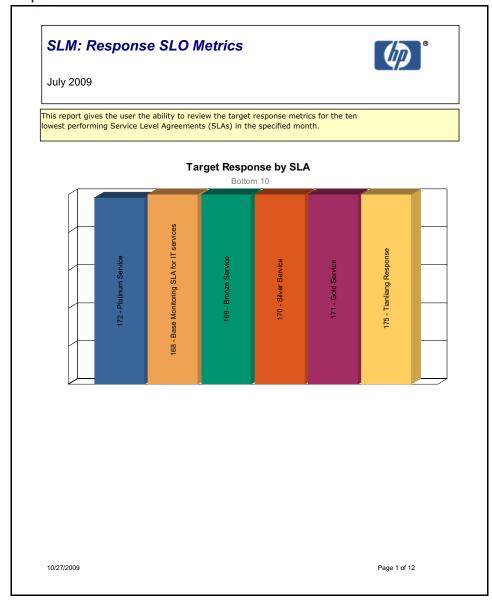


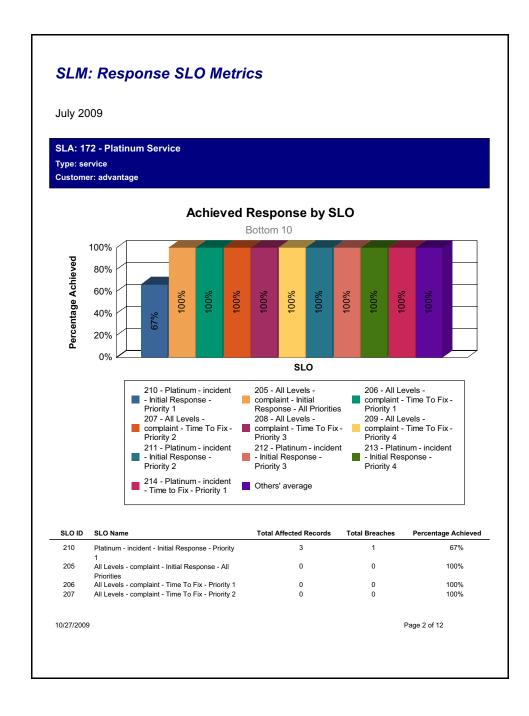
Number of Service Desk Requests by Department



