A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Assistant/Manager

Performance Management

Administrator Documentation
07/2024

A31003-H34B0-M119-01-76A9

Mitel

Contents

1 Overview

Performance Management (PM) is a measurement tool for OpenScape 4000 systems. PM allows you to generate various reports (see Report Definition) on metered data stored in the PM database. Data objects can be defined on the Telephony Items Tab

The data for PM comes from the CDR records, ZAUSL files and CMI files collected by Collecting Agent (COL).

NOTICE: The target value for the accuracy of the PM measurement data evaluation is 1%.

PM covers the following:

- Creating reports
- Creating report groups
- Running reports
- Running report groups
- Listing a report or report group
- Scheduling reports
- Selecting systems and Items to be metered
- Administering Performance Management

Several reports can be combined into a Report Group for collective processing.

Reports and report groups may be run over a specified time.

You can also remove unwanted data from the PM database and either archive it or delete it. This can be carried out either manually or automatically.

PM has two levels of functionality:

- Standard—includes minor enhancements to PM version 1.0, additional description fields to the Filter Definition, Report Definition, and Report Group, and the ability to define and run one-off reports in a single screen.
- From PM Version 4, you can select the format of the report output 'Flexible' instead of the 'Standard' format. For the flexible output refer to Downloading Flexible Reports.
- Advanced—includes all the enhancements in the Standard version and includes enhanced and scheduled reports. The Advanced level is not a separately licensed product.

The PM application has many report templates which can be used to generate tabular or chart reports. Two sets of reports are generated (refer to Table 1).

Table 1: PM Report Sets

Reports Generated	Usage	Requirements
• Reports pre-configured by Crystal Reports	PM V2.0 and higher - Standard-only generates Crystal Reports-based reports.	

Reports Generated	Usage	Requirements
• Flexible report output	PM V4 and higher - Selectable Output format (HTML, PDF, XML, CSV) instead of Standard report (Crystal based), and e-mail option. Refer to Downloading Flexible Reports.	
• Reports exported to Microsoft (MS) Excel.	PM V2.0 and higher - Advanced - reports exported to MS Excel. Users who do not have MS Excel have the choice to output Crystal Reports-based reports.	MS Excel installed on the client PC

Related Topics

Languages Supported by Performance Management

Accessing Performance Management

PM Home Page

PM Features

1.1 Languages Supported by Performance Management

The following languages are supported by Performance Management:

- English
- German

Related Topics

PM User Interface

PM Home Page

1.2 Summation Reports

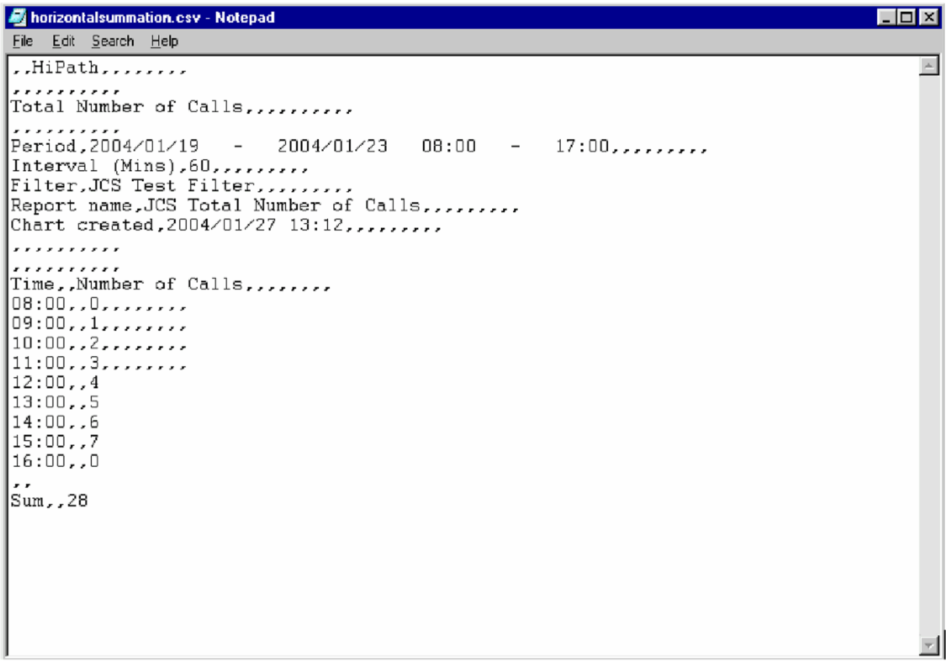
The intermediate results and summation reports are stored on the server as individual files containing raw data. They can be viewed through MS Excel on the client PC using the "Display" button on the Schedule Results page or they can be downloaded and saved on the client PC using the "Download" button and associated file format selection mechanism on the Schedule Results page. The format of the saved file is ASCII text, xls, csv, or csv with no report header.

When displayed, the raw data is converted into a HTML page with embedded VB script that creates, populates, and displays a MS Excel Chart.

When downloaded to xls or csv files, the raw data is converted into a HTML page with embedded VB script that creates, populates, and automatically saves the MS Excel Chart without displaying it on screen.

When downloaded to an ASCII text file, the raw data is sent to the client PC unaltered.

Figure 1 and Figure 2 show the contents of the raw data accumulated and appended summation reports. Figure 3 shows the raw data contents of an appended summation report with compression.



```
horizontalsummation.csv - Notepad
File  Edit  Search  Help
,,HiPath,,,,,,,,
,,,,,,,,,,
Total Number of Calls,,,,,,,,,,
,,,,,,,,,,
Period,2004/01/19   -   2004/01/23   08:00   -   17:00,,,,,,,,,
Interval (Mins),60,,,,,,,,,
Filter,JCS Test Filter,,,,,,,,,
Report name,JCS Total Number of Calls,,,,,,,,,
Chart created,2004/01/27 13:12,,,,,,,,,
,,,,,,,,,,
,,,,,,,,,,
Time,,Number of Calls,,,,,,,,
08:00,,0,,,,,,,,
09:00,,1,,,,,,,,
10:00,,2,,,,,,,,
11:00,,3,,,,,,,,
12:00,,4
13:00,,5
14:00,,6
15:00,,7
16:00,,0
,,
Sum,,28
```

Figure 1: Example of Accumulated Summation Report

The accumulated summation report has the following format:

1) The first 12 rows are the standard report header using commas to separate each field.

NOTICE:

The 'Period' row details the period of the appended summation report.

When the report is compressed, the 'Interval' row details the interval of the appended summation report.

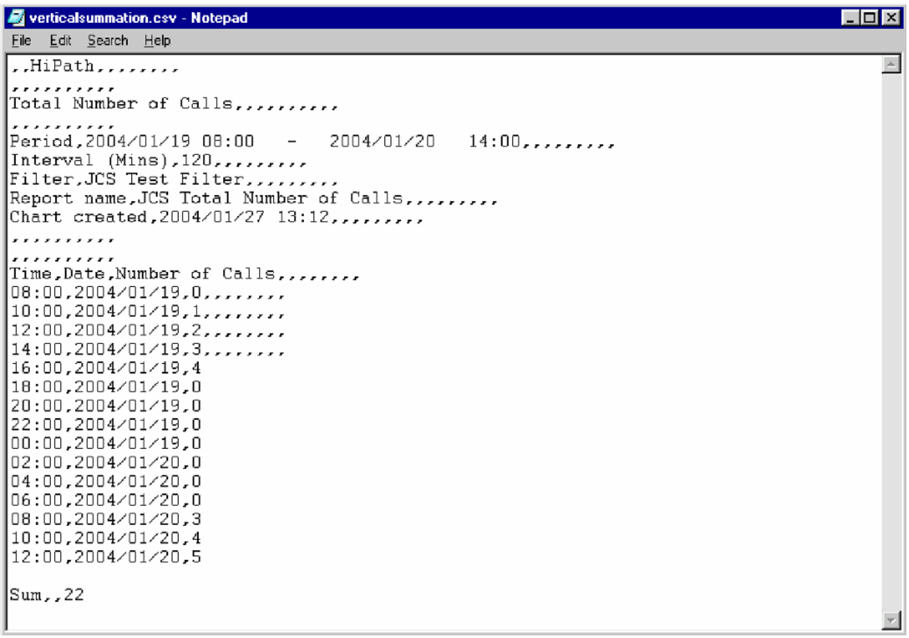
2) The subsequent rows contain the calculated sum or average across the same cell of each report.

NOTICE:

The contents of the 'Date' column are cleared as they are no longer appropriate.

The positions of the columns are unaltered between the scheduled intermediate results and the accumulated summation report.

3) The final row contains any other additional information, including the sum.


verticalsummation.csv - Notepad

File Edit Search Help

```
,,HiPath,,,,,,,,
,,,,,,,,,,
Total Number of Calls,,,,,,,,,,
,,,,,,,,,,
Period,2004/01/19 08:00   -   2004/01/20   14:00,,,,,,,,,
Interval (Mins),120,,,,,,,,,
Filter,JCS Test Filter,,,,,,,,,
Report name,JCS Total Number of Calls,,,,,,,,,
Chart created,2004/01/27 13:12,,,,,,,,,
,,,,,,,,,,
,,,,,,,,,,
Time,Date,Number of Calls,,,,,,,,
08:00,2004/01/19,0,,,,,,,,
10:00,2004/01/19,1,,,,,,,,
12:00,2004/01/19,2,,,,,,,,
14:00,2004/01/19,3,,,,,,,,
16:00,2004/01/19,4
18:00,2004/01/19,0
20:00,2004/01/19,0
22:00,2004/01/19,0
00:00,2004/01/19,0
02:00,2004/01/20,0
04:00,2004/01/20,0
06:00,2004/01/20,0
08:00,2004/01/20,3
10:00,2004/01/20,4
12:00,2004/01/20,5

Sum,,22
```

Figure 2: Example of Appended Summation Report

The appended summation report has the following format:

1) The first 12 rows are the standard report header using commas to separate each field.

NOTICE:

The 'Period' row details the period of the appended summation report.

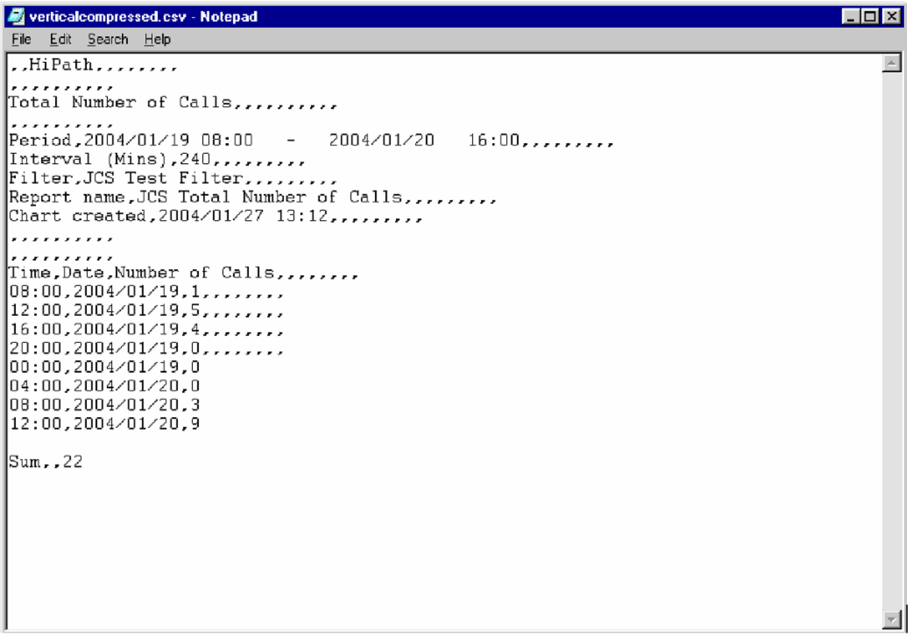
When the report is compressed, the 'Interval' row details the interval of the appended summation report (see Figure 3).

2) The subsequent rows contain the appended data from each report.

NOTICE: The positions of the columns are unaltered between the scheduled intermediate results and appended summation report.

3) The final row contains any other additional information, including the sum.

> **NOTICE:** The sum must be recalculated after each set of new data is added to the appended summation report.




```
,,HiPath,,,,,,,,
,,,,,,,,,,
Total Number of Calls,,,,,,,,,,
,,,,,,,,,,
Period,2004/01/19 08:00   -   2004/01/20   16:00,,,,,,,,,
Interval (Mins),240,,,,,,,,,
Filter,JCS Test Filter,,,,,,,,,
Report name,JCS Total Number of Calls,,,,,,,,,
Chart created,2004/01/27 13:12,,,,,,,,,
,,,,,,,,,,
,,,,,,,,,,
Time,Date,Number of Calls,,,,,,,,
08:00,2004/01/19,1,,,,,,,,
12:00,2004/01/19,5,,,,,,,,
16:00,2004/01/19,4,,,,,,,,
20:00,2004/01/19,0,,,,,,,,
00:00,2004/01/19,0
04:00,2004/01/20,0
08:00,2004/01/20,3
12:00,2004/01/20,9

Sum,,22
```

Figure 3: Example of Appended Summation Report with Compression

1.3 Installing Performance Management

Performance Management gets its information forwarded by Collecting Agent. (COL). To install Performance Management and COL, refer to the OpenScape 4000 Management Collecting Agent (Assistant/Manager) documentation using the following websites:

Collecting Agent Links

- http://apps.g-dms.com:8081/techdoc/en/P31003H3470M1040276A9/P31003H3470M1040276A9_addfiles.pdf (English)
- http://apps.g-dms.com:8081/techdoc/de/P31003H3470M1040200A9/P31003H3470M1040200A9_addfiles.pdf (German)

Related Topics

Requirements for MS Excel-based reports, page 18

Configuring Java Memory for Running Several Reports at the Same Time, page 18

1.3.1 Requirements for MS Excel-based reports

PM from V2.x requires the following:

- Install Microsoft (MS) Office Excel for MS Excel-based reports

- Install MS Excel report templates (.xlt files) with the client CD or download from PM GUI.

Related Topics

Installing Performance Management, page 18

Configuring Java Memory for Running Several Reports at the Same Time, page 18

1.3.2 Configuring Java Memory for Running Several Reports at the Same Time

If you want to run several reports at the same time with PM, you may have to increase the Java memory usage as follows:

1) Close all Java using applications such as Internet Explorer, Firefox Browsers etc.

2) Open from the Windows **Control Panel** of the Client PC the **Java Plug-in**.

3) Set the maximum memory usage for Java as follows:

For Java 1.6.0_14, later and multiple versions:

- Open the **Java** tab in the **Java Control Panel** and click **View...**:

Figure 4: Java 1.6.0_14 Control Panel

- Open the **User** tab of the **Java Runtime Environment Settings** window.
- Enter the Java **Runtime Parameters** value: *-Xmx512m:*

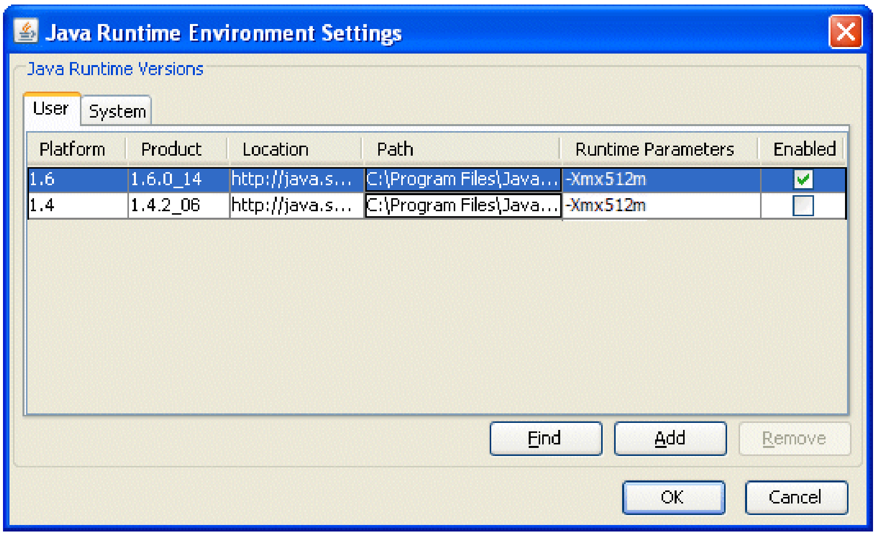


Figure 5: Configure Java Memory Usage for Java 1.6.0_14, later and multiple versions

With this setting you allow Java usage up to 512 MB of your client PC's memory. You may increase the allowed memory usage by changing the value, e.g.: *-Xmx750m* (for 750 MB) or *-Xmx1G* (for 1 GB), but be sure that there is enough memory available.

Note: Please use the latest Java 1.6.0_14 (or later), older versions have bugs!

- Click **OK**.

Related Topics

Installing Performance Management

Requirements for MS Excel-based reports

2 PM User Interface

The OpenScape 4000 Manager Performance Management user interface is web-based. It is used for viewing and administration.

This chapter covers the following topics:

- Accessing Performance Management, page 22
- PM Home Page, page 23

Step-by-Step Instructions

Accessing Performance Management, page 22

Related Topics

PM Features, page 41

Step-by-Step Instructions, page 525

2.1 Accessing Performance Management

The PM Home page can be accessed as follows:

- By selecting the Performance Management option from the OpenScape 4000 desktop
- By double-clicking **Performance Management** at the OpenScape 4000 application tree (see figure below).

- By clicking the **Home** symbol from any of the Performance Management application pages.

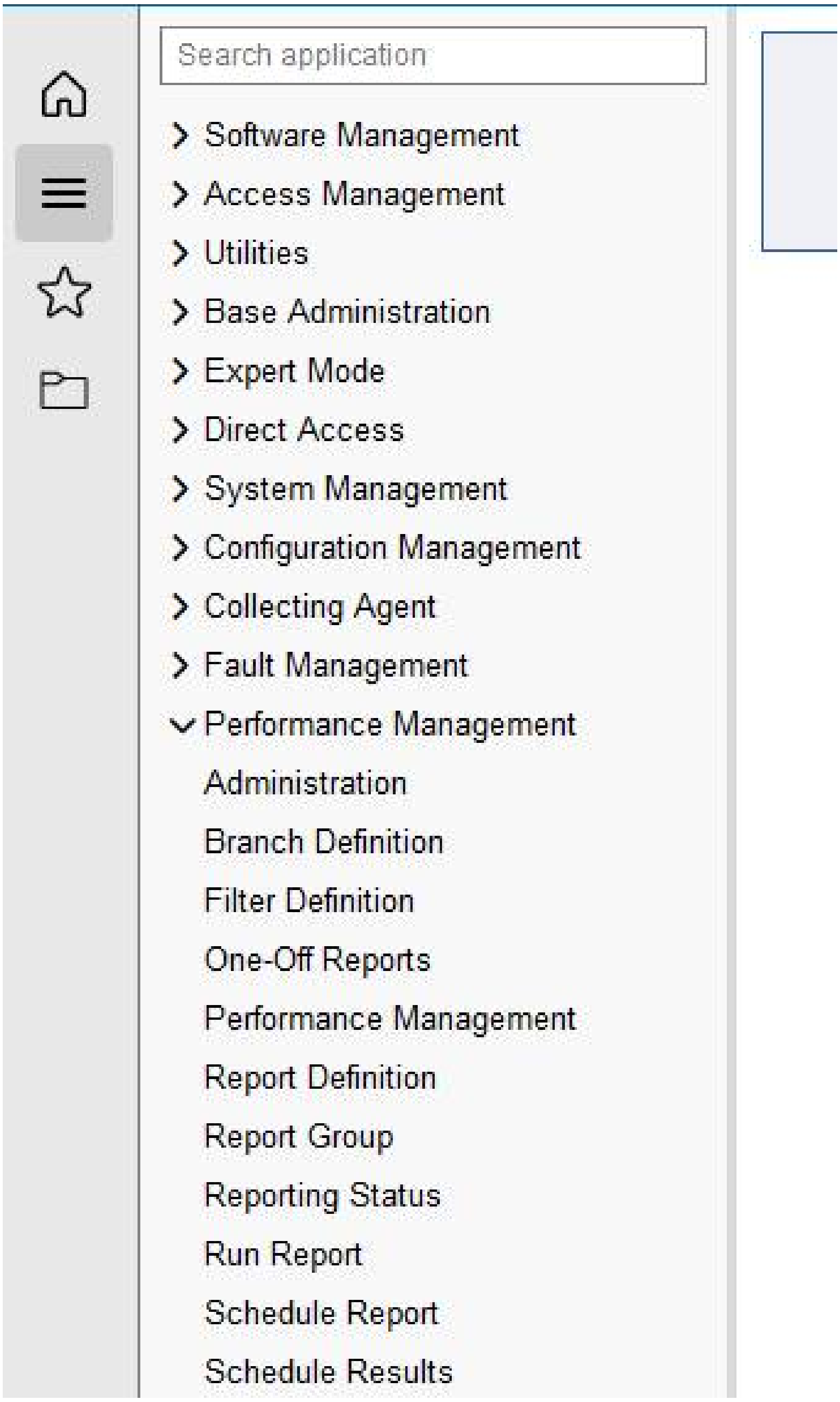


Figure 6: OpenScape 4000 Application Tree

NOTICE: A double-click on any item in the PM application tree links you to the corresponding PM page.

Related Topic

PM Home Page, page 23

2.2 PM Home Page

The PM home page consists of a Welcome to Performance Management message and the Navigation Pane on the left-hand side.

The PM Home Page is displayed when you double-click **Performance Management** from the OpenScape 4000 Manager desktop application list or when you single-click the Home symbol on the toolbar.

PM Advanced level has three web pages that have been added to the PM Home Page:

- Schedule Report
- The One-Off Report Page
- Schedule Results Page

It also has the menus:

- Navigate
- Action
- Help

Step-by-Step Instructions

Accessing Performance Management

Related Topics

Navigation Pane

Content Pane

Welcome Pane

Description Pane

License Description

Tool Bar

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.1 Navigation Pane

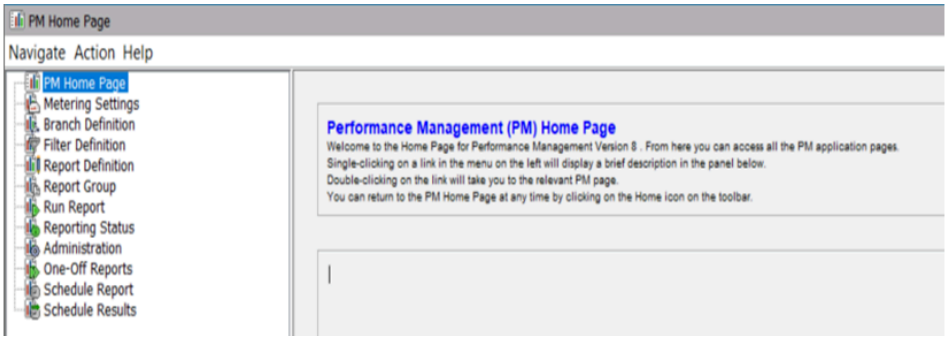


Figure 7: Performance Management Home Page - Advanced

The navigation panel has the following links to PM-related web pages:

Table 2: Navigation Panel Links and Descriptions

Links	Description	Alway Disab
PM Home Page	Link to the PM Home Page	Alway
Metering Settings	Link to the PM Tab Sheet in System Administration (refer to Metering Settings)	Alway
Branch Definition	Link to Branch Definition	Alway
Filter Definition	Link to Filter Definition	Alway
Report Definition	Link to Report Definition	Alway
Report Group	Link to Report Group	Alway
Run Report	Link to Run Report	Alway
Reporting Status	Link to Reporting Status	Alway
Administration	Link to PM Administration	Alway
One-Off Reports	Link to One-Off Report	Alway
Schedule Report	Link to Schedule Report	Alway
Scheduled Results	Link to Schedule Results Page	Alway
Call Routing Display	Link to the Call Routing Package	Alway

Double-clicking a link opens the appropriate PM page.

Single-clicking a link displays a brief description in the bottom right-hand panel of the PM Home page.

Related Topics

PM Home Page

Content Pane

Welcome Pane

Description Pane

License Description

Tool Bar

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.2 Content Pane

The content pane consists of the Welcome Pane and the Description Pane. The Welcome message is always displayed.

When a link in the navigation pane is selected with a single mouse click, a short description of the selected feature is displayed in the lower half of the content pane.

When a link in the navigation pane is selected with a double mouse click, that specific feature is started.

Related Topics

PM Home Page

Navigation Pane

Welcome Pane

Description Pane

License Description

Tool Bar

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Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.3 Welcome Pane

The Welcome panel is always enabled. The version number displayed in the Welcome message (Version x.y.z) indicates which release of PM which is being run.

The Welcome pane also provides you information about accessing the PM application pages.

Related Topics

PM Home Page

Navigation Pane

Content Pane

Description Pane

License Description

Tool Bar

Record Selection Mechanism

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Switching from List View to Object View by Double Click

2.2.4 Description Pane

When a link is single-clicked on the contents pane, a description of the feature appears on the description pane (refer to Table 3).

Table 3: Description of Links in Performance Management

Menu Item	Displayed Text
Home Page	Contents depend on the user's license level.
Branch Definition	**Branch Definition** The Branch Definition page allows you to create, modify or delete a A Branch refers to a branch location within a network that is connect configured as a switching centre with an ASC attached. To define a Branch you have to specify: • a name for the Branch • a switch with an ASC attached • the branch switch • and optionally, a set of trunk groups
Metering Settings	**Metering** This menu item takes you to the PM tab sheet of the System Manag From this tab sheet you can specify the metering settings that are as selected switch. These items can then be referenced in a Filter. You can specify: • that all items on the switch should be metered, or • that only selected Telephony items (i.e. Extensions, Trunks, Trunl should be metered • that SWU/ADP Load data should be metered

Menu Item	Displayed Text
Filter	**Filter Definition** The Filter Definition page allows you to create or modify a Filte A Filter consists of a set of definitions that specify which items from the PM database of metered data so that they can then b a Report. Note that a Filter will only be effective if it contains ite selected for metering. To define a Filter you have to specify: • a name for the Filter • the switch or switches to be included in the Report • for each switch, the Telephony Items (i.e. Extensions, Trunk etc.) to be included in the Report • the Call Types (Internal/External, Incoming/Outgoing/Transi the Report
Report Definition	**Report Definition** The Report Definition page allows you to create or modify a Re To define a report you have to specify: • a name for the report • the name of a Filter that contains a set of definitions that sp be included in the Report • a template that controls the way the report is laid out • a scale interval (if the template is a histogram or a table)
Report Group	**Report Group** The Report Group page allows you associate one or more Rep Group. This allows common running of more than one Report. To define a Report Group you have to specify: • a name for the Report Group • the names of the Reports which you wish to include in the R
Run Report	**Run Report** This page allows you to run a Report or Report Group immedia over a defined time period. To run a Report (or Report Group) you have to specify: • the name of the Report or Report Group • the reporting period over which the data is to be gathered • the output format; Advanced (MS Excel based) or Flexible (xml). The Advanced option is only available through Interne supported version of MS Excel is installed on your PC. The are displayed on screen unless 'Save to file on PC' is selec format is chosen.

<table>
<tr><th>Menu Item</th><th>Displayed Text</th></tr>
<tr><td>Schedule Report</td><td>Schedule Report
This page allows you to schedule a Report or Report Group so that i
collected over a defined time period and is output at a specified time
To schedule a Report (or Report Group) you have to specify:
• the name of the Report or Report Group
• an indication of how frequently the Report/Report Group is to be r
weekly or monthly)
• the reporting period over which the data is to be gathered
• the data and time at which the output will be generated</td></tr>
<tr><td>Reporting Status</td><td>Reporting Status
The Reporting Status page is the main window onto the PM Report-I
facilities.
From this page you can:
• View the list of available Reports and Report Groups
• Add, Delete, Edit or Schedule a Report or Report Group
• Add, Delete or Edit the current Schedules</td></tr>
<tr><td>Administration</td><td>PM Administration
This page allows you to perform the following administration functior
the PM database:
• specify how data from the PM database is to be automatically ret
• manually delete data
• determine database statistics
• view the number of records for each week
It also allows you to download the advanced report templates and co
your PC.</td></tr>
<tr><td>One-Off Reports</td><td>One-Off Reports
This page allows you to quickly construct and run a Report. The Rep
in either advanced or standard modes.
To run a One-Off report you must specify:
• a scale interval (if the template is a histogram or a table)
• a reporting period over which the data is to be gathered
• the Call Types (Internal/External, Incoming/Outgoing/Transit) to b
the Report
• the switch or switches to be included in the Report along with
• associated telephony items
• a template that controls the way the report is laid out
Note: If required the user may import an existing filter into the One-C</td></tr>
</table>

Menu Item	Displayed Text
Schedule Results and Admin	**Schedule Results and Admin** This page allows you to view the reports which have been gen scheduler. You can also delete any reports which are no longer required. The Administration tab allows you to specify when you would li automatically deleted.
Call Routing Display	**Call Routing Display** This menu item takes you the Call Routing Display package

Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

License Description

Tool Bar

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.5 License Description

From OpenScape 4000 Manager/Assistant V8 on, the PM license for all the PM-Packages is included in the Port License of Assistant/Manager.

Table 4: PM-Packages overview

PM-Package Mnemonic	Included in License Type	Description
PM-N	Assistant/ Manager Port License	This package provides reports on Trunks and Line L switches in the switch.
PM-E	Assistant/ Manager Port License	This package provides reports on Subscribers, Hunt Attendant Consoles, Attendant Console Groups and Patterns on the switch processors. This package also includes the PM ASC Package (s
PM_ASC	Assistant/ Manager Port License	This package provides reports on Attendant Supervi Console (ASC) statistics, Total Number of Calls, and Answered, Not Answered and Lost because Busy or

The MS Excel-based reports are also included in Port License. They are available in all PM Packages.

Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

Description Pane

Tool Bar

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.6 Tool Bar

The toolbar on the Performance Management home page has the following icons and menu items:

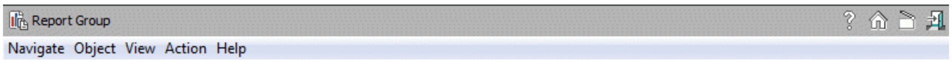
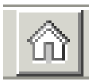
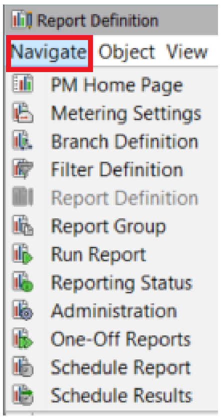
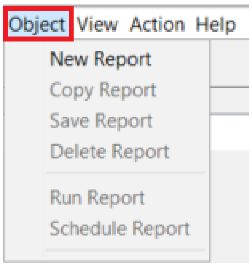
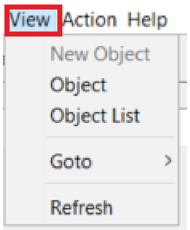
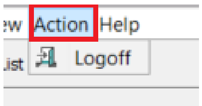
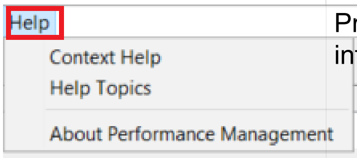


Figure 8: Toolbar in Performance Management

Icons and Menu Items in Performance Management

Table 5: PM Toolbar Icons and Menu Items

Icon and Menu Item	Description
	Launches the Performance Management Help
	Brings you to the PM Home page
	Brings back to the OpenScape 4000 Manager desktop
	Gives you warning that you are about to log off your sessing.
	When you click the Navigation link, PM sends you to your request This identifies the title of your web page.

Icon and Menu Item	Description
	Has a list of PM pages in the same order and description as The list of displayed PM pages is dependent upon the level menu items for Schedule Report and Scheduled Results are Version 2.0 (and higher) - Advance. Selecting an entry in the navigate menu takes you to the rel
	Has a list of options such as create, copy, delete, run, or sch list is dependent upon the PM page that you are in. Clicking takes you to another web page.
	Gives you the option to view by object, object list, go to anot the page.
	Has the Logoff menu item. This allows you to log out (in the
	Provides you options for context-sensitive Help and Help top information about the version of Performance Management

Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

Description Pane

License Description

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.7 Record Selection Mechanism

The record selection mechanism is a standard data access control used by all pages which display details of a selected object. It is present in the following windows, but **not** when they are in the state "New Object view":

- Report Group
- Report Definition
- Branch Definition
- Filter Definition
- Schedule Report

The records appear in ascending alphabetical order, however, you can modify this order in the Object List View. This order is used until it is changed again or until the Report Definition page is closed.

The record selection mechanism consists of four buttons and a record indicator as follows:

Go to Start (|<)

This is the leftmost button. When clicked, the details of the first object are displayed and the record indicator is updated accordingly.

Back (<)

This is the second button from the left. When clicked, the details of the object preceding the current object are displayed and the record indicator is updated accordingly. If the first record was being displayed, clicking this button has no effect.

Record Indicator (2/25, for example)

This appears to the right of the Back button. It shows the number of the object whose details are currently displayed and the total number of that type of object that there is in the database, (separated by a '/')

Forward (>)

This is the third button from the left. When clicked, the details of the object after the current object are displayed and the record indicator is updated accordingly. If the last record was being displayed, clicking this button has no effect.

Go to End (>|)

This is the rightmost button. When clicked, the details of the last object are displayed and the record indicator is updated accordingly.

Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

Description Pane

License Description

Tool Bar

Multiple Selection of Records in List View

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.8 Multiple Selection of Records in List View

Multiple selection of records in list view is possible in the following pages:

- Reporting Status
- Report Group
- Report Definition
- Branch Definition
- Filter Definition
- Schedule Report
- Summation Report
- Schedule Results Page
- Scheduled Results Page - Status of Scheduled Runs Tab

After having selected more than one line, it is possible to delete the complete selection by clicking the **Delete** button on the bottom of the page.

A dialog box is displayed showing the selection and prompting to confirm the deletion of all the entries.

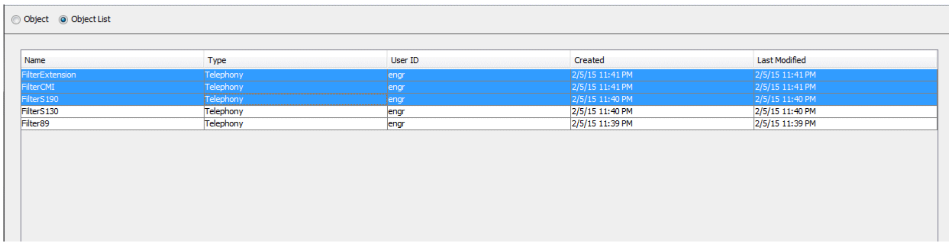
In case of an error in deleting one of the entries in the selection (e.g. the entry is locked etc.), an error message is displayed, and the deletion procedure will stop. All remaining entries of the selection will not be deleted.

The functionalities that have no meaning in a multi selection context will be disabled. Thus, for example the **Copy** button will become disabled.

Selection of multiple entries in a table is done by using the mouse together with the shift or the CTRL-key.

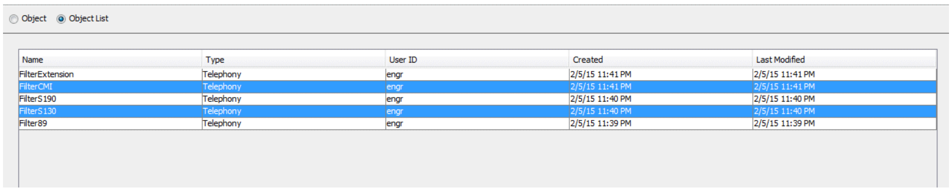
Multiple selection of a range of lines

By keeping the shift key pressed you can select a range of values with the mouse.



Multiple selection of a seperate lines

By keeping the CTRL-key pressed you can select multiple separate entries with the mouse.



When either key is released selection reverts back to normal mode.

Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

Description Pane

License Description

Tool Bar

Record Selection Mechanism

Sorting of Records in List View

Switching from List View to Object View by Double Click

2.2.9 Sorting of Records in List View

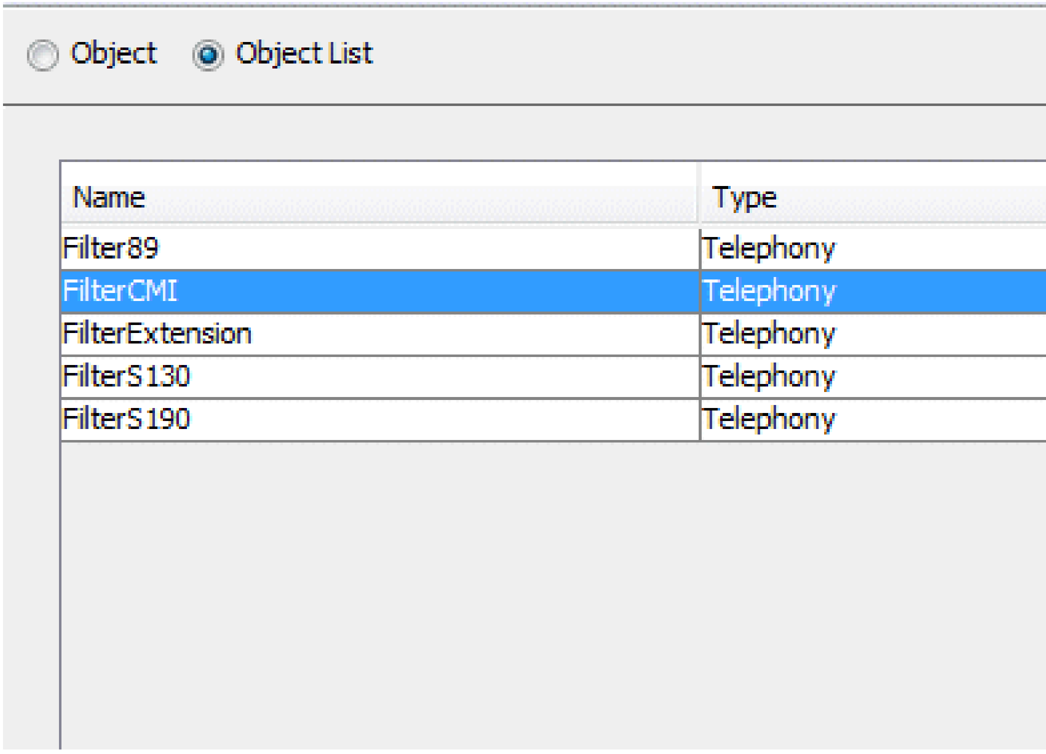
Sorting of records in a table in list view is possible in the following pages:

- Reporting Status, page 42
- Report Group, page 49
- Report Definition, page 52
- Branch Definition, page 95
- Filter Definition, page 99
- Restoring Data, page 145
- Viewing Data Records, page 153
- Schedule Report, page 164
- Summation Report, page 204
- Schedule Results Page, page 234
- Scheduled Results Page - Status of Scheduled Runs Tab, page 237

Sorting in ascending and descending order

Clicking the header of any of the table columns will sort the records in ascending order of the contents of this column first.

Clicking the same header again, will sort in descending order.



Related Topics

PM Home Page, page 23

Navigation Pane, page 24

Content Pane, page 25

Welcome Pane, page 26

Description Pane, page 27

License Description, page 30

Tool Bar, page 31

Record Selection Mechanism, page 33

Multiple Selection of Records in List View, page 35

Switching from List View to Object View by Double Click, page 38

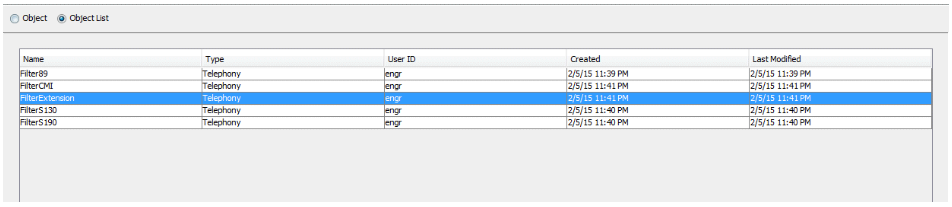
2.2.10 Switching from List View to Object View by Double Click

Double clicking a record in a line of the table will display the details of the corresponding record in object view.

This feature is available in the following pages:

- Reporting Status
- Report Group
- Report Definition
- Branch Definition
- Filter Definition
- Schedule Report

- Summation Report
- Schedule Results Page
- Scheduled Results Page - Status of Scheduled Runs Tab



Related Topics

PM Home Page

Navigation Pane

Content Pane

Welcome Pane

Description Pane

License Description

Tool Bar

Record Selection Mechanism

Multiple Selection of Records in List View

Sorting of Records in List View

3 PM Features

Performance Management supports the following features:

NOTICE: Cordless report generation in Assistant PM is also possible.

3.1 Reporting Status

This section covers the following topics:

3.1.1 The Reporting Status Page

The Reporting Status page is your main window into the PM-handling facilities. It allows you to:

- Display the available reports and report groups in the database
- Add a report or report group
- Run a report or report group immediately using the Run Report page
- Edit an existing report or report group using the Report Definition or Report Group page
- Delete an existing report or report group
- Define a new report or report group using the Report Definition or Report Group page
- Schedule a report or report group using the Schedule button.

The Reporting Status page now shows the hourly, every n hours, and daily scheduled reports for the summation reports.

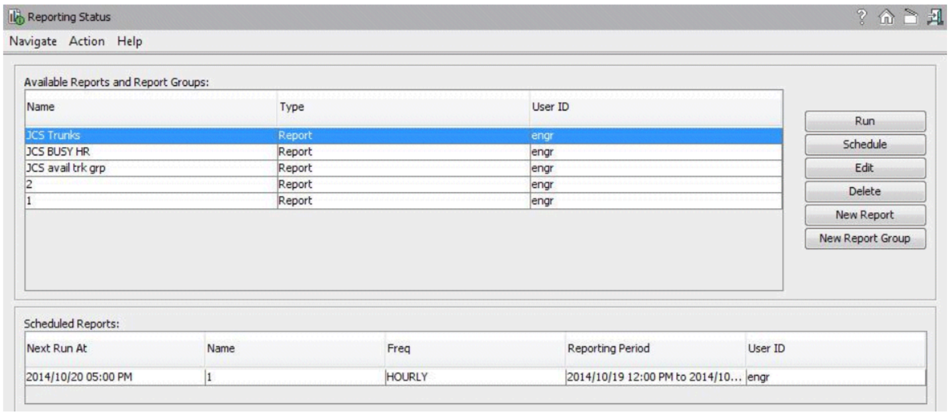


Figure 9: Reporting Status Page

The Reporting Period column for Scheduled Reports shows which hourly, every n hours, and daily scheduled reports are for summation reports. It displays **Summation** instead of the reporting period.

When you select an entry with **Summation** in the Reporting Period column and clicking the **Modify** button displays the appropriate entry in the Scheduled Report Setup Page, Define Schedule tab.

Fields and Controls Descriptions

Available Reports and Report Groups

Run

Schedule

Edit

Delete

New Report

New Report Group

Scheduled Reports

Reporting Status Schedule Buttons ("Modify", "Delete")

Step-by-step Instructions

Accessing the Reporting Status Page

Related Topics

Creating a Report

Creating a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Deleting a Report

Canceling a Report

3.1.2 Accessing the Reporting Status Page

To access the Reporting Status Page, on the Performance Management Home Page, double-click **Reporting Status**. The Report Status page appears.

You can run, edit, and delete a report or reports from the list.

When you click **New Report**, **New Report Group**, **Run**, and **Edit** buttons, another page appears.

3.2 Run Report

This section covers the following topics:

3.2.1 The Run Report Page

The Run Report page allows you to define the report mode and reporting period for a specific report or report group and run it immediately. Report or Report Group comprises the Run Report page.

> **NOTICE:** You cannot direct the Report's output to a printer but you can request a printout directly from the report when it is displayed on the screen.

- In PM Version 2.0 and higher, you can select the format of the report output: Standard or Advanced. The Standard reports are Crystal Reports-based reports while the Advanced reports have the option to display to a screen or saved to a file on the PC in a particular directory relative to the root drive.
- From PM Version 4, you can select the format of the report output 'Flexible' instead of the 'Standard' format. For the flexible output refer to Downloading Flexible Reports on page 3-249.
- Whether the report is displayed on screen or saved to a file on the PC. The format of the saved file xls, csv, or csv with no report header.

PM (from Version 2.2) has been enhanced to produce two different modes of report:

- Full
- Summary.

The main differences between the two modes of reports are:

- The reporting period for a full report is continuous from the start date and time to the end date and time. Whereas, the reporting period for a summary report is from the same start time to the same end time on each day from the start date to the end date. The summary report may not be a contiguous from the start time on the start date to the end time on the end date. There may be overnight gaps in the summary report.
- The full reports contain a single sheet with all of the information on it. While the summary reports contain an individual sheet of results for each day and an additional sheet with the overall results. The overall results are the sum of

the individual results for each interval of each day throughout the reporting period.

The summary reports are Advanced only reports. They are required for ASC 3.0 Parity. Summary reports cannot be saved in csv format because they contain multiple sheets.

Advanced reports have been enhanced as follows:

- The file format selection mechanism is placed under the **Save to file on PC** option rather than next to it.
- There is a new directory selection mechanism which allows you to specify the directory the advanced report files are saved in.

The directory selection mechanism consists of a Directory text entry field and associated Browse button which allows you to manually enter the name of a directory or browse through the file systems accessible to the client PC.

When you click the **Browse** button, a new file browser window pops up. You can browse the file system, select a directory, select a download format and click the **OK** button. Subsequently, the contents of the Directory text entry field and the Format drop-down combo are updated with your selection.

When you click the **Browse** button followed by the **Cancel** button, the contents of both the Directory text entry field and the Format drop-down combo are not changed.

When the Run Report page is first displayed, the Directory text entry field shows the default directory "C:\[company name]\PM\SavedReports". When you specified a particular directory, the text field shows your specified directory.

The Directory text entry field and associated Browse button are only enabled when the Save to file on PC option is enabled.

When Advanced report output and Save to file on PC options are selected and the Run button is clicked, the directory information is retained on the client PC so that the next time the Run Report page is displayed, the Directory text entry field is updated with your last used directory. Finally, the advanced report or report group is generated and saved on the client PC in the specified format in the specified directory.

You may specify different directories for the immediate and scheduled advanced reports. They are stored separately on the client PC.

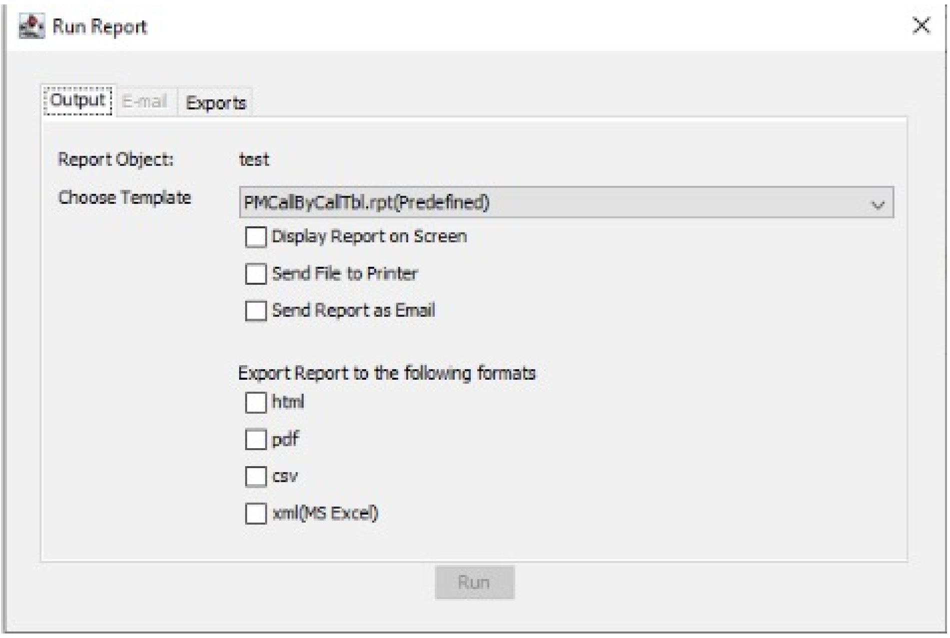


Figure 10: Advanced Run Report Page

Related Topics

Refer to Reports for examples of reports.

Refer to Downloading Flexible Reports for the flexible output format option of the report.

Field and Controls Descriptions

Report or Group

Report Mode (in Advanced Report)

Reporting Period

From: Date

To: Time

Report output (in Advanced Report)

Run

Step-by-step Instructions

Running a Report

Running a Report Group

Related Topic

Accessing the Run Report Page

3.2.2 Accessing the Run Report Page

To access the Run Report Page, on the Performance Management Home Page, double-click **Run Report**. The Run Report page appears.

3.3 Report Group

This section covers the following topics:

The Report Group Page

Accessing the Report Group Page

3.3.1 The Report Group Page

The Report Group page allows you to associate one or more Reports into a Report Group so you can run one or more reports simultaneously.

Reports may be run over a specified time.

This page allows you to create, modify, delete, run or schedule a report group. You can also view a list of report groups or view a detailed list of reports in a report group.

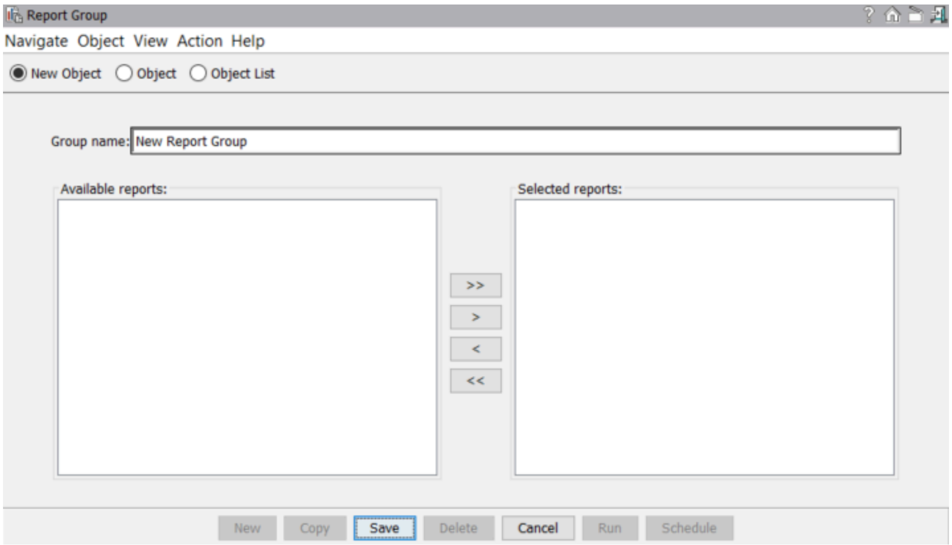


Figure 11: Report Group Page (Object View)

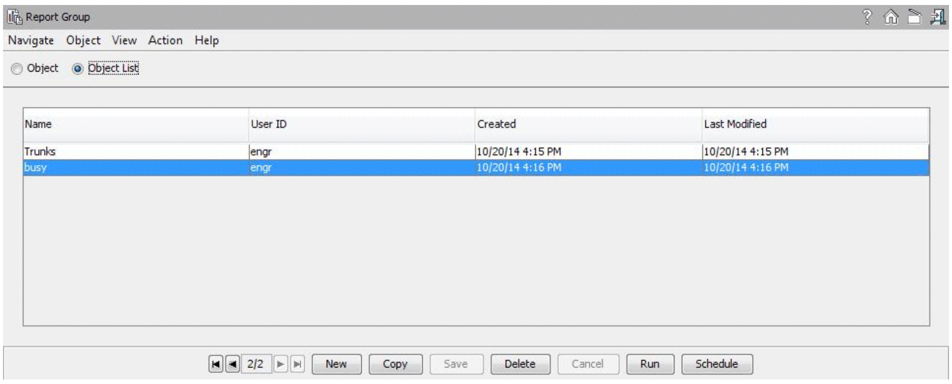


Figure 12: Report Group Page (Object List View)

Field and Controls Descriptions

(New Object)

Object

Object List

In Object view:

Group Name

Available Reports

Selected Reports

>>

>

<

<<

In Object list view:

Name

User ID

Created

Last Modified

Buttons:

New

Copy

Save

Delete

Run

Cancel

Schedule

Step-by-step Instructions

Creating a Report Group

Saving a Report Group

Running a Report Group

Deleting a Report Group

Copying a Report Group

Canceling a Report Group

Related Topics

Accessing the Report Group Page

3.3.2 Accessing the Report Group Page

You can access the Report Group page in one of the following ways:

- By double-clicking the Report Group option in the navigation pane of the PM Home page
- By clicking the Edit button on the Reporting Status page when a Report Group is selected in the Available Reports and Report Groups list
- By clicking on the New Report Group button on the Reporting Status page

3.4 Report Definition

This section covers the following topics:

Report Definition Page

Accessing the Report Definition Page

Report Templates

3.4.1 Report Definition Page

In the "**Define Report Tab**" (Object View) of the Report Definition page you are able to create, modify, and delete reports using the following.

- ACD - Automatic Call Distribution Template
- Attendant Console Templates
- Call Timings Template
- Call Tracking Template
- Call Volumes Template
- Cordless Statistics - Cordless Base Stations Template
- Cordless Statistics - Cordless SLC Cards Template
- Cordless Statistics - Cordless Stays Template
- Cordless Statistics - Overload Duration Template

NOTICE: Cordless report generation in Assistant PM is also possible.

- Hit Parade/Top Usage
- System Statistics Report Templates
- Trunk Groups Templates

A report consists of a:

- Named Filter (that contains a set of definitions that specify which items are to be included in the Report
- Template (that controls the way the Report is laid out)
- Scale interval (if the template specifies a histogram or a table

In the **Object List View** of this page you are able to view a list of all reports.

The current list of schedule reports and report groups are held in the PM database. This includes the following:

- The name of the report or group
- Who scheduled this report or group
- The reporting period for which data is to be extracted from the database
- Whether the report is a simple report or a group

- The output data and time
- The output destination of the report (screen, printer, or file)

Reports may be run over a specified time. Reports that are scheduled to be produced periodically (daily, weekly, or monthly) must be rescheduled after they have been outputted.

The "**Define Report Tab**" of this page includes service level and call ignoring parameters. These parameters are required for ASC 3.0 Parity. The service level parameter only applies to the Service Level reports.

The service level parameters indicate the acceptable waiting time for answered incoming calls and the percentage of incoming calls which have been answered within this time.

The call ignoring parameter indicates whether not answered calls with a ringing time (waiting time at Attendant Console) less than the value set are counted in the statistics. The call ignoring parameter applies to most Call Volume, Call Timings, Attendant Console, Call Tracking, and Organisation Detail reports.

Additional ignoring parameters are also provided for the Cordless Statistics (ignoring of short stays and of overload durations).

With the "**Define Thresholds Tab**" of this page, you are able to define PM reports that display only values exceeding these threholds. Furthermnore, you are able to define whether an alarm should be sent to the Fault Management or not, if one of the thresholds is exceeded. The Define Thresholds Tab cannot be used for all types of reports. If the currently selected report template does not support the definition of thresholds, the the Define Thresholds Tab displays a blank area.

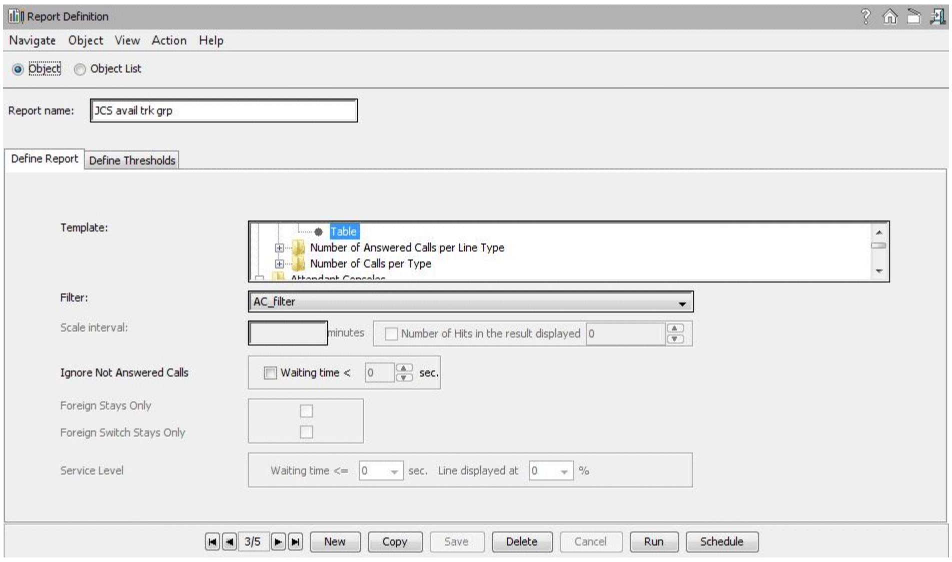


Figure 13: Report Definition Page ("Define Reports" Tab in Object View)

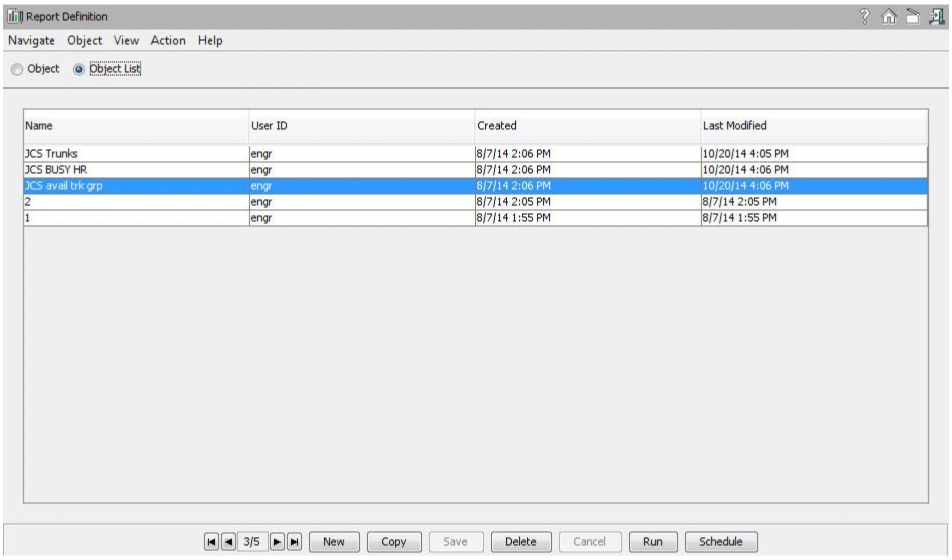


Figure 14: Report Definition Page (Object List View)

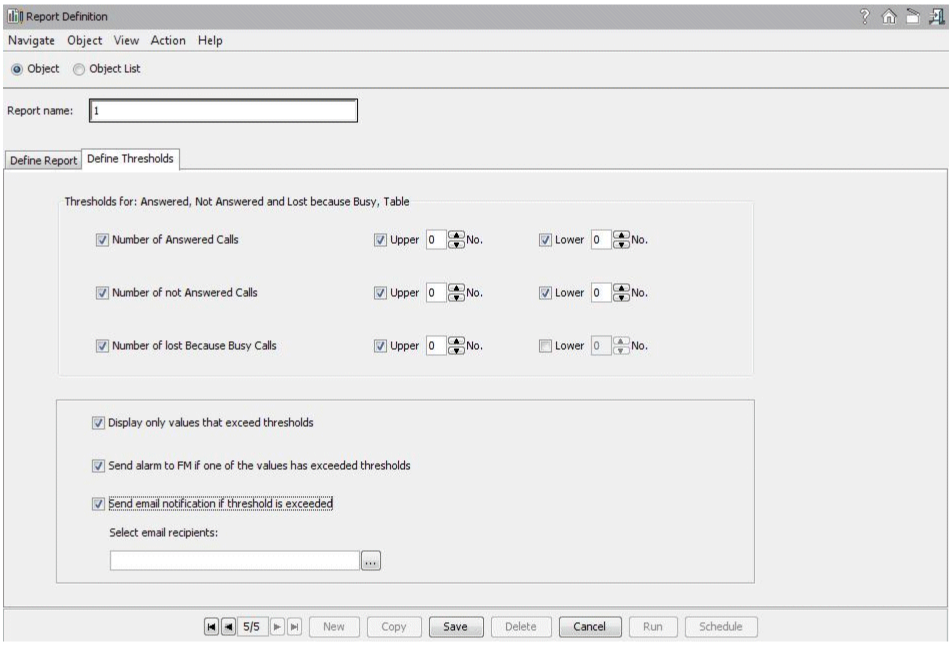


Figure 15: Report Definition Page ("Define Thresholds" Tab)

Fields and Controls Descriptions

Items in the upper part of the Report Definition window

(New Object)

Object

Object List

Report Name (in Object view)

Items of the Define Report Tab

Template

Filter

Scale Interval

Number of Hits in the result displayed

Controls for Ignoring Report Values

Foreign Stays Only

Foreign Switch Stays Only (for "Cordless Stays per Extension" report)

Service Level

Items of the Define Thresholds Tab

Threshold Definition Area

Display Exceeded Values / Send Alarm to FM

Send email notification if threshold is exceeded

Select email recepients

Buttons

New

Copy

Cancel

Save

Delete

Run

Schedule

Step-by-Step Instructions

Creating a Report

Canceling a Report

Copying a Report

Deleting a Report

Running a Report

Saving a Report

Scheduling a Report

Related Topics

Accessing the Report Definition Page

Attendant Console Templates

Call Timings Template

Call Volumes Template

Cordless Statistics - Cordless Base Stations Template

Cordless Statistics - Cordless SLC Cards Template

System Statistics Report Templates

Trunk Groups Templates

Reports

3.4.2 Accessing the Report Definition Page

You can access the Report page in any of the following ways:

- Double-clicking **Report Definition** in the navigation pane of the PM Home page
- By selecting a Report from the **Available Reports and Report Groups** list on the Reporting Status page and clicking the **Edit** button
- Clicking the **New Report** button on the Reporting Status page

3.4.3 Report Templates

The report template describes the following parameters:

- Statistic that is being reported on such as total number of calls or ringing times
- Item that the data in the report is about such as trunks, trunk groups, extensions, and so on
- Format of the report, that is either a Table, Column chart or Pie chart or an Organisational report.

When the feature, parallel ringing is carried out for an extension, the incoming call for this extension is counted twice in PM reports.

Parallel ringing is performed as follows:

The target extension rings on its own. When parallel ringing is carried out, the connection that is established to the extension ends and two new connections are established: one to the attendant console and the other, to the extension. When the original connection ends, a second call charge is recorded that PM cannot identify as the same call.

Cordless report generation in Assistant PM is also possible.

Related Topics

ACD - Automatic Call Distribution Template

Attendant Console Templates

Call Timings Template

Call Tracking Template

Call Volumes Template

Cordless Statistics - Cordless Base Stations Template

Cordless Statistics - Cordless SLC Cards Template

Cordless Statistics - Cordless Stays Template

Cordless Statistics - Overload Duration Template

Hit Parade/Top Usage

System Statistics Report Templates

Trunk Groups Templates

Downloading Flexible Reports

3.4.3.1 ACD - Automatic Call Distribution Template

Automatic Call Distribution (ACD) Reports can be used to track activity of automatic call distribution centers.

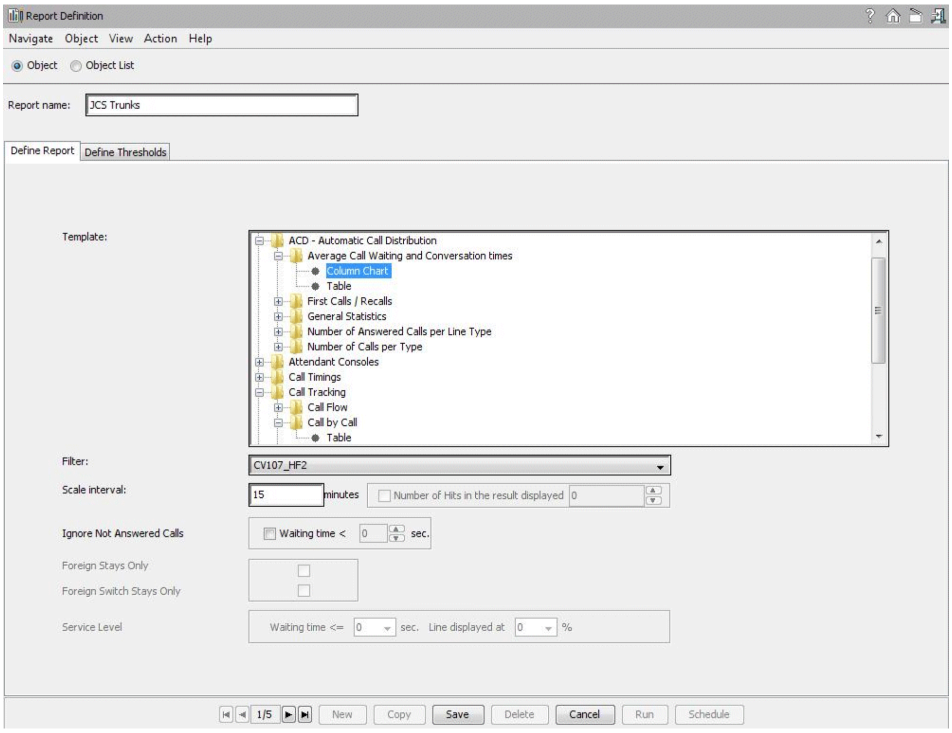


Figure 16: Report Definition Page - Automatic Call Distribution Templates

The following reports are supported for this purpose:

Table 6: Call Timings Report Templates

Report	Available Formats
Average Call Waiting and Conversation times	• Column chart • Table
First Calls / Recalls	• Column chart • Table
General Statistics	• Table
Number of Answered Calls per Line Type	• Column chart • Table
Number of Calls per Type	• Column chart • Table

Average Call Waiting and Conversation times

This report provides information about two different average times in call scenarios where an ACD group participates. The user is able to define which participating ACD groups are to be considered for this report (by filter settings).The output of this report is given in intervals, which can be also specified by the user. The report values are in seconds.

First Calls / Recalls

This report provides information about the number of first calls and recalls in call scenarios where an ACD group participates. The user is able to define which participating ACD groups are to be considered for this report (by filter settings). The output of this report is given in intervals, which can be also specified by the user. The report values are given in "number of calls".

General Statistics

The report gives a "total picture" of ACD activity by including statistics that are provided also by the other four Reports.

Number of Answered Calls per Line Type

This report provides information about calls taking place in the Exchange Line, in the ACD Line and in the Personal Line, for call scenarios where an ACD group (or a directly called ACD Agent) participates. The output of this report is given in intervals, which have been previously specified by the user. The report values are given in "number of calls".

Number of Calls per Type

This PM report provides information about calls that took place in the Exchange line, ACD line, Personal line and Outgoing line, for call scenarios where an ACD group (or a directly called ACD Agent) participates. The output of this report is given in intervals, which have been previously specified by the user. All values are given in "number of calls".

3.4.3.2 Attendant Console Templates

NOTICE: AC 2 Queue, AC Multiple Queue and AC Common reports are only allowed to be run with filters that have AC Group and/or Attendant Consoles items selected. Trying to run or save a report that violates this rule, a warning message will be displayed, informing about the restriction, and the action is aborted.

There are three types of Attendant Console templates:

- AC 2 Queue
- AC Multiple Queue
- Common

AC 2 Queue

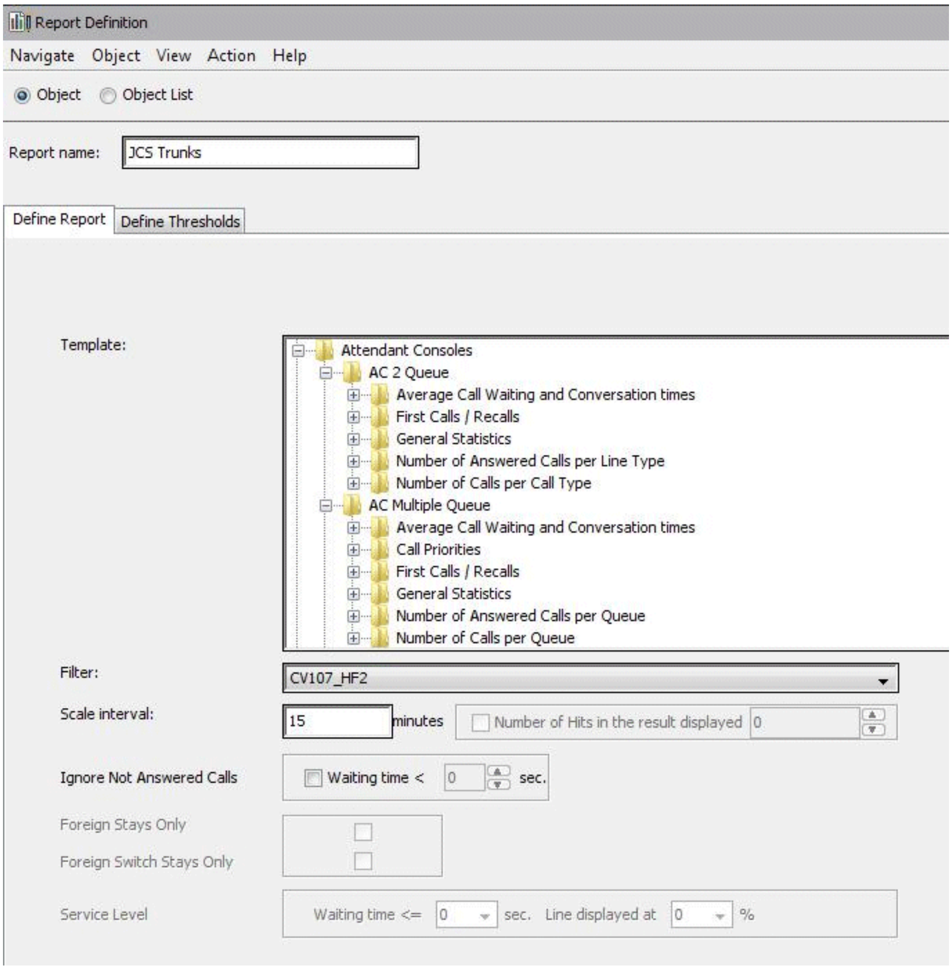


Figure 17: Report Definition - AC 2 Queue Attendant Console Templates

The AC 2 Queue attendant console report templates provides the following reports:

Table 7: Attendant Console Report Templates - AC 2 Queue

Report	Available Formats
Average Call Waiting and Conversation Times	• Column chart • Table
First **Calls/Recalls**	• Column chart • Table
General Statistics	• Table
Number of Answered Calls per Line Type	• Column chart • Table
Number of Answered Calls per Queue	• Column chart • Table

AC Multiple Queue

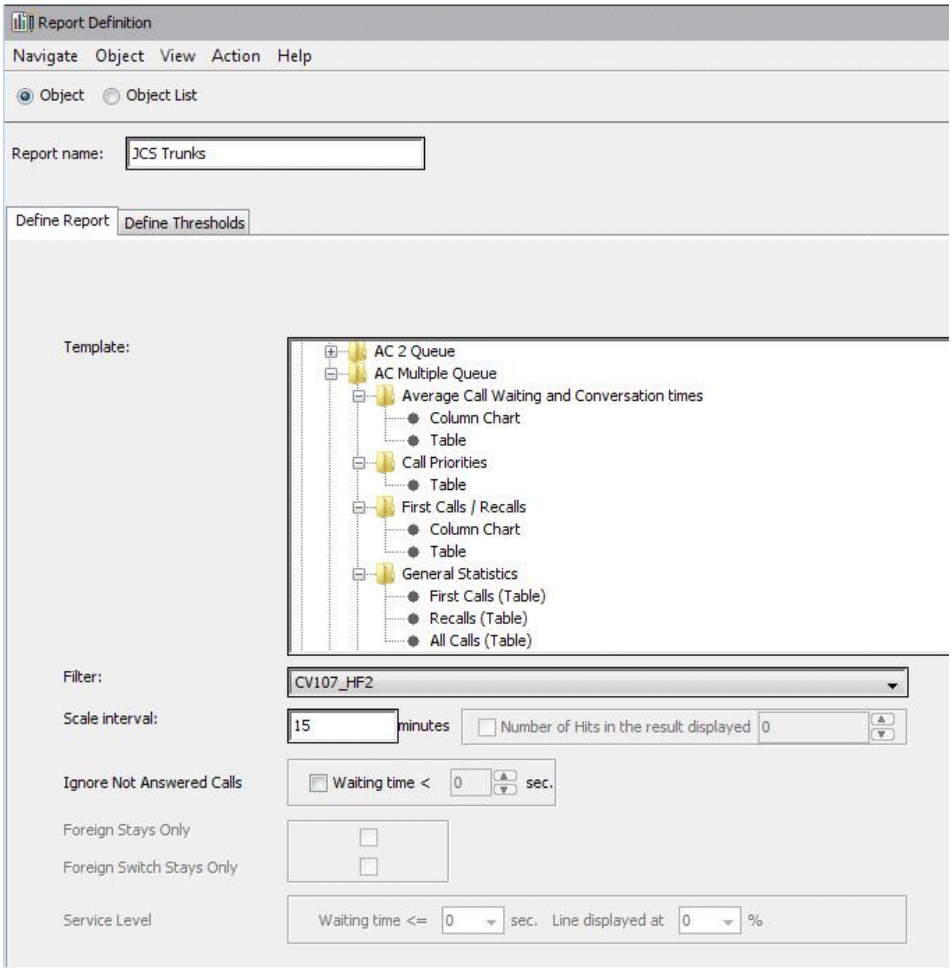


Figure 18: Report Definition - AC Multiple Queue Attendant Console Templates (3 of 6)

The AC Multiple Queue attendant console report templates provides the following reports:

Table 8: Attendant Console Report Templates - AC Multiple Queue

Report	Available Formats
Average Call Waiting and Conversation Times	• Column chart • Table
Call Priorities	• Table
First **Calls/Recalls**	• Column chart • Table
General Statistics	• First Calls (Table) • Recalls (Table) • All Calls (Table)
Number of Answered Calls per Line Type	• Column chart • Table

Report	Available Formats
Number of Calls per Call Type	• Column chart • Table

Common

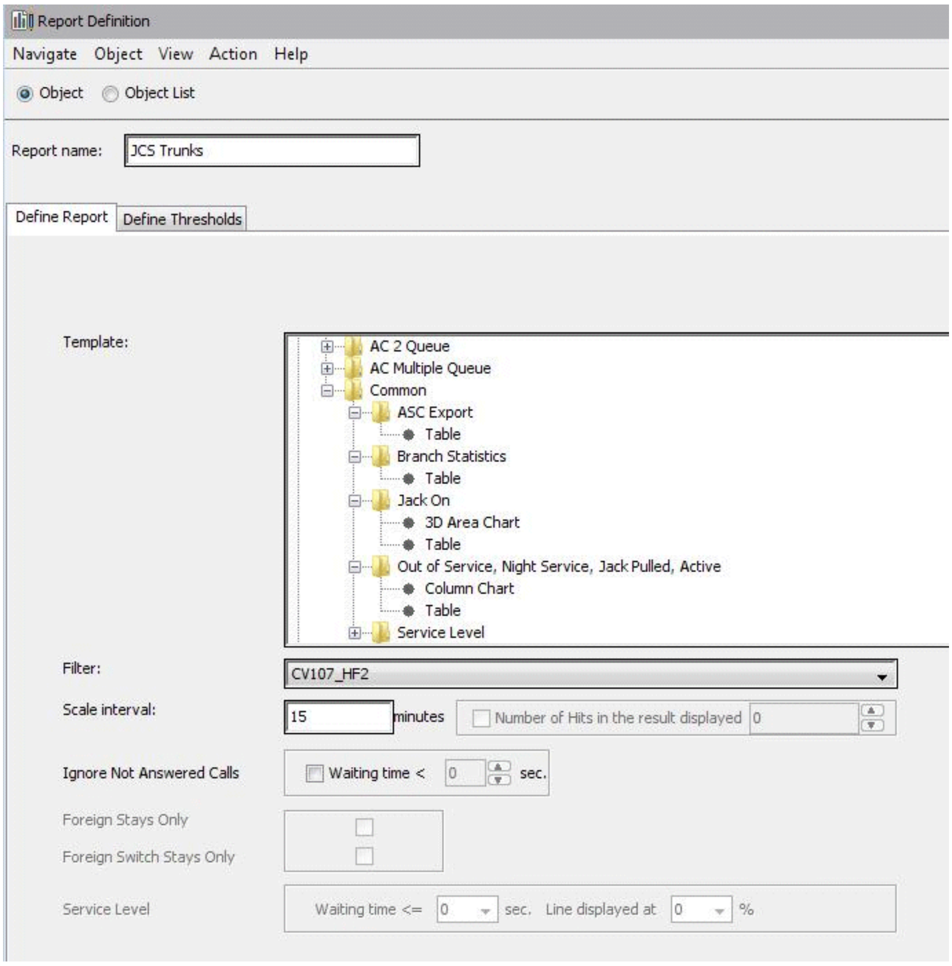


Figure 19: Report Definition - Common Attendant Console Templates (5 of 6)

The AC Common attendant console report templates provides the following reports:

Table 9: Attendant Console Report Templates - Common

Report	Available Formats
ASC Export	• Table
Branch Statistics	• Table
Jack On	• 3D Area Chart • Table

Out of Service, Night Service, Jack Pulled, Active	• Column chart • Table
Service Level	• Column chart • Table

Average Call Waiting and Conversation Times

The average call waiting and conversation time for the specified attendant console at a given report period. The new waiting time is the caller's time spent in the call queue including the ring time at the attendant console. Both accepted and unaccepted calls are displayed.

First Calls/Recalls

The number of first calls and recalls of the specified attendant console or AC groups in a given period.

General Statistics

General statistics provide a summary of statistics for Attendant consoles (ACs) on a single sheet. The following values are indicated:

- **Number of calls per call type**
- Number of calls contains the values for the exchange line (incoming, external), the attendant line (incoming, internal), the personal line (incoming, personal line in AC2Q consoles) and the outgoing line. The column, *incoming lines*, summarizes the values for exchange line, attendant line and personal line. The column, *all lines*, summarizes the values for exchange line, attendant line, personal line and outgoing line. Recalls count as additional calls to the first call.

  Examples: If a call goes from the exchange line or attendant line to the attendant console and is forwarded (through speed call transfer or through consultation), the call is recorded as an incoming call in the ASC statistics. Call transfer is not be recorded. If the attendant console makes a call on the outgoing line, an outgoing call is recorded.
- **Number of calls per line (exchange line, attendant line, personal line, outgoing line)**
- The value exchange line contains all calls, that are created from external by means of the trunk code number. It is not relevant for the ASC if a call is transferred or not. The call is recorded by exchange line. The value, *attendant line*, contains all calls, that are created from internal via the attendant code number. It is not relevant for the ASC if a call is transferred or not. The call is recorded by attendant line. The value, *personal line*, contains all calls, that goes to the personal number directly. It is not relevant for the ASC if a call is transferred or not. The call is recorded by personal line. The value outgoing line holds all calls, which are initiated by the attendant console through the outgoing line (no transfer). The column, *incoming lines*, summarizes the values for exchange line, attendant line and personal line.

  A recall counts as an additional call to the first call.
- **Number of answered calls (incoming, outgoing)**

  Incoming answered calls are exchange calls, attendant calls, and personal calls, that are answered by the attendant console. Outgoing answered calls are outgoing calls, which have been taken by the partner station.

- **Number of not answered calls (incoming, outgoing)**

  Incoming not answered calls are exchange calls, attendant calls, and personal calls, that are not answered by the attendant console. If the evaluation is for AC-group or all AC-groups, calls which are on-hook in the attendant console-queue, is contained. Correlating subtotals for *signalled in call queue only* and s*ignalled at AC* is displayed also. Outgoing not answered calls are outgoing calls, which have not been taken by the partner station.
- **Number of initial calls**

  First calls (exchange line, attendant line) are calls which are incoming calls addressed initially to the AC Group.
- **Number of recalls**

  Number of recalls = calls (exchange or attendant line), that have been transferred, but has not been answered by the destination party and that are, after a certain time, signalled by the attendant console again.
- **Times (average - seconds)**

  All times are displayed as average values rounded to integers, the following statistics are given:

  – **Waiting time (call queue)**

    Waiting time (call queue) is the sum of waiting times in the call queue (exchange line, attendant line) divided by the number of calls which queued.

  – **Ringing time**

    Average ringing time = the sum of ringing times (exchange line, attendant line) divided by the number of calls which rang.

  – **Sum of waiting time and ringing**

    The sum of waiting times and ringing times.

  – **Placing time (conversation + hold)**

    The sum of conversation times and hold times.

Number of Answered Calls per Line Type

This report provides information about the total of calls for each incoming line (exchange line, attendant line, and personal line).

Number of Calls per Call Type

Number of calls; contains the values for the exchange line (incoming, external), the attendant line (incoming, internal), the personal line (incoming, personal line in AC2Q consoles) and the outgoing line. The column, *incoming lines*, summarizes the values for exchange line, attendant line and personal line. The column, *all lines*, summarizes the values for exchange line, attendant line, personal line and outgoing line. Recalls count as additional calls to the first call.

Number of Answered Calls per Queue

The total number of calls made to the 12 Queues on the AC-Win MQ, and the number of those calls that were answered. If the report is requested for a single AC (or set of individual ACs) the values shown are for answered calls only (that is the *total* and *answered* statistics are the same.

Number of Calls per Queue

The number of calls for each line (Exchange Line, Attendant Line, Personal Line, Outgoing Line) are displayed. The report may be viewed as a table or as a column chart. The total number of calls for each line of all the ACs in a group may differ from the number of calls for each line of the AC group. This could be due to the fact that the AC group also contains the calls which have hung up in the call queue. These were not yet assigned to an AC and only appear in the AC group statistics.

These statistics are only possible for attendant consoles and attendant console groups.

For AC MQ, this is the total number of calls made to the 12 Queues on the AC-Win MQ. If the report is requested for a single AC (or set of individual ACs) the values shown are for answered calls only.

Call Priorities

The priorities of calls made to the 12 Queues on the AC-Win MQ. If the report is requested for an AC Group the values shown include the answered and not answered calls. If the report is requested for a single AC (or set of individual ACs) the values shown are for answered calls only.

ASC Export

ASC Export is an Advanced only report and can only be executed for AC Groups.

Refer to Common - ASC Report.

Branch Statistics

Branch reports are standard Crystal Reports and advanced MS Excel-based reports.

Refer to Common - Branch Statistics Report.

Jack On

Only for Attendant Console Filter items.

The length of time that the jack is connected or unplugged for the specified attendant console in a given period.

Out of Service, Night Service, Jack Pulled, Active

Only for Attendant Console Filter items.

The activity (out-of-service, jack pulled, night switch option) for the specified attendant console in a given report period.

Service Level

Service Level Statistics reports are Flexible Reports (html, pdf, csv, xml) and advanced MS Excel-based reports.

Refer to Common - Service Level Statistic Report.

3.4.3.3 Call Timings Template

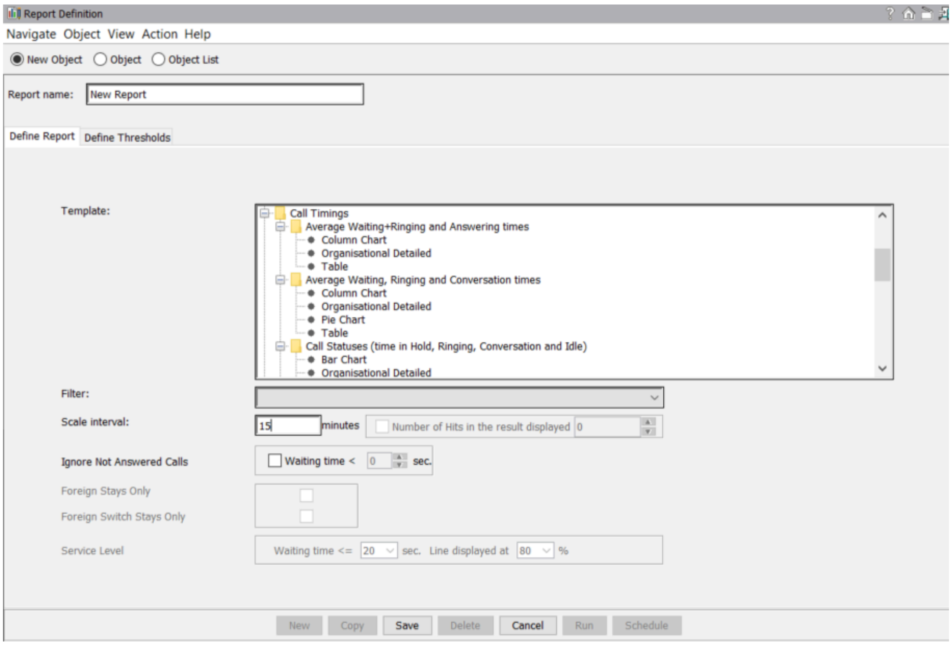


Figure 20: Report Definition Page - List of Call Timings Templates (1 of 2)

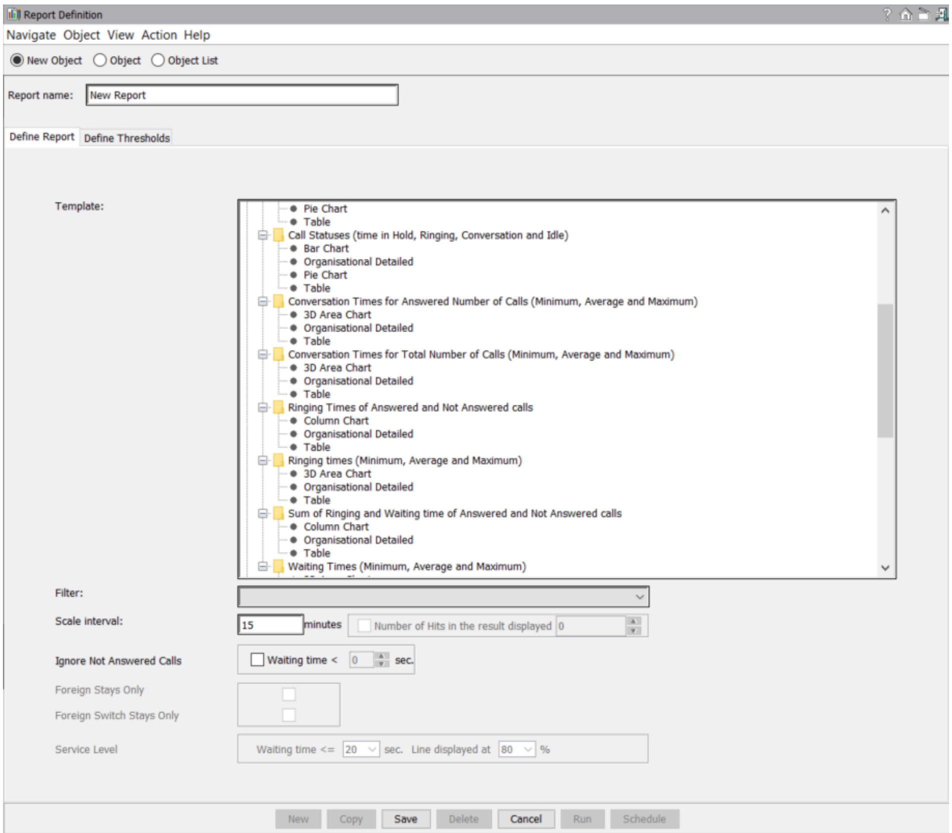


Figure 21: Report Definition Page - List of Call Timings Templates (2 of 2)

The call timings report template provides the following reports:

Table 10: Call Timings Report Templates

Report	Available Formats
Average Waiting+Ringing and Answering times	• Column chart • Organisational Detailed • Table
Average Waiting, Ringing and Conversation times	• Column chart • Organisational Detailed • Pie chart • Table
Call Status (time in Hold, Ringing, Conversation and Idle)	• Bar chart • Organisational Detailed • Pie chart • Table
Conversation Times for Answered Number of Calls (Minimum, Average and Maximum)	• 3D Area Chart • Organisational Detailed • Table
Conversation Times for Total Number of Calls (Minimum, Average and Maximum)	• 3D Area Chart • Organisational Detailed • Table
Ringing Times of Answered and Not Answered calls	• 3D Area Chart • Organisational Detailed • Table
Ringing Times (Minimum, Average and Maximum)	• Column chart • Organisational Detailed • Table
Sum of Ringing and Waiting Time of Answered and Not Answered calls	• Column chart • Organisational Detailed • Table
Waiting times (Minimum, Average, Maximum)	• 3D Area chart • Organisational Detailed • Table

Average Waiting+Ringing and Answering times

This report provides statistics about the average sum of ringing and wait time for accepted and rejected external calls and the average time taken for acceptance by the called party. The report may be viewed as a table or column chart or as an Organisational Detailed report in table format.

Average Waiting, Ringing and Conversation times

This report provides statistics about average wait, ringing, and call times at selected monitored objects. The report may be viewed as a table, column chart, or pie chart or as an Organisational Detailed report in table format.

Call Status (time in Hold, Ringing, Conversation and Idle)

This report provides statistics about connection statuses of selected monitored objects (on hold, busy or blocked, digit input, call, ringing, and idle). The report may be viewed as a table, horizontal bar chart or pie chart or as an Organisational Detailed report in table format.

Conversation Times for Answered Number of Calls (Minimum, Average and Maximum)

This report calculates the minimum, average and maximum values per time interval, regarding the conversation time for a selected filter item in a specified reporting period. So, in a specific interval (e.g. 09:00 - 09:15) you can see the value of the minimum conversation time, the maximum and also the average time for the answered calls.

In general, this report has the same configuration settings as the "Conversation Times for Total Number of Calls Report".

The report may be viewed as a table, area chart or as an Organisational Detailed report in table format.

Conversation Times for Total Number of Calls (Minimum, Average and Maximum)

This report provides statistics about minimum, average, and maximum values of total call times to the monitored objects. The report may be viewed as a table or as an area chart or as an Organisational Detailed report in table format.

Ringing Times of Answered and Not Answered calls

This report provides statistics on the minimum, average, and maximum ringing times of calls to selected monitored objects. The report may be viewed as a table or column chart or as an Organisational Detailed report in table format.

Ringing Times (Minimum, Average and Maximum)

This report provides statistics on the ringing times of accepted and rejected calls to selected monitored objects. The report is divided into five groups according to their respective ringing time. The report may be viewed as a table or as an area chart or as an Organisational Detailed report in table format.

Sum of Ringing and Waiting Time of Answered and Not Answered calls

This report provides statistics about the sum of ringing and wait times of accepted and rejected calls to selected monitored objects. The calls are divided into five groups in accordance with the total time. The report may be viewed as a table or column chart or as an Organisational Detailed report in table format.

Waiting times (Minimum, Average, Maximum)

This report provides statistics about minimum, average, and maximum values of waiting times to the monitored objects. The report may be viewed as 3D area chart and table or as an Organisational Detailed report in table format.

3.4.3.4 Call Tracking Template

NOTICE: Call Tracking reports are not available for Cordless data from SLC cards or Cordless base stations.

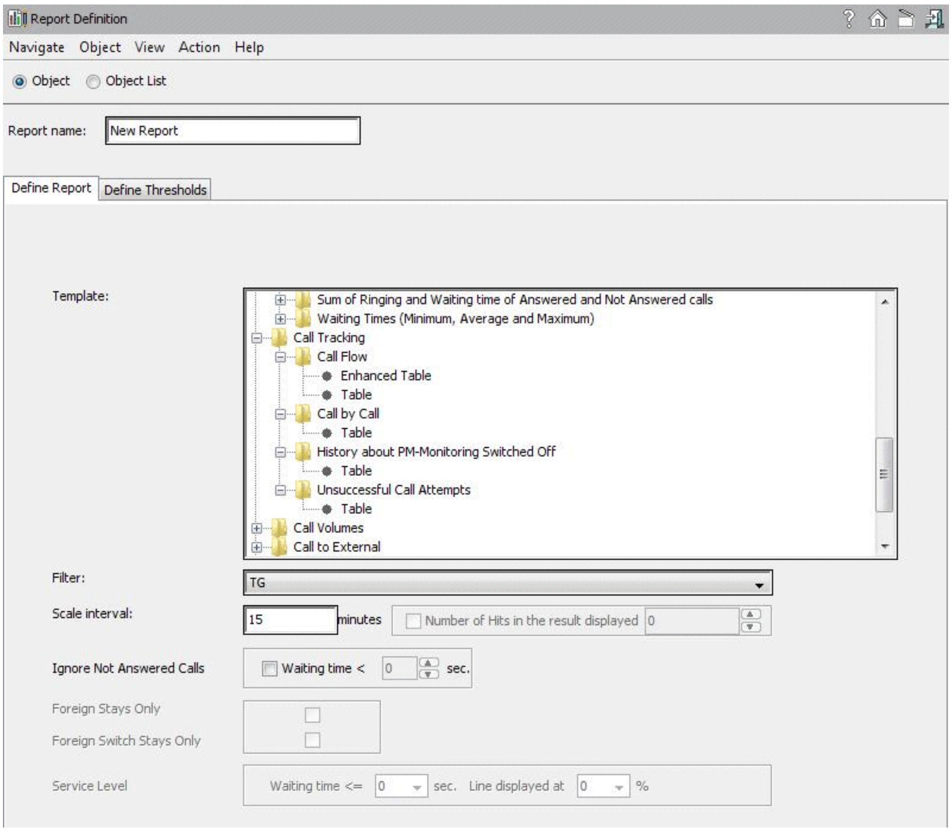


Figure 22: Report Definition Page - List of Call Tracking Templates

The call tracking report template provides the following reports:

Table 11: Call Tracking Report Templates

Report	Available Formats
Call-Flow	• Table • Enhanced Table
Call-by-Call	• Table
History about PM-Monitoring Switched Off	• Table
Unsuccessful Call Attempts	• Table

Call-Flow

This report shows statistics from CDR records with the same Global Node and Global sequence numbers for all the calls that are referenced by the specified filter. The reports are shown in order by global node number, global sequence number and the end date and time of the CDR record. The report shows the full 'track' of the calls from their first origin to their final destination. So it is possible to trace the calls in terms of transfers, diversions etc. during the progress of the call. There are two versions of Call-Flow Reports:

- 'Standard' Call-Flow Report and
- 'Enhanced' Call-Flow Report.

Call-by-Call

This report shows summary information for a particular call or set of calls. Each line in the report output represents one call as it is listed by PM. This summary includes the Global Node and Global Sequence numbers as statistics in the report.

History about PM-Monitoring Switched Off

This report shows the unmonitored switch related data.

Unsuccessful Call Attempts

An unsuccessful call attempt is a failure of a call attempt that occurs on an extension side because of various reasons such as no trunk, no service, no line, etc. This feature adds capability of reporting these attempts to PM.

For the data of the 'Trunk Group Lost Because Busy' (the number of missed calls since the trunk group was full or out of service), you have to run a different, trunk group related report.

3.4.3.5 Call Volumes Template

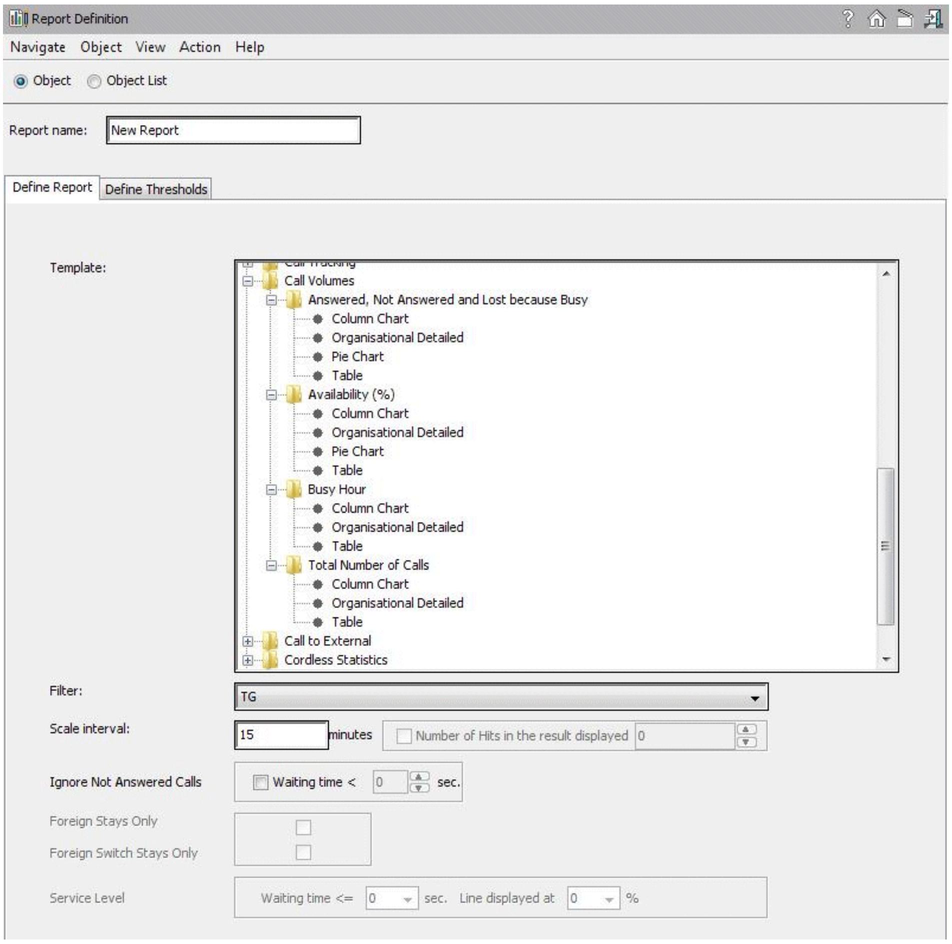


Figure 23: Report Definition Page - List of Call Volumes Templates

The call volumes report template provides the following reports:

Table 12: Call Volumes Report Templates

Report	Available Formats
Answered, Not Answered and Lost because Busy	• Column chart • Organisational Detailed • Pie chart • Table
Availability (%)	• Column chart • Organisational Detailed • Pie chart • Table
Busy Hour	• Pie chart • Organisational Detailed • Table

Report	Available Formats
Total number of calls	• Column chart • Organisational Detailed • Table

Answered, Not Answered and Lost because Busy

The number of accepted, rejected/unanswered, and missed calls (busy) for selected items in the given report period. The report may be viewed as column chart, as pie chart or as a table or as an Organisational Detailed report in table format.

Availability (%)

The percentage availability is the time that the selected telephony item was available to receive new calls. If an item is busy for 20 minutes over a period of one hour, then the availability if 66.7% and the item was not available for 33.3% of the time. The time spent in queuing, ringing, and connected states is counted as not available. The report may be viewed as column chart, pie chart or as a table or as an Organisational Detailed report in table format.

Busy Hour

The main traffic hour for the selected telephony items in the given report period following CCITT recommendations. The report may be viewed as pie chart or as a table or as an Organisational Detailed report in table format.

Total number of calls

The total number of calls for the selected telephony items in the given report period. The report may be viewed as pie chart or as a table or as an Organisational Detailed report in table format.

3.4.3.6 Cordless Statistics - Cordless Base Stations Template

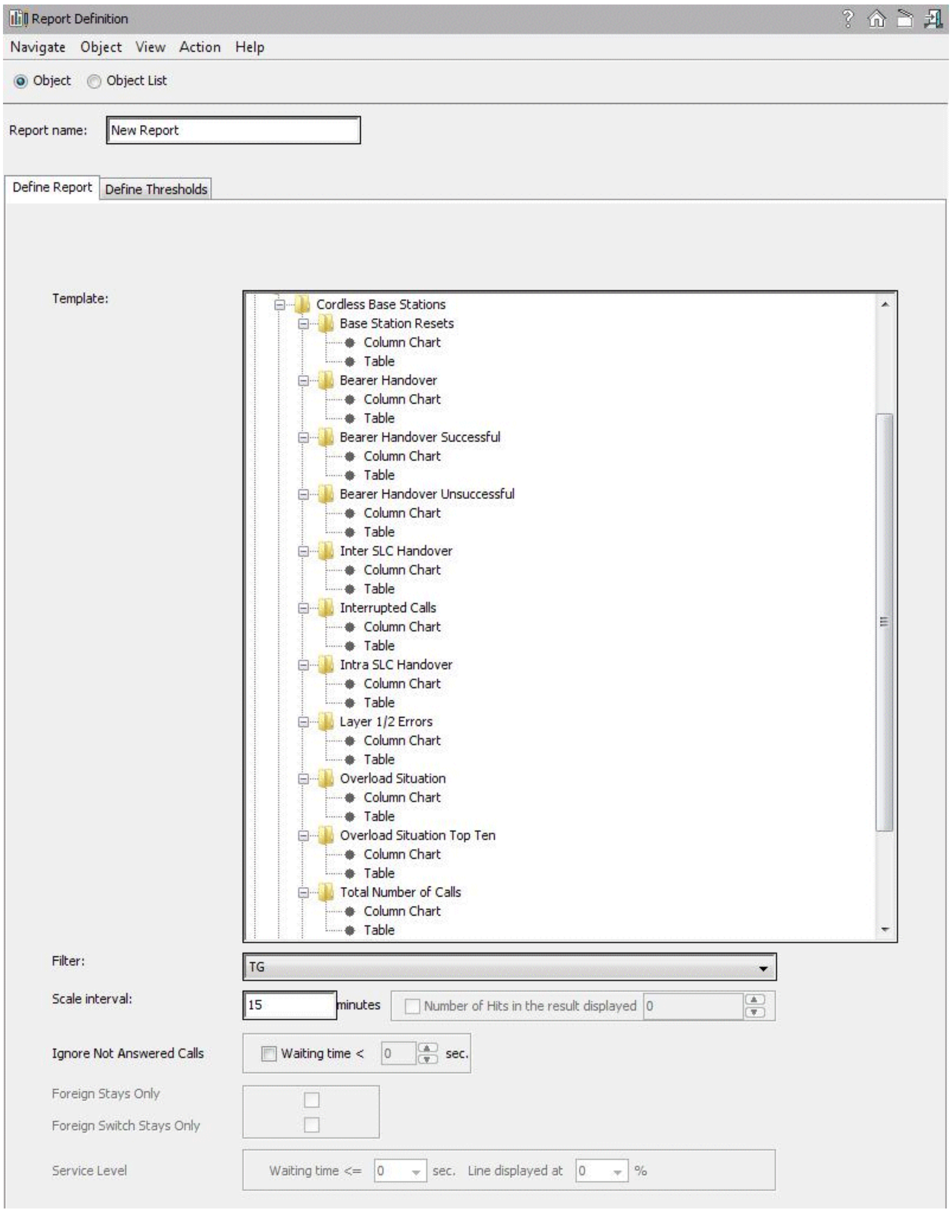


Figure 24: Report Definition Page - List of Cordless Base Stations Templates

Cordless base stations report template provides the following reports:

Table 13: Cordless Base Stations Report Templates

Report	Available Formats
Base Station Resets	• Column chart • Table
Bearer Handover	• Column chart • Table

Report	Available Formats
Bearer Handover Successful	• Column chart • Table
Bearer Handover Unsuccessful	• Column chart • Table
Inter SLC Handover	• Column chart • Table
Interrupted Calls	• Column chart • Table
Intra SLC Handover	• Column chart • Table
Layer 1/2 Error	• Column chart • Table
Overload Situation	• Column chart • Table
Total Number of Calls	• Column chart • Table
Overload Situation Top 10	• Column chart • Table
Total Number of Calls Top 10	• Column chart • Table

Base Station Resets

The number of resets for the selected base stations in the given report period.

Bearer Handover

The number of internal channel-handovers for the selected base stations in the given report period.

Bearer Handover Successful

The number of unsuccessful internal channel-handovers for the selected base stations in the given report period.

Bearer Handover Unsuccessful

The number of unsuccessful internal channel-handovers for the selected base stations in the given report period.

Inter SLC Handover

The number of handovers between two base stations in two Inter-SLC groups for the selected base stations in the given report period.

Interrupted Calls

The number of calls that are interrupted in the connection time for the selected base stations in the given report period.

Intra SLC Handover

The number of handovers between two base stations in two Intra-SLC groups for the selected base stations in the given report period.

Layer 1/2 Error

The number of layer 1/2 errors for the selected base station is the given report period.

Overload Situation

The number of RSP Busy Flag settings for the selected base stations in the given report period.

Total Number of Calls

The total number of incoming and outgoing calls for the selected base stations in the given report period.

Overload Situation Top 10

The 10 cordless base stations with the highest overload values in the given report period.

Total Number of Calls Top 10

The 10 cordless base stations with the highest call volumes of incoming and outgoing calls in the given report period.

3.4.3.7 Cordless Statistics - Cordless SLC Cards Template

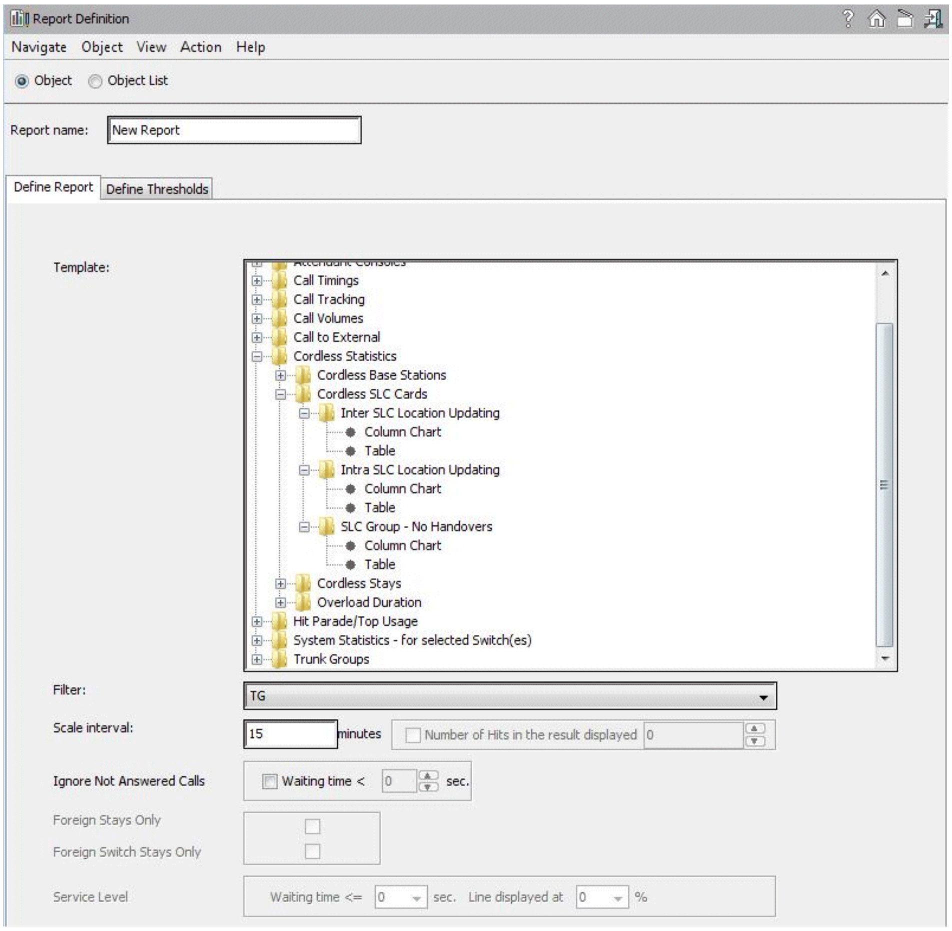


Figure 25: Report Definition Page - List of SCL Cards Templates

Cordless SLC cards report template provides the following reports:

Table 14: Cordless SLC Cards Report Templates

Report	Availab
Inter SLC Location Updating	• Colu • Tabl
Intra SLC Location Updating	• Colu • Tabl
SLC Module - No Handovers	• Colu • Tabl

Inter SLC Location Updating

The number of inter-SLC location updating events for the selected SLC cards in the given report period.

Intra SLC Location Updating

The number of intra-SLC location updating events for the selected SLC cards in the given report period.

SLC Module - No Handovers

The number of calls that could not be transferred to another SLC group for the selected SLC cards in the given report period.

3.4.3.8 Cordless Statistics - Cordless Stays Template

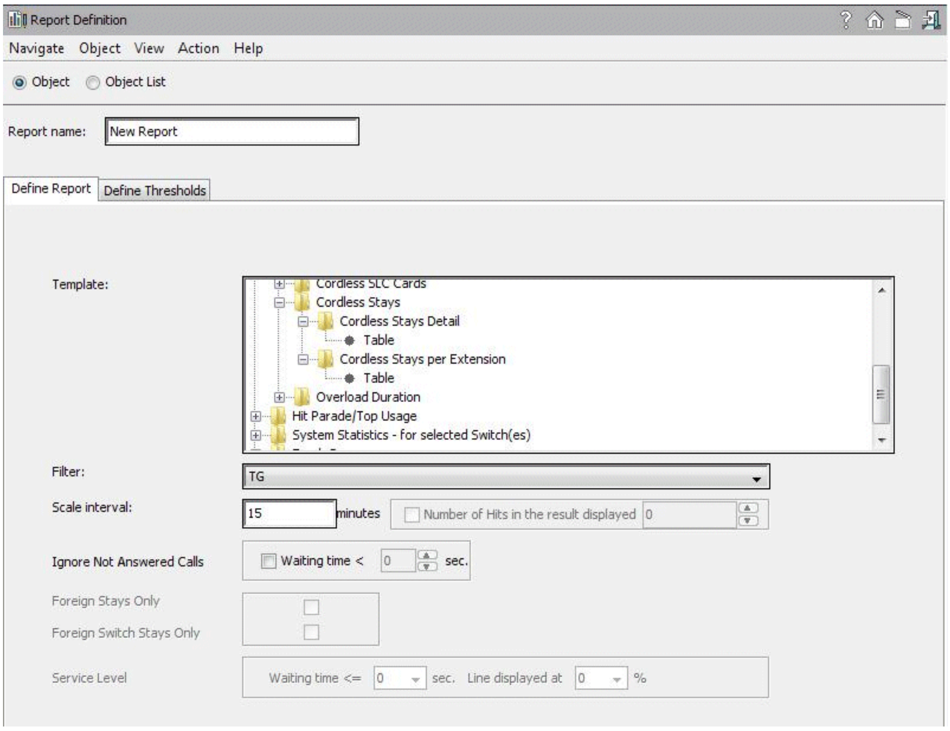


Figure 26: Report Definition Page - List of Cordless Stays Templates

The Cordless Stays report template provides the following reports:

Table 15: Cordless Stays Report Templates

Report	Available Formats
Cordless Stays Detail	• Table
Cordless Stays per Extension **Note**: For this report you may set the Foreign Switch Stays Only filter.	• Table

Cordless Stays Detail

The number of cordless stays in the given reporting period. It is possible to set a threshold to define the duration of the stays.

Cordless Stays per Extension

The total duration of the stays per switch for the selected reporting period. With this report it is possible to know how long the CMI Subscriber stays on his/her Home SLC or on a foreign SLC.

3.4.3.9 Cordless Statistics - Overload Duration Template

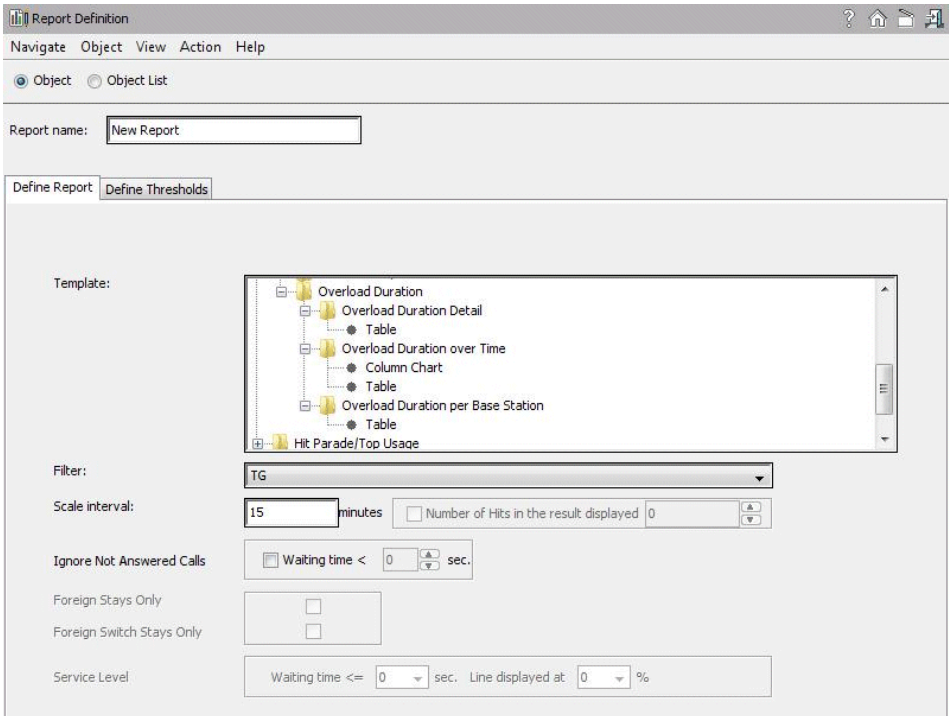


Figure 27: Report Definition Page - List of Overload Duration Templates

The Overload Duration report template provides the following reports:

Table 16: Cordless Stays Report Templates

Report	Available Formats
Overload Duration Detail	• Table
Overload Duration over Time	• Column chart • Table
Overload Duration per Base Station	• Table

The Generation of PM reports related to **Cordless Overload Duration** scenarios require some configuration steps as pre-requisite; for furter information, please refer to section "Configuration for Cordless Overload Duration Metering".

If the configuration is changed (e.g. base stations are moved, added or deleted), data about the history of changes are not kept. This results in the loss of data or in the display of incorrect data.

Therefore, if a base station is moved from one PEN (Port Equipment Number) to another, and a filter is set for the new PEN of the base station, in the report there will be no data presented for the period before.

In the report "Overload duration over time", in order to calculate the percentage of overload for a time interval, the overload duration for every base station is added and divided with the whole period and with the number of base stations.

Overload Duration Detail

Displays all overload situations in the selected reporting period according to the specified filter conditions. It is possible to set a threshold to define the minimum overload duration to be considered for this report.

Overload Duration over Time

Displays the overload duration over the time interval according to the defined filter conditions.

The values are displayed in the format hh:mm:ss. The days of the overload duration are displayed in the format dd, but only if the overload duration exceeds 24 hours.

The report displays also the percentage describing the relation between the overload duration and the interval value (e.g. 15 minutes).

It is possible to set a threshold to define the minimum overload duration to be considered for this report.

Overload Duration per Base Station

Displays for the selected reporting period the total overload duration per base station in the format dd hh:mm:ss. The days of the overload duration are displayed in the format dd, but only if the overload duration exceeds 24 hours.

This report includes also a new field "Overload in %" displaying the relation between total overload duration and total reporting period for a specific base station.

It is possible to set a threshold to define the minimum overload duration to be considered for this report.

3.4.3.10 Hit Parade/Top Usage

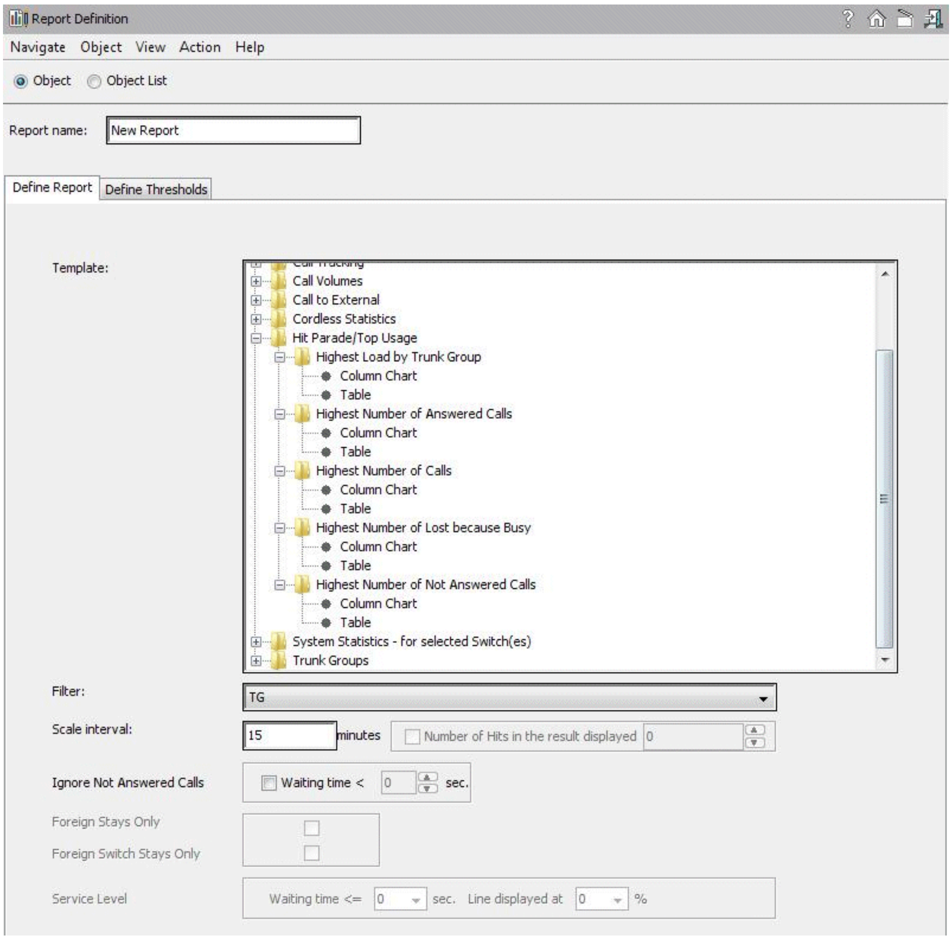


Figure 28: Report Definition Page - List of Hit Parade/Top Usage Templates

The Hit Parade/Top Usage report template provides the following reports:

Table 17: Cordless SLC Cards Report Templates

Report	Available Formats
Highest Load by Trunk Group	• Column chart • Table
Highest Number of Answered Calls	• Column chart • Table
Highest Number of Calls	• Column chart • Table
Highest Number of Lost because Busy	• Column chart • Table
Highest Number of Not Answered Calls	• Column chart • Table

Highest Load by Trunk Group

Displays the highest load by trunk group, i. e. the highest sum of traffic per trunk group in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

This report should be only used with a Trunk Group Filter.

Highest Number of Answered Calls

Displays the highest number of answered calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

Highest Number of Calls

Displays the highest number of calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

Highest Number of Lost because Busy

Displays the highest number of missed calls (busy) in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

Highest Number of Not Answered Calls

Displays the highest number of not answered calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

3.4.3.11 System Statistics Report Templates

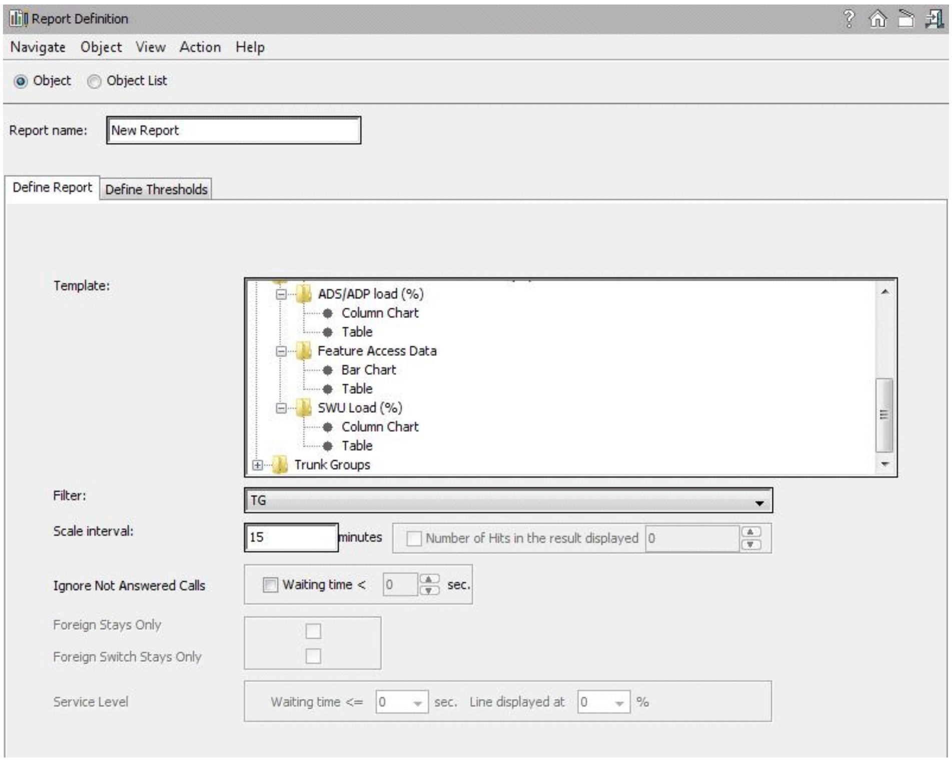


Figure 29: Report Definition Page - List of System Statistics Templates

System Statistics report template provides the following reports:

Table 18: Cordless SLC Cards Report Templates

Report	Available Formats
ADS/ADP Load (%)	• Column chart • Table
Feature Access Data	• Bar chart • Table
SWU Load (%)	• Column chart • Table

ADS/ADP Load (%)

The average ADS?ADP load date for the specified switch(es) in the given report period, displayed as a percentage.

Feature Access Data

The number of times the feature has been activated (always valid for the selected switches not only for monitored objects) in the given report period. For example, how many times the "do not disturb" feature has been switched on.

SWU Load (%)

The average SWU load data for the selected switch(es) in the given report period, displayed as a percentage.

3.4.3.12 Trunk Groups Templates

The report templates provides three types of reports:

- Trunk Group Metering/CDR reports
- Trunk Group Metering/CDR with B-Channel Availability Check reports

Trunk Group Metering/CDR reports

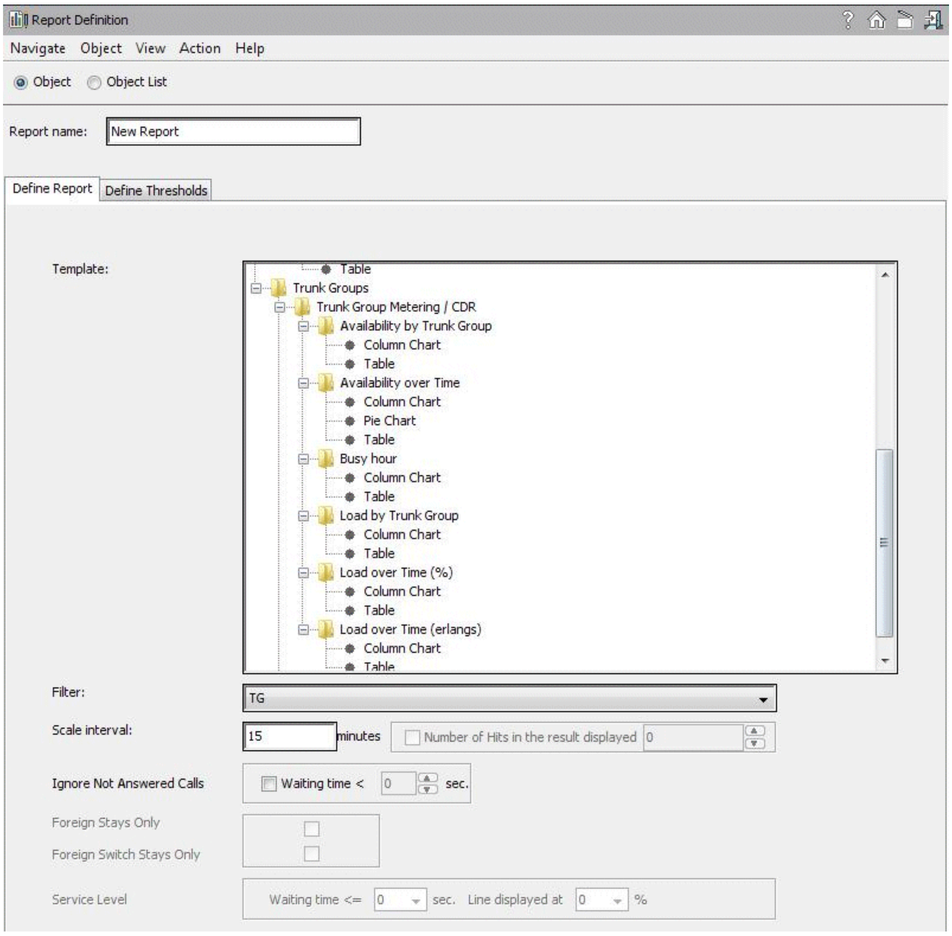


Figure 30: Report Definition Page - List of Trunk Group Metering/CDR Templates

Table 19 lists the Trunk Group Metering/CDR reports:

Table 19: Trunk Group Metering/CDR Reports

Report	Available Fo
Availability by Trunk Group	• Column c • Table

Report	Availab
Availability over Time	• Colu • Pie • Tabl
Busy Hour	• Colu • Tabl
Load by Trunk Group	• Colu • Tabl
Load over Time (%)	• Colu • Tabl
Load over Time (erlangs)	• Colu • Tabl

Trunk Group Metering/CDR with B-Channel Availability Check reports

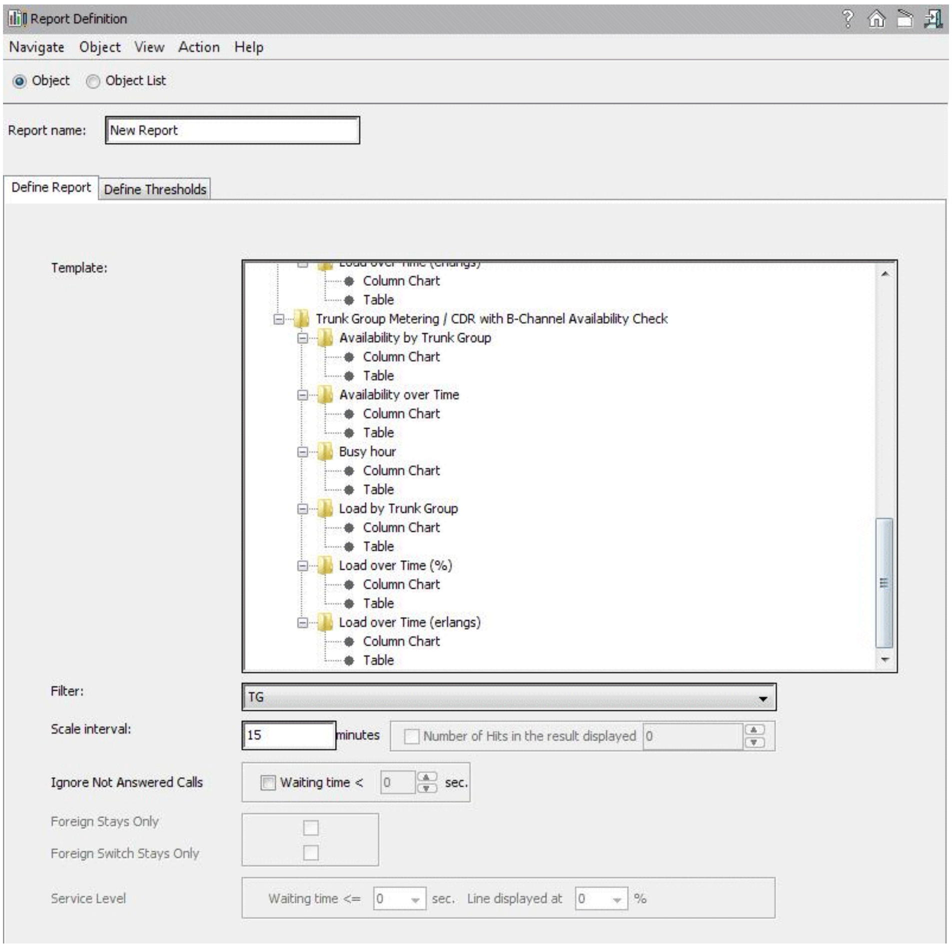


Figure 31: Report Definition Page - List of Trunk Group Metering/CDR with B-Channel Availability Check Templates

Table 20 lists the Trunk Group Metering/CDR with B-Channel Availability Check reports:

Table 20: Trunk Group Metering/CDR with B-Channel Availability Check Reports

Report	Available Formats
Availability by Trunk Group	• Column chart • Table
Availability over Time	• Column chart • Table
Busy Hour	• Column chart • Table
Load by Trunk Group	• Column chart • Table
Load over Time (%)	• Column chart • Table
Load over Time (erlangs)	• Column chart • Table

Availability by Trunk Group

This is the percentage of time (for the entire reporting period), in which the Trunk Group is available (connected). If a failure happens the Trunk Group is not connected any longer and the availability is decreased. If it is always connected then the availability always shows 100%.

The mathematical type of the Availability is as follows: Availabilty = Mean Time Between Failure (Mean Time Between Failure + Mean Down Time)

Availability over Time

This report shows the percentage of time (for each interval), in which the Trunk Group is available (connected). If a failure happens the trunk group is not connected any longer and the availability is decreased. If it is always connected then the availability always shows 100%.

The mathematical type of the Availability is as follows: Availabilty = Mean Time Between Failure (Mean Time Between Failure + Mean Down Time)

Busy Hour

The busy hour for each selected trunk group in the given report period. The percentage load during the busy hour is shown against the start time of the hour. The busy hour is shown as starting on a 15-minute boundary, either on the hour or at 0, 15, 30, or 45 minutes past. If no traffic occurs on a trunk group within the report period, the busy hour is show as the start time of the report.

Load by Trunk Group

The sum of incoming and outgoing traffic for each selected trunk group in the given report period. The data is displayed as a percentage.

Load over Time (%)

Shows the percentage load (of the whole group) against time for the selected trunk groups in the given report period.

Load over Time (erlangs)

The variation of trunk group traffic load (in erlangs) against time, the load value for both outgoing and incoming traffic is shown for the selected trunk groups in the given report period.

3.5 Branch Definition

This section covers the following:

Branch Definition Page,

Accessing the Branch Definition Page

3.5.1 Branch Definition Page

The Branch Definition (Object View) page allows you to create or modify a branch. A branch refers to branch locations within a network which are connected to a PABX configured as a switching centre with an ASC attached.

In ASC 3.0, a branch consists of the branch name, two switches, and a set of assigned trunk groups between the two switches. One of the switches must have ASCs attached.

In PM, the ASC 3.0 branch allows you to choose between using the physical node IDs of the two switches or assigning the trunk groups between the two switches. The default choice is **Use Physical Node IDs**.

When Node IDs are used, any ASC handled calls between the two switches are included in the statistics. When trunk groups are assigned, only those ASC handled calls using those trunk groups between the two switches are included in the statistics. Any other ASC handled calls between the two switches which use trunk groups that are not assigned to the particular branch are not be included in the statistics.

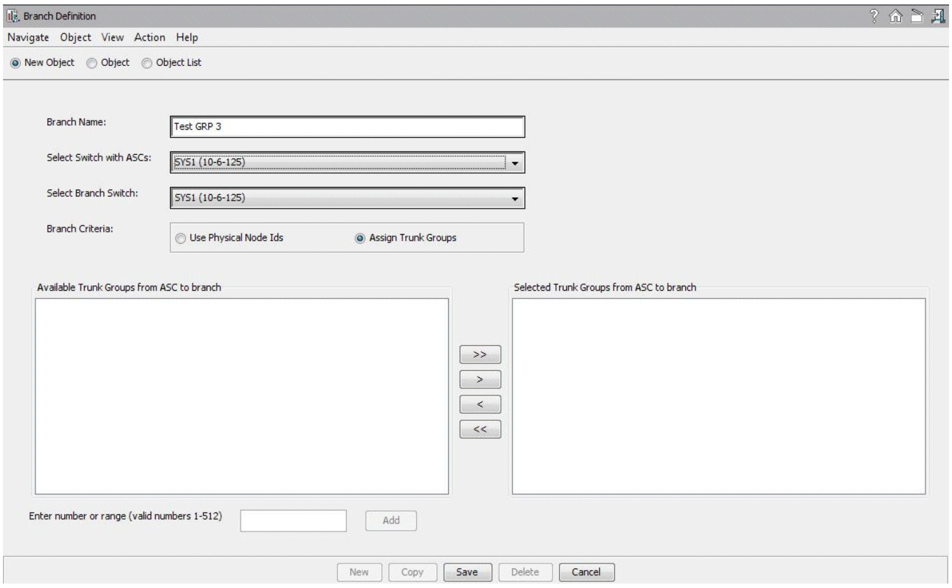


Figure 32: Branch Definition Page (Object View) - Assign Trunk Groups

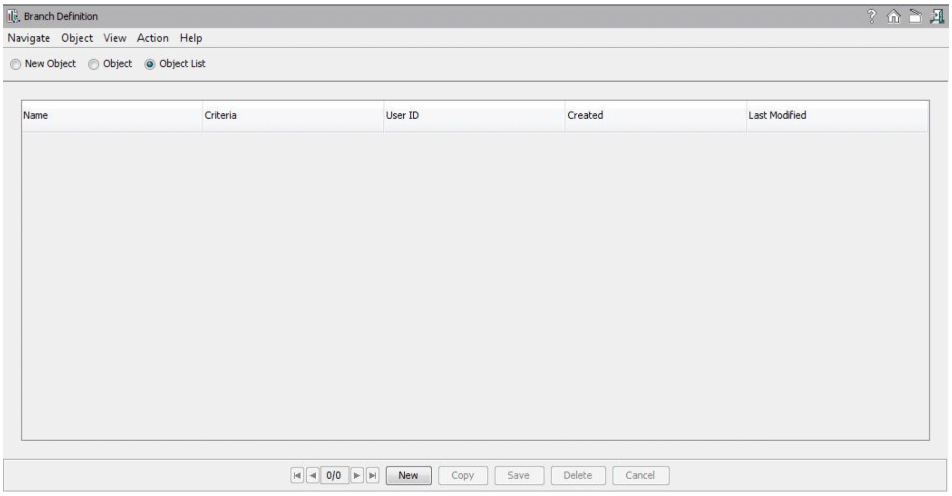


Figure 33: Branch Definition Page (Object List View)

Field and Control Descriptions

Views of the Branch Definition Page:

(New Object)

Object

Object List

Fields in the Object View:

Branch name

Select Switch with ASCs

Select Branch Switch

Branch Criteria

Branch Definition Trunk Group Assignment

Enter number or range (valid numbers 1-512)

Add

Columns in the Object List View:

Name

Criteria

User ID

Created

Last Modified

Buttons:

New

Copy

Save

Delete

Cancel

Related Topics

Accessing the Branch Definition Page

3.5.2 Accessing the Branch Definition Page

To access the Branch Definition Page on the Performance Management Home Page, double-click **Branch Definition**. The Branch Definition page appears.

You can run, edit, and delete a report or reports from the list.

When you click New Report, New Report Group, Run, and Edit buttons, another page appears.

3.6 Filter Definition

A filter consists of a set of definitions that specify which items are to be extracted from the database or metered data so that they can be used to generate a report.

- A telephony filter is applicable, if it contains the switch or switches to be included in the Report.
- An organisational filter is applicable, if it contains levels of an organisation hierarchy, representing a different number of extensions.

This section covers the following topics:

Accessing the Filter Definition Page

Telephony Filter Type

Organisational Filter Type

Call Types Tab

Filter Summary Tab

Reference Information on Filters

3.6.1 Accessing the Filter Definition Page

The Filter Page can be accessed by double-clicking the **Filter Definition** option in the navigation pane of the PM Home Page.

- Invoking the Filter Definition Page, by default displays the first filter which is defined in the database. The **Filter Type** radio button switches either to **Telephony** or to **Organisational**, depending on the type of this filter.

  Please refer to

  – Telephony Filter Type, page 104,
  – Organisational Filter Type, page 115,

  or for the selection of a different filter, refer to

  – Filter Definition Page - List View, page 101.
- *If no filters are defined,* the Filter Definition Page is displayed in "New" Mode, page 102.

Field and Control Descriptions (in all tabs in Object Views of Filter Definition Page)

(New Object)

Object

Object List

Filter Name

Filter Type

Record Selection Mechanism

New

Copy

Save

Delete

Cancel

Related Topics

Filter Definition Page - List View

"New" Mode

Telephony Filter Type

Organisational Filter Type

Call Types Tab

Filter Summary Tab

Reference Information on Filters

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Listing Filters

3.6.1.1 Filter Definition Page - List View

In List View the Filter Definition Page lists in read-only mode all available filters with

- Name of the filter
- Type of the filter (Telephony or Organisational Filter)
- User ID of the generator of the filter
- Date of creation of the filter
- Last modification date of the filter.

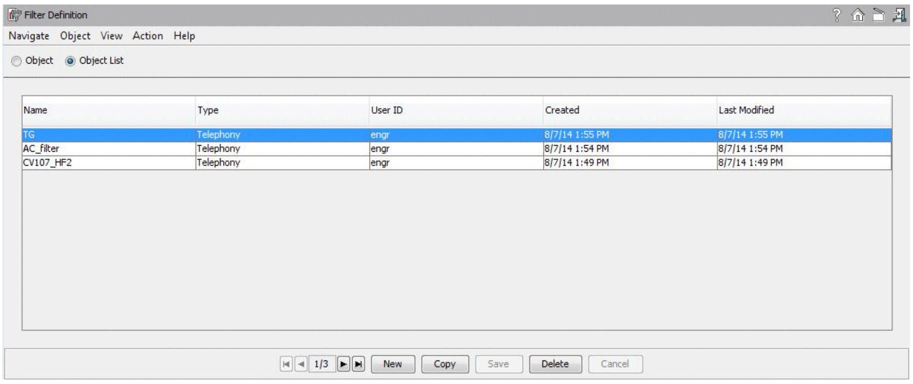


Figure 34: Filter Definition Page - List View

Field and Control Descriptions

(New Object)

Object

Object List

Record Selection Mechanism

New

Copy

Save

Delete

Cancel

Related Topics

"New" Mode

Telephony Filter Type

Organisational Filter Type

Call Types Tab

Filter Summary Tab

Reference Information on Filters

3.6.1.2 "New" Mode

In "New" mode, when no filter at all is defined, the Filter Definition Page presents - still unassigned - six tabs for telephony and organisational filters all together, to initiate a new filter definition. The **Filter name** field is left blank, and the **Filter type** radio button is not selected. You may create a new filter now, please refer to the subsequent sections and to Creating a Telephony Filter.

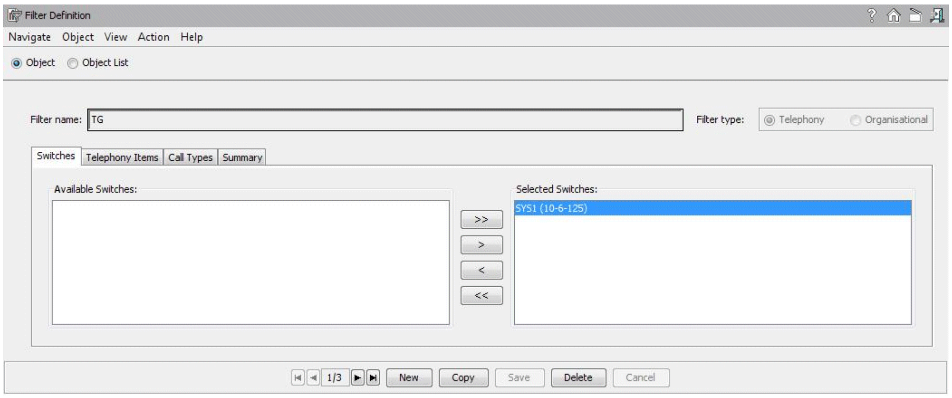


Figure 35: Filter Definition Page - "New" mode

The tabs in "New" mode of the Filter Definotion Page refer to the following:

- The **Switches** tab represents the Switches Tab of a Telephony filter.
- The **Telephony Items** tab represents the Telephony Items Tab of a Telephony filter.
- The Call Types Tab tab is identical for both filter types **Telephony** and **Organisational**.
- The **Summary** tab represents the Filter Summary Tab - Telephony Filter Type.
- The **Organisational Detail** tab represents the Organisational Items Tab of an Organisational filter.
- The **Filter Summary** tab represents the Filter Summary Tab - Organisational Filter Type.

Related Topics

Filter Definition Page - List View

Telephony Filter Type

Organisational Filter Type

Call Types Tab

Filter Summary Tab

Reference Information on Filters

3.6.2 Telephony Filter Type

The Filter Definition (Object view) page, with the **Telephony** radio button activated, allows you to create, modify, or delete a telephony filter. For each switch, the telephony items types that are to be included in the Report, and the specific items within the telephony items types (refer to Telephony Items Tab, page 107).

This page has four tabs:

- Switches Tab
- Telephony Items Tab
- Call Types Tab
- Filter Summary Tab - Telephony Filter Type

NOTICE: Note that if you create a new Filter and change the type, any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

Field and Control Descriptions (in Tabs of Telephony Filter Definition Pages)

Switches Tab

Telephony Items Tab

Call Types Tab

Filter Summary Tab

Available Items (Attendant Consoles, AC Groups, and so on)

Selected Items (Attendant Consoles, AC Groups, and so on)

Enter the number range (only available in some of the Telephony Items Tab)

Add (only available in some of the Telephony Items Tab)

>, >>, <, and <<

Related Topics

Accessing the Filter Definition Page

Organisational Filter Type

Call Types Tab

Filter Summary Tab

Reference Information on Filters

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Listing Filters

3.6.2.1 Switches Tab

The Switches tab allows you to specify which switch or switches you want to display on the report. The Switches tab consists of two scrolled lists as follows:

- Available Switches—lists all the switches that are known to the PM database but excludes any that are in the Selected Switches list
- Selected Switches—lists all the switches that are included in the current Filter definition

This page also allows you view a list of reports or view a detailed list of a report. You can access reports using the Record Selection Mechanism, .

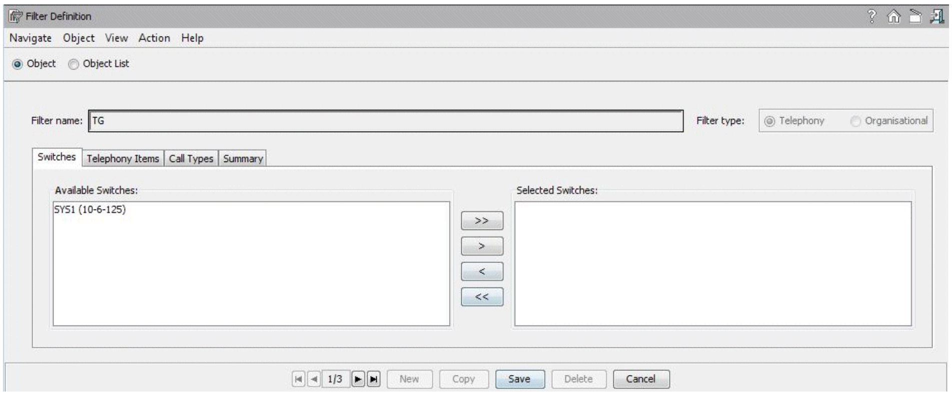


Figure 36: Filter Definition Page (Telephony Filter - Object View)

The Filter Definition (Object view/Telephony) page includes branches. Refer to Branches for additional information.

3.6.2.2 Telephony Items Tab

The Telephony Items tab is where you specify which telephony items and which items within those item types are included in relation to a filter and each selected switch. Information in this tab such as extensions, hunt groups, or trunk groups is maintained by the Configuration Management application.

Only active telephony items will be displayed in the Telephony Items tab. However, any changes are not reflected instantly in this tab. If a telephony item is moved or deleted after the dialog is opened, a refresh of the dialog is required to see the latest active items.

The Telephony Items tab is normally enabled. However, it is disabled if there are no switches in the Selected Switches list on the Switches Tab.

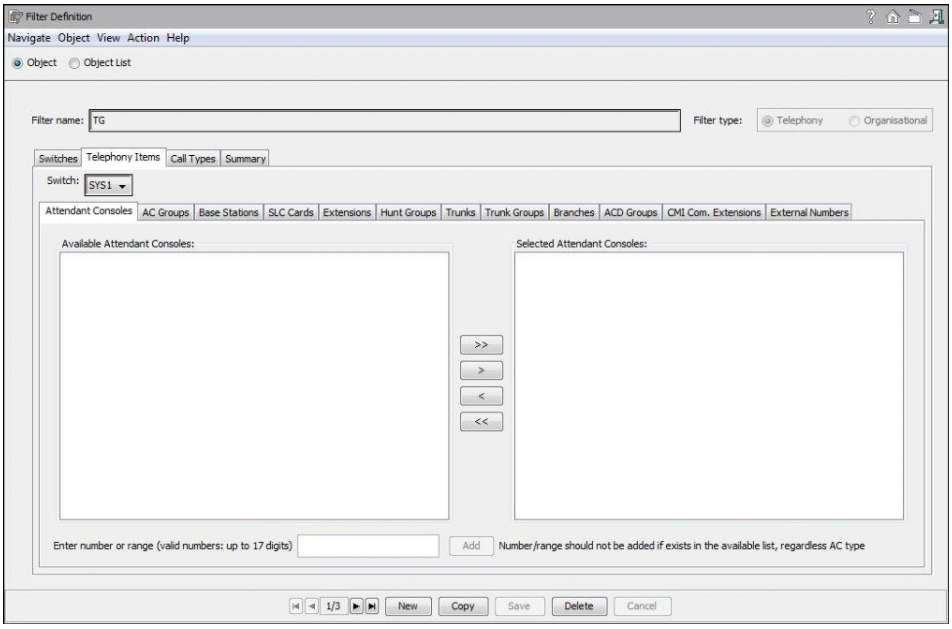


Figure 37: Filter Definition Page - Telephony Items Tab

3.6.2.3 Sub Tabs of the Telephony Items Tab

Each Item Type sub tab contains two scrollable lists together with four selection buttons that allow the items to be moved between the two lists. There is also a range selection mechanism for specifying multiple items and unlisted items.

Attendant Consoles

This tab allows you to specify which Attendant Console numbers are to be included in the filter definition.

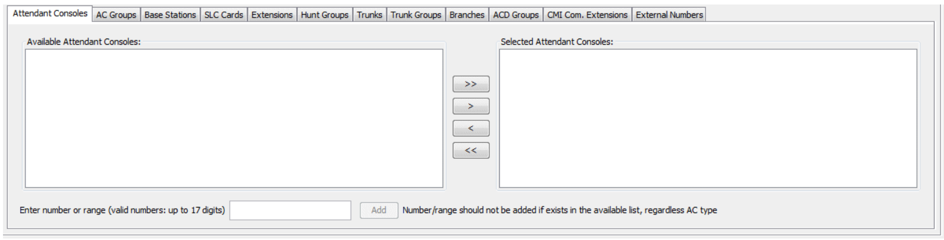


Figure 38: Filter Definition Page - Telephony Items Tab - Attendant Console Sub Tab

AC Groups

This tab allows you to specify which Attendant Console Group numbers are to be included in the filter definition.

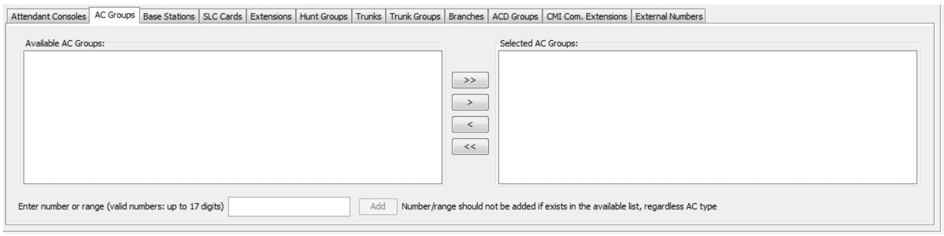


Figure 39: Filter Definition Page - Telephony Items Tab - AC Groups sub tab

Base Stations

This tab allows you to specify which Cordless Base Station numbers are to be included in the filter definition.

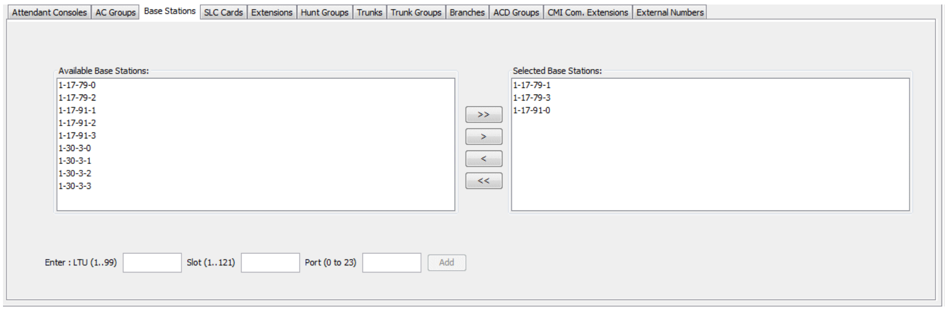


Figure 40: Filter Definition Page - Telephony Items Tab - Base Station sub tab

SLC Cards

This tab allows you to specify which Cordless SLC Card numbers are to be included in the filter definition.

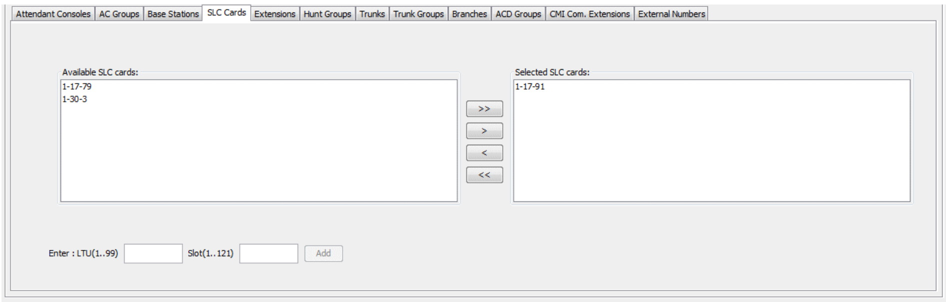


Figure 41: Filter Definition Page - Telephony Items Tab - Cordless SLC sub tab

Extensions

This tab allows you to specify which extension numbers are to be included in the filter definition.

Depending on activation or deactivation of the transformation of a Virtual Node Access Code (VNAC) for a Virtual Switch by using AMO commands, the available extensions are listed in this tab either in

- **long** format or in

- **short** format.

> **NOTICE:** It is not possible that extensions exist in both short and long format in the "Available Extensions" list, because activation/deactivation of VNAC applies to the physical switch, so all extensions will either be short (feature deactivated) or long (activated).

The **long format** includes a VNAC number, appended at the beginning of each extension which belongs to this Virtual Switch. This additional information is retrieved by CM tables. So, if for example the extension 1001 belongs to a switch which has activated the VNAC, it will be displayed as **18**1001. All extensions belonging to this switch are transformed to the same long or short format.

In order to select the proper filter items regarding the extensions item type, the corresponding access code must be known.

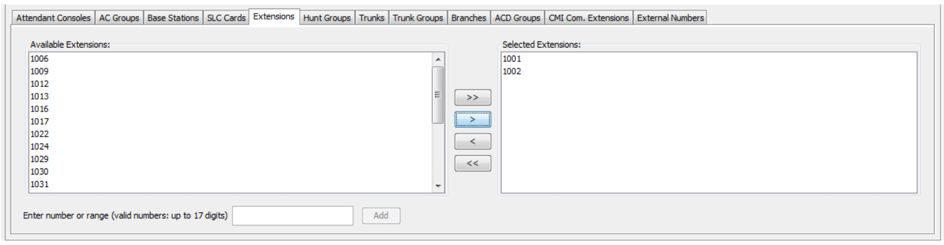


Figure 42: Filter Definition Page - Telephony Items Tab - Extensions sub tab; example with short extension format (VNAC not activated)

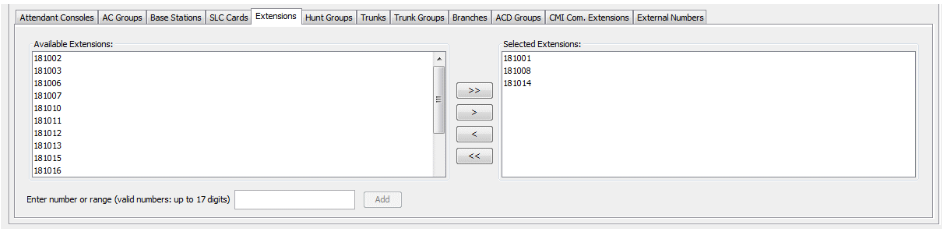


Figure 43: Filter Definition Page - Telephony Items Tab - Extensions sub tab; example with long extension format (here: activated VNAC 50)

Hunt Groups

This tab allows you to specify which Hunt Group numbers are to be included in the filter definition.

.

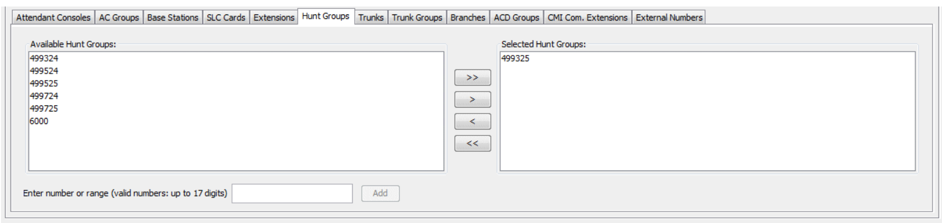


Figure 44: Filter Definition Page - Telephony Items Tab - Hunt Groups sub tab

Trunks

This tab allows you to specify which trunk numbers are to be included in the filter definition.

PM measures trunks using the data that it gets in CDR. In CDR, the trunk is represented with a virtual number (FTBL element in TNLIST) configured in AMO FBTN and with a real number (FTBL element TNREAL) that is configured automatically and can be displayed with AMO SDSU.

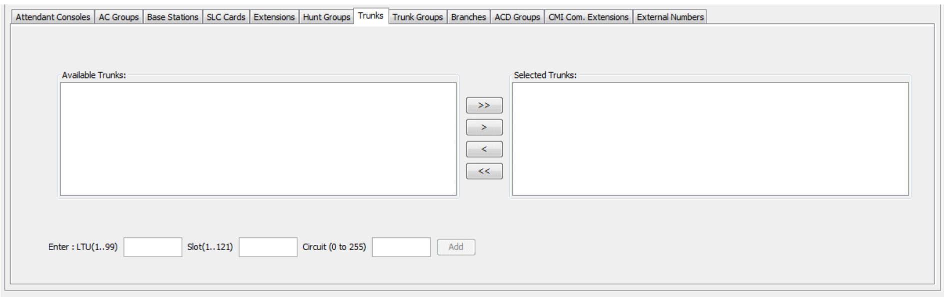


Figure 45: Filter Definition Page - Telephony Items Tab - Trunks sub tab

Trunk Groups

This tab allows you to specify which Trunk Group numbers are to be included in the filter definition.

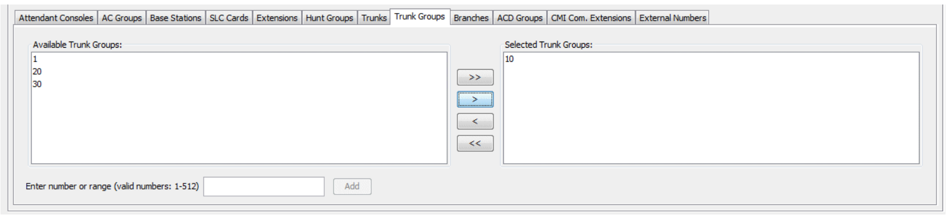


Figure 46: Filter Definition Page - Telephony Items Tab - Trunk Groups sub tab

Branches

This tab allows you to add or remove branches from the filter. Branches are required for the new Branch Statistic Reports. Branches are not metered items. They associate two switches, one with ASCs attached. The ASC-handled calls between the two switches may be identified by the node IDs of the two switches or the assigned trunk groups between the two switches that carry the ASC handled calls.

Branch filter items can be combined with any other filter items. Branch filter items only affect the Branch Statistic Reports. They do not effect any other report.

NOTICE: The only filter items that affect Branch Statistic Reports are: branch, attendant console, AC groups, and two call types; internal call and external call. The remaining filter items do not affect Branch Statistic Reports. A valid filter for the Branch Statistics Reports must contain a selected branch and at least one attendant console or AC group on the switch with the ASCs attached otherwise the generated Branch Statistics Report does not contain correct information.

When branches are selected, they are added to the Filter Summary tab. When branches are deselected, they are removed from the Filter Summary tab. The Filter Summary tab does not display the list of trunk groups assigned to the particular branch.

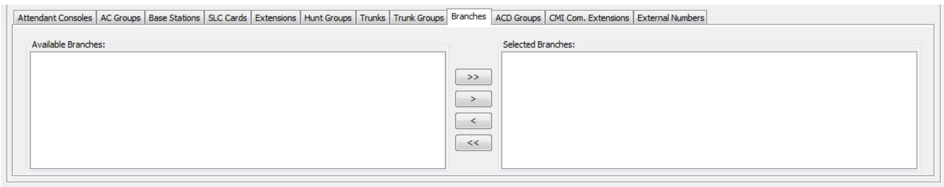


Figure 47: Filter Definition Page - Telephony Items Tab - Branches sub tab

ACD Groups

This tab allows you to specify which ACD Group numbers are to be included in the filter definition.

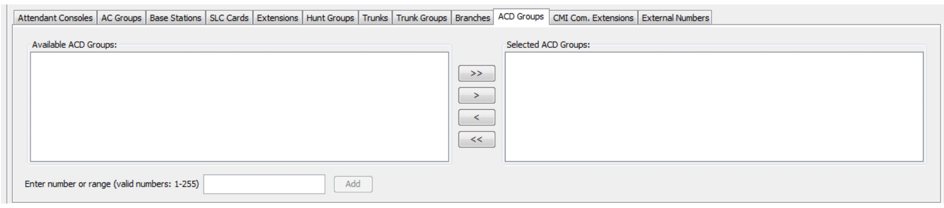


Figure 48: Filter Definition Page - Telephony Items Tab - ACD Groups sub tab

CMI Com. Extensions

This tab allows you to specify which CMI Com. Extension numbers are to be included in the filter definition.

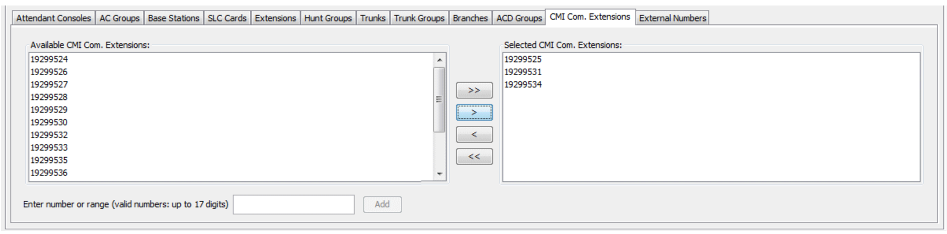


Figure 49: Filter Definition Page - Telephony Items Tab - CMI Com Extensions sub tab

External Numbers

This tab allows you to specify, which external destination numbers (e.g. external numbers, emergency numbers, mobile phone numbers), not related to a particular switch, are to be included in the filter definition. So PM reports are filtered according to the selected external destination numbers.

Figure 50: Filter Definition Page - Telephony Items Tab - External Numbers sub tab

- The external numbers **cannot** be used with another type of telephony item (like Attendant Consoles, AC Groups, Extensions, etc.) in a report.
- For external numbers adding telephony items process is different from the process of adding items in the other 'Telephony Items' sub tabs: if an external number item is added to a filter, this telephony item needs to be added for **all** switches, not only for the selected one.

3.6.3 Organisational Filter Type

The Filter Definition (Object view) page, with the **Organisational** radio button activated, allows you to create, modify, or delete an organisational filters for generating Call Timing Reports and Call Volumes Reports by organisational criteria.

Prerequisites:

1) Enable the collection of organisational data in the PM Administration (Configuration tab, see Storing the PM Data on page 151).

2) Define the organisational structure from the settings in the CM application groups under **Personal Data**.

After completing these two steps, PM is ready to build the organisational data based on the settings in CM, PM need not be restarted.

Each extension number, which is involved in a call scenario, will be related to the relevant organisational data from Configuration Management (CM). For these extensions, the organisational data will be transported from CM to the PM tables. This is important because PM works on CDR records and the organisational data can be transported from CM to PM only if the extension is involved in a call, meaning that there must a CDR record for this extension.

PM also keeps track of the organisational structure as set in CM. If there is a change of personnel assigned to an extension, this change will be taken into account while calculating the PM reports.

NOTICE: Note that if you create a new Filter and change the type, any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

Field and Control Descriptions (in Tabs of Organisational Filter Definition Pages)

Organisational Items Tab

Filter Summary Tab

Call Types Tab

Related Topics

Organisational Items Tab

Call Types Tab

Filter Summary Tab - Organisational Filter Type

Record Selection Mechanism

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Listing Filters

3.6.3.1 Organisational Items Tab

An Organisation level can be assigned to a particular extension in the system using Configuration Management (CM). Each level in the organisation hierarchy usually represents a different number of extensions.

At each level in the organisation hierarchy different entries may exist, for example within a country different companies may exist with a group or association of companies. A complex tree structure may be built up, which maps the whole organisation. The organisation level of an extension can be changed at any time. In order that PM produces consistent reports it is essential that the organisation level assigned to an extension is time based.

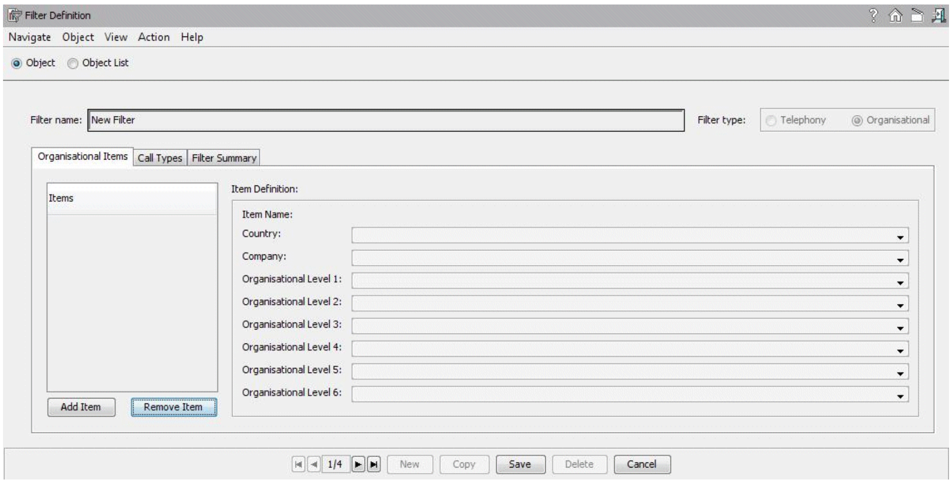


Figure 51: Filter Definition Page (Organisational Filter - Object View)

Field and Control Descriptions

Items (list)

Item Definition

Buttons:

Add Item

Remove Item

3.6.4 Call Types Tab

The Call Types tab is where you specify call types and call directions - both of which can be included in reports that use the filter.

This tab applies both to the filter types **Telephony** and to **Organisational** and comprises two sets of checkboxes: Call Type checkboxes and Call Direction checkboxes.

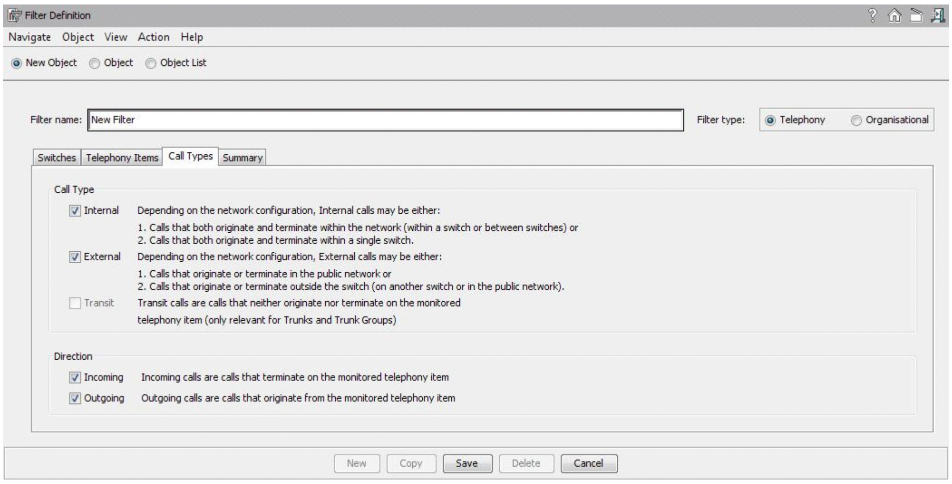


Figure 52: Filter Definition Page - Call Types Tab

Field and Control Descriptions

Call Type checkboxes

- Internal
- External
- Transit

Call Direction checkboxes

- Incoming
- Outgoing

Related Topics

Telephony Filter Type

Organisational Filter Type

Filter Summary Tab

Record Selection Mechanism

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Listing Filters

3.6.5 Filter Summary Tab

Depending on the selected filter type **Telephony** or **Organisational**, this tab is presented as

- Filter Summary Tab - Telephony Filter Type
- or as
- Filter Summary Tab - Organisational Filter Type.

Related Topics

Telephony Filter Type

Organisational Filter Type

Call Types Tab

Record Selection Mechanism

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Listing Filters

3.6.5.1 Filter Summary Tab - Telephony Filter Type

The Filter Summary is a read-only table listing all the telephony items currently defined for the filter. It is a helpful reminder on a single list.

For each item in the Filter definition details of Switch, Item Type and Item are displayed.

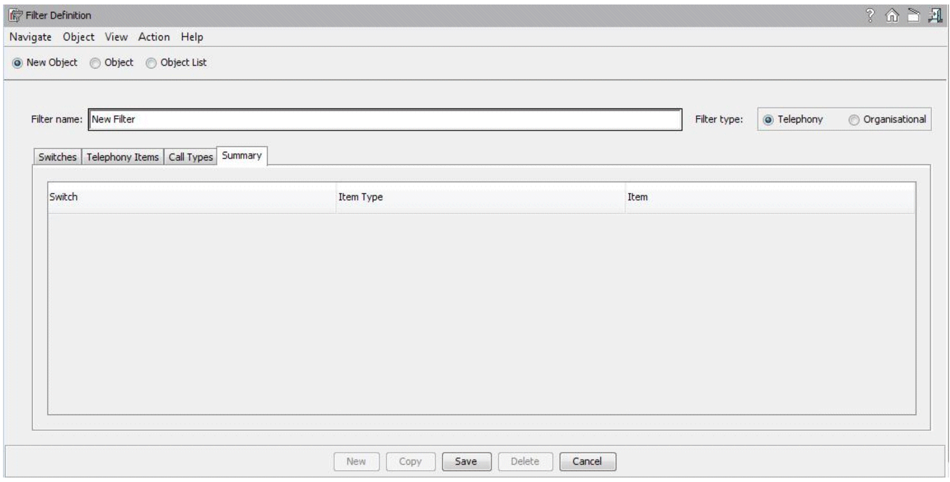


Figure 53: Filter Definition Page - Filter Summary Tab with Selected Branches

Field and Control Descriptions

Switch

Item Type

Item

3.6.5.2 Filter Summary Tab - Organisational Filter Type

The Filter Summary is a read-only table which presents a table with the Organisational Items for the selected Filter.

The default sorting criteria in the table is by the **Country** column.

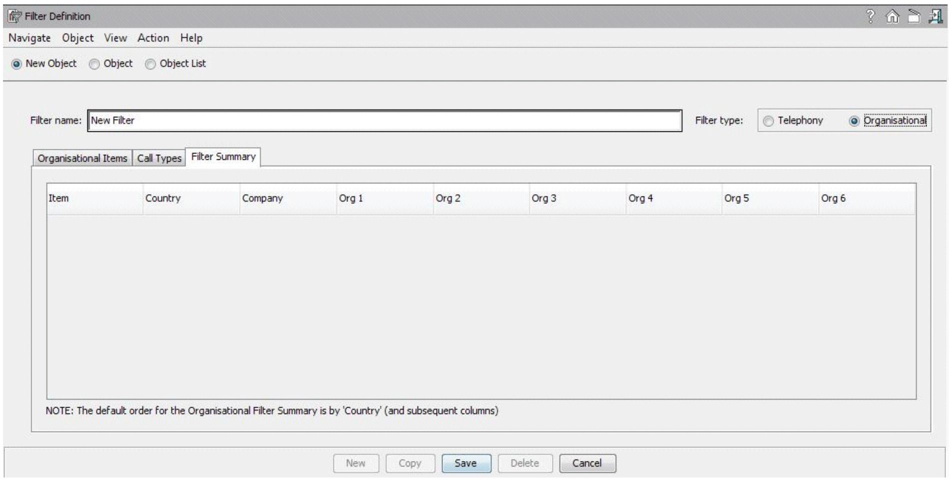


Figure 54: Filter Definition Page - Filter Summary Tab for Organisational Filters

Field and Control Descriptions

Item

Country

Company

Org 1 ... Org 6

3.6.6 Reference Information on Filters

A filter specifies the items to be extracted from the database of metered data so that they can then be used to generate a report.

A filter specifies the following to appear in a report:

- One or more switches for **Telephony Item Types** for each switch or Organisational Items.
- Items defined in the Telephony Items Tab (for example, the trunk group number within the Trunk Groups item type) or items defined in the Organisational Items Tab.
- Call types and call directions (refer to Call Types Tab)

Telephony Item Types

Telephony items and item types include:

Telephony Item Types	Telephony Items
Attendant Consoles	Extension numbers for attenda
Attendant Console Groups	Attendant console group numb
Cordless Base	Cordless Base numbers
Cordless SLC	Cordless SLC numbers
Extensions	Extension numbers
Hunt Groups	Hunt group numbers
Trunks	Trunk numbers
Trunk Groups	Trunk group numbers
Branches	Branch node IDs and groups
ACD Groups	Automatic Call Distribution nur
CMI Com. Extensions	CMI Com. Extensions number
External Numbers	External destination numbers f

Related Topics

Accessing the Filter Definition Page

Telephony Filter Type

Organisational Filter Type

Step-by-step Instructions

Defining Filters

Creating a Telephony Filter

3.7 Metering Settings

NOTICE: Configuration Management makes no provision for the administration of attendant consoles. This is why there are no values available for selection when you try to configure the metering objects in System Management (PM tab) and the filters in PM under "Available Attendant Consoles" and "AC Groups". The station numbers of the attendant consoles or AC groups must be entered directly in the dialog boxes themselves.

This section covers the following topics:

NOTICE: Cordless report generation in Assistant PM is also possible.

3.7.1 Performance Management tab sheet (System Management - OpenScape 4000 Administration)

Metering Settings allow you to specify which data is collected and stored in the PM database for the reports.

The **Performance Management** tab sheet in **System Management - OpenScape 4000 Administration** is where you specify the items to be metered for PM for each switch. You can define metering for more than one switch.For the selected switch, you can:

- Indicate that all items associated with the switch should be metered
- Collect the following types of data:
  - SWU/ADP Load
  - Feature Usage
  - Cordless Statistic Counters
  - Cordless Overload Duration
  - Cordless Stay Statistics
- Refresh the cordless list
- Indicate that only the selected telephony item types are going to be metered. The full set of telephony items are:
  - Attendant Consoles
  - AC Groups
  - Extensions
  - Hunt Groups
  - Trunks
  - Trunk Groups
  - Branches
  - ACD Groups
  - CMI Com. Extensions
  - External Numbers

  The Performance Management tab sheet has two **Metered Items** option buttons:
- Selected Items
- All Items

Each Item Type tab has two scrolled lists with four selection buttons that allow the items to be moved between the two lists. Each tab also provides a field to enter unlisted items.

3.7.2 Accessing the Performance Management PM Tab Sheet of System Management - OpenScape 4000 Administration

To access the **Performance Management** tab sheet in **System Management - OpenScape 4000 Administration**:

1) On the Performance Management Home Page, double-click **Metering Settings**. The System Administration page appears.
2) If the Performance Management application is not selected, click the box.
3) When the checkmark appears in the Performance Management application, click **Search**. A table appears with switch information.
4) Double-click at an entry on the table. The PM tab sheet appears on the System Administration page.

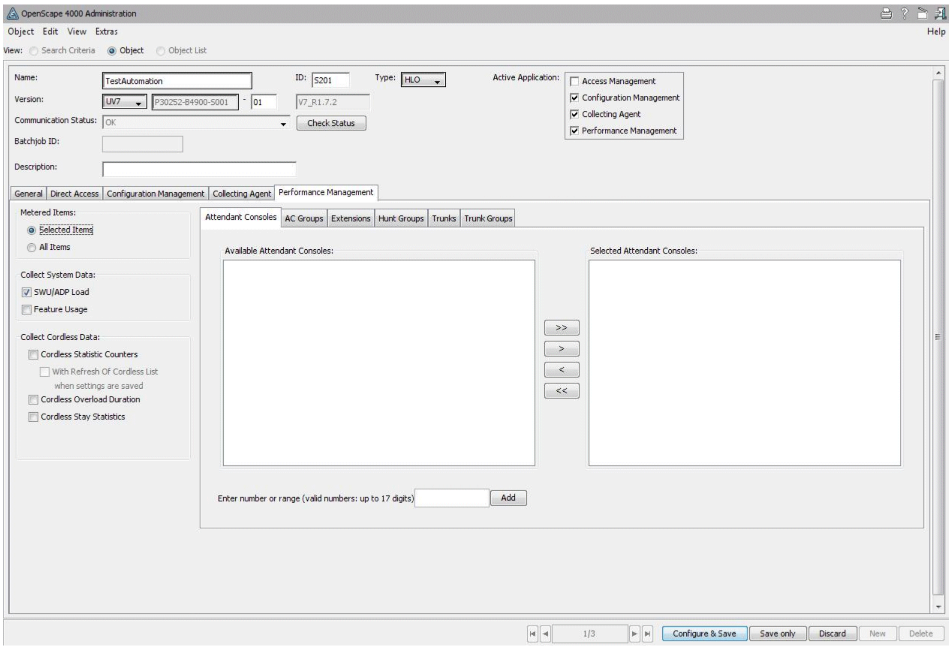


Figure 55: OpenScape 4000 Administration Page with PM Tab Sheet and sub tabs (example)

Fields and Controls Description

"View" Area

Search Criteria

Object

Object List

(New Object)

"Metered Items" Area

Selected Items

All Items

"Collect System Data" Area

SWU/ADP Load

Feature Usage

Cordless Overload Duration

"Collect Cordless Data" Area

Cordless Statistic Counters

With Refresh Of Cordless List when settings are saved

Cordless Overload Duration

Cordless Stay Statistics

List Area displaying the available and the selected telephony items

Available Items List

Selected Items List

>

>>

<

<<

Enter Number or Range

Add

Buttons

Save

Discard

New

Delete

Step-by-step Instructions

Selecting Systems to be Metered

Selecting Items to be Metered

Related Topics

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

3.7.3 Metering Settings for Attendant Consoles

NOTICE: Configuration Management makes no provision for the administration of attendant consoles. This is why there are no values available for selection when you try to configure the metering objects in System Management (PM tab) and the filters in PM under "Available Attendant Consoles" and "AC Groups". The station numbers of the attendant consoles or AC groups must be entered directly in the dialog boxes themselves.

The Attendant Consoles tab in the PM tab sheet allows you to specify which attendant console numbers are to be included in the metering definition.

The Attendant Consoles tab is only enabled:

- If the Selected Items option button is selected

3.7.4 Metering Settings for AC Groups

NOTICE: Configuration Management makes no provision for the administration of attendant consoles. This is why there are no values available for selection when you try to configure the metering objects in System Management (PM tab) and the filters in PM under "Available Attendant Consoles" and "AC Groups". The station numbers of the attendant consoles or AC groups must be entered directly in the dialog boxes themselves.

The AC Groups tab in the PM tab sheet allows you to specify which attendant console group numbers are to be included in the metering definition.

The AC Groups tab is only enabled:

- If the Selected Items option button is selected

3.7.5 Metering Settings for Extensions

This tab allows you to specify which extension numbers are to be included in the metering definition.

The Extensions tab is only enabled:

- If the Selected Items option buttons is selected

3.7.6 Metering Settings for Hunt Groups

This tab allows you to specify which hunt group numbers are to be included in the metering definition.

The Hunt Groups tab is only enabled:

- If the Selected Items option buttons is selected

3.7.7 Metering Settings for Trunks

This tab allows you to specify which trunk numbers are to be included in the metering definition.

The Trunks tab is only enabled:

- If the Selected Items option buttons is selected

3.7.8 Metering Settings for Trunk Groups

This tab allows you to specify which trunk group numbers are to be included in the metering definition.

The Trunk Groups tab is only enabled:

- If the Selected Items option buttons is selected

3.7.9 Saving the Current Metering Configuration

The system stores its metering configuration on a per switch basis. The metering configuration contains all metering for the selected items within the chosen switch. Metering configurations are stored as part of the PM database.

When the Save button is pressed, PM automatically removes all the metering and then reapplies the metering defined by the configuration in the metering setting screen.

Related Topics

Issuing Metering AMOs in the Network, page 132

Refreshing the Cordless Configuration

Configuration for Cordless Overload Duration Metering

3.7.10 Issuing Metering AMOs in the Network

To meter the items that you selected, PM issues AMOs to the switch. Each time the **Apply** button is pressed on the metering setting page, a comparison is made between the stored metering configuration in the database and the revised metering configuration that you just specified. AMOs are issued to either start or stop metering on the items that have been added or removed from the metering configuration. The new metering configuration is then saved to the PM database.

The AMO DEFTM is used to store 500 target objects which can be either a subscriber, a trunk, or an attendant, trunk group number, attendant group numbers, or subscribers of heads of hunt groups. Each of the target objects can be a single item (for example, a single extension 4439) or a range of items (for example, a number of extensions forming a range of 4400-4500).

Related Topics

Saving the Current Metering Configuration

Refreshing the Cordless Configuration

Configuration for Cordless Overload Duration Metering

3.7.11 Refreshing the Cordless Configuration

If the Refresh Now button is pressed, the application is instructed to perform an immediate refresh on the cordless concentrator list.

NOTICE: The Refresh Now button is only available if the Cordless Statistic Counters option is checked.

Related Topics

Saving the Current Metering Configuration

Issuing Metering AMOs in the Network

Configuration for Cordless Overload Duration Metering

3.7.12 Configuration for Cordless Overload Duration Metering

PM reports related to **Cordless Overload Duration** scenarios evaluate data which derive from the table `pm_bs_overload` of the Manager. In overload situations, the data for this table are gathered by the `aer6` daemon of **Asfm** package of the Manager.

NOTICE: The concerning reports are supported only for CMI V3.0 and in switches with UV3.0 or higher.

In order to fill the table, the `aer6` daemon evaluates CMI fault messages provided by the Switch RMX side. To obtain a proper working daemon and evaluable CMI fault messages, the following configuration steps must be applied.

NOTICE: As pre-requisite to set up the metering functionality for PM in the **Performance Management** tab sheet in **System Management - OpenScape 4000 Administration**, step 1 has to be performed first.

1) **On the RMX side** of the switch, where the Cordless CMI V3 cards and base stations are defined:
   - Activate the operation of AMO AFR.
   - Activate the Generation of CMI Base Station Overload Fault Message of the Switch.
2) In the **Performance Management** tab sheet in **System Management - OpenScape 4000 Administration** of the Manager which will collect the Cordless Duration data:
   - Metering Settings for Collecting Cordless Overload Duration data.

Related Topics

Saving the Current Metering Configuration

Issuing Metering AMOs in the Network

Refreshing the Cordless Configuration

3.7.12.1 Activate the operation of AMO AFR

AMO AFR is activated by using the following AMOs on the RMX side of the switch:

```
CHA-FUNCT:SLANG=ENG;

REGEN-CPTP;
ADD-CPTP:DPCON,<free dva verb numberDVANCC01, DVANCC02, or
 DVANCC03
> ,<IP number IP number of OpenScape 4000 Manager
>;
ADD-CPTP:APPL,<free appl
number>,FAMAFR2,DVANCC01
ACT-AFR:AFR2,LDU;
```

A correct configuration produces for example the following Regen-CPTP output:

```
|   8   | DVANCC02 | 192.168.0.84     |

|  21   | FAMAFR2   | DVANCC02 | FM1   | YES |102 |102  |FM-
HIC
|FM-DMS     |
```

See also

Activate the Generation of CMI Base Station Overload Fault Message of the Switch

Metering Settings for Collecting Cordless Overload Duration data

Configuration for Cordless Overload Duration Metering

3.7.12.2 Activate the Generation of CMI Base Station Overload Fault Message of the Switch

In order to activate the CMI fault message generation you should use the CATool (Cordless Administration Tool - a configuration tool for service staff in charge of cordless cards). For details using CATool, please refer to the help file of the tool.

---

[1] must match the DPCON

[1],FM2,YES,102,102,FM-HIC,FM-DMS;

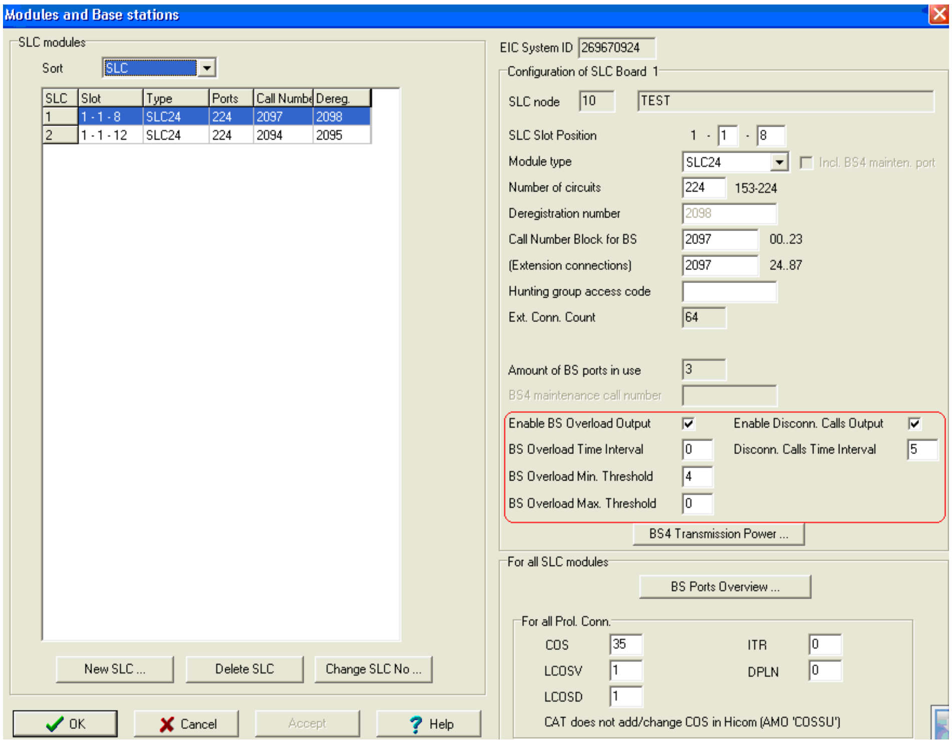


Figure 56: CATool: Activate generation of CMI Base Station Overload Fault Message

Set the configuration data with CATool (see also the red marked area in Figure 56 above):

- Check **Enable BS Overload Output** for each selected SLC card from the left side table, you want to receive overload data.
- Enter the desired values in the entry fields
  - **BS Overload Time Interval**: values are *0* = immediate output in HISTA; *1-FF* = value of time interval for collecting overloads and output in HISTA after time elapsed
  - **BS Overload Min. Threshold**: alarm off if level will be underrun
  - **BS Overload Max. Threshold**: alarm on if level will be reached
  - **Disconn. Calls Time Interval**; (**Enable Disconn. Calls Output** checked); values are: *0* = immediately; *1-FF* = value of time interval in which data for disconnects are collected and output to HISTA after timeout.
- Click **OK** to save the entered configuration data.

With those fields selected and filled in CATool, the program automatically sends the necessary commands.

```
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=95,FOR
MAT=HEX,CMDARY=01;
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=96,FOR
MAT=HEX,CMDARY=05;
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=97,FOR
```

```
MAT=HEX,CMDARY=01;
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=98,FOR
MAT=HEX,CMDARY=00;
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=99,FOR
MAT=HEX,CMDARY=04;
CHA-
SLCB:CTYPE=CDAC,TYPE=DATA,TRANSFER=NO,LTU=1,SLOT=8,POS=100,FO
RMAT=HEX,CMDARY=00;
EXEC-SLCB:CTYPE=CDAC,LTU=1,SLOT=8,POS=95,LENGTH=6;
```

- Afterwards the CMI boards must be restarted with the `REST-BSSU` AMO command.
- Then run the following commands to save the configuration changes to the RMX side of the switch: `exec-updat:a1,all;` and `exec-updat:bp,all;`

See also

Activate the operation of AMO AFR

Metering Settings for Collecting Cordless Overload Duration data

Configuration for Cordless Overload Duration Metering

3.8 PM Administration

This section covers the following topics:

Description of the PM Administration Page

Accessing the Administration Page

Applying the COL Files to the PM Database

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.1 Description of the PM Administration Page

The PM Administration page allows you to perform the following administration functions on the data in the PM database:

- Specify whether the data from the PM database is to be retained, deleted or archived
- Delete or archive data automatically
- Maintain the CDR table for generating reports
- Delete or archive data manually

- Restore data from the archives for report generation
- Assign specific codes to switches
- Determine the available space on the database
- Download templates and logos for Advanced reports
- Set up directory names

PM data is derived from the Collecting Agent (COL) according to the metering settings that are defined using PM. When the data is received, COL stores it in a date-stamped file and informs PM of its presence. PM then copies the data to its database and deletes the file created by COL.

PM uses **Auto Archiving** by retaining collected data in the PM database for a specified period of time (the **data retention period**) and thereafter is removed automatically to archive files. The archiving process is normally conducted on the basis of calendar months, but on very large systems even one month's data may be too much to retain in the live PM database. To overcome this it is possible to specify a retention periods of one week or two weeks.

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.2 Applying the COL Files to the PM Database

COL outputs PM data to files and informs PM that a new data is available. PM reads the new data, updates the PM database, and deletes the files.

The files supplied by COL has the date and time appended as part of the file name. This is the date and time at which COL started the collection data. To collect the PM data manually, open the COL status page, select the system from the list and click the **Collect Now** button.

Related Topics

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.3 Accessing the Administration Page

To access the Administration Page:

1) On the Performance Management Home Page, double-click **Administration**. The Administration page appears.

   The Administration consists of the following tabs:

   - Archive/Delete
   - Restore data
   - Calls Maintenance
   - Statistics
   - Configuration
   - Database Summary
   - Advanced Reports

2) Choose the tab that you want to configure.

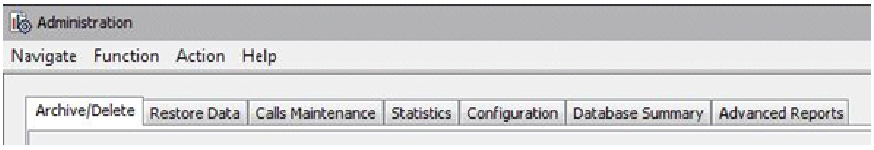


Figure 57: Menu and Tabs in the PM Administration Page

Related Topics

Applying the COL Files to the PM Database

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.4 Archiving and Deleting Data and Deallocating Disk Space

This tab allows you to archive or delete stored PM data automatically or manually so as not to fill up the database, and set the option for automatically removing deleted filter extensions.

You may also maintain the CDR table which is used for generating reports.

The following operations are possible:

- Control the length of time that collected data is retained in the database
- Delete or archive the collected data after the retention period has exceeded.
- Manually delete or archive data from the PM database

- Keep the database table **pm_cdrdatatbl** with call data records (CDR) compact and regain disk space by deleting old records from the CDR table. Older records than a date which is to be set during the procedure, will be deleted from the CDR table first. In a second step the table will be reconstructed in order to minimize the the allocated disk space for the file, which is not acheived by the sole deletion of records.
- Set the option for automatically removing the deleted extensions from the existing PM filters, if they are a part of any filter.

Important Hint

Before defining a directory path for the archive file make sure that sufficient storage space is available on the hard disk. It is recommended to delete from time to time archive files which are no longer needed.

No other PM operation should be running or be scheduled to run during deletion of CDR records.

When the optimization of the CDR table is to be started, but there is a running process for generating a report (from the pages One-Off Reports, Run Report or Reporting Status), a warning message will appear, informing that the optimization cannot take place at the moment and to try again later.

The automated removal of deleted filter extensions feature shares the same scheduling mechanism with CDR deletion, and occurs on the selected time and period.

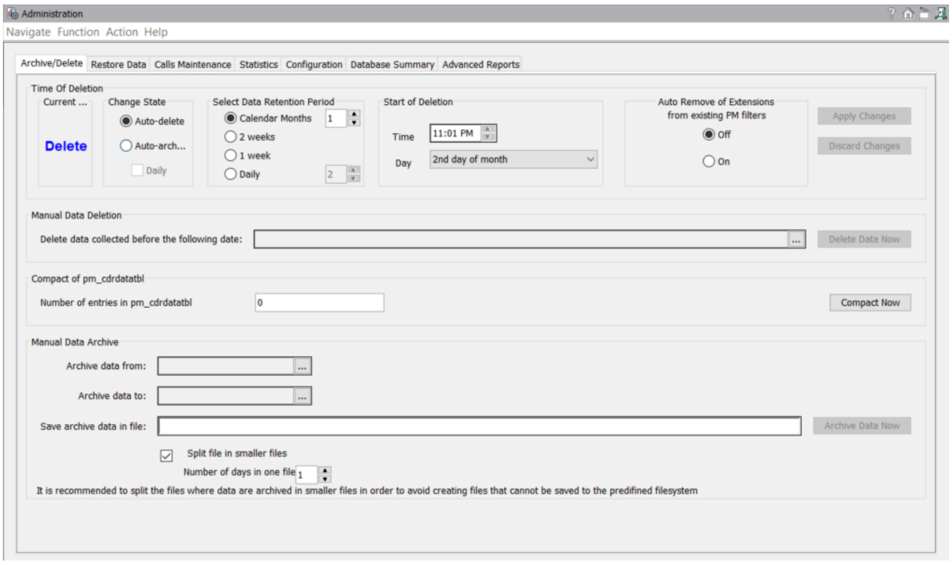


Figure 58: PM Administration Page - Archive/Delete Tab

Fields and Controls Description

Archive/Delete

Automatic Data Deletion:

Current State

Change State

Select Data Retention Period

Start of deletion

Auto Extension Remove

Apply changes

Discard changes

Manual Data Deletion:

Delete data collected before the following date:

Delete Data Now

Compact of pm_cdrdatatbl table:

Number of records in pm_cdrdatatbl table

Compact now

NOTICE: The functionality "Compact CDR Data table" is *not* available for the **Assistant**!

Manual Data Archive:

Archive data from:

Archive data to:

Save archive data in file:

Split file in smaller files

Number of days in one file

Archive Data Now

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.5 Restoring Data

The Restore Data tab allows you to restore data from the archive files to the PM database so you can generate reports. It consists of a table with details of the archived data files that can be restored.

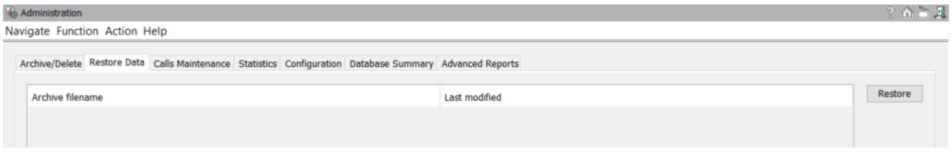


Figure 59: PM Administration Page - Restore Data Tab

Fields and Controls Description

Archive filename

Last modified

Restore

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.6 Assigning Codes to Switches

The Call Maintenance tab allows you to assign international code access numbers, international prefixes and/or national prefix of calling parties to switches. This effects that different presentations of a call number of an individual party (e.g. 00302106**6247400**, 0210**6247400** and 0**6247400**) will be transformed into one single number.

Multiple assignments are possible, and it is recommended to assign all relevant prefixes to all switches step by step.

The relevant codes can be observed by running the Call-Flow report (within the "Call Tracking" report category of PM). This report provides all information regarding a phone call and there a user can observe problematic situations with certain call number formats. Therefore, PM users can identify which is the problematic prefix in each case, regarding the calling party.

As far as the destination parties are concerned, these have a limited transformation: the Call Maintenance tab will add up more zeros in some problematic call scenarios, in order to obtain a more correct format. The solution for the destination parties is limited, because the information from the data records is not sufficient, in order to fix more cases. Regardless of this, PM is more dependent upon calling parties in order to count calls, so this limitation is not so important.

As a result, the call numbers, which are normally presented differently in call data records, are displayed and evaluated in the correct format for PM reports.

The call numbers from the call data records will be reconstructed with regard to the call number format of the CALLIPTY (Calling parties) and DESTPTY (Destination parties) entries in the call data records. The reconstruction of the call data records is performed as a cronjob.

The starting time and interval of this job can also be configured in the Call Maintenance tab. This will affect call data records which are collected during a period of time (daily, 12 hours, 8 hours).

When this scheduled process is executed for the first time, the reconstruction period, this process will run, is set to one day back by default. This means that the reconstruction will take place for the previous day only.

NOTICE: This feature supports the reconstruction of calling party only since HiPath UV1.0/OpenScape UV7 and later versions.

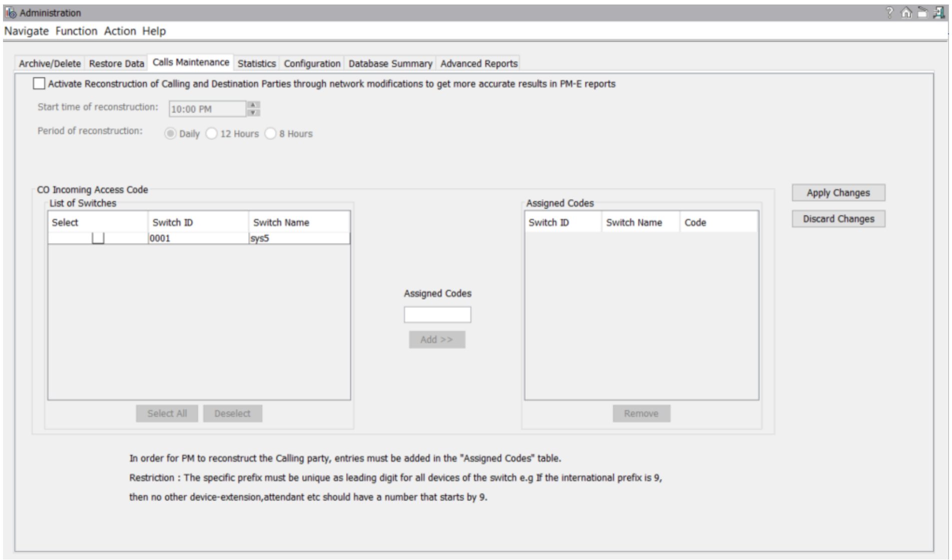


Figure 60: PM Administration Page - Calls Maintenance Tab

Fields and Controls Description

Activate Reconstruction of Calling and Destination Parties through modifications to get more accurate results in PM-Reports

Start time of reconstruction

Period of reconstruction

CO Incoming Access Code

List of Switches

Select All

Deselect

Assigned Codes (text box)

Add >>

Assigned Codes (table)

Remove

Apply Changes

Discard Changes

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.7 Setting the Threshold Value of the PM Database

The Statistics tab provides statistics for the following:

- Number of defined PM reports
- Number of defined PM report groups
- Number of defined PM filters
- Proportion of database in percentage occupied by PM

This tab allows you to see what proportion of the OpenScape 4000 Manager database is occupied by PM data. It also allows you to set a threshold value for the PM database size and lists how many of each of PM records are defined in the database and to select email recipients wo will receive automated reports, if the defined threshold of the database exceeds.

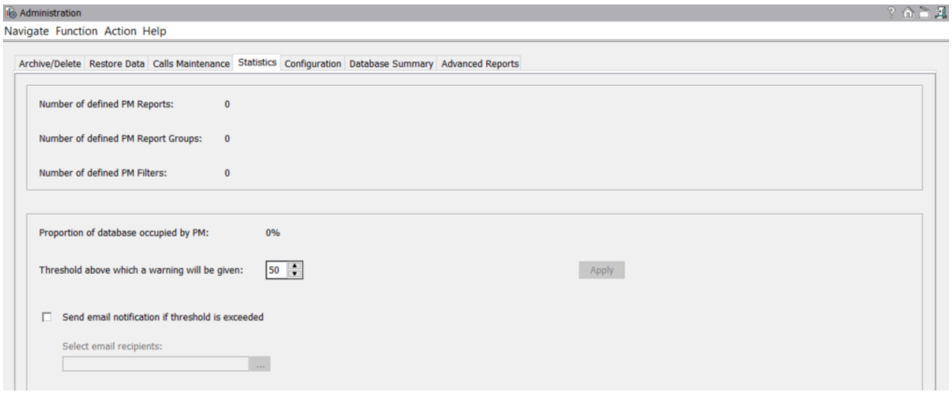


Figure 61: PM Administration Page - Statistics Tab

Fields and Controls Description

Threshold above which a warning will be given:

Apply

Send email notification if threshold is exceeded

Select email recepients

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Storing the PM Data

Viewing Data Records

Downloading Advanced Reports

3.8.8 Storing the PM Data

The Configuration tab allows you to set up the directory into which PM data should be stored.

NOTICE: If the data is currently being written to the old directory, it is not going to be copied to the new directory.

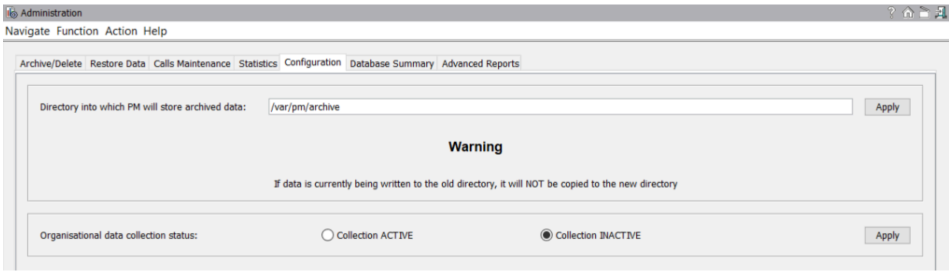


Figure 62: PM Administration Page - Configuration Tab

Fields and Controls Description

Directory into which PM will store archived data

Apply (changes done in the Directory definition)

Organisational data collection status

Apply (changes done in the Organisational Data Collection Status area)

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Viewing Data Records

Downloading Advanced Reports

3.8.9 Viewing Data Records

The Database Summary tab allows you to view the number of data records currently held in the CDR table. In PM Version 2.0 and higher, two additional columns have been added to the table: Weekly period in PM database and Number of data records.

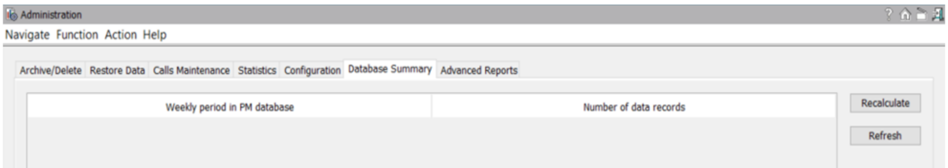


Figure 63: PM Administration Page - Database Summary Tab

Fields Description

Database Summary

Weekly period in PM database

Number of data records

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Downloading Advanced Reports

3.8.10 Downloading Advanced Reports

The Advanced Reports tab allows you to download the advanced report templates and the logo.

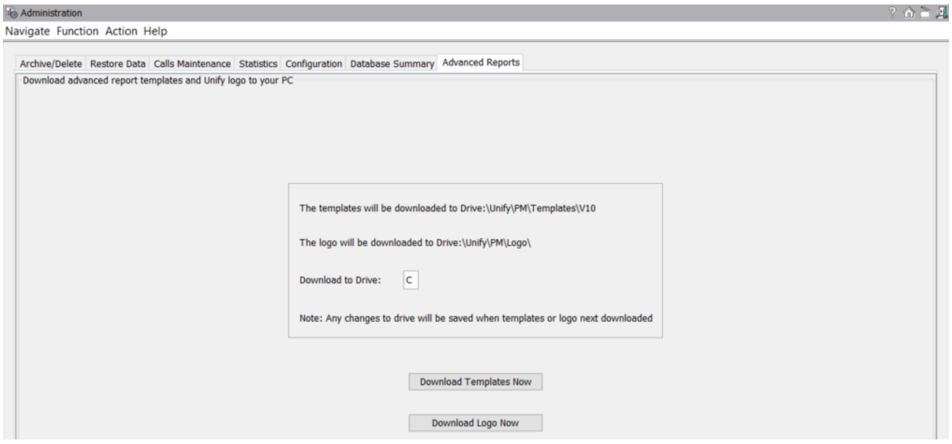


Figure 64: PM Administration Page - Advanced Reports Tab

Fields and Controls Description

Download Drive

Download Templates Now

Download Logo Now

Related Topics

Applying the COL Files to the PM Database

Accessing the Administration Page

Archiving and Deleting Data and Deallocating Disk Space

Restoring Data

Assigning Codes to Switches

Setting the Threshold Value of the PM Database

Storing the PM Data

Viewing Data Records

3.9 One-Off Report

This section covers the following topics:

The One-Off Report Page

Accessing the One-Off Report Page

Importing a Filter

3.9.1 The One-Off Report Page

The One-Off report page is a feature that allows you to dynamically define and run one-off reports. It is available from PM Version 2.0 Standard and Advanced.

NOTICE: This type of report cannot be saved.

From PM Version 4, you can select the format of the report output 'Flexible' instead of the 'Standard' format. For the flexible output refer to Downloading Flexible Reports.

The Advanced feature allows you to choose between two formats of report output: Standard (Crystal Reports based) or Advanced (MS Excel-based).

The Advanced option is only enabled if MS Excel is installed on the client PC.

The default value is the Advanced option. If MS Excel is not installed on the client, then the default is 'Flexible'.

The flexibility of the existing PM Filter definition page allows items to be selected on different switches. As a result the One-Off Report page has three tabs:

- **Set Parameters**—allows you to set all of the parameters required for a One-Off report either for telephony items or organisational items, depending on selection. This tab is based on the existing Report Definition, Run Report, and Filter Definition pages.

  The One-Off Report page includes service level and call ignoring parameters for Call Volume, Call Timing, and Attendant Console, Call Tracking, and Organisation Detail reports. These parameters are required for ASC 3.0 Parity.

  This page produces two different modes of report; full and summary.
- **Select Items**—allows you to select the telephony items for the One-Off report. You can select one or several items by pulling in an existing filter in the Set Parameters tab.

  – If a **Telephony** filter is selected, this tab is based on the existing Telephony Items Tab in the Filter Definition page and consists of a set of telephony items sub tabs. These are:

  Attendant Consoles,

  AC Groups,

  Base Stations,

  SLC Cards,

  Extensions,

  Hunt Groups,

  Trunks,

  Trunk Groups,

  Branches,

  ACD Groups,

  CMI Com. Extensions and

  External Numbers,

  which allow you to select the items reported on. Refer to chapter Filter Definition for additional information.

  – If an **Organisational** filter is selected, this tab is based on the existing Organisational Items Tab in the Filter Definition page
- **Set Thresholds**— By setting thresholds via this tab, you are able to define reports that display only values exceeding these thresholds. Furthermore,

you are able to define whether an alarm should be sent to the Fault Management, if one of the thresholds is exceeded.

If the One-Off report is based on an existing filter, all of the parameters can be set in one tab because it allows an existing filter to be used for One-Off reports. Once an existing filter has been pulled in, the selected items and the call types may be modified without affecting the existing filter.

If an existing filter is used to populate the information in the One-Off Report page and the existing filter is subsequently changed before the One-Off report is run, the original filter values are used, not the updated ones.

Having run a spontaneous One-Off report, you can change any of the information and run a new spontaneous One-Off report.

When the One-Off Report page is opened all fields on the Select items tab are blank, all fields on the Set Parameters tab have default values, and the Run button is disabled. When the browser with the One-Off Report page is closed or logged off, the current settings are lost.

In the **Template** selection box on the One-Off Report page the same entries are listed as in the Report Templates box of the Report Definition Page. The structure and content of each new branch is exactly the same as that in the Report Definition Page.

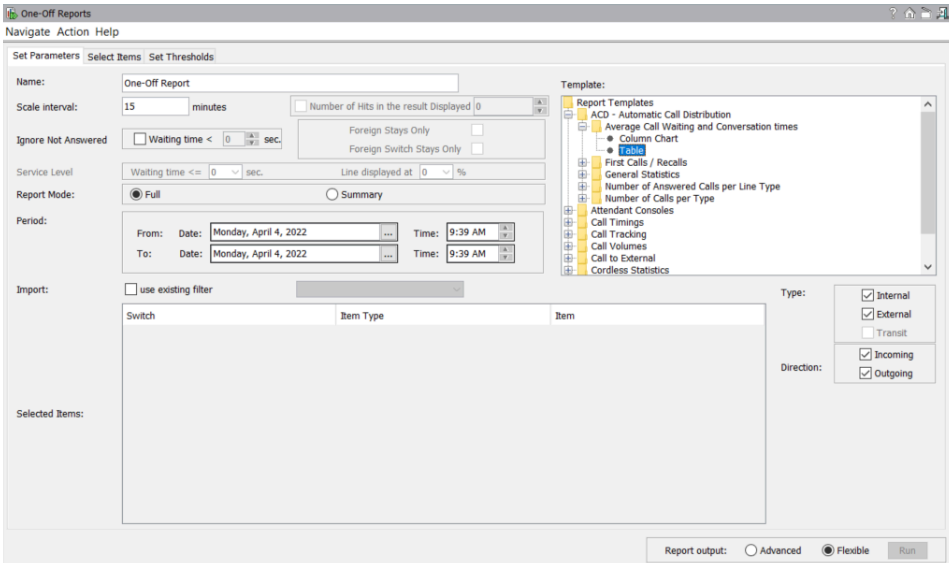


Figure 65: One-Off Report Page - Set Parameters Tab (example for Telephony Filter Types)

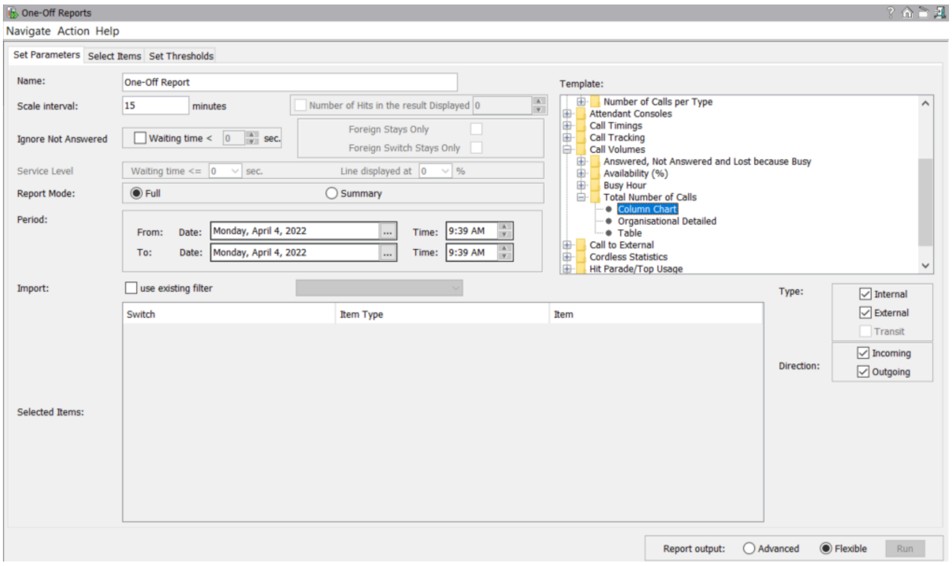


Figure 66: One-Off Report Page - Set Parameters Tab (example for Organisational Filter Types)

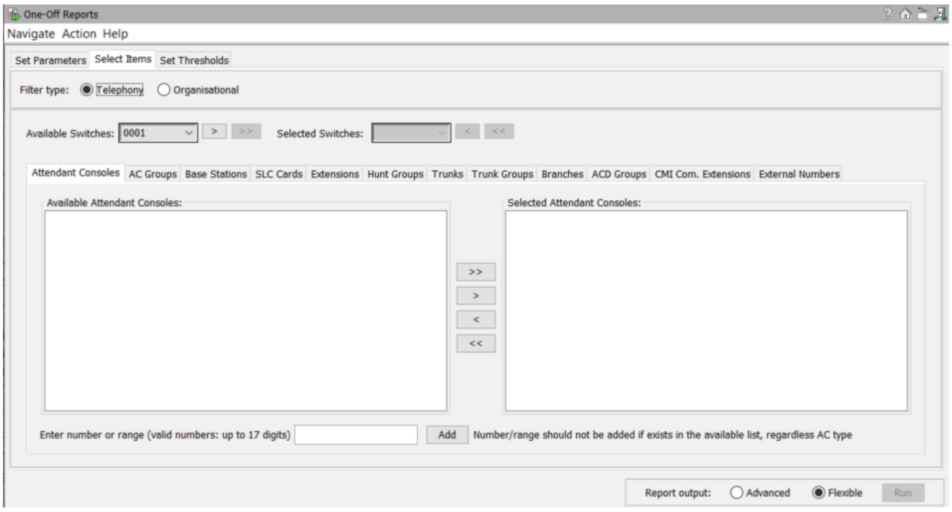


Figure 67: One-Off Report Page - Select Items Tab (example for Telephony Filter Types)

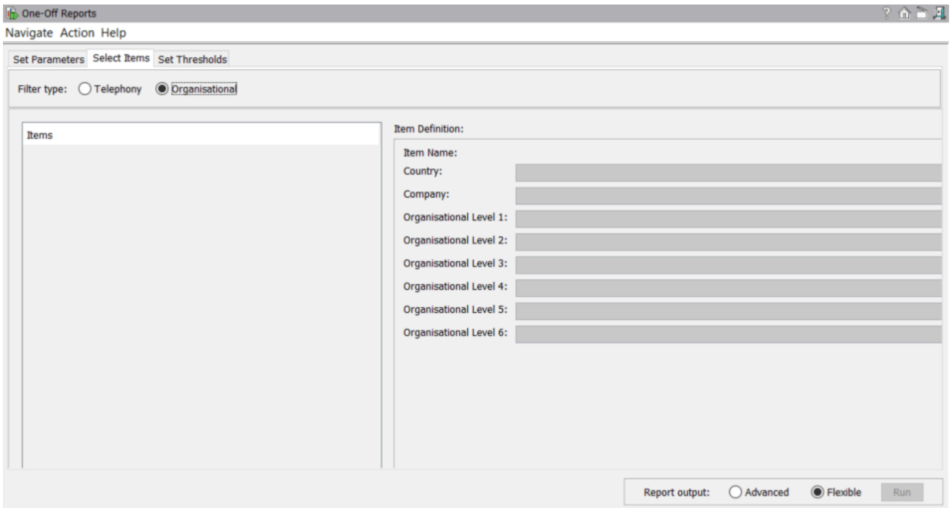


Figure 68: One-Off Report Page - Select Items Tab (example for Organisational Filter Types)

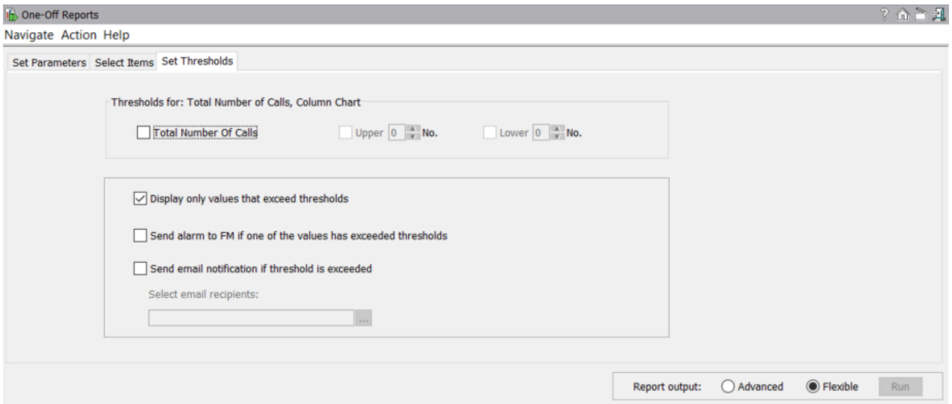


Figure 69: One-Off Report Page - Set Thresholds Tab

Figure 70: One-Off Report Page - Selected Items Tab (example for External Numbers)

Fields and Controls Descriptions

Tabs of the One-Off Reports Page

Set Parameters Tab

Select Items Tab

Set Thresholds Tab

Items of the Set Parameters Tab

Name

Scale Interval

Number of Hits in the result displayed (One-Off Report)

Controls for Ignoring Report Values (One-Off Report)

Foreign Stays Only (One-Off Report)

Foreign Switch Stays Only (One-Off Report) - for "Cordless Stays per Extension" report

Service Level

Report Mode

Reporting Days

Daily time periods

Period

Import

Selected Items

Template

Type

Direction

Report Output

Items of the Select Items Tab

Filter Type

Available Switches (when "Telephony" Filter Type is set)

Selected Switches (when "Telephony" Filter Type is set)

Item (when "Organisational" Filter Type is set)

Item Definition (when "Organisational" Filter Type is set)

Refer also to Fields and Control in the Telephony Items Tab and Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Items of the Set Thresholds Tab

Fields and Controls in the Set Thresholds Tab (One-Off Report)

Button

Run

Related Topics

Accessing the One-Off Report Page

AC Multiple Queue Reports

Importing a Filter

The One-Off Report Page

Downloading Flexible Reports

Defining a One-Off Report

Selecting Items for the One-Off Report

3.9.2 Accessing the One-Off Report Page

To access the One-Off Report page on the Performance Management Home Page, double-click **One-Off Reports**. The One-Off Report page appears.

You can run One-Off reports using this page.

3.9.3 Importing a Filter

To import a filter:

1) On the One-Off Report page, check the Import (**use existing filter**) checkbox.
2) In the drop-down list box, select an existing filter. The Selected Items and Call Types are automatically filled with the values from the selected filter.

3.10 Schedule Report

This section covers the following topics:

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report,

Define Summation Tab

Summary Reports

Accessing the Schedule Report Page

3.10.1 Schedule Report Setup Page - Object View for Summary Reports

The Schedule Report Setup (object view) page allows the user to schedule an advanced report or report group to run single instance at a particular date and time in the future or periodically starting from a particular date and time in the future.

The Schedule Report Setup (object view) page schedules single instance, periodic weekly or periodic monthly summary reports. Summary reports contain an individual sheet of results for each day and an additional sheet with the overall results. The summary reports are required for ASC 3.0 Parity.

Figure 71 shows the Schedule Report Setup (object view) page with summary reports for ASC 3.0 Parity and the additional schedule option element "Summation".

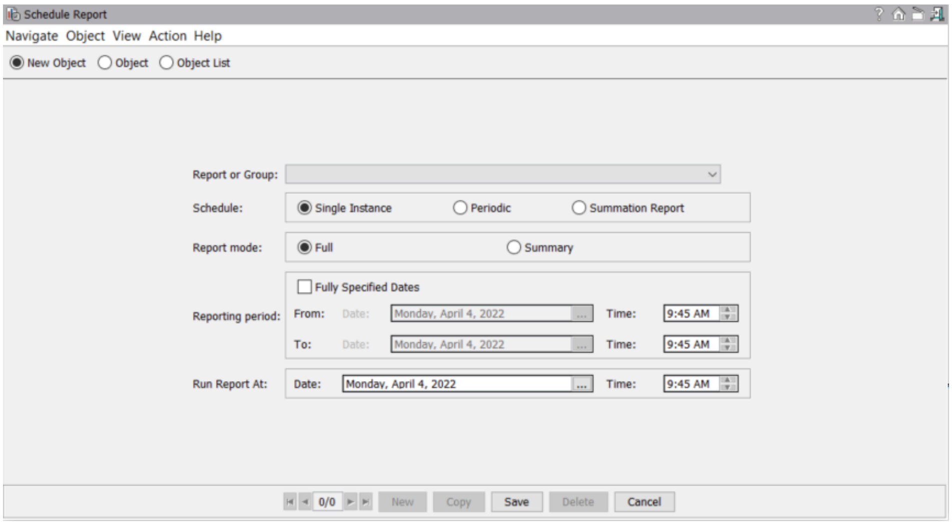


Figure 71: Schedule Report Setup Page (Object View) - Summary Reports for ASC 3.0 Parity

The Schedule Report Setup (object view) page includes full and summary report modes, reporting days, and daily time periods.

Notes:

When **Periodic** schedule and **Summary** report mode options are selected, the drop down list of available frequencies only contains Weekly and Monthly. These are the only frequencies that can have periodic summary reports. The other frequencies; quarter hourly, half hourly, hourly, every n hours, and daily can not have periodic summary reports. They can only have periodic full reports.

The schedule option should be selected before the report mode option.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Summary Reports

Accessing the Schedule Report Page

3.10.2 Schedule Report Setup Page - Smaller Periodic Frequencies

The Schedule Report Setup (object view) page allows the user to periodically schedule a report or report group hourly, every n hour, daily, weekly, and monthly.

The Schedule Report Setup (object view) page allows report or report groups to be periodically scheduled every quarter hour and every half hour. A customer specific enhancement to ASC 3.0 runs a specific report every half hour from 07:30 AM to 07:30 PM.

Figure 72 shows the Schedule Report Setup (object view) page with half hourly frequency and the additional schedule option element "Summation".

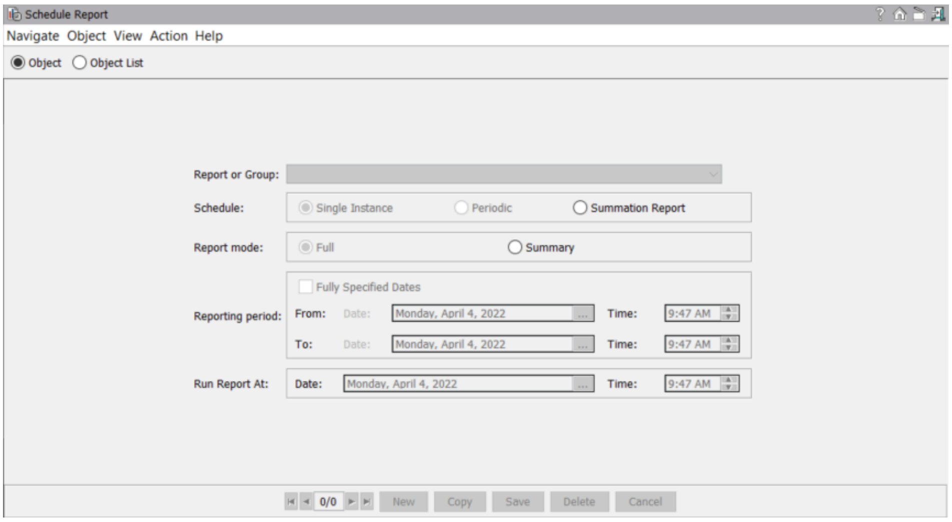


Figure 72: Schedule Report Setup Page (Object View) - with Half Hourly Frequency

The Schedule Report Setup (object view) page also includes additional quarter hourly and half hourly frequencies.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Summary Reports

Accessing the Schedule Report Page

3.10.3 Single Instance Scheduling

The Schedule Report feature allows you to:

- Schedule a Single Instance report at a particular date and time
- Periodically schedule a report or report group starting from a particular date and time

In PM Version 2.0 (and higher) - Advanced, you can schedule a single instance of a Report or Report Group for a particular date and time in the future.

Two pieces of information are required; the period (that is, f**rom** date and time and **to** date and time) and the **date and time** at which the report should be run.

Figure 73 shows the Schedule Report Setup page for Single Instance Scheduling.

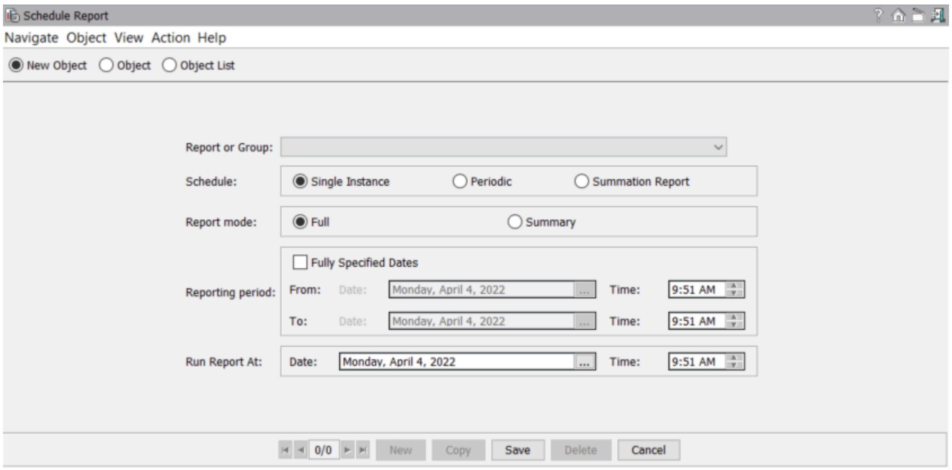


Figure 73: Schedule Report Setup Page - Single Instance Schedule

The Schedule Report Setup page for Single Instance Scheduling has the following areas:

- The standard header
- A standard view bar
- A Report or Group selection mechanism which allows you to select a particular Report or Report Group from the drop down list of available Reports and Report Groups.
- A Schedule selection mechanism which allows you to select between single instance and periodic scheduling. The default value is single instance scheduling.
- A Reporting Period selection mechanism which allows you to set the **from** and **to** date and times.
- The length of the reporting period
- A Run Report At selection mechanism which allows you to set the date and time the single instance is run.

  There is an interaction between the reporting period and the **run report at** date and time. Normally, the **run report at** date and time should be later than the **from** and **to** date and times. However, to allow OpenScape 4000 Managers, Assistants, and switches to be in different time zones the **from** and **to** date and times may be later than the **run report at** date and time.

  There is an interaction between single instance scheduling and COL. COL is responsible for collecting the metered items data from switches. The start date and time for the first collection and the cycle time for subsequent collections are set up for each switch through the Collecting Agent tab in System Management. Different switches may have collections running at different times.

  The Run Report At date and time for single instance scheduling must be coordinated with the COL collection times to ensure that all of the data required for the report is collected before the report is run otherwise the report is going to be wrong because it does not contain all of the data.

Figure 74 shows an example of the co-ordination between Single Instance scheduling, COL Collection times, and Run Report At date and time to ensure that all data is collected.

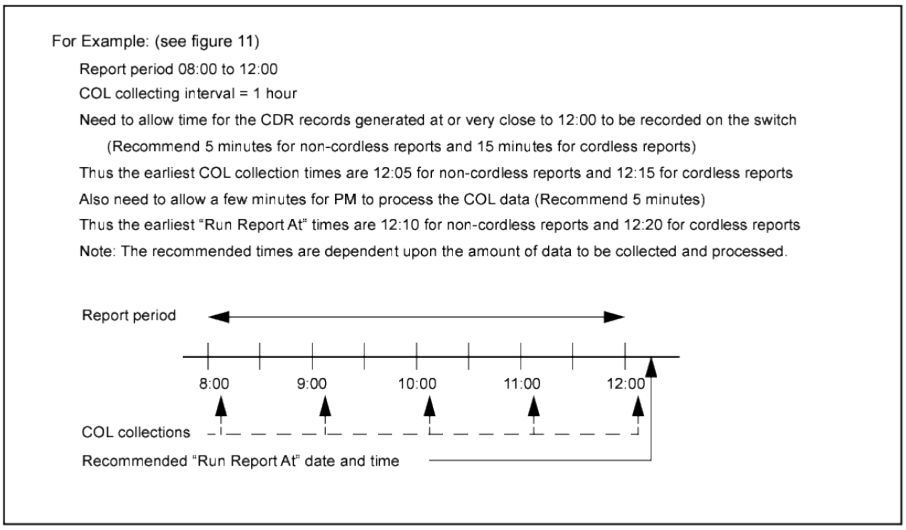


Figure 74: Co-ordination between Single Instance Scheduling and Collection Times

- The standard button bar at the foot of the screen has the following controls:
  - Navigation control that shows the current scheduled report in a "1/3" format with arrow keys that allow you to select the first, next, previous or last scheduled report.
  - **New** button that allows you to define a new scheduled report.
  - **Copy** button that allows an existing scheduled report to be copied and then amended.
  - **Save** button which allows you to add the report to the list of reports that are scheduled to run.
  - **Delete** button that removes the scheduled report from the set of scheduled reports stored in the database.
  - **Cancel** button which allows you to cancel the "Schedule Report Setup" page and return to the previous page without creating a new scheduled single instance report or modifying an existing scheduled single instance report.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Summary Reports

Accessing the Schedule Report Page

3.10.4 Periodic Scheduling

In PM Version 2.0 (and higher) - Advanced, you can schedule the same Report or Report Group to run periodically starting from a particular date and time in the future.

Three pieces of information are required; the period (that is, the time the report covers), the frequency [that is, how often the report is scheduled] and the date and time at which the report should be first run.

There is an interaction between periodic scheduling and COL. COL is responsible for collecting the metered items data from the switches. The start date and time for the first collection and the cycle time for subsequent collections are set up for each switch through the Collecting Agent tab in System Management. Different switches may have collections running at different times.

The period, frequency, and **run report at** date and time for periodic scheduling must all be coordinated with the COL collection times to ensure that all of the data required for the report is collected before the report is run otherwise the report is going to be wrong because it does not contain all of the data.

Figure 75 shows an example of the co-ordination between periodic scheduling, COL collection times, and run report at date and times to ensure that all data is collected.

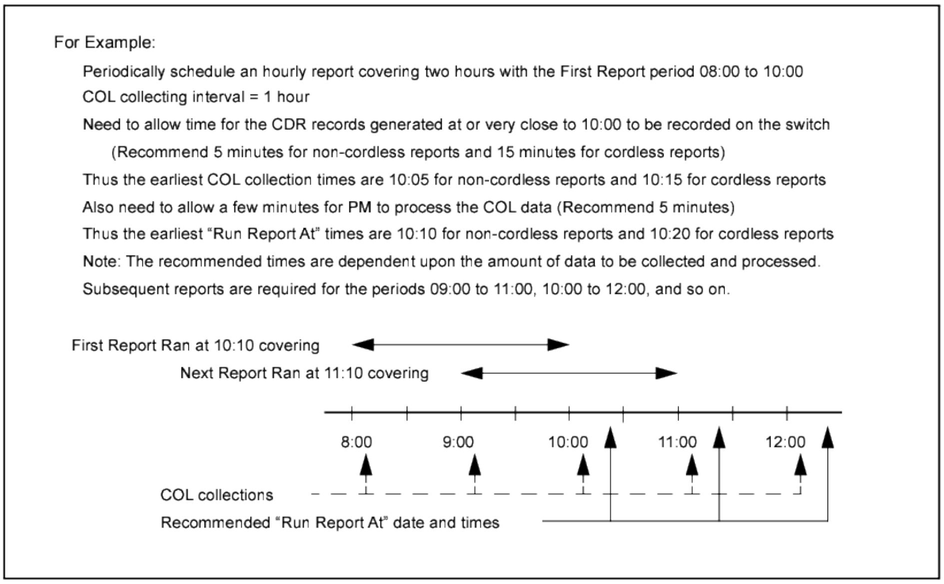


Figure 75: Co-ordination between Periodic Scheduling and Collection Times

The periodic report can be scheduled; hourly, every 2, 3, 4, 6, 8, or 12 hours, daily (every day, on a single day, or on several days of the week), weekly, and monthly (on a particular date in the month, the last day of the month, or the last day minus 1 to 7 days).

To start periodic scheduling, you must select the periodic radio button on the Schedule Report Setup page. The default periodic scheduling is weekly.

Figure 76 shows a screen shot of the Schedule Report Setup page for Periodic Scheduling.

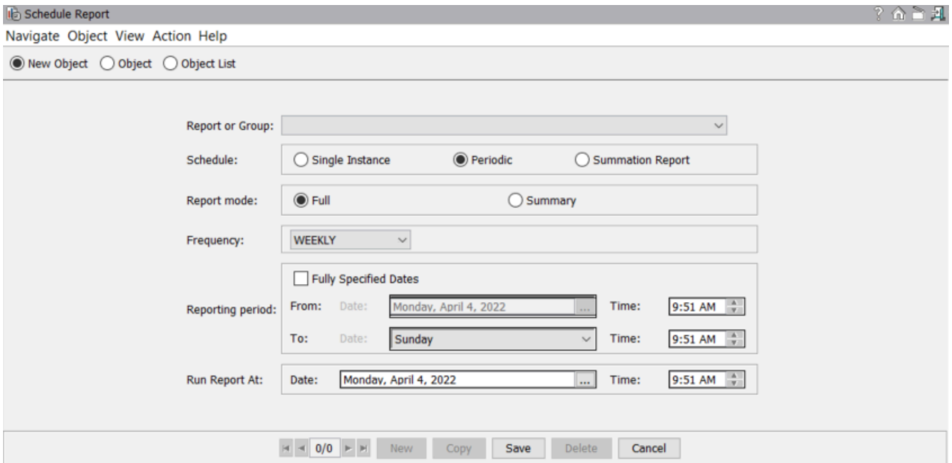


Figure 76: Schedule Report Setup Page - Periodic Schedule

The Schedule Report Setup page for Periodic Scheduling has the following areas:

- The standard header
- A standard view bar t
- A Report or Group selection mechanism which allows you to select a particular Report or Report Group from the drop down list of available Reports and Report Groups.

- A Schedule selection mechanism which allows you to select between single instance and periodic scheduling.
- A Frequency selection mechanism which allows you to define how often the report is scheduled. You can select alternative frequencies from the drop down list of available frequencies.
  - The available frequencies are;
  - Hourly
  - Every n Hours
  - Daily
  - Weekly
  - Monthly.
- A Reporting Period selection mechanism which allows you to define the time the report covers.
- The reporting period is dependent upon the frequency and the "Fully specified dates" checkbox.
- A Run Report At selection mechanism which allows you to set the date and time the first report is run.
- The standard button bar at the foot of the screen containing the following controls:
  - Navigation control that shows the current scheduled report in a "1/3" format with arrow keys that allows you to select the first, next, previous or last scheduled report.
  - **New** button that allows you to define a new scheduled report.
  - **Copy** button that allows an existing scheduled report to be copied and then amended.
  - **Save** button which allows you to add the report to the list of reports that are scheduled to run. When the page is initially displayed, the "Save" button is disabled. The button is enabled when information is selected or entered in each area of the Delete" button that removes the scheduled report from the set of scheduled reports stored in the database.
  - **Cancel** button which allows you to cancel the Schedule Report Setup page and return to the previous page without creating a new scheduled

single instance report or modifying an existing scheduled single instance report.

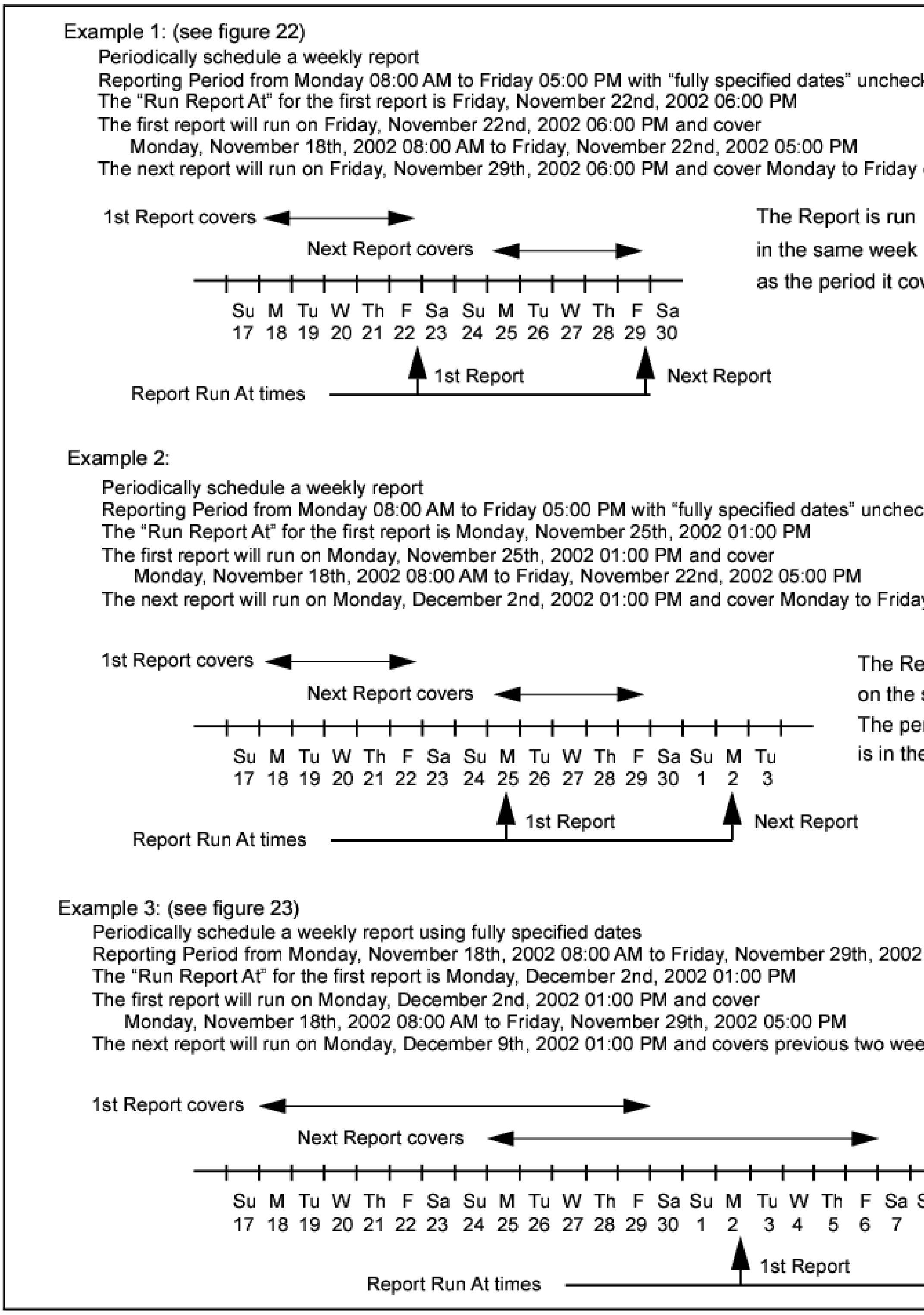


Figure 77: Influence of Run Report At Date and Time on the Reporting Period for Weekly Reports

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Summary Reports

Accessing the Schedule Report Page

3.10.4.1 Schedule Report Setup Page - Periodic Scheduling - Hourly

A report can be scheduled hourly.

Figure 78 and Figure 79 show the Schedule Report Setup page for Hourly Periodic Scheduling, using shortened and fully specified dates, respectively.

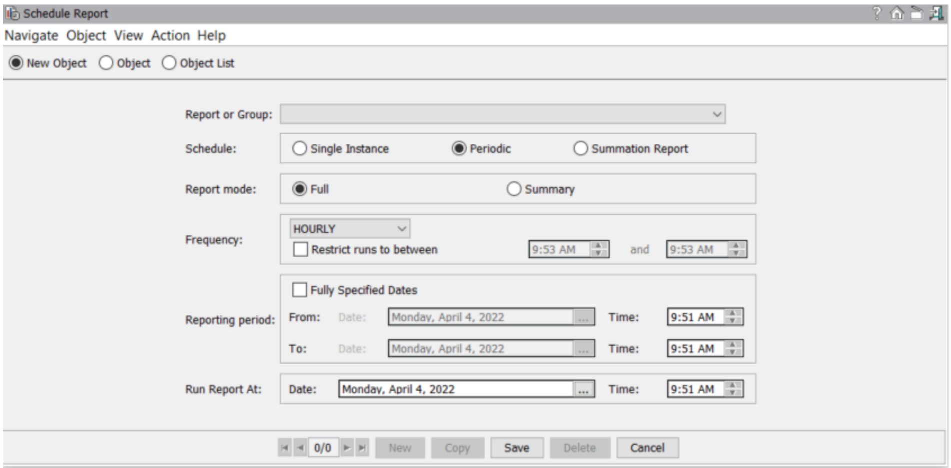


Figure 78: Schedule Report Setup Page - Hourly Periodic Scheduling using Shortened Form

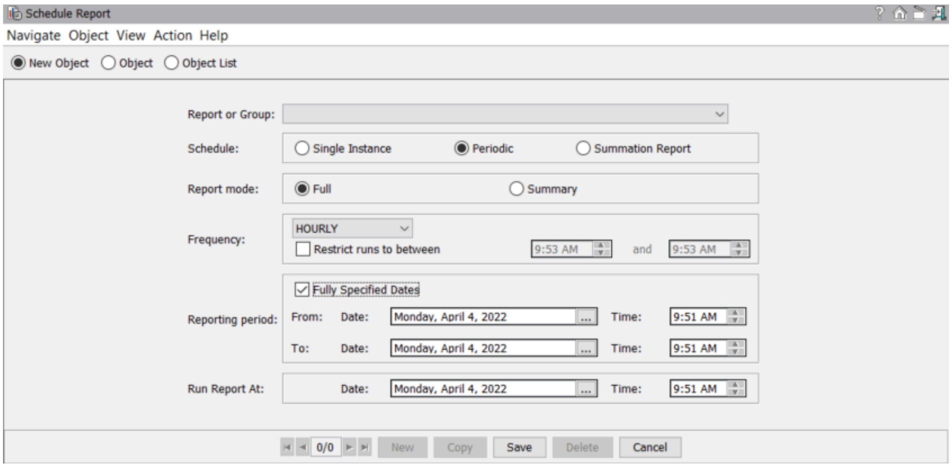


Figure 79: Schedule Report Setup Page - Hourly Periodic Scheduling using Fully Specified Dates

When you select the Hourly option in the Frequency area of the Schedule Report Setup page, the reporting period changes to reflect the hourly selection.

The reporting period for an hourly report with **Fully specified dates** unchecked is **from** and **to** particular times. The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** times must be entered. The **from** time must be earlier than the to time. The default times are the current time on the server. This particular selection mechanism limits the length of the reporting period to a maximum of 24 hours.

The reporting period for an hourly report with **Fully specified dates** checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered. The **from** date and time must be earlier than the **to** date and time. The default values for both the **from** and **to** date and times is the current date and time on the server. This particular selection mechanism does not limit the length of the reporting period.

The **run report at** for an hourly report is a particular date and time.

When the periodic report has been added to the list of reports that are scheduled to run, the first report is run on the specified date at the specified time covering the specified period. Subsequent reports is run an hour later and cover the specified period an hour later.

Usage Examples:

- If a schedule is setup with a reporting period of 08:00 AM to 10:00 AM, **fully specified dates** unchecked, and a **run report at** date and time of Monday, November 11th, 2004 10:30 AM (see Figure 78). The first report runs on Monday, November 11th, 2004 at 10:30 AM and cover Monday, November 11th, 2004 08:00 AM to 10:00 AM. The next report runs an hour later and cover 09:00 AM to 11:00 AM of that day.
- If a schedule is setup with a reporting period of 08:00 AM to 10:00 AM, **fully specified dates** unchecked, and a **run report at** date and time of Monday, November 11th, 2004 09:00 AM. The first report runs on Monday, November 11th, 2002 at 09:00 AM and cover Sunday, November 10th, 2002 08:00 AM to 10:00 AM. The next report runs an hour later and cover 09:00 AM to 11:00 AM of the previous day.
- If a schedule is setup with a reporting period of Monday, November 11th, 2004 08:00 AM to Monday, November 11th, 2002 10:00, **fully specified dates** checked, and a **run report at** date and time of Monday, November 11th, 2002 09:00 AM (see Figure 79). The first report runs on Monday, November 11th, 2002 at 09:00 AM and cover Monday, November 11th, 2002 08:00 AM to 10:00 AM. The next report run san hour later and cover 09:00 AM to 11:00 AM of the same day. This allows collections across time zones.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

3.10.4.2 Schedule Report Setup Page - Periodic Scheduling - Every n Hours

A report can be scheduled every 2, 3, 4, 6, 8, or 12 hours. Figure 80 and Figure 81 show the Schedule Report Setup page for Every n Hours Periodic Scheduling, using shortened and fully specified dates, respectively.

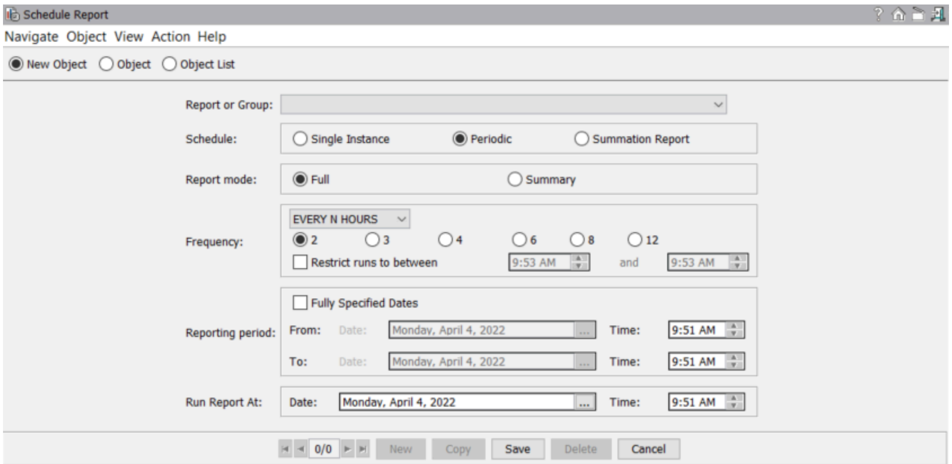


Figure 80: Schedule Report Setup Page - Every n Hours Periodic Scheduling using Shortened Form

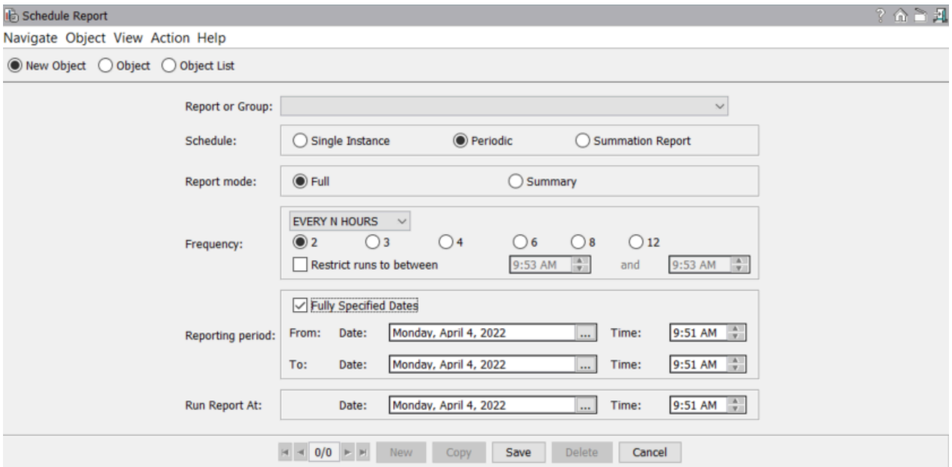


Figure 81: Schedule Report Setup Page - Every n Hours Periodic Scheduling using Fully Specified Dates

When you select the Every n Hours option in the Frequency area of the Schedule Report Setup page, an additional selection mechanism is displayed. It allows you to select between; 2, 3, 4, 6, 8, or 12 hours. The default entry is **2 hours**. The reporting period also changes to reflect the every n hours selection.

The reporting period for an every n hours report with **Fully specified dates** unchecked is **from** and **to** particular times. The times are specified in hours and minutes, AM and PM (that is 00:00 AM to 00:00 AM). The **from** and **to** times must be entered. The **from** time must be earlier than the **to** time. The default times are the current time on the server. This particular selection mechanism limits the length of the reporting period to a maximum of 24 hours.

The reporting period for an every n hours report with **Fully specified dates** checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered. The **from** date and time must be earlier than the **to** date and time. The default values for both the **from** and **to** date and times is the current date and time on the server. This particular selection mechanism does not limit the length of the reporting period.

The **run report at** for an every n hours report is a particular date and time.

When the periodic report has been added to the list of reports that are scheduled to run, the first report is on the specified date at the specified time covering the specified period. Subsequent reports run n hours later and cover the specified period n hours later.

Usage Examples:

- If a schedule is setup with a reporting period of 08:00 AM to 10:00 AM, **fully specified dates** unchecked, every 2 hours, and a **run report at** date and time of Monday, November 11th, 2002 10:30 AM (see Figure 80). The first report runs on Monday, November 11th, 2002 at 10:30 AM and cover Monday, November 11th, 2002 08:00 AM to 10:00 AM. The next report runs two hours later and cover 10:00 AM to 12:00 PM of that day.
- If a schedule is setup with a reporting period of 08:00 AM to 10:00 AM, fully specified dates unchecked, every 2 hours, and a **run report at** date and time of Monday, November 11th, 2002 09:00 AM. The first report runs on Monday, November 11th, 2002 at 09:00 AM and cover Sunday, November 10th, 2002

08:00 AM to 10:00 AM. The next report runs two hours later and cover 10:00 AM to 12:00 PM of the previous day.

- If a schedule is setup with a reporting period of Monday, November 11th, 2002 08:00 AM to Monday, November 11th, 2002 10:00, **fully specified dates** checked, every 2 hours, and a **run report at** date and time of Monday, November 11th, 2002 09:00 AM (see Figure 81). The first report runs on Monday, November 11th, 2002 at 09:00 AM and cover Monday, November 11th, 2002 08:00 AM to 10:00 AM. The next report runs two hours later and cover 10:00 AM to 12:00 AM of the same day. This allows collections across time zones.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Periodic Scheduling - Hourly

Schedule Report Setup Page - Periodic Scheduling - Daily

Schedule Report Setup Page - Periodic Scheduling - Weekly

Schedule Report Setup Page - Periodic Scheduling - Monthly

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summary Reports

Accessing the Schedule Report Page

3.10.4.3 Schedule Report Setup Page - Periodic Scheduling - Daily

A report can be scheduled daily (every day, on a single day, or on several days of the week).

Figure 82 and Figure 83 show the Schedule Report Setup page for Daily Periodic Scheduling, using shortened and fully specified dates, respectively.

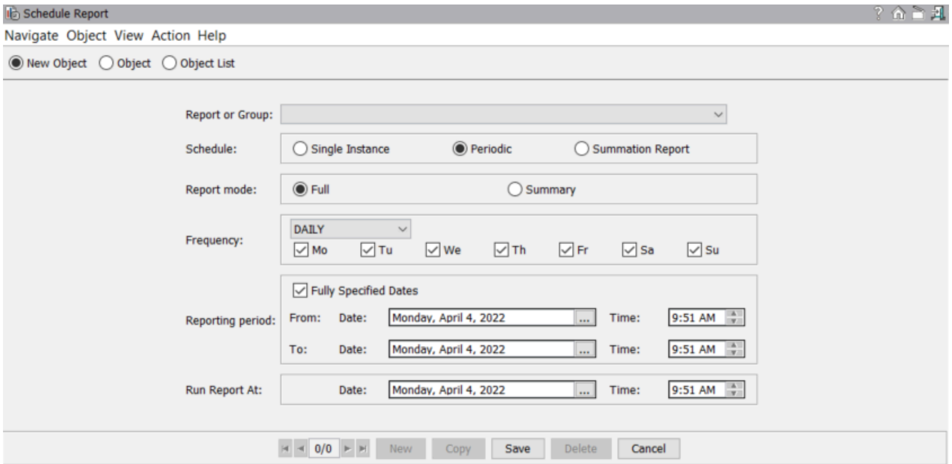


Figure 82: Schedule Report Setup Page - Daily Periodic Scheduling using Shortened Form

When you select the Daily option in the Frequency area of the Schedule Report Setup page, an additional selection mechanism is displayed. It allows you to select the days of the week on which the report is run. The default entry is all days selected. The reporting period also changes to reflect the daily selection.

The reporting period for a daily report with **Fully specified dates** unchecked is **from** and **to** particular times. The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** times must be entered. The **from** time must be earlier than the **to** time. The default times are the current time on the server. This particular selection mechanism limits the length of the reporting period to a maximum of 24 hours.

The reporting period for a daily report with **Fully specified dates** checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered. The **from** date and time must be earlier than the **to** date and time. The default values for both the **from** and **to** date and times is the current date and time on the server. This particular selection mechanism does not limit the length of the reporting period.

The **run report at** for a daily report is a particular date and time.

When the periodic report has been added to the list of reports that are scheduled to run, the first report runs on the specified date at the specified time covering the specified period providing the specified date is on a selected day. Subsequent reports run on the next selected day and cover the specified period appropriate to that day.

Usage Examples:

- If a schedule is setup with a reporting period of 08:00 AM to 05:00 PM, **fully specified dates** unchecked, daily with every day selected, and a **run report**

at date and time of Friday, November 22nd, 2002 06:00 PM (see Figure 82). The first report runs on Friday, November 22nd, 2002 at 06:00 PM and cover Friday, November 22nd, 2002 08:00 AM to 05:00 PM. The next report runs on Saturday, November 23rd, 2002 and cover 08:00 AM to 05:00 PM of that day.

- If a schedule is setup with a reporting period of 08:00 AM to 05:00 PM, **fully specified dates** unchecked, daily with every day selected, and a **run report at** date and time of Monday, November 11th, 2002 01:00 PM. The first report runs on Monday, November 11th, 2002 at 01:00 PM and cover Sunday, November 10th, 08:00 AM to 05:00 PM. The next report runs on Tuesday, November 12th, 2002 and cover 08:00 AM to 05:00 PM of the previous day.
- If an schedule is setup with a reporting period of 08:00 AM to 05:00 PM, **fully specified dates** unchecked, daily with Monday, Tuesday, Wednesday, Thursday, and Friday selected, and a **run report at** date and time of Monday, November 11th, 2002 01:00 PM. The first report runs on Monday, November 11th, 2002 at 01:00 PM and cover Friday, November 8th, 08:00 AM to 05:00 PM. The next report runs on Tuesday, November 12th, 2002 and cover 08:00 AM to 05:00 PM of the previous day.
- If a schedule is setup with a reporting period of Monday, November 11th, 2002 08:00 AM to Monday, November 11th, 05:00 PM, **fully specified dates** checked, daily with Monday, Tuesday, Wednesday, Thursday, and Friday selected, and a **run report at** date and time of Monday, November 11th, 2002 01:00 PM (see Figure 83). The first report runs on Monday, November 11th, 2002 at 01:00 PM and cover Monday, November 11th, 2002 08:00 AM to 05:00 PM. The next report runs on Tuesday, November 12th, 2002 and cover 08:00 AM to 05:00 PM of the same day. This allows collections across time zones.

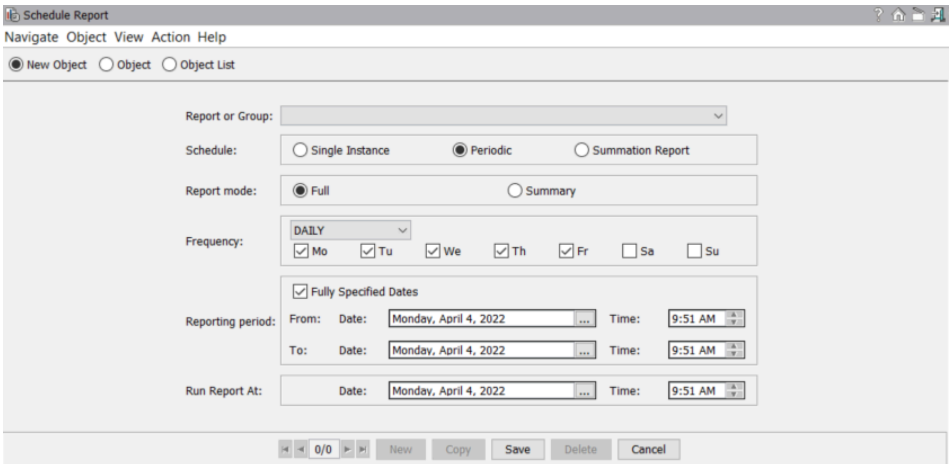


Figure 83: Schedule Report Setup Page - Daily Periodic Scheduling using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Periodic Scheduling - Hourly

Schedule Report Setup Page - Periodic Scheduling - Every n Hours

Schedule Report Setup Page - Periodic Scheduling - Weekly

Schedule Report Setup Page - Periodic Scheduling - Monthly

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summary Reports

Accessing the Schedule Report Page

3.10.4.4 Schedule Report Setup Page - Periodic Scheduling - Weekly

A report can be scheduled weekly.

Figure 84 and Figure 85 show the Schedule Report Setup page for Weekly Periodic Scheduling, using shortened and fully specified dates, respectively.

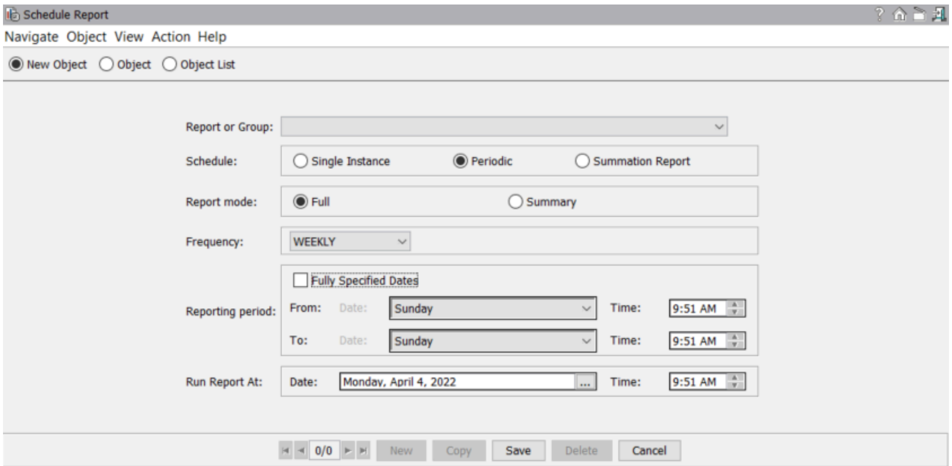


Figure 84: Schedule Report Setup Page - Weekly Periodic Scheduling using Shortened Form

When you select the Weekly option in the Frequency area of the Schedule Report Setup page, the reporting period changes to reflect the weekly selection.

The reporting period for a weekly report with **Fully specified dates** unchecked is **from** and **to** particular days and times. The days are selected from a drop down list of the available days (that is, Sunday to Saturday). The times are specified in hours and minutes, AM and PM (that is. 00:00 AM to 00:00 AM). The **from** and **to** days and times must be entered. The default days are Sunday. The default times are the current time on the server. This particular selection mechanism limits the length of the reporting period to a maximum of seven days.

The reporting period for a daily report with **Fully specified dates** checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered. The **from** date and time must be earlier than the **to** date and time. The default values for both the **from** and **to** date and times is the current date and time on the server. This particular selection mechanism does not limit the length of the reporting period.

The **run report at** for a daily report is a particular date and time.

When the periodic report has been added to the list of reports that are scheduled to run, the first report runs on the specified date at the specified time covering the specified period. Subsequent reports run a week later and cover the specified period a week later.

Usage Examples:

- If a schedule is setup with a reporting period of Monday 08:00 AM to Friday 05:00 PM, **fully specified dates** unchecked, and a **run report at** date and time of Friday, November 22nd, 2002 06:00 PM (see Figure 84). The first report runs on Friday, November 22nd, 2002 at 06:00 PM and cover Monday, November 18th, 2002 08:00 AM to Friday, November 22nd, 2002 at 05:00 PM. The next report runs a week later and cover Monday to Friday of that week.
- If a schedule is setup with a reporting period of Monday, November 18th, 2002 08:00 AM to Friday, November 29th, 2002 05:00PM, **fully specified dates** checked, and a **run report at** date and time of Monday, December 2nd, 2002 01:00 PM (see Figure 85). The first report runs on Monday,

December 2nd, 2002 at 01:00 PM and cover Monday, November 18th, 2002 08:00 AM to Friday, November 29th, 2002 05:00PM. The next report runs a week later and cover the previous two weeks.

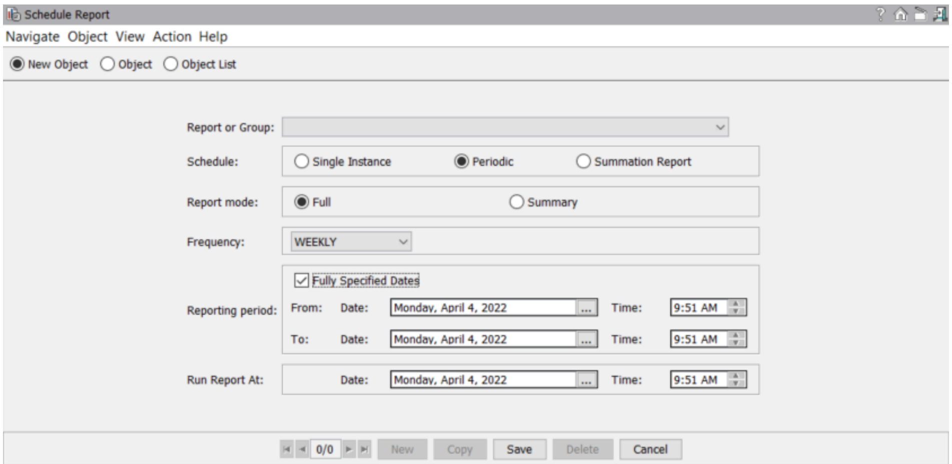


Figure 85: Schedule Report Setup Page - Weekly Periodic Scheduling using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Periodic Scheduling - Hourly

Schedule Report Setup Page - Periodic Scheduling - Every n Hours

Schedule Report Setup Page - Periodic Scheduling - Daily

Schedule Report Setup Page - Periodic Scheduling - Monthly

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summary Reports

Accessing the Schedule Report Page

3.10.4.5 Schedule Report Setup Page - Periodic Scheduling - Monthly

A report can be scheduled monthly (on a particular date in the month, the last day of the month, or the last day minus 1 to 7 days).

Figure 86 and Figure 87 show the Schedule Report Setup page for Monthly Periodic Scheduling, using shortened and fully specified dates.

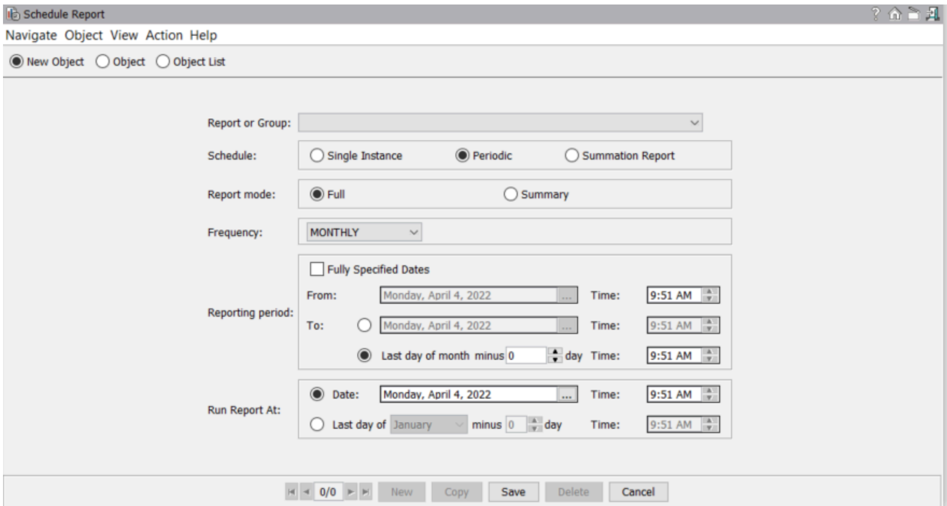


Figure 86: Schedule Report Setup Page - Monthly Periodic Scheduling using Shortened Form

When you select the Monthly option in the Frequency area of the Schedule Report Setup page, the reporting period and "run report at" change to reflect the monthly selection.

The reporting period for a monthly report with **Fully specified dates** unchecked is **from** a particular date and time **to** either a particular date and time or the last day of the month minus 0 to 7 days. The dates are selected from a drop down list of the available dates for the current month on the server (that is, 1st to 28th/29th, 1st to 30th, or 1st to 31st). The times are specified in hours and minutes, AM and PM (00:00 AM to 00:00 AM). The **from** and **to** dates and times must be entered. The default dates are the current date on the server. The default times are the current time on the server. The default choice for **to** is the current date on the server. This particular selection mechanism limits the length of the reporting period to a maximum of one calendar month.

The reporting period for a monthly report with **Fully specified dates** checked is **from** a particular date and time **to** either a particular date and time or the last day of the month minus 0 to 7 days. The dates are selected from a calendar.

The times are specified in hours and minutes, AM and PM (00:00 AM to 00:00 AM). The **from** and **to** dates and times must be entered. The default dates are the current date on the server. The default times are the current time on the server. This particular selection mechanism does not limit the length of the reporting period.

The r**un report at** for a monthly report is either a particular date and time or the last day of a particular month minus 0 to 7 days. The month is selected from a drop down list of available months (that is, January to December). The default month is the current month on the server. The default choice for **run report at** is the current date on the server.

The **reporting period - last day of month** and **run report at - last day of month** both have an additional spin control to select the number of days before the end of the month. The range is between 0 and 7 days with a default value of 0 days.

When the periodic report has been added to the list of reports that are scheduled to run, the first report runs on the specified date at the specified time covering the specified period. Subsequent reports run a month later on the same (or relative) date in the month and cover the specified period in the subsequent month.

Usage Examples:

- If a schedule is setup with reporting period of 1st at 08:00 AM to 20th at 05:00 PM, **fully specified dates** unchecked, and a **run report at** date and time of Monday, December 2nd, 2002 09:00 AM (see Figure 86). The first report run on Monday, December 2nd, 2002 at 09:00 AM and cover part of November from the 1st at 08:00 AM to the 20th at 05:00 PM. The next report runs on Thursday, January 2nd, 2003 and cover part of December from the 1st at 08:00 AM to the 20th at 05:00 PM.
- If a schedule is setup with reporting period of 1st at 08:00 AM to last day of month minus 0 days at 05:00 PM, f**ully specified dates** unchecked, and a **run report at** date and time of Monday, December 2nd, 2002 09:00 AM. The first report runs on Monday, December 2nd, 2002 at 09:00 AM and cover the whole of November from the 1st at 08:00 AM to the 30th at 05:00 PM. The next report runs on Thursday, January 2nd, 2003 and cover the whole of December from the 1st at 08:00 AM to the 31st at 05:00 PM.
- If a schedule is setup with reporting period of 1st at 08:00 AM to last day of month minus 0 days at 05:00 PM, f**ully specified dates** unchecked, and a **run report at** date and time of last day of November minus 0 days 06:00 PM. The first report runs on Saturday, November 30th, 2002 at 06:00 PM and cover the whole of November from the 1st at 08:00 AM to the 30th at 05:00 PM. The next report runs on Tuesday, December 31st, 2002 and cover the whole of December from the 1st at 08:00 AM to the 31st at 05:00 PM.
- If a schedule is setup with reporting period of 1st at 08:00 AM to last day of month minus 1 day at 05:00 PM, **fully specified dates** unchecked, and a **run report at** date and time of Monday, December 2nd, 2002 09:00 AM. The first report runs on Monday, December 2nd, 2002 at 09:00 AM and cover most of November from the 1st at 08:00 AM to the 29th at 05:00 PM. The next report runs on Thursday, January 2nd, 2003 and cover most of December from the 1st at 08:00 AM to the 30th at 05:00 PM.
- If a monthly report is set up on the 2nd of each month, with the reporting period of Monday, September 23rd, 2002 at 09:00 AM to Friday, November 22nd, 2002 at 05:00 PM, and **fully specified dates** checked. The first report runs on Monday, December 2nd, 2002 at 06:00 PM and covers Monday,

September 23rd, 2002 09:00 AM to Friday, November 22nd, 2002 05:00 PM. The next report runs a month later on Monday, January 2nd, 2003 at 09:00 AM and covers Wednesday, October 23rd, 2002 09:00 AM to Sunday, December 22nd, 2002 05:00 PM.

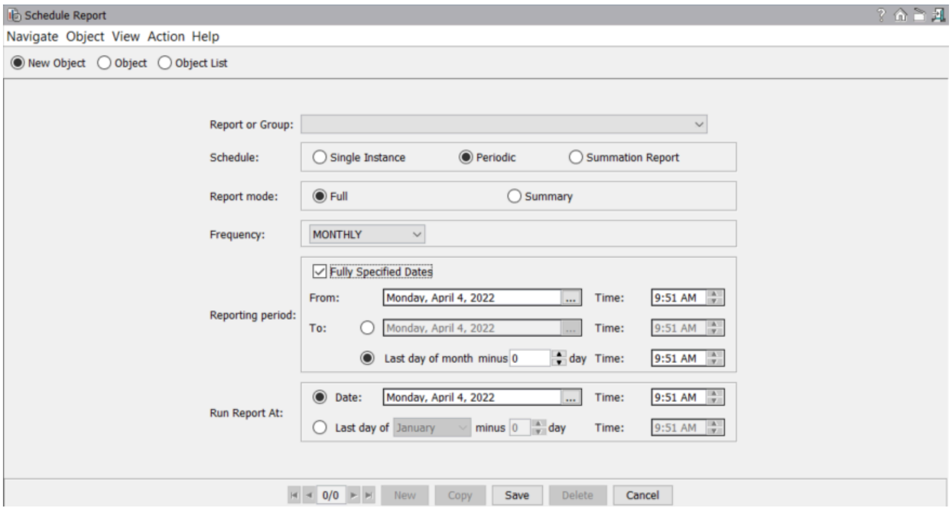


Figure 87: Schedule Report Setup Page - Monthly Periodic Scheduling using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Periodic Scheduling - Hourly

3.10.5 Schedule Report Setup Page - Object View for Summation

The Schedule Report Setup (object view) page allows you to schedule an advanced report or report group to run as single instance or periodically at a particular date in the future. The Schedule Report Setup (object view) page have been enhanced to include summation.

The periodic report can be scheduled; hourly, every 2, 3, 4, 6, 8, or 12 hours, daily (every day, on a single day, or on several days of the week), weekly, and monthly (on a particular date in the month, the last day of the month, or the last day minus 1 to 7 days). The periodic report can be output in full or summary mode. The updates for the summation reports can be scheduled; hourly, every 2, 3, 4, 6, 8, or 12 hours, and daily (every day, on a single day, or on several days of the week). The summation reports may be compressed by using larger scale intervals; 15 or 30 minutes, 1, 2, 4, 6, 8, or 12 hours, 1 day, 1 week, or 1 calendar month.

There are two forms of Summation:

- Accumulated (see Figure 88) - The results from subsequent scheduled runs of the same report are summed or averaged across the same cell of each result into a new summation report. With an additional parameter setting the scale interval can be set to a greater interval so that the summation report is compressed. When compression is switched on, summation reports have reduced number of rows and greater scale interval. The results (also termed *intermediate results*) are unaffected.

NOTICE: Accumulated summation could be achieved by post-processing the appended summation reports. However, the file size of the appended summation reports is going to be greater than the accumulated summation reports.

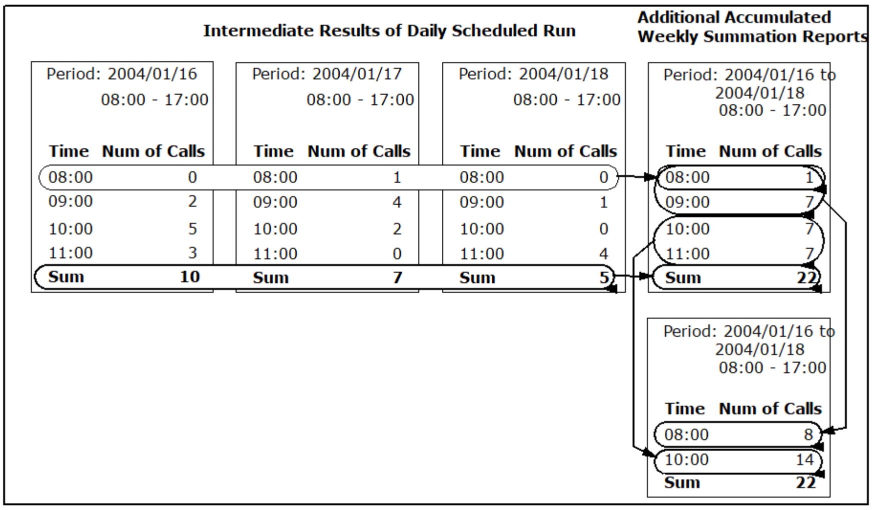


Figure 88: Accumulated Summation of Scheduled Results

- Appended (see Figure 89) - The results from subsequent scheduled runs of the same report are appended into a new summation report. The new summation report contains all of the traffic data from the intermediate results in date and time order. The same additional parameter, as described above, can be applied to reduce the size of the summation report.

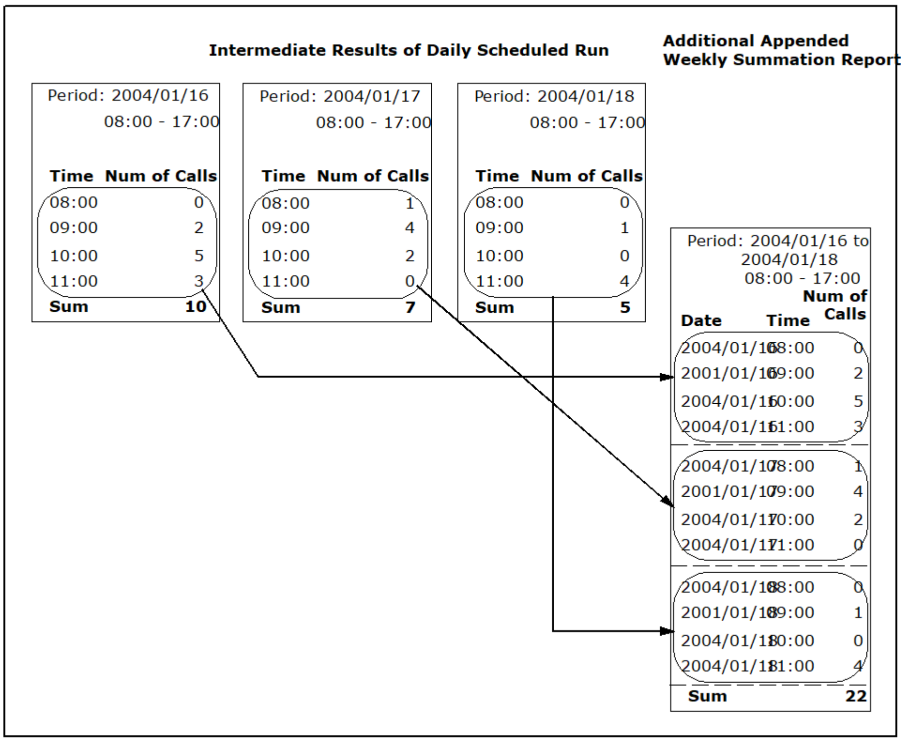


Figure 89: Appended Summation of Scheduled Results

The summation enhancements allow you to produce daily, weekly, monthly, and quarterly accumulated and appended summation reports or report groups, with or without compression, in which the data is accumulated or appended every hour, n hours, or daily.

The Schedule Report Setup (object view) page has been enhanced as follows:

- A new Schedule option labeled **Summation** that allows you to define the summation reports and the associated schedule.
- Whenever you select the **Schedule Summation** option, two new tabs, **Define Summation** and **Define Schedule** are displayed. The Define Summation tab (refer to Section 3.10.7) has the additional selection mechanisms required to define daily, weekly, monthly, and quarterly accumulated and appended summation reports. The Define Schedule tab has the existing frequency, reporting period, run report at selection mechanisms to set up the hourly, every n hours, or daily scheduled updates to the summation reports.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Summation Report

Define Summation Tab

Summary Reports

Accessing the Schedule Report Page

3.10.6 Summation Report

This feature use the periodic report results to do a summation of the existing report results. From Version 2.0, all reports run on the PM raw data in PM database. The Summation Report run on the result of the reports. The summation report also allows you to run reports faster by compressing the data.

The Summation report can be run in two ways

- Horizontal
- With horizontal summation, the results of the daily scheduled report are summed up or averaged on the right side of the web page. If the scale

interval is set to a greater interval, the report is compressed or stacked under the Additional Summation Reports column.

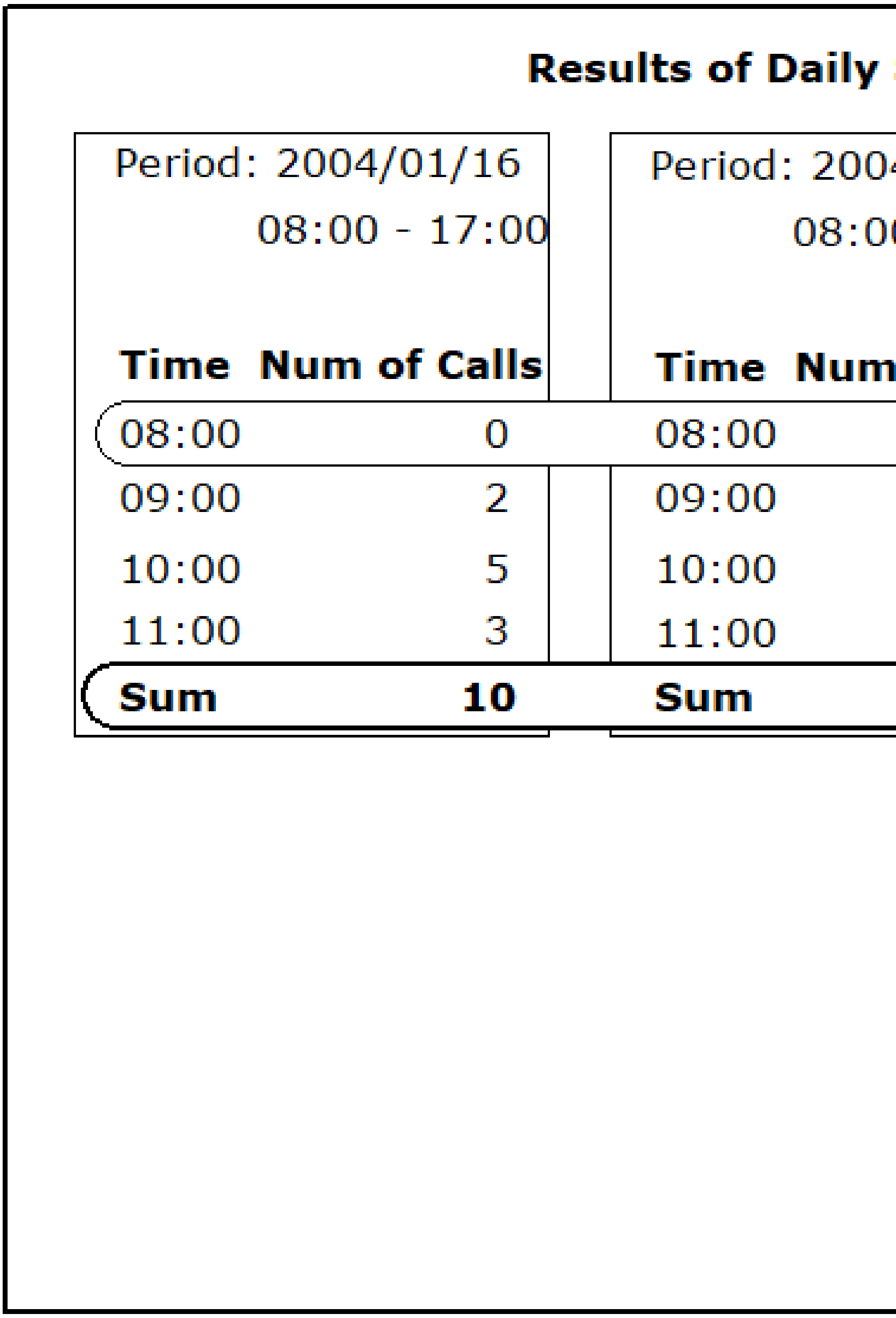


Figure 90: Accumulated Summation of Scheduled Results

- Vertical
- With vertical summation, the individual results of the daily scheduled report are summed up in one new report. If the scale interval is set to a greater interval, the report is compressed. When compression is switched on,

the number of rows are reduced and the new report show a greater scale interval.

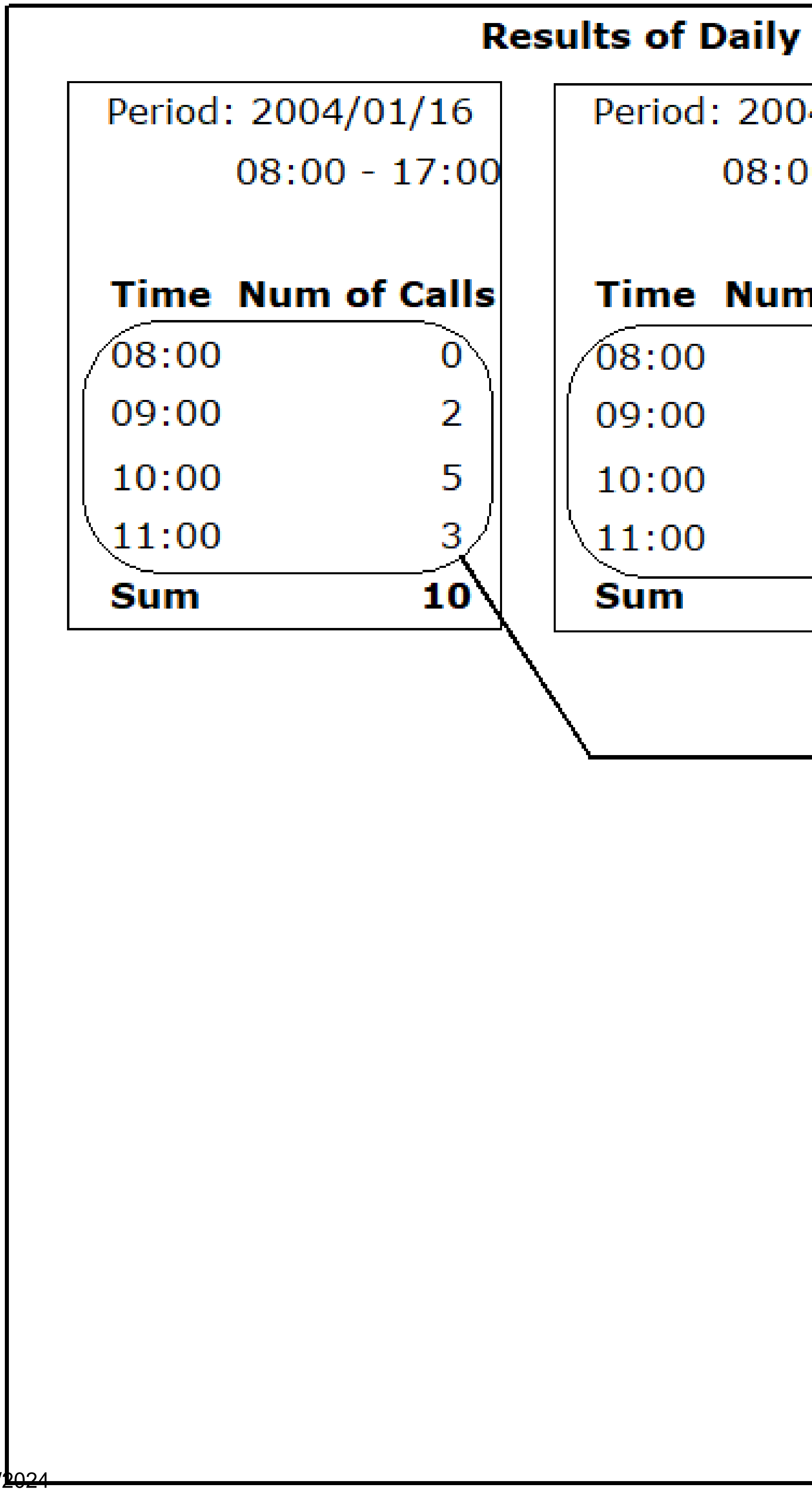


Figure 91: Appended Summation of Scheduled Results

Important Notes:

– The summation can be done daily, weekly, monthly and quarterly for periodic reports or report groups with or without compression depending on the set frequency. For example if the frequency of the periodic report is set to hourly the summation can only be done for daily, weekly, monthly or quarterly.
– The different values for the compression are 15 min, 30 min, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, 2 days, 4 days, 1 week, 2 weeks, 1 month
– If there is a problem with some of the periodic report results, you can recalculate the existing report result. The application asks you if you want to replace the existing report periodic report result. The recalculated report result is not replaced automatically because it takes a little time to delete the existing metering data for the previous reporting period. Once you accept the recalculation the summation report is updated.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports, page 164

Schedule Report Setup Page - Smaller Periodic Frequencies, page 167

Single Instance Scheduling, page 169

Periodic Scheduling, page 173

Schedule Report Setup Page - Object View for Summation, page 200

Define Summation Tab, page 208

Summary Reports, page 230

Accessing the Schedule Report Page, page 232

3.10.7 Define Summation Tab

Periodic scheduled reports may be summed on a daily, weekly, monthly, and quarterly basis.

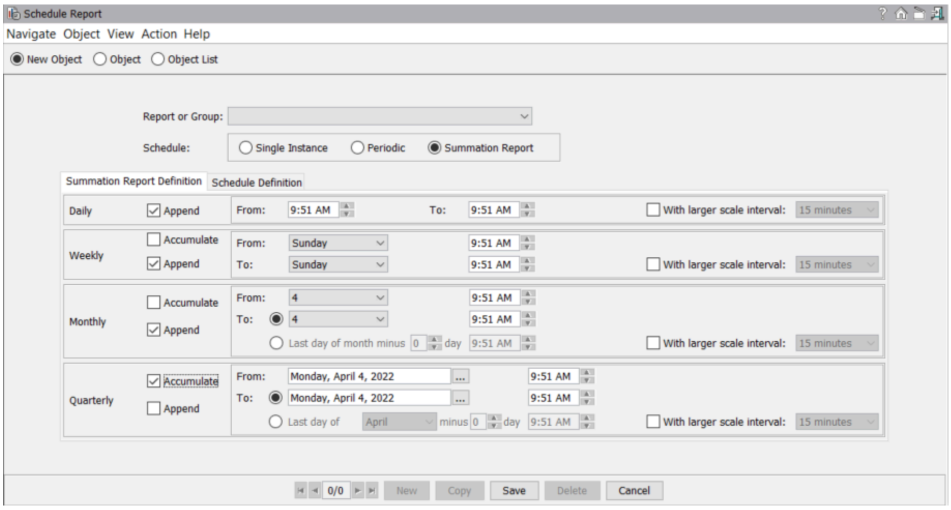


Figure 92: Schedule Report Page - Define Summation Tab

The Define Summation Tab has the following areas:

- A daily selection mechanism which allows you to set up the daily appended summation reports. You can define the period and larger scale interval for the summation reports. The period is mandatory and the larger scale interval is optional.

  The period for daily appended summation reports is **from** and **to** particular times. The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** times must be entered. The **from** time must be earlier than the **to** time. The default times are the current times on the server.

  The different values for the larger scale intervals are 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, and 1 day.

  The daily period and larger scale interval selection mechanisms are grayed out when the daily **Append** check box is unchecked. They are only enabled when the daily check box is checked. The drop down list of available scale intervals is only enabled when the associated checkbox is checked.

  When the **Fully specified dates** checkbox on the Define Schedule tab is unchecked, the full dates and times that define the Daily summation period are stored as, the current date on the server appended by the **From /To** time configured by you, When **Fully Specified Dates** is checked the full dates and times that are stored for the Daily Summation period are, fully specified date from the Schedule definition tab appended by the **From / To** time defined in the Daily summation period definition. When **Fully Specified Dates** is checked and the dates for the Daily summation are not the current date a dialog box is displayed (see Figure 92) when Save is pressed asking you to confirm the summation period.

```
Example:
Current Date is Tuesday, December 7th 2004
Daily Period From: 8:00 AM To: 6:00 PM
```

If you leave **Fully Specified Dates** unchecked on the Schedule Definition tab the Daily summation period is stored as:

```
From: Tuesday December 7th 2004 8:00 AM To: Tuesday,
 December
7th 2004 6:00PM
```

If you leave **Fully Specified Dates** checked and the From and To dates within the Schedule Definition set for Tuesday, 14th January 2005 the Daily summation period is set as:

From: Tuesday, 14th December 2004 8:00 AM To: Tuesday, 14th December 2004 6:00 PM

You can specify a daily period that runs over a day boundary that is, the **To** time of the day is earlier than the From time of the day (for example, From 5:00PM To 4:45PM). You must check the **Fully Specified Dates** checkbox on the Schedule Definition tab. When you press the **Save** button the **To** date is automatically rolled forward by a day to span the boundary. If the **Fully Specified Dates** checkbox is not checked the validation rules gives an error stating that the daily **To** time is before the **From** time.

- A weekly selection mechanism which allows you to set up the weekly accumulated and appended summation reports. You can define the period and larger scale interval for the summation reports. The **period** is mandatory and the larger scale interval is optional. Both weekly summation reports have the same period and larger scale interval.

  The period for weekly summation reports is **from** and **to** particular day and times.

  When you leave the **Fully specified dates** checkbox on the Define Schedule tab unchecked, the full dates and times that define the Weekly summation period are stored as, the dates of the given **From** and **To** days within the current week appended by the **From / To** time that you configured, W

  When you check **Fully Specified Dates**, the full dates and times that are stored for the Weekly Summation period are, the dates of the given days within the week defined in the Schedule Definition appended by the **From / To** time defined in the Weekly summation period definition. Also, when **Fully Specified Dates** is checked and the dates for the Weekly summation are not within the current week a dialog box is displayed (see Figure 92) when **Save** is pressed asking you to confirm the summation period.

```
Example:
Current Date is Tuesday, December 7th 2004
Weekly Period From: Monday 8:00 AM To: Friday 6:00 PM
```

  If **Fully Specified Dates** is unchecked on the Schedule Definition tab the Weekly summation period is stored as:

```
From: Monday December 6th 2004 8:00 AM To: Friday,
 December
```

```
10th 2004 6:00 PM
```

If you check **Fully Specified Dates** and the From and To dates within the Schedule Definition is set for Tuesday, 14th January 2005, the Weekly summation period is set as:

```
From: Monday, 13th December 2004 8:00 AM To: Friday,
 17th
December 2004 6:00PM
```

You can specify a weekly period that runs over a week boundary that is, the **To** day of the week is before the From day of the week (for example, From Wednesday To Tuesday). Check the **Fully Specified Dates** checkbox on the Schedule Definition tab. When you press the **Save** button the **To** date is automatically rolled forward by one week to create a summation period that spans the week boundary. If you do not check the **Fully Specified Dates** checkbox, the validation rules provides an error stating that the weekly **To** date is before the **From** date.

The **from** date must be earlier than the **to** date. The default days are Sunday. The default dates are the current date on the server.

The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The **from** and **to** days and times must be entered. The **from** time must be earlier than the **to** time. The default times are the current time on the server.

The period (that is, the number of days between the **from** and **to** days) must be less than or equal to 7 days.

The different values for the larger scale intervals are 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, and 1 week.

The weekly period and larger scale interval selection mechanisms are greyed out when the weekly **Accumulate** and **Append** check boxes are both unchecked. They are only enabled when either or both weekly check boxes are checked. The drop down list of available scale intervals is only enabled when the associated checkbox is checked.

- A monthly selection mechanism which allows you to set up monthly accumulated and appended summation reports. You can define the period and larger scale interval for the summation reports. The period is mandatory and the larger scale interval is optional. Both monthly summation reports have the same period and larger scale interval.

  The period for monthly summation reports is **from** a particular date and time **to** either a particular date and time or the last day of the month minus 0 to 7 days and a particular time. The default choice for **to** is the particular date.

  When you leave the **Fully specified dates** checkbox on the Define Schedule tab unchecked, the full dates and times that define the Monthly summation period are stored as, the dates of the given **From** and **To** days within the current month appended by the **From / To** time that you configured When you check **Fully Specified Dates**, the full dates and times that are stored for the Monthly Summation period are, the dates of the given days within the month defined in the Schedule Definition appended by the **From / To** time defined in the Monthly summation period definition. When **Fully Specified Dates** is checked and the dates for the Monthly summation are not within the current month a dialog box is displayed (see Figure 92) when **Save** is pressed asking you to confirm the summation period.

```
Example:
Current Date is Tuesday, December 7th 2004
Monthly Period From: 1st 8:00 AM To: 30th 6:00 PM
```

With you leave the **Fully Specified Dates** unchecked on the Schedule Definition tab the Monthly summation period is stored as:

```
From: Wednesday December 1st 2004 To: Tuesday, December
 30th
2004
```

With you check **Fully Specified Dates** and the **From** and **To** dates within the schedule Definition set for Saturday, 1st January 2005 the Monthly summation period is set as:

```
From: Saturday, 1st January 2005 8:00 AM To: Sunday,
 30th
January 2005 6:00 PM
```

You can specify a monthly period that runs over a month boundary that is, the **To** day of the month is before the From day of the month (for example. From 15th To 14th). Check the **Fully Specified Dates** checkbox on the Schedule Definition tab must be checked. When you press the **Save** button the **To** date is automatically rolled forward by one month to create a summation period that spans the month boundary. If the **Fully Specified Dates** checkbox is not checked the validation rules provides an error stating that the monthly **To** date is before the **From** date.

The **from** and **to** dates must be entered. The **from** date must be earlier than the **to** date. The default dates are the current date on the server.

There is an additional spin control to select the number of days before the end of the month selected in **Run Report At** on the Define Schedule tab. The range is between 0 and 7 days with a default value of 0 days.

The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The from and to days and times must be entered. The **from** time must be earlier than the **to** time. The default times are the current time on the server.

The period between the **from** and **to** dates must be less than or equal to one calendar month.

The different values for the larger scale intervals are 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, 1 week, and 1 calendar month.

The monthly period and larger scale interval selection mechanisms are greyed out when the monthly **Accumulate** and **Append** check boxes are both unchecked. They are only enabled when either or both monthly check boxes are checked. The drop down list of available scale intervals is only enabled when the associated checkbox is checked.

- A quarterly selection mechanism which allows you to set up quarterly accumulated and appended summation reports. You can define the period and larger scale interval for the summation reports. The period is mandatory and the larger scale interval is optional. Both quarterly summation reports have the same period and larger scale interval.

  The period for quarterly summation reports is **from** a particular date and time **to** either a particular date and time or the last day of a particular month minus 0 to 7 days and a particular time. The default choice for to is the particular date.

The dates are defined using full dates that is, day, month, and year) selected from a calendar. The default dates are the current date on the server. The **to** month may be selected from a drop down list of available months (that is January to December). The default month is the current month on the server. The **from** and **to** dates must be entered. The from date must be earlier than the **to** date.

There is an additional spin control to select the number of days before the end of the selected month. The range is between 0 and 7 days with a default value of 0 days.

The period between the from and to dates must be less than or equal to three calendar months.

The times are specified in hours and minutes, AM and PM (that is,00:00 AM to 00:00 AM). The **from** and **to** days and times must be entered. The **from** time must be earlier than the to time. The default times are the current time on the server.

The different values for the larger scale intervals are 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, 1 week, and 1 calendar month.

The quarterly period and larger scale interval selection mechanisms are greyed out when the quarterly **Accumulate** and **Append** check boxes are both unchecked. They are only enabled when either or both quarterly check boxes are checked. The drop down list of available scale intervals is only enabled when the associated checkbox is checked.

Important Notes:

- You must define the summation and the associated schedule.
- You can define up to 7 summation reports for one associated schedule in the Define Summation tab.
- There are interactions between the summation periods and the associated scheduled frequency, reporting period, and **Run Report At** as follows:
  - The initial reporting period **from** date and time should be the same as the summation period **from** date and time. If it is later, the summation reports contains timed entries with zero values. If it is earlier, the intermediate results is not included in the summation reports.
  - With daily scheduled updates, the reporting period **from** and **to** times should be the same as the summation period **from** and **to** times otherwise, the summation reports may contain timed entries with zero values or the results is not included in the summation reports.
  - The schedule for the intermediate results must not contain overlapping times otherwise the summation reports contain meaningless data (see Figure 89).
- When the **Save** button is pressed, consistency checks are performed between the summation periods and the associated schedule frequency, reporting period, and Run Report At. If there are any overlaps, a dialog is displayed informing you and requesting their correction. If there are any inconsistencies, a warning dialog is displayed informing you that the summation reports may contain zero values or missing results and requesting user confirmation to proceed with the saving of the reports.
- If fully specified dates is checked for the **Reporting period** in the **Define Schedule** tab, they are also used for the daily, weekly and monthly

summation periods in the **Define Summation** tab. If the fully specified date is anything other than the current date the following dialog box (see Figure 93) is displayed to you to confirm with you the periods that are set.

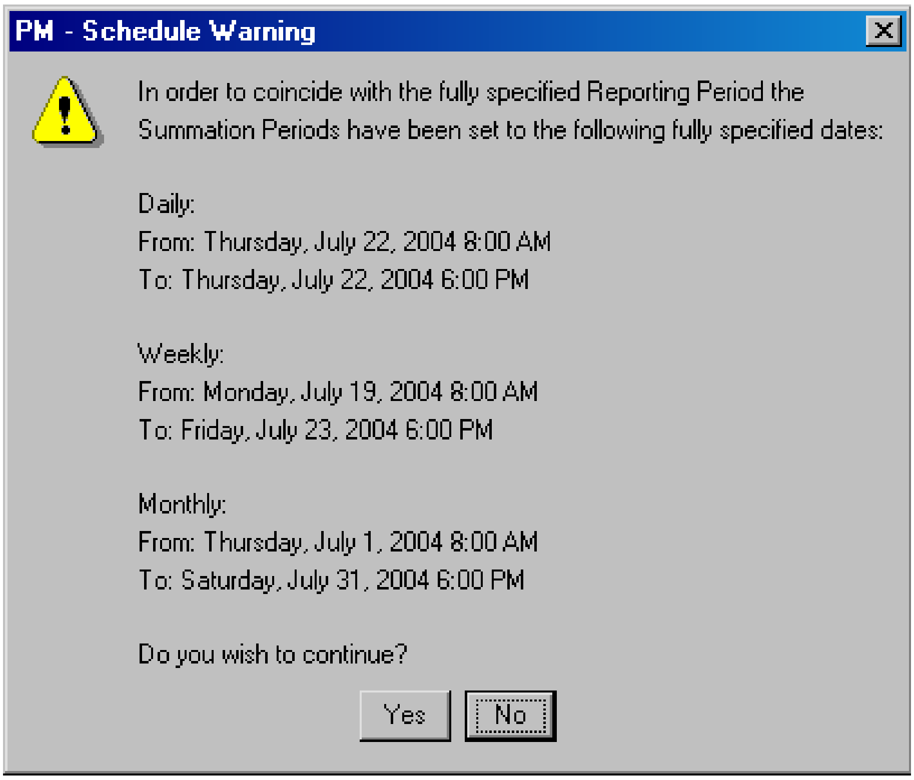


Figure 93: Schedule Warning

Figure 93 illustrates a scenario where you have defined a Daily, Weekly and Monthly summation and the schedule is set for a period other than the current day. The text in the dialog box is dynamic and therefore only display warnings for those summations that have been configured. So if for example, you had only setup a Daily summation report the dialog would present only the warning for the Daily summation. The Weekly and Monthly summation warnings would be omitted.

NOTICE: Quarterly summations do not get included in this type of validation or dialog as the quarterly summation setup panel includes a full date control allowing fully specified dates to be set.

- The Call Volumes - Busy Hour, column chart, organizational detail, and table report template cannot be accumulated.

NOTICE: The accumulate check boxes are greyed out if the selected report is one of the above report templates. They are enabled if the selected report is a group or any other report template.

- The following report templates cannot be appended:
  - Call Volumes - Total Number of Calls, organizational detail
  - Call Volumes - Answered, Not Answered and Lost because Busy, organizational detail
  - Call Volumes - Availability (%), organizational detail
  - Call Volumes - Busy Hour, organizational detail
  - Call Timings - Ringing Times, organizational detail
  - Call Timings - Waiting Times, organizational detail
  - Call Timings - Conversation Times, organizational detail
  - Call Timings - Ringing Times of Answered and Not Answered Calls, column chart, organizational detail, and table
  - Call Timings - Sum of Ringing and Waiting Times of Answered and Not Answered Calls, column chart, organizational detail, and table
  - Call Timings - Average Ringing, Waiting and Conversation Times, organizational detail
  - Call Timings - Average Ringing, Waiting and Answering Times, organizational detail
  - Call Timings - Call Statuses, bar chart, pie chart, organizational detail, and table
  - Trunk Groups - Availability by Trunk Group, column chart and table
  - Trunk Groups - Busy Hour, column chart and table
  - Trunk Groups - Load by Trunk Group, column chart and table
  - Attendant Consoles - Common - Branch Statistics, table
  - Attendant Consoles - AC 2 Queue - General Statistics, table
  - Attendant Consoles - AC Multiple Queue - MQ General Statistics, table
  - Attendant Consoles - AC Multiple Queue - Call Priorities, table
  - System Statistics - Feature Access Data, bar chart and table
  - Call Tracking - Call-by-Call, table
  - Call Tracking - Call Flow, table and enhanced table (organizational)

  The append check boxes are greyed out if the selected report is one of the above report templates. They are enabled if the selected report is a group or any other report template.

  The accumulated summation of the above report templates can not be compressed using larger scale intervals

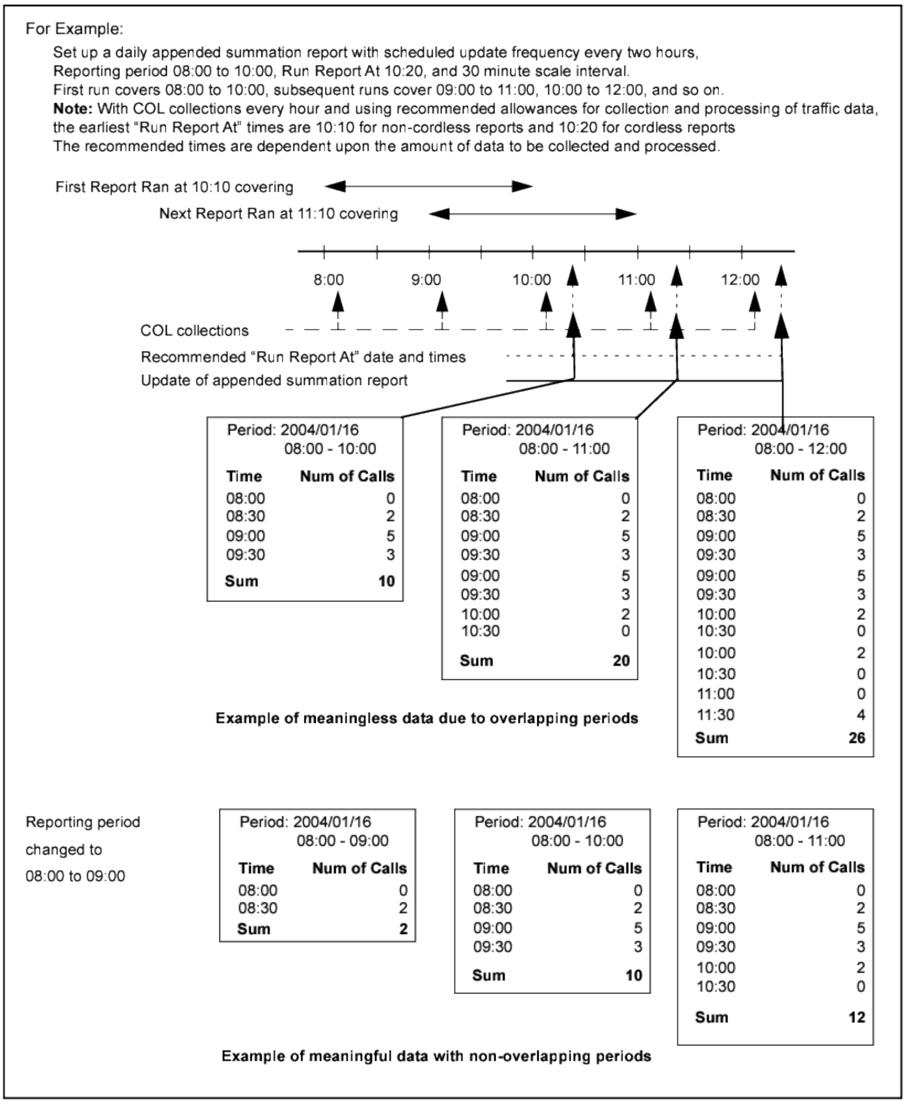


Figure 94: Example of Appended Summation Report

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Summary Reports

Accessing the Schedule Report Page

3.10.7.1 Summation - Define Schedule Tab - Hourly

A summation report can be updated hourly.

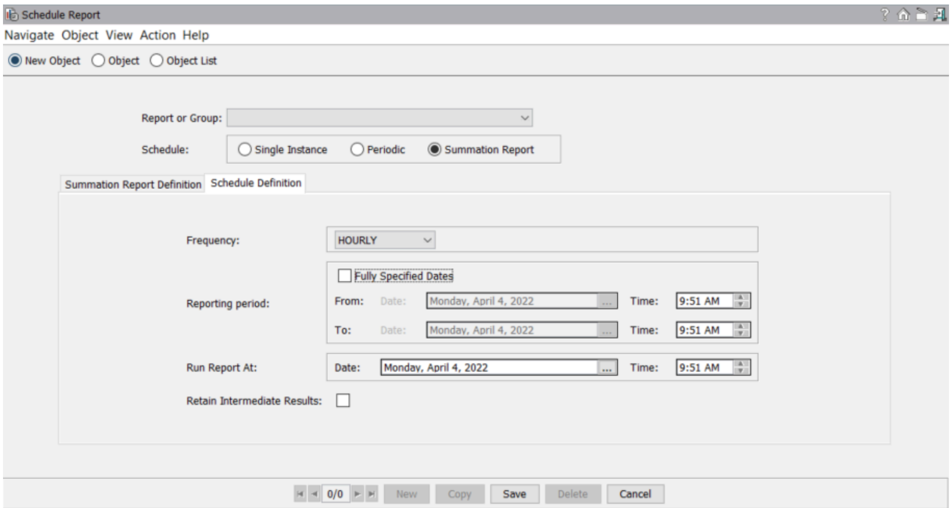


Figure 95: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Hourly using Shortened Form

When you select the Hourly option in the Frequency area of the Define Schedule tab, the reporting period changes to reflect the hourly selection.

Usage Examples:

- If a daily appended summation report is setup with a summation period from 09:00 AM to 05:00 PM, hourly scheduled update, a reporting period from 09:00 AM to 10:00 AM, **Fully specified dates** unchecked, a **Run Report At** date and time of Monday, November 11th, 2002 10:30 AM, and **Retain Intermediate Results** checked.

  The first intermediate report runs on Monday, November 11th, 2002 at 10:30 AM and cover Monday, November 11th, 2002 09:00 AM to 10:00 AM. The daily appended summation report is created on Monday, November 11th, 2002 at 10:30 AM with the results from the first intermediate report.

The next intermediate report is run an hour later and cover 10:00 AM to 11:00 AM of that day. The results are appended to the daily summation report.

Any results after 05:00 PM of that day and before 09:00 AM of the next day are not added to the daily summation report. A new daily appended summation report is created for each day.

- If a weekly appended summation report is setup with a summation period from Monday 09:00 AM to Friday 05:00 PM, hourly scheduled update, a reporting period from 09:00 AM to 10:00 AM, "Fully specified dates" unchecked, a "Run Report At" date and time of Monday, November 11th, 2002 10:30 AM, and "Retain Intermediate Results" checked (see Figure 95).

  The first intermediate report runs on Monday, November 11th, 2002 at 10:30 AM and cover Monday, November 11th, 2002 09:00 AM to 10:00 AM. The weekly appended summation report is created on Monday, November 11th, 2002 at 10:30 AM with the results from the first intermediate report.

  The next intermediate report runs an hour later and cover 10:00 AM to 11:00 AM of that day. The results are appended to the weekly summation report.

  Any results after 05:00 PM of that day and before 09:00 AM of the next day are added to the weekly summation report. A new weekly appended summation report is created for each week.
- If a weekly accumulated summation report is setup with a summation period from Monday 09:00 AM to Friday 05:00 PM, hourly scheduled update, a reporting period from 09:00 AM to 10:00 AM, **Fully specified dates** unchecked, a **Run Report At** date and time of Monday, November 11th, 2002 10:30 AM, and **Retain Intermediate Results** checked (see Figure 96).
- The first intermediate report runs on Monday, November 11th, 2002 at 10:30 AM and cover Monday, November 11th, 2002 09:00 AM to 10:00 AM. The weekly accumulated summation report is created on Monday, November 11th, 2002 at 10:30 AM with the results from the first intermediate report.

  The next intermediate report runs an hour later and cover 10:00 AM to 11:00 AM of that day. The results are accumulated (or averaged) with those in the weekly summation report then the weekly summation report is updated with the new values.

Any results after 05:00 PM of that day and before 09:00 AM of the next day are not added to the weekly accumulated summation report. A new weekly accumulated summation report is created for each week.

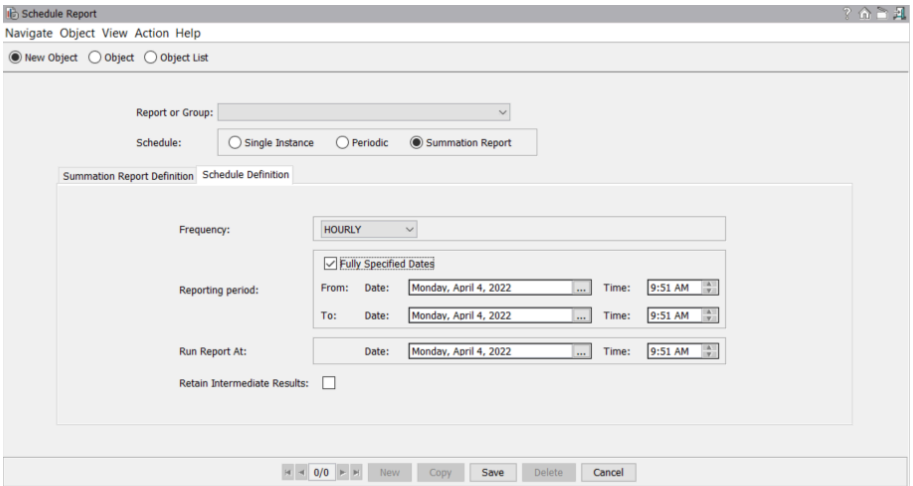


Figure 96: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Hourly Using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report
Define Summation Tab
Summation - Define Schedule tab - Every n Hours
Summation - Define Schedule Tab - Daily
Summary Reports
Accessing the Schedule Report Page

3.10.7.2 Summation - Define Schedule tab - Every n Hours

A summation report can be updated every 2, 3, 4, 6, 8, or 12 hours.

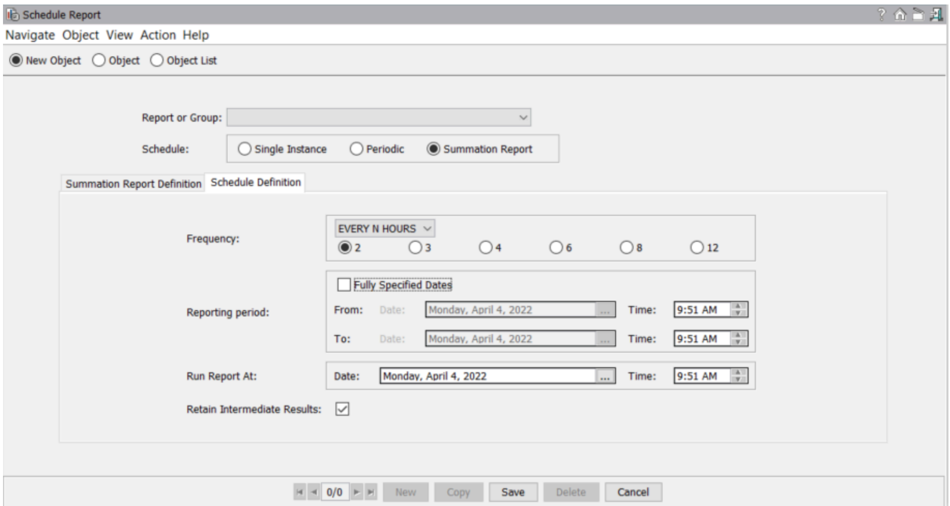


Figure 97: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Every n Hours using Shortened Form.

When you select the Every n Hours option in the Frequency area of the Define Schedule tab, an additional selection mechanism is displayed. It allows you to select between; 2, 3, 4, 6, 8, or 12 hours. The default entry is 2 hours. The reporting period also changes to reflect the every n hours selection.

Usage Example:

If a daily appended summation report is setup with a summation period from 08:00 AM to 06:00 PM, every 2 hours scheduled update, a reporting period from 08:00 AM to 10:00 AM, **Fully specified dates** unchecked, a **Run Report At** date and time of Monday, November 11th, 2005 10:30 AM, and **Retain Intermediate Results** checked (see Figure 89). The first intermediate report run son Monday, November 11th, 2005 at 10:30 AM and cover Monday, November 11th, 2005 08:00 AM to 10:00 AM. The daily appended summation report is created on Monday, November 11th, 2005 at 10:30 AM with the results from the first intermediate report. The next intermediate report runs two hours later and cover 10:00 AM to 12:00 PM of that day. The results are appended to the daily summation report. Any results after 06:00 PM of that day and before 08:00 AM of the next day are not added to the daily summation report. A new daily appended summation report is created for each day (see Figure 98).

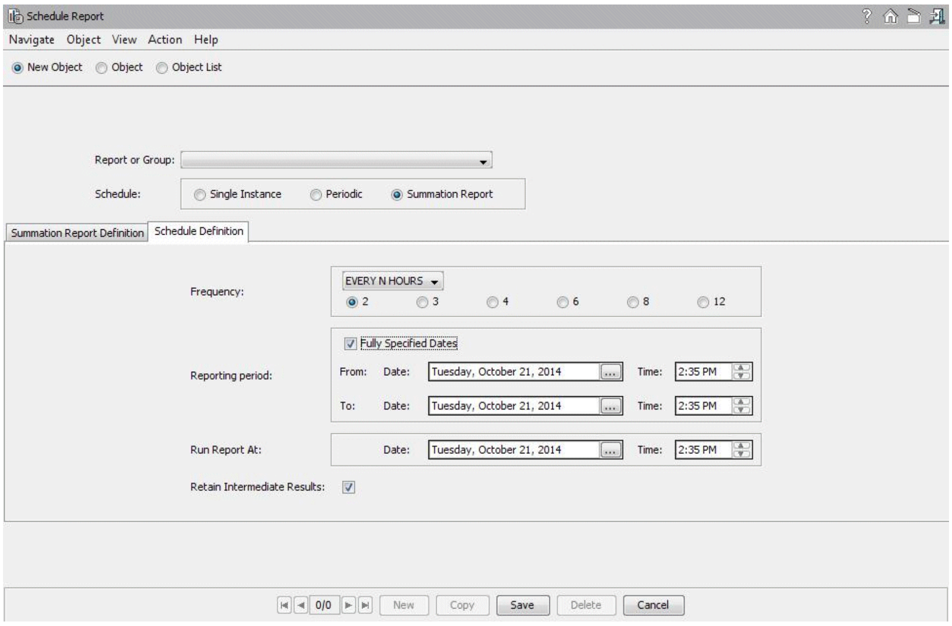


Figure 98: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Every n Hours using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule Tab - Daily

Summary Reports

Accessing the Schedule Report Page

3.10.7.3 Summation - Define Schedule Tab - Daily

A summation report can be updated daily (every day, on a single day, or on several days of the week).

Figure 99 shows the Schedule Report Setup page.

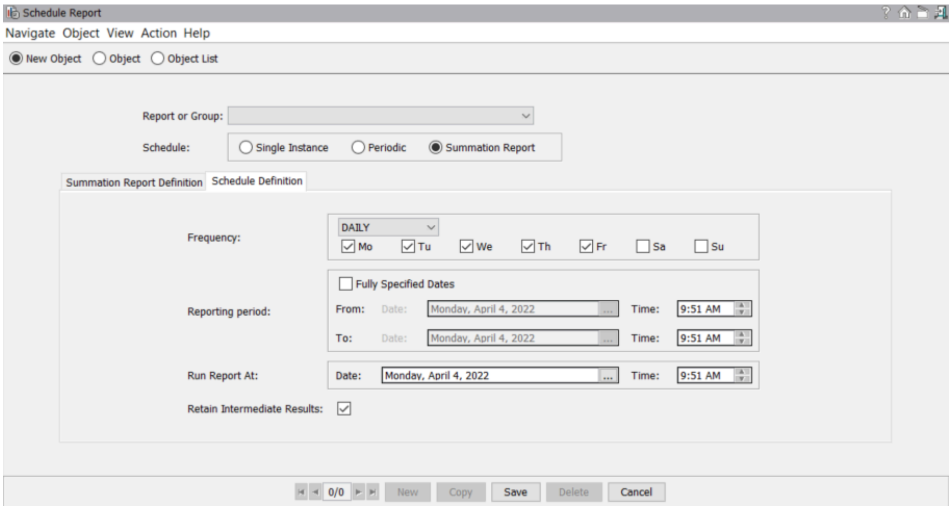


Figure 99: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Daily using Shortened Form

When you select the Daily option in the Frequency area of the Define Schedule tab, an additional selection mechanism is displayed. It allows you to select the days of the week on which the scheduled report is run. The default entry is all days selected. The reporting period also changes to reflect the daily selection.

Usage Example:

- If a daily appended summation report is setup with a summation period from 08:00 AM to 10:00 AM, daily scheduled update with Monday, Tuesday, Wednesday, Thursday, and Friday selected, a reporting period from 08:00 AM to 10:00 AM, **Fully specified dates** unchecked, a **Run Report At date** and **time** of Friday, November 22nd, 2005 06:00 PM, and **Retain Intermediate Results** checked (see Figure 99).

  The first intermediate report runs on Friday, November 22nd, 2005 at 06:00 PM and cover 08:00 AM to 10:00 AM of that day. The daily appended summation report is created on Friday, November 22nd, 2005 at 06:00 PM with the results from the first intermediate report.

  The next intermediate report runs on the next selected day and cover 08:00 AM to 10:00 AM of that day. A new daily appended summation report is created for each selected day with the results from that day's intermediate report.

Any results after 10:00 AM of that day and before 08:00 AM of the next day are not added to the daily appended summation report.

There are no daily appended summation reports for the non-selected days of the week (that is, Saturday and Sunday).

- If a weekly appended summation report is setup with a summation period from Monday 08:00 AM to Friday 10:00 AM, a daily scheduled update with Monday, Tuesday, Wednesday, Thursday, and Friday selected, a reporting period from 08:00 AM to 10:00 AM, **Fully specified dates** unchecked, a **Run Report At date** and **time** of Friday, November 22nd, 2005 at 06:00 PM, and **Retain Intermediate Results** checked (see Figure 99).

  The first intermediate report runs on Friday, November 22nd, 2005 at 06:00 PM and cover 08:00 AM to 10:00 AM of that day. The first weekly appended summation report is created on Friday, November 22nd, 2005 at 06:00 PM with the results from the first intermediate report.

  The next intermediate report runs on the next selected day and cover 08:00 AM to 10:00 AM of that day. The results are appended to the weekly summation report.

  A new weekly appended summation report is created for each week

  Any results after 10:00 AM of that day and before 08:00 AM of the next day and for non-selected days of the week (that is, Saturday and Sunday) are not added to the weekly appended summation report.

- If a weekly accumulated summation report is setup with a summation period from Monday 08:00 AM to Friday 05:00 PM, a daily scheduled update with Monday, Tuesday, Wednesday, Thursday, and Friday selected, a reporting period from Monday, November 11th, 2002 08:00 AM to Monday, November 11th, 2005 05:00 PM, **Fully specified dates** checked, a **Run Report At date** and **time** of Monday, November 11th, 2005 06:00 PM, and **Retain Intermediate Results** checked (see Figure 100).

  The first intermediate report runs on Monday, November 11th, 2005 at 06:00 PM and cover 08:00 AM to 05:00 PM of that day. The first weekly accumulated summation report is created on Monday, November 11th, 2005 at 06:00 PM with the results from the first intermediate report.

  The next intermediate report runs on the next selected day and cover 08:00 AM to 05:00 PM of that day. The results are accumulated (or averaged) with those in the weekly accumulated summation report then the weekly accumulated summation report is updated with the new values.

A new weekly accumulated summation report is created for each week

Any results after 05:00 PM of that day and before 08:00 AM of the next day are not added to the weekly accumulated summation report.

There are no weekly accumulated summation reports for the non-selected days of the week (that is, Saturday and Sunday).

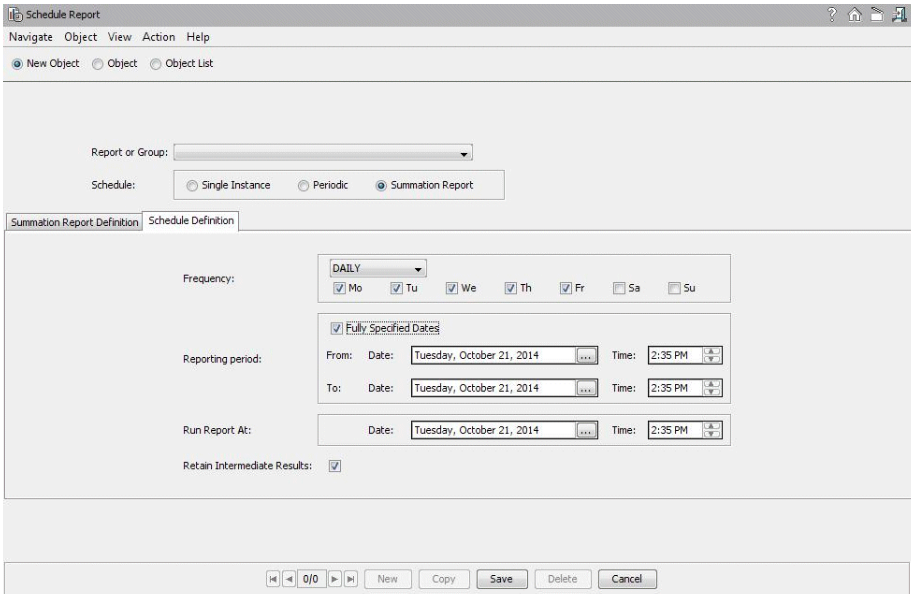


Figure 100: Schedule Report Setup Page - Summation Schedule - Define Schedule Tab - Daily using Fully Specified Dates

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports
Schedule Report Setup Page - Smaller Periodic Frequencies
Single Instance Scheduling
Periodic Scheduling
Schedule Report Setup Page - Object View for Summation
Summation Report
Define Summation Tab
Summation - Define Schedule Tab - Hourly
Summation - Define Schedule tab - Every n Hours
Summary Reports
Accessing the Schedule Report Page

3.10.8 Summary Reports

The MS Excel-based reports are available in two modes:

- Full
- Summary

The main differences between the two modes are:

- The reporting period for a full report is continuous from the start date and time to the end date and time. The reporting period for a summary report is from the same start time to the same end time on each day from the start date to the end date. The summary report may not be a contiguous report from the start time on the start date to the end time on the end date. There may be overnight gaps in the summary report.
- The full reports contain a single sheet with all of the information on it. The summary reports contain an individual sheet of results for each day and an additional sheet with the overall results. The overall results are the sum or average of the individual results for the same interval of each day throughout the reporting period. This is a horizontal calculation through the individual sheets of the report.

The summary reports are required for ASC 3.0 Parity. The full reports are unchanged.

Total Number of Calls		
Period	2004/01/19 - 2004/01/23 08:00 - 17:00	
Interval (Mins)	60	
Filter	JCS Test Filter	
Report name	JCS Total Number of Calls	
Chart created	2004/01/27 13:12	
	Time	**Number of Calls**
	8:00	0
	9:00	14
	10:00	15
	11:00	16
	12:00	17
	13:00	18
	14:00	19
	15:00	7
	16:00	0
	Sum	**106**

Figure 101: Summary Report - Daily Statistic Sheet

The totals displayed on the results sheets are the sum of the values across each of the daily sheets. For example, the value for 08:00 on the results sheet is the sum of the values for 08:00 across each of the daily sheets.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

NOTICE: The format of the period displayed on summary and full reports is different to clearly identify the two modes of reports. The standard format, start date and time - end date and time, cannot be used on summary reports because the period of the report may not be contiguous between the two dates and times.

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Accessing the Schedule Report Page

3.10.9 Accessing the Schedule Report Page

To access the Schedule Report page, on the Performance Management Home Page, double-click **Schedule Report**. The Schedule report page appears.

You can create, copy, save, and delete a scheduled report or scheduled report groups using this page.

Fields and Controls Descriptions

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

Related Topics

Schedule Report Setup Page - Object View for Summary Reports

Schedule Report Setup Page - Smaller Periodic Frequencies

Single Instance Scheduling

Periodic Scheduling

Schedule Report Setup Page - Object View for Summation

Summation Report

Define Summation Tab

Summation - Define Schedule Tab - Hourly

Summation - Define Schedule tab - Every n Hours

Summation - Define Schedule Tab - Daily

Summary Reports

3.11 Schedule Results Page

The Schedule Results feature allows you to:

- View the output of a report that has been generated previously at a pre-scheduled date and time, by sending the contents of the output file held on the server to MS Excel on the client PC
- Stop a running report or report group.
- Delete the output file on the server (that has the results of a scheduled run of a report)
- Control the automatic deletion of the output files held on the server (that contains the results of a scheduled run of a report).
- Recalculate immediately
- List a summation report
- Download scheduled results, summation reports, and SDC data export reports

When the scheduled report is originally run, the CDR records for the specified reporting period may not have been collected from the appropriate switch or switches, so the generated report may not contain meaningful data. The only way to regenerate the report is through the **Run Report** page. The PM enhancement cannot ensure that the data has been collected before the report is run. Instead, it allows you to immediately rerun the report from the **Schedule Results** page (see Figure 102).

The information required to describe the results of the scheduled runs and the summation reports cannot be listed in the same table. The Summation Reports tab has been added to the **Schedule Results** page to list the summation reports.

The immediately run MS Excel based reports or report groups can be displayed on screen or saved to a file on the PC. The format of the saved file is xls, csv, or csv with no report header. Whereas, the scheduled MS Excel based reports or report groups can only be displayed on screen. The only way to save the scheduled MS Excel based reports is to display them on screen and manually save them.

To allow the automatic saving of scheduled MS Excel-based reports, a **Download** button and associated download directory and file format selection mechanisms have been added. It allows you to define the file format (that is, xls, csv or csv with no report header) for automatically saving the MS Excel-based reports or report groups without displaying them on screen and the directory the files are automatically saved in.

One of the ASC 3.0 Parity enhancements allows you to periodically schedule the ASC data into two ASCII format files on the OpenScape 4000 Manager/ Assistant. These files cannot be viewed through the existing **Display** button on the **Schedule Results** page because they are the wrong format. The **Download** button can also be used to download the contents of the ASCII format files from the server to the client PC and automatically store them on the client PC as ASCII text files.

The Schedule Results page has three tabs:

- Status of Scheduled Runs is a table that provides the following information:
  - Ran At
  - Name
  - Frequency
  - Reporting Period
  - User ID
  - Status

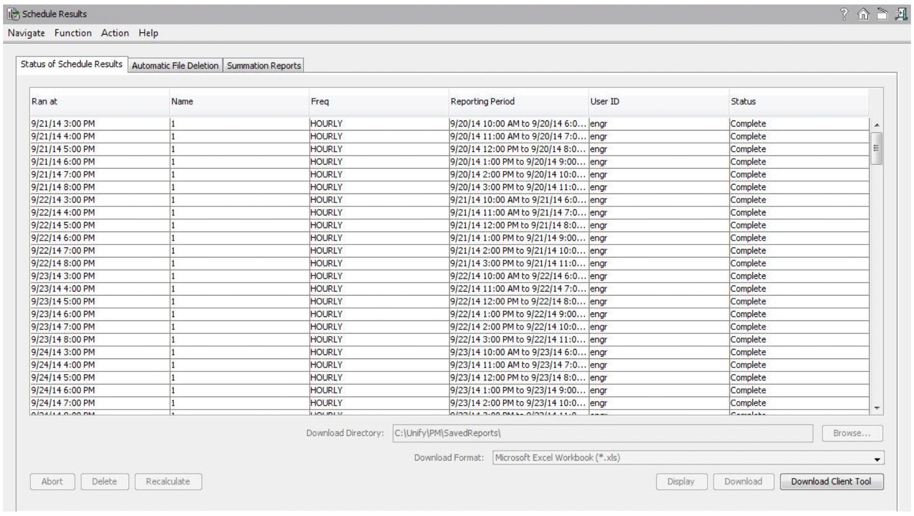


Figure 102: Schedule Results Page

- Automatic File Deletion allows you to control whether the output files held on the server are automatically deleted or not.

- Summation Reports tab to list the summation reports.

  The List of Summation Reports tab provides the following information:

  – The time the intermediate report was run and the appropriate summation reports were updated
  – The name of the Report or Report Group.
  – The frequency of summation; daily, weekly, monthly, or quarterly
  – The type of summation; append, accumulate, or intermediate
  – The period of the summation report
  – The scheduled update frequency; hourly, every n hours, or daily
  – The enhanced scale interval; none, 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, 1 week, and 1 calendar month
  – You user ID
  – The status (whether the report successfully run or not or whether it is still running or pending update)

Field and Controls Descriptions

Download Directory

Browse

Download Format

Abort

Delete

Recalculate

Display

Download

Download Client Tool

Related Topics

Accessing the Schedule Results Page

Schedule Results Page - List of Summation Reports Tab

Schedule Results Page - Summation Reports

Viewing the Schedule Results

Stopping the Schedule Result

Deleting a Schedule Result,

Deleting a Schedule Result Automatically,

Downloading Reports with 'Scheduled Report Downloader'

3.11.1 Accessing the Schedule Results Page

To access the Schedule Results page, on the Performance Management Home Page, double-click **Schedule Results**. The Schedule Results page appears.

You can display, stop, and delete schedules using this page.

When you click the **Display** button, an Excel window appears, which displays the selected report.

Related Topics

Scheduled Results Page - Status of Scheduled Runs Tab

Schedule Results Page - Automatic File Deletion

Schedule Results Page - List of Summation Reports Tab

Schedule Results Page - Summation Reports

3.11.2 Scheduled Results Page - Status of Scheduled Runs Tab

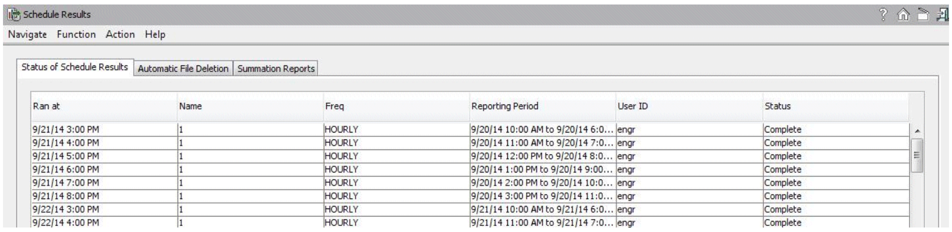


Figure 103: Scheduled Results Page - Status of Scheduled Runs Tab

The Status of Scheduled Runs tab has the following areas:

- A table for the results of the scheduled runs.

  The table contains individual columns for:

  – The time the report was run
  – The name of the Report or Report Group
  – The frequency; Hourly, Every n hours, Daily, Weekly, Monthly or Single
  – The reporting period
  – You user ID.
  – The status - was the report successfully run or not or is it still running.

Field and Controls Descriptions

Download Directory

Browse

Download Format

Abort

Delete

Recalculate

Display

Download

Download Client Tool

Related Topics

Accessing the Schedule Results Page

Schedule Results Page - Automatic File Deletion

Schedule Results Page - List of Summation Reports Tab

Schedule Results Page - Summation Reports

Viewing the Schedule Results

Stopping the Schedule Result

Deleting a Schedule Result,

Deleting a Schedule Result Automatically,

Downloading Reports with 'Scheduled Report Downloader'

3.11.3 Schedule Results Page - Automatic File Deletion

The Schedule results page (see Figure 104) consists of two tabs:

- Status of scheduled runs
- Automatic file deletion

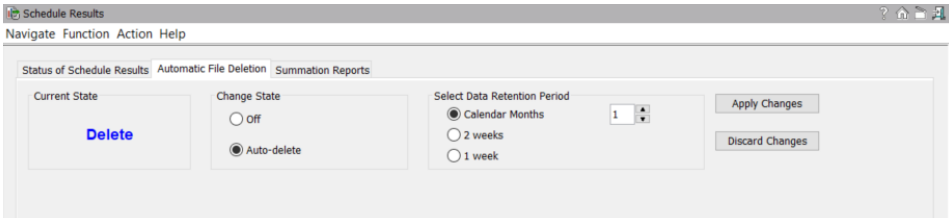


Figure 104: Scheduled Results Page - Automatic File Deletion Tab

The Automatic File Deletion tab allows you to control whether the output files held on the server (that has the results of a scheduled run of a report) are automatically deleted or not. If they are, how long they are retained on the server before they are deleted.

It consists of the following areas:

- A **Current State** indicator
- A **Change State** mechanism which allows you to switch the auto-deletion on or off.
- A **Select File Retention Period** which allows you to set how long the files are retained on the server before they are automatically deleted.
- Two buttons labeled **Apply Changes** and **Discard Changes**.

Field and Controls Descriptions

Download Directory

Browse

Download Format

Abort

Delete

Recalculate

Display

Download

Download Client Tool

Related Topics

3.11.4 Schedule Results Page - List of Summation Reports Tab

An additional tab has been added to the Schedule Results page to list summation reports.

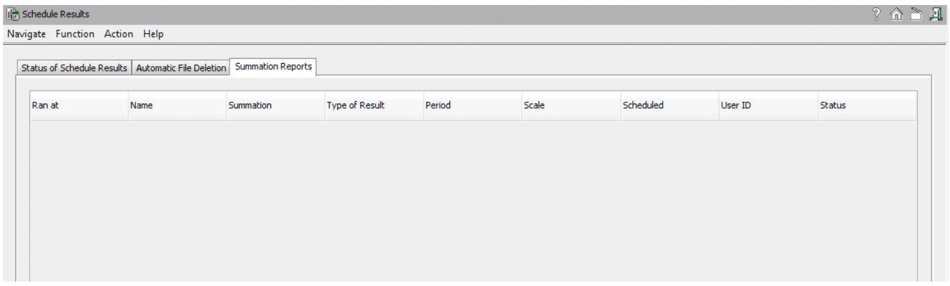


Figure 105: PM Schedule Results Page - Summation Reports Tab

The List of Summation Reports tab has the following information:

- The time the intermediate report was run and the appropriate summation reports were updated
- The name of the Report or Report Group.
- The frequency of summation; daily, weekly, monthly, or quarterly
- The type of summation; append, accumulate, or intermediate
- The period of the summation report
- The scheduled update frequency; hourly, every n hours, or daily
- The enhanced scale interval; none, 15 minutes, 30 minutes, 1 hour, 2 hours, 4 hours, 6 hours, 8 hours, 12 hours, 1 day, 1 week, and 1 calendar month
- Your user ID
- The status - was the report successfully run or not or is it still running or pending update.

Field and Controls Descriptions

Download Directory

Browse

Download Format

Abort

Delete

Recalculate

Display

Download

Download Client Tool

Related Topics

Accessing the Schedule Results Page

Scheduled Results Page - Status of Scheduled Runs Tab

Schedule Results Page - Automatic File Deletion

Schedule Results Page - Summation Reports

Viewing the Schedule Results

Stopping the Schedule Result

Deleting a Schedule Result,

Deleting a Schedule Result Automatically,

Downloading Reports with 'Scheduled Report Downloader'

3.11.5 Schedule Results Page - Summation Reports

The intermediate results and summation reports are stored on the server as individual files containing raw data. They can be viewed through MS Excel on the client PC using the **Display** button on the Schedule Results page or they can be downloaded and saved on the client PC using the **Download** button and associated file format selection mechanism on the Schedule Results page. The format of the saved file is ASCII text, xls, csv, or csv with no report header.

When displayed, the raw data is converted into a HTML page with embedded VB script that creates, populates, and displays a MS Excel Chart.

When downloaded to xls or csv files, the raw data is converted into a HTML page with embedded VB script that creates, populates, and automatically saves the MS Excel Chart without displaying it on screen.

When downloaded to an ASCII text file, the raw data is sent to the client PC unaltered.

Figure 106 shows an example of the contents of the raw data accumulated summation reports.

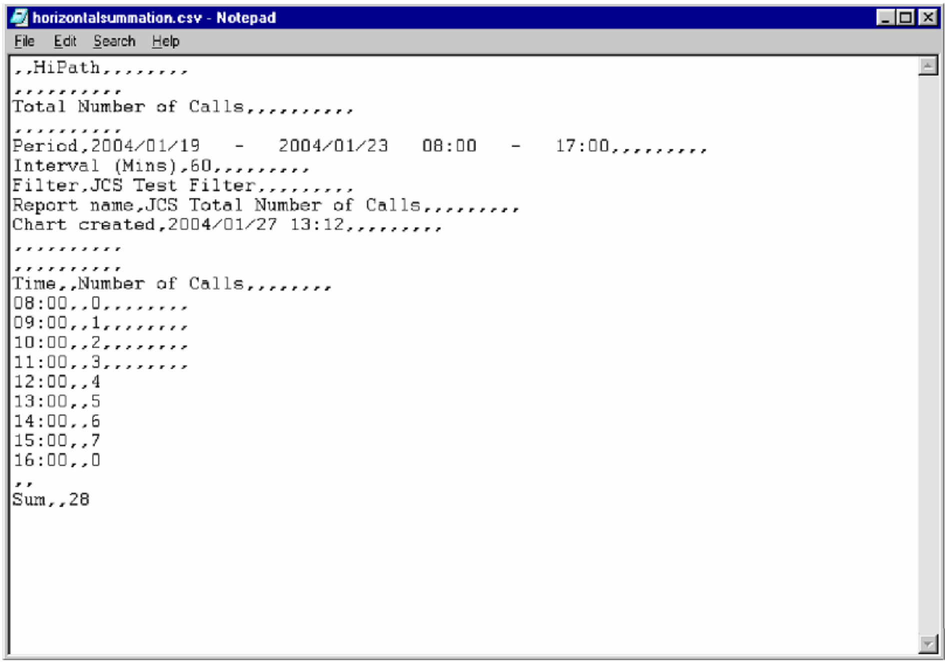
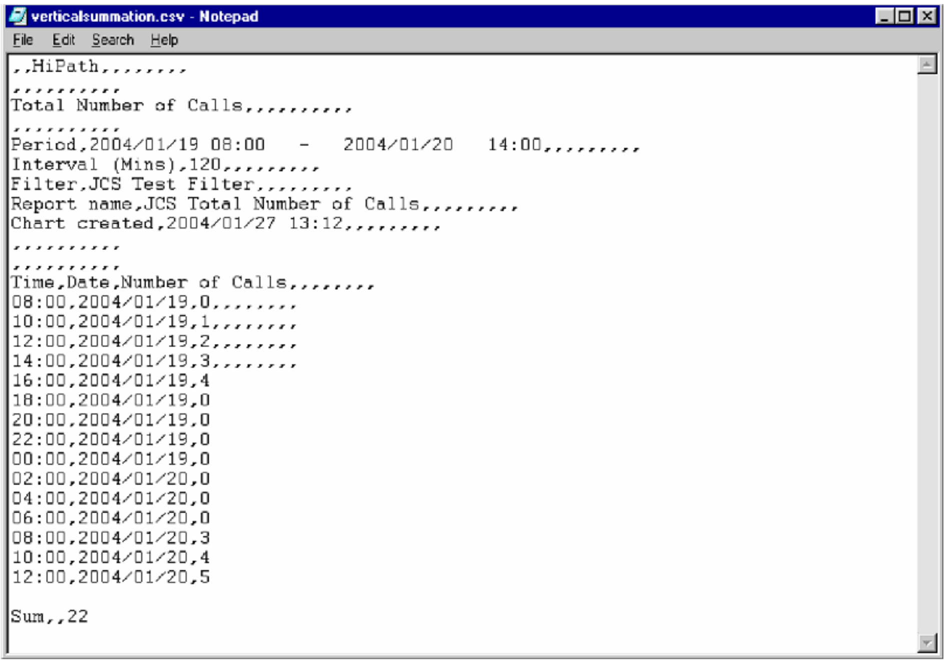


Figure 106: Accumulated Summation Report

The accumulated summation report has the following format:

- The first 12 rows are the standard report header using commas to separate each field.
- The **Period** row details the period of the appended summation report.
- When the report is compressed, the **Interval** row details the interval of the appended summation report.
- The subsequent rows contain the calculated sum or average across the same cell of each report.
- The contents of the **Date** column are cleared as they are no longer appropriate.
- The positions of the columns are unaltered between the scheduled intermediate results and the accumulated summation report.
- The final row contains any other additional information, including the sum.

Figure 107 shows the contents of the raw data appended summation report.




```
,,HiPath,,,,,,,,
,,,,,,,,,,
Total Number of Calls,,,,,,,,,,
,,,,,,,,,,
Period,2004/01/19 08:00   -   2004/01/20   14:00,,,,,,,,,
Interval (Mins),120,,,,,,,,,
Filter,JCS Test Filter,,,,,,,,,
Report name,JCS Total Number of Calls,,,,,,,,,
Chart created,2004/01/27 13:12,,,,,,,,,
,,,,,,,,,,
,,,,,,,,,,
Time,Date,Number of Calls,,,,,,,,
08:00,2004/01/19,0,,,,,,,,
10:00,2004/01/19,1,,,,,,,,
12:00,2004/01/19,2,,,,,,,,
14:00,2004/01/19,3,,,,,,,,
16:00,2004/01/19,4
18:00,2004/01/19,0
20:00,2004/01/19,0
22:00,2004/01/19,0
00:00,2004/01/19,0
02:00,2004/01/20,0
04:00,2004/01/20,0
06:00,2004/01/20,0
08:00,2004/01/20,3
10:00,2004/01/20,4
12:00,2004/01/20,5

Sum,,22
```

Figure 107: Appended Summation Report

The appended summation report has the following format:

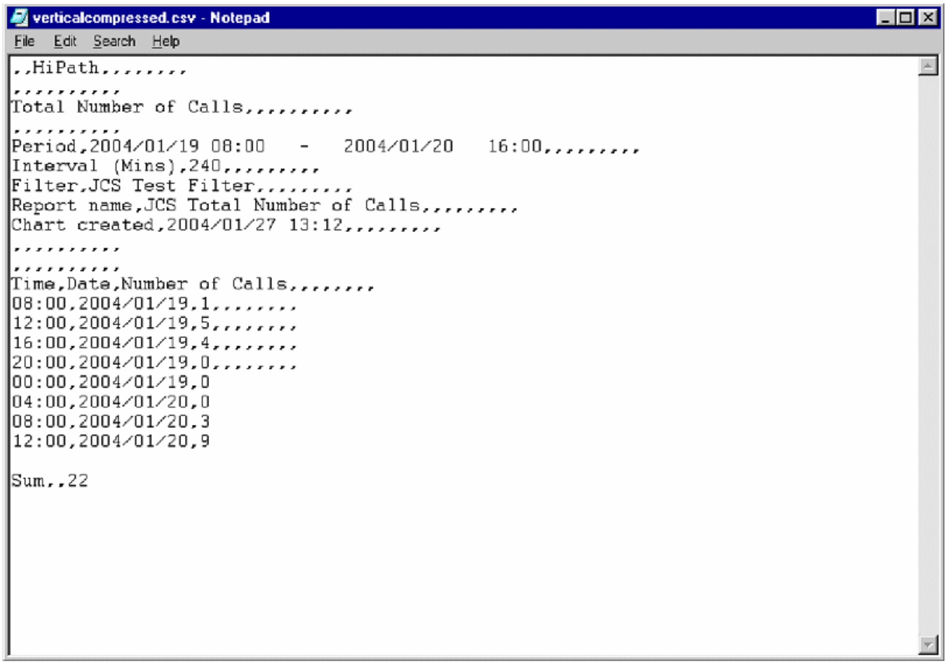
- The first 12 rows are the standard report header using commas to separate each field.
- The **Period** row details the period of the appended summation report.
- When the report is compressed, the **Interval** row details the interval of the appended summation report.
- The subsequent rows contain the appended data from each report.

> **NOTICE:** The positions of the columns are unaltered between the scheduled intermediate results and appended summation report.

- The final row contains any other additional information, including the sum.

> **NOTICE:** The positions of the columns are unaltered between the scheduled intermediate results and appended summation report.

Figure 108 shows an example of the raw data contents of an appended summation report with compression.




```
,,HiPath,,,,,,,,
,,,,,,,,,,
Total Number of Calls,,,,,,,,,,
,,,,,,,,,,
Period,2004/01/19 08:00   -   2004/01/20   16:00,,,,,,,,,
Interval (Mins),240,,,,,,,,,
Filter,JCS Test Filter,,,,,,,,,
Report name,JCS Total Number of Calls,,,,,,,,,
Chart created,2004/01/27 13:12,,,,,,,,,
,,,,,,,,,,
,,,,,,,,,,
Time,Date,Number of Calls,,,,,,,,
08:00,2004/01/19,1,,,,,,,,
12:00,2004/01/19,5,,,,,,,,
16:00,2004/01/19,4,,,,,,,,
20:00,2004/01/19,0,,,,,,,,
00:00,2004/01/19,0
04:00,2004/01/20,0
08:00,2004/01/20,3
12:00,2004/01/20,9

Sum,,22
```

Figure 108: Appended Summation Report with Compression

Related Topics

Accessing the Schedule Results Page

Scheduled Results Page - Status of Scheduled Runs Tab

Schedule Results Page - Automatic File Deletion

Schedule Results Page - List of Summation Reports Tab

Viewing the Schedule Results

Stopping the Schedule Result

Deleting a Schedule Result,

Deleting a Schedule Result Automatically,

Downloading Reports with 'Scheduled Report Downloader'

3.12 Downloading Flexible Reports

After selecting the 'Flexible' output option and clicking the **Run** button in the Run Report page or in the One-Off Report page, the Run Report Dialog window is displayed. In this dialog the following options for the export of the report file can be configured:

- Output Format
- Email Recipients
- Export File Locations

Related Topics

Run Report Dialog - Output Tab

Run Report Dialog - E-mail Tab

Run Report Dialog - Exports Tab

Run Report - Status Window

Run Report

The One-Off Report Page

Defining a One-Off Report

3.12.1 Run Report Dialog - Output Tab

The Output tab of the Run Report dialog allows you to select the template and different output media and output file formats for the report.

Multiple selection for display and/or export options is possible in general.

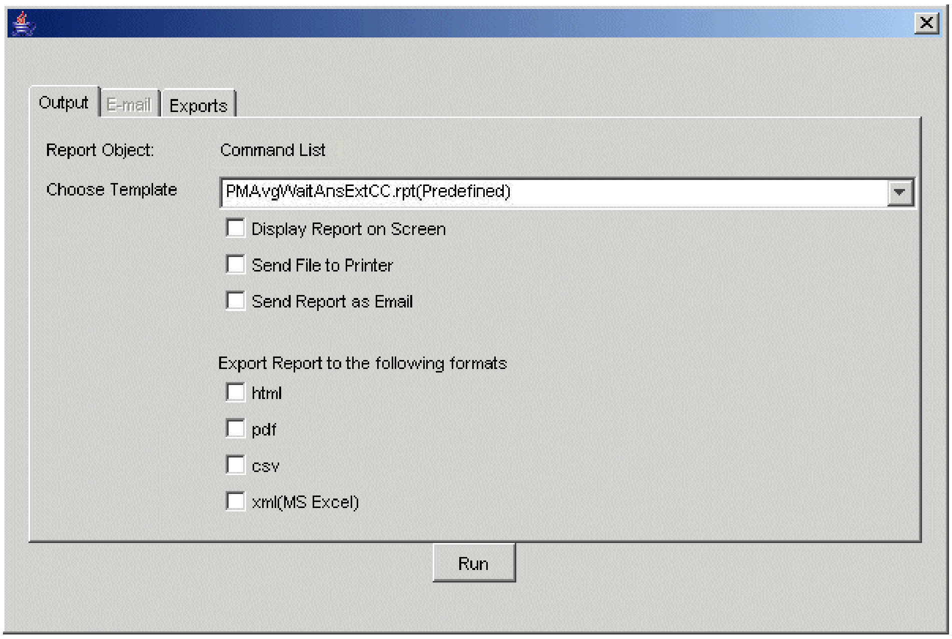


Figure 109: Run Report Dialog - Output Tab

Field and Controls Descriptions

Report Object:

Choose template

Display Report on Screen

Send File to Printer

Send Report as Email

Export Report to the following formats

Run

Related Topics

Run Report Dialog - E-mail Tab

Run Report Dialog - Exports Tab

Run Report - Status Window

3.12.2 Run Report Dialog - E-mail Tab

The E-mail tab of the Run Report dialog allows you to send the report to selectable e-mail recipients.

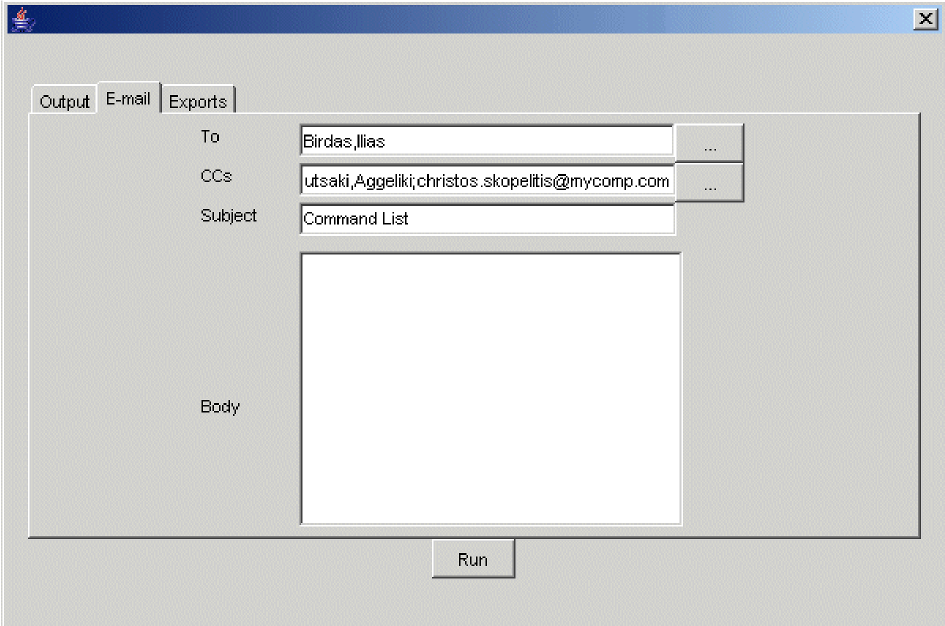


Figure 110: Run Report Dialog - Email Tab

Field and Controls Descriptions

To

CCs

Subject

Body

Run

Related Topics

Run Report Dialog - Output Tab

Run Report Dialog - Exports Tab

Run Report - Status Window

3.12.3 Run Report Dialog - Exports Tab

The Exports tab of the Run Report dialog allows you to define file locations for each output format for saving the report.

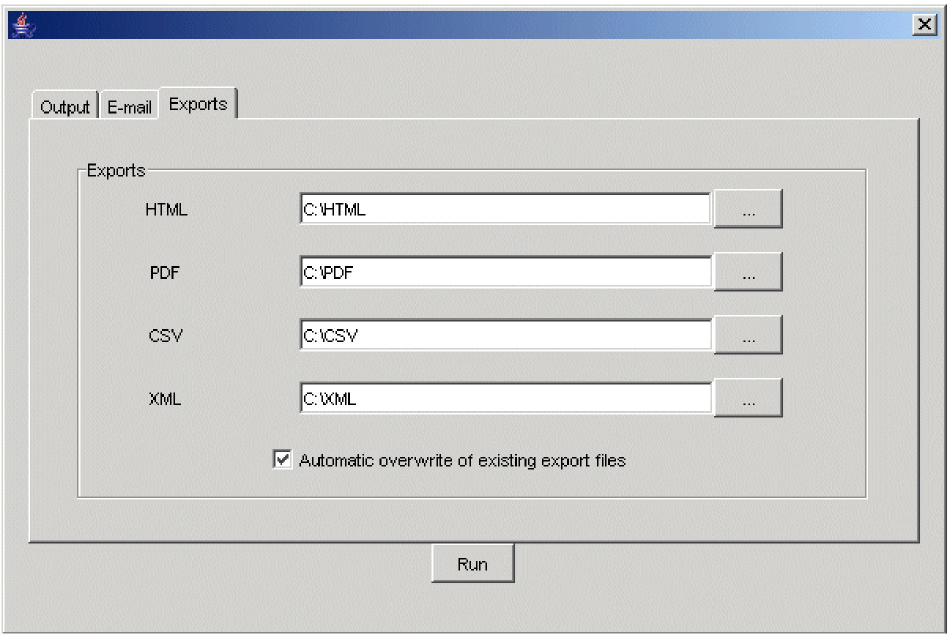


Figure 111: Run Report Dialog - Exports Tab

Field and Controls Descriptions

Exports *(HTML, PDF, CSV, XML)*

Automatic overwrite of existing export files

Run

Related Topics

Run Report Dialog - Output Tab

Run Report Dialog - E-mail Tab

Run Report - Status Window

3.12.4 Run Report - Status Window

After clicking the **Run** button in the Run Report Dialog the generation of the report according to the selected settings is started and the status window is displayed, showing information about the current progress of the report export/ generation.

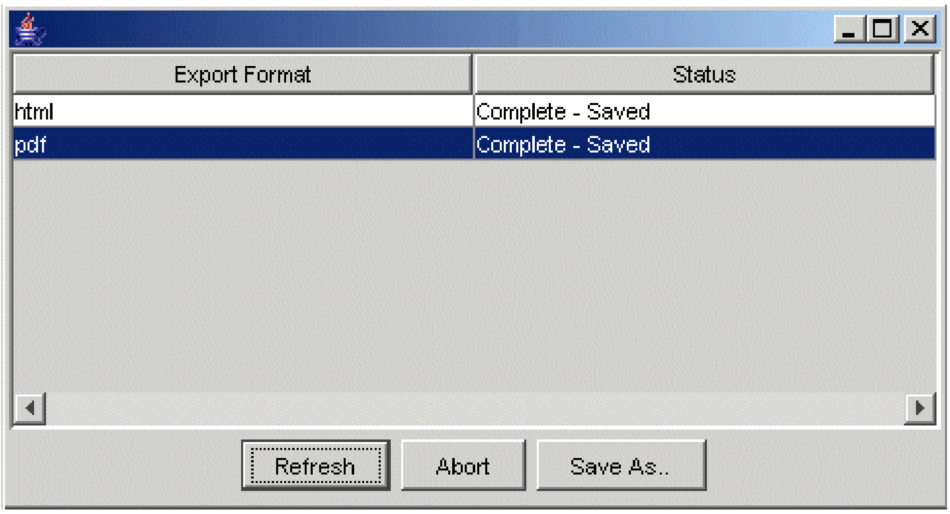


Figure 112: Run Report - Status Window

Field and Controls Descriptions

Export Format

Status

Refresh

Abort

Save As...

Related Topics

Run Report Dialog - Output Tab

Run Report Dialog - E-mail Tab

Run Report Dialog - Exports Tab

4 Fields and Controls

This chapter covers the following topics:

4.1 Fields and Controls in Reporting Status

Available Reports and Report Groups

Lists all the reports and report groups currently in the Performance Management database. The list is identified as follows:

- Name

  Identifies the name of the available report or report group.
- Type

  Identifies the report either as a Report or Group.
- User ID

  Identifies the user of the report or report group.

  You can sort the items in the Available Reports and Report Groups list by clicking the appropriate column heading. The listed items is sorted in ascending alphabetical order of the selected column's contents. A second click sorts the items in descending alphabetical order of the selected column's contents.

You can also select one item at a time from the Available Reports and Report Groups list by clicking anywhere within the required row.

If the Report of Report group is deleted, the Report or Report Groups is removed from the Available Reports and Report Groups list automatically by the system.

Run

When you select a report or report group from the Available Reports and Report Groups list and click **Run**, the Run Report page appears.

You can proceed to run the report or report group. For instructions, refer to Running a Report, or Running a Report Group.

Schedule

From PM Version 2.0 - Advance, clicking this button takes you to the Schedule Report page which shows reports that have been scheduled to run at a future time.

Edit

When you select a report or report group from the Available Reports and Report Groups list and click **Edit**, the Report Definition or the Report Group page appears.

You can proceed to edit the report or report group. For instructions, refer to Editing a Report, orEditing a Report Group.

Delete

When you select a report from the Available Reports and Report Groups list and click **Delete**, it will be deleted if it is not referenced in a report group.

To delete a report group, select a group from the Available Reports and Report Groups list and click **Delete**.

> **NOTICE:** If the selected item is a report and it is referenced by one or more report groups, it must be removed from those report groups before it can be deleted.

New Report

Opens the Report Definition page, allowing you to create a report. For instructions, refer to Creating a Report.

New Report Group

Opens the Report Group page, allowing you to create a report group. For instructions, refer to Creating a Report Group.

Scheduled Reports

Shows the next report that is scheduled to be run. It consists of the following information:

- Next Run At
- Name
- Freq
- Reporting Period
- User ID

Reporting Status Schedule Buttons

Consists of the Delete and Modify buttons as follows:

1) Delete

Deletes the report or report group.

1) Modify

Displays the Schedule Report Setup page with preset values of the selected report or report group.

4.2 Fields and Control in Run Report

Report or Group

Reporting Period

From: Date

From: Time

To: Time

To: Date

Report output

Run

Report Mode

Reporting days

Daily time periods (Summary mode)

Daily time periods (Full mode)\

Report or Group

Identifies the report the you are running.

Reporting Period

Period of time over which the data for the selected report is going to be gathered.

From: Date

The starting date of the reporting period.

From: Time

The starting time of the reporting period.

To: Date

The ending date of the reporting period.

To: Time

The ending time of the reporting period.

Report output

Allows you to choose a report output to run:

- Flexible. You may configure output media (screen, printer), various file formats for the report output (html, pdf, csv, xml), and send the report to e-mail recipients after clicking the **Run** button.
- Advanced. The Advanced radio button allows you to display the MS Excel-based report on screen or save it to a file on the PC. The format of the saved file is xls, csv, or csv with no report header.

The Advanced option is only enabled if MS Excel is installed on the client PC. If MS Excel is not installed on the client PC, the Flexible option is selected.

Run

Runs the selected Report or Report Group.

Error messages appear If **Run** is pressed and:

- If the **To: Date** and **To: Time** is earlier than the **From: Date** and **From: Time**
- If the **To: Date** and **To: Time** is not in the past

Having selected the 'Flexible' report output option, the Run Report Dialog is displayed (see also Downloading Flexible Reports, page 249).

Report Mode

Allows you to select between full or summary reports.

Default = full

When **Full** is selected When full is selected the existing run report page is displayed.

When **Summary** is selected, the existing **Reporting Period** is replaced by **Reporting days** and **Daily time periods**, and in **Report output**, the Flexible option is greyed out, and the **Save to File on PC Format** is set to xls and greyed out.

Reporting days

Allows you to set the **From** and **To** days.

The **From** day must be earlier than the **To** day. The default values for both the **From** and **To** days is the current date on the server. If any of the above criteria are not satisfied when the **Run** button is clicked, a dialog appears informing you to correct the error.

Input required.

Daily time periods (Summary mode)

Allows you to set the From and To times for each day in the reporting period. The From time must be earlier than the To time. The default values for both the **From** and **To** times is the current time on the server.

If any of the above criteria are not satisfied when the **Run** button is clicked, a dialog appears informing you to correct the error.

Input required.

Daily time periods (Full mode)

Allows you to set the From and To times for each day in the reporting period. The From time must be earlier than the To time. The default values for both the **From** and **To** times is the current time on the server.

If any of the above criteria are not satisfied when the **Run** button is clicked, a dialog appears informing you to correct the error.

Input required.

4.3 Fields and Controls in Report Group

Radio buttons in the upper part

(New Object)

Object List

Object

Object view

Group Name

Available Reports

Selected Reports

>>

>

<

<<

Object list view

Name

User ID

Created

Last Modified

Buttons

New

Copy

Save

Delete

Run

Cancel

Schedule

New Object

Only available, when a new, unsaved report definition is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the newly-created report definition to be displayed.

Object List

Shows a detailed list of a new Report Group such as the Name, User ID, and date and time when the report was created and modified.

Selecting the Object List View option, causes the previously-displayed report group to be re-displayed.

Object

Allows you to create or modify a report group. It allows common running or scheduling of more than one report.

Group Name

The name of the currently selected report group.

Input: Required

Valid Values: 1-50 characters.

Available Reports

The reports that you can put in a group.

Selected Reports

The reports that are in the group.

Name

The Report Group name.

Valid Values: 1 - 50 characters.

User ID

The user ID of the user who created the Report Group.

Valid values: 1 - 20 characters.

Created

The date and time that the Report Group was first created, in the format dd-Mmm-yyyy hh:mm.

Last Modified

The Date and Time that the Report Group was recently modified, in the format dd-Mmm-yyyy hh:mm.

>>

Adds all the available report groups to the Selected reports column.

>

Adds a report group or groups to the Selected reports column.

<

Removes a report group or groups from the Selected reports column to the Available report groups column.

<<

Removes all the report groups from the Selected reports column to the Available report groups column.

New

Creates a new Report Group.

Copy

Creates a new Report Group based on the details of the currently-displayed Report Group.

Save

Saves the details of the currently selected Report Group.

Delete

Deletes the currently selected Report Group from the system.

Run

Runs the currently selected Report Group.

Cancel

Discards unsaved details of a Report Group definition.

Schedule

This button is available from PM Version 2.0 - Advance only. This button allows the current report to be scheduled. The Schedule button is enabled whenever the Run button is enabled. When the Schedule button is clicked, the Schedule Report Setup page is displayed, and the Report or Group field on that page is preset with details of the current report.

4.4 Fields and Controls in Report Definition

Items in the upper part of the Report Definition window

(New Object)

Object

Object List

Report Name

Items of the Define Reports Tab

Template

Filter

Scale Interval

Number of Hits in the result displayed

Controls for Ignoring Report Values

Foreign Stays Only

Foreign Switch Stays Only

Service Level

Items of the Define Thresholds Tab

Threshold Definition Area

Display Exceeded Values / Send Alarm to FM

Send email notification if threshold is exceeded

Select email recepients

Buttons

New

Copy

Cancel

Save

Delete

Run

Schedule

New Object

Only available, when a new, unsaved report definition is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the newly-created report definition to be displayed.

Object

The Object View option allows the user to create or modify a report. The report consists of a named filter, a template, and a scale interval. When the Object button is clicked, it causes the previously-displayed report definition to be re-displayed. Clicking the New Object option causes the newly-created report definition to be displayed.

Object List

Displays a list of reports in a table format that is comprised of the following columns:

- Name-should not exceed 50 characters
- User ID-should not exceed 20 characters.
- Created-the date and time that the report group was created, in the format of dd-Mmm-yyyy hh:mm
- Last modified-the date and time that the report group definition was recently defined, in the format of dd-Mmm-yyyy hh:mm

When the Report Definition page is first opened in Object List View, the reports are listed in ascending alphabetical order. You can change the order in which the reports are displayed by clicking the appropriate heading. This causes the reports to be listed in ascending alphabetical order of the selected columns contents. A second click causes the reports to be listed in descending alphabetical order of the selected column's contents. Further clicks toggle between these two display modes. You cannot edit any of the table entries in the Object List View.

Report Name

The report name contains the name of the currently selected report.

Input: required when you create a report.

Valid Values: 1-50 characters.

Template

A template is used to indicate the type of Report to be run and specifies the way that it is formatted.

A template specifies:

- Basic category of statistics (such as Ringing Time and Total Number of Calls) for which a report may be generated
- Output format (table, column chart, bar chart, pie chart, 3D area chart) to be applied to the report.

Input: required when you create a report

Filter

The filter to be applied to the report.

Input: required when you create a report

This field has a list of filter names in the system. If there are no filters stored in the system, the list is empty. The filter names in the list are displayed in alphabetical order.

A named Telephony Filter specifies which switch (PBX) or switches (PBXs) are relevant to the report and, for each switch, what telephony items in the Telephony Items Tab.

Types of calls and call direction data in the Call Types Tab are to be included.

You may also select an Organisational Filter Type, as defined in the Organisational Items Tab of the Filter Definition Page. There are two types of reports, which can be generated, using an Organisational filter:

1) Organisational Summary reports:

These reports use the standard templates for report generation, but with an Organisational filter. In the Report Definition page you may select a standard report template, for example a 'Table' or 'Column Chart' and then set an Organisational filter in the filter selection box. When the report is run, its appearance will be the same as for a report run for example on a single extension, but the statistics presented will be for all extensions in the selected organisation.

> **NOTICE:** Not all reports will produce meaningful results if an organisational filter is selected, for example if a Trunk Group report template is chosen, selecting an Organisational Filter is not appropriate as organisational information does not define Trunk Groups. If the user to use an Organisational Filter with a report template where it is not appropriate, then the user will be informed of the inappropriate selection when they attempt to save the report, and the report will not be saved.

2) Organisational Detail reports:

These reports use special templates which are specifically designed to present a detailed report, which will show statistics at each level of the organisation below the point(s) selected in the organisational filter. The templates are identified at "Organisational Detail" in the template selection tree. The breakdown of the statistics in the report will include all departments, sub-departments, sections and sub-sections below the selected point(s) in the organisation and will include statistics for individual extensions at the lowest level.

The "Organisational Detail" reporting template applies to all the Call Timings and Call Volumes reports, but not the Attendant Consoles, Cordless, System statistics and Trunk Group reports. If the "Organisational Detail" template option has been for for a report then when the "Save" button is pressed a check will be performed to ensure that the filter defined for the report is an "Organisational Filter". If not, a dialog will be displayed informing the user of the inappropriate selection and the Report will not be saved.

> **NOTICE:** The "Organisational Detail" reports are presented in a table format only

Scale Interval

Enabled when the selected template is a graph, table, or histogram.

Disabled when the first column of the data table in the report is not a measurement of elapsed time.

This field allows the user to enter a scale interval to be used if the selected template is either a graph or a histogram. Scale intervals are in minutes, in the range of 1 to 1440 (equal to 1 day).

Valid values: 1-1440 minutes

The Scale interval field does not apply to the following templates:

- Call Timings - Ringing Times of Answered and Not Answered Calls
- Call Timings - Sum of Ringing and Waiting Times of Answered and Not Answered Calls
- Call Timings - Call Statuses
- Call Tracking - Call-by-Call
- Call Tracking - Call-Flow
- Cordless Statistics - Cordless Stays
- Cordless Statistics - Overload Duration
- Hit Parade / Top Usage
- Trunk Groups - Availability by Trunk Group
- Trunk Groups - Busy Hour
- Trunk Groups - Load by Trunk Group
- Attendant Consoles - General Statistics
- System Statistics - Feature Usage Data

When you select any of these templates, the Scale interval field is disabled and its value is unchanged.

Number of Hits in the result displayed

This control is only sensitive, if the currently selected template belongs to the "Hit Parade/Top Usage" group.

If the checkbox is selected, then the report will only display the number of scores set in the adjacent spin control, e.g. if you set the value "11", then only the top 11 scores will be displayed in the report.

If the checkbox is unchecked, then all filter entries, as specified by the filter settings, will be displayed (no reduction).

The minimum start value for the spin control is 10.

Controls for Ignoring Report Values

Depending on the currently selected template type, you are able to exclude certain values from the report.

1) Ignore Short Stays

The "Ignore Short Stays" parameter is only available for Cordless Stays statistics. If the corresponding checkbox "Duration" is selected, then the report will display only short stay duration values smaller than the defined minimum Duration time. The Duration time can be set using the spin control at the right side of this checkbox.

1) Ignore Overload Duration

The " Ignore Overload Duration " parameter is only available for Overload Duration statistics. If the corresponding checkbox "Waiting Time" is selected, then the report will ignore overload duration values smaller than the defined minimum Waiting Time. The Waiting Time can be set using the spin control at the right side of this checkbox.

1) Ignore Not Answered Calls

The call ignoring parameter applies to most Call Volume, Call Timings, Attendant Console, Call Tracking, and Organisation Detail reports.

If the corresponding checkbox "Waiting Time" is selected, then the report will display only ringing time values (e.g. waiting time at Attendant Console) smaller than the defined minimum Waiting Time.

The Waiting Time can be set using the spin control at the right side of this checkbox.

Default value for this checkbox = unchecked.

Default value = 0. Maximum value = 999.

Foreign Stays Only

If this checkbox is selected, then only the foreign stays will be displayed in the report. This means that only stays are considered, where home switch ID + home SLC are different from Current switch ID + Current SLC. See also Foreign Switch Stays Only.

Foreign Switch Stays Only

This checkbox can be selected only for Cordless Stays Per Extension reports and when the "Foreign Stays Only" checkbox is also checked. Otherwise it is deactivated (i.e. it is greyed out).

If this checkbox is selected, only the foreign stays on the foreign switch will be displayed in the report. This means that only stays are considered, where home switch ID is different from the current switch ID.

The foreign stays on the same switch due to stays on different SLC boards will **not** be displayed.

Service Level

Allows you to set acceptable waiting time for answered incoming calls and comparison value displayed on the generated advanced report as a line drawn across the report

Preassigned values:

First set - 20 seconds and a line at 80%

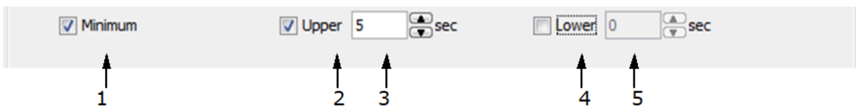
Second set - 30 seconds and a line at 98%. You can also enter other values.

The service level selection mechanism only applies to Attendant Consoles - Service Level Statistics template. It is only enabled when one of the service level statistic report templates is selected.

Threshold Definition Area

NOTICE: The threshold names (**1**) and the amount of thesholds in this area depend on the selected report template.

Five controls are displaye for each threshold:



No.	Object	Description
1	Threshold Name Checkbox	Indicates if the specified threshold is to be activated when the repor Activates/Deactivates the associated threshold.
2	Upper Checkbox	Indicates if the threshold should check for an Upper value. Activates Deactivates the associated spin button.
3	Upper Spin button	Use this button to define the upper threshold value.
4	Lower Checkbox	Indicates if the threshold should check for an Lower value. Activates Deactivates the associated spin button.
5	Lower Spin button	Use this button to define the lower threshold value.

Notes:

- You are able to define a threshold only for an upper value (or only for a lower value) by activating only the "Upper" checkbox (or the "Lower" checkbox).
- In case of multiple Queue Reports, a drop down list is displayed, allowing to choose on which attendant console queue the defined thresholds should apply.

Display Exceeded Values / Send Alarm to FM

Display Exceeded Values: When checked, the resulting report displays only the values that are above the upper or below the lower thresholds. This option is only supported for full reports and appended summation. It is not supported for accumulated summation and summary reports.

- **Send Alarm to FM:** If this checkbox is selected, an alarm will be sent to the Fault Management, each time when the defined thresholds (Upper and/or Lower) are trespassed.

Send email notification if threshold is exceeded

If this option is enabeled, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator Manual; V6 (English)
- Report Generator Manual; V6 (German)

Select email recipients

By clicking the Look-up button (**...**) button on the right of the text input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator Manual; V6 (English)
- Report Generator Manual; V6 (German)

After saving the report definition by clicking the **Save** button, the entire e-mail recipients list will be checked for duplicate values and the validity of each e-mail address. If an email address is added twice or more, a message window with this information is displayed.

New

This button allows you to define a new report.

Copy

This button allows you to create a new report by using the details of the currently-displayed report.

Cancel

This button allows you to discard unsaved details of a report definition.

Save

This button allows you to save the details of the currently-select report.

When you make changes to a report configuration, the stored version in the PM database is updated.

Delete

This button allows you to delete the currently-selected report from the system.

Run

This buttons allows you to run the currently selected report.

Schedule

This button is available from PM Version 2.0 - Advance only. This button allows the current report to be scheduled. The Schedule button is enabled whenever the Run button is enabled. When the Schedule button is clicked, the Schedule Report Setup page is displayed, and the Report or Group field on that page is preset with details of the current report.

4.5 Fields and Controls In Filter Definition

Field and Controls (in all tabs in Object View of Filter Definition Page)

Section above the tab sheets:

(New Object)

Object

Object List

Filter Name

Filter Type

Section below the tab sheets:

Record Selection Mechanism

New

Copy

Save

Delete

Cancel

New Object

Only available, when a new, unsaved filter definition is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the new created filter definition to be displayed.

Object

The Object view page allows the user to select a filter in order to view details, copy it, create or modify it in object view.

Object List

When the Filter Definition page is first opened in Object List View, the page shows a list of user-defined Filters. The Filters are listed in ascending alphabetical order of the Filter name.

You can alter the order in which the Filters are displayed by clicking the appropriate column heading. This causes the Filters to be listed in ascending alphabetical order of the selected column's contents. A second click causes the Filters to be listed in descending alphabetical order of the selected column's contents. Further clicks toggle between these two display modes. You cannot edit any of the table entries. These tables are read-only.

Filter Name

This field contains the name of the currently-selected filter in the PM database.

The contents of this field can be edited. You can rename an existing Filter by editing its name.

Input: required

Valid Values: up to 50 characters.

Filter Type

Shows filter type option elements:

- Telephony
- Organisational

There are two types of reports, which can be generated, using an Organisational filter:

1) Organisational Summary reports:

2) These reports use the standard templates for report generation, but with an Organisational filter. In the Report Definition page you may select a standard report template, for example a 'Table' or 'Column Chart' and then set an Organisational filter in the filter selection box. When the report is run, its appearance will be the same as for a report run for example on a single extension, but the statistics presented will be for all extensions in the selected organisation.

> **NOTICE:** Not all reports will produce meaningful results if an organisational filter is selected, for example if a Trunk Group report template is chosen, selecting an Organisational Filter is not appropriate as organisational information does not define Trunk Groups. If the user to use an Organisational Filter with a report template where it is not appropriate, then the user will be informed of the inappropriate selection when they attempt to save the report, and the report will not be saved.

3) Organisational Detail reports:

4) These reports use special templates which are specifically designed to present a detailed report, which will show statistics at each level of the organisation below the point(s) selected in the organisational filter. The templates are identified at "Organisational Detail" in the template selection tree. The breakdown of the statistics in the report will include all departments, sub-departments, sections and sub-sections below the selected point(s) in the organisation and will include statistics for individual extensions at the lowest level.

The "Organisational Detail" reporting template applies to all the Call Timings and Call Volumes reports, but not the Attendant Consoles, Cordless, System statistics and Trunk Group reports. If the "Organisational Detail" template option has been set for for a report, then, when the "Save" button is pressed, a check is performed to ensure that the filter defined for the report is an correct "Organisational Filter". If the check fails, a message is displayed informing of an inappropriate selection and the filter will not be saved.

> **NOTICE:** The "Organisational Detail" reports are presented in a table format only.

Activating one of these options toggles the Filter Definition Page for defining a Telephony Filter Item, respectively an Organisational Filter Item.

New

This button allows you to define a new Filter.

Copy

This button allows you to create a new Filter based on the details of the currently-displayed Filter.

Save

This button allows you to save the details of the currently-selected filter.

NOTICE: Until you press the Save button is operated, any unsaved changes made to any tabs of the current filter definition is not be written to the database.

In the Branches tab, when the Save button is clicked, there is a validity check for branches, attendant consoles, and AC groups. If the filter contains a branch and no attendant console or AC group, a dialog appears informing you and requesting you to remove the branch or add at least one attendant console or AC group.

Delete

This button allows you to delete the currently-selected filter from the system.

Cancel

The Cancel button allows you to discard unsaved details of a Filter definition.

4.5.1 Fields and Controls - "Telephony" Filter Type

Items in Object View:

Switches Tab

Telephony Items Tab

Call Types Tab

Filter Summary Tab

Available Items (Attendant Consoles, AC Groups, and so on)

Selected Items (Attendant Consoles, AC Groups, and so on)

>, >>, <, and <<

Add (only available in some of the Telephony Items Tab)

Switches Tab

The Switches tab allows you to specify which switch or switches you want to display on the report. The Switches tab consists of two scrolled lists as follows:

- Available Switches-lists all the switches that are known to the PM database but excludes any that are in the Selected Switches list.
- Selected