Service Level Management Reports

SLM: Response SLO Metrics





SLM: Response SLO Metrics

July 2009

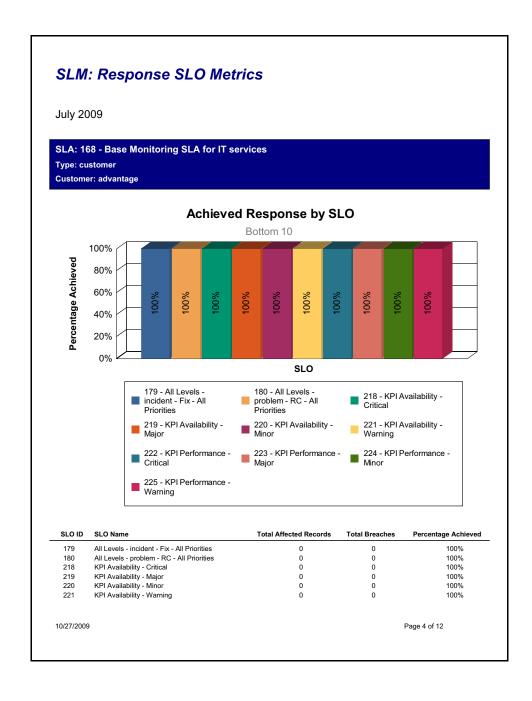
SLA: 172 - Platinum Service

Type: service

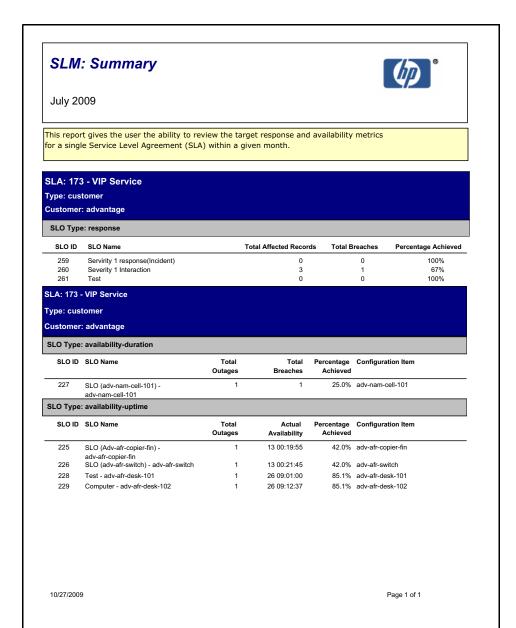
Customer: advantage

SLO ID	SLO Name	Total Affected Records	Total Breaches	Percentage Achieved
208	All Levels - complaint - Time To Fix - Priority 3	0	0	100%
209	All Levels - complaint - Time To Fix - Priority 4	0	0	100%
211	Platinum - incident - Initial Response - Priority 2	0	0	100%
212	Platinum - incident - Initial Response - Priority 3	0	0	100%
213	Platinum - incident - Initial Response - Priority 4	0	0	100%
214	Platinum - incident - Time to Fix - Priority 1	3	0	100%
215	Platinum - incident - Time to Fix - Priority 2	0	0	100%
216	Platinum - incident - Time to Fix - Priority 3	0	0	100%
217	Platinum - incident - Time to Fix - Priority 4	0	0	100%
250	KPI Availability - Critical	0	0	100%
251	KPI Availability - Major	0	0	100%
252	KPI Availability - Minor	0	0	100%
253	KPI Availability - Warning	0	0	100%
254	KPI Performance - Critical	0	0	100%
255	KPI Performance - Major	0	0	100%
256	KPI Performance - Minor	0	0	100%
257	KPI Performance - Warning	0	0	100%

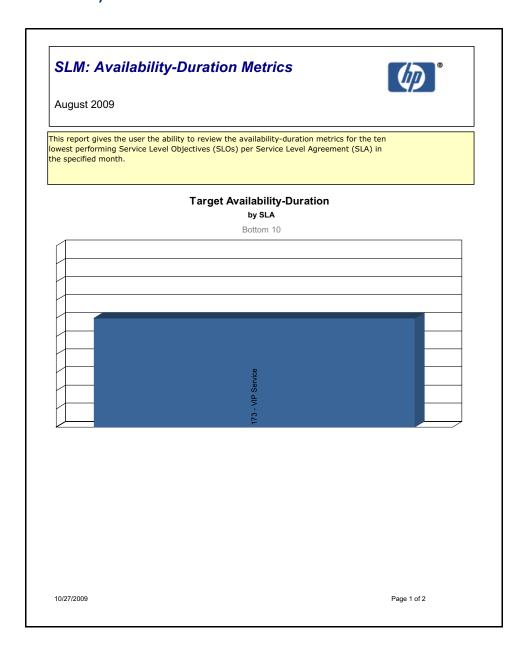
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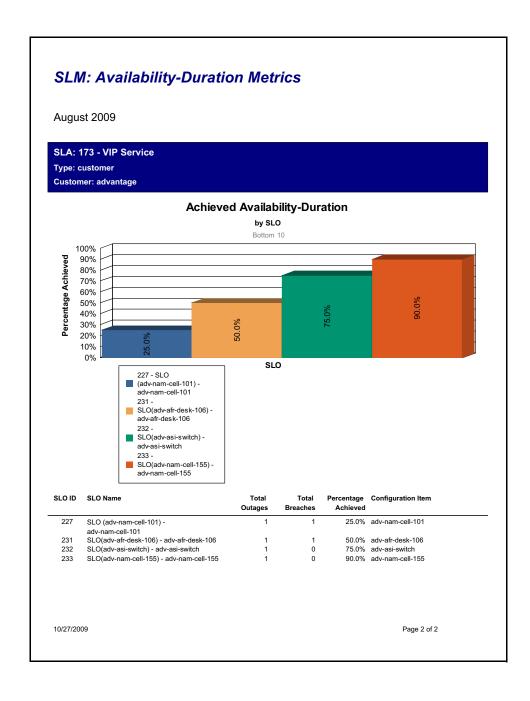


SLM: Summary



SLM: Availability-Duration Metrics





SLM: Availability-Uptime Metrics

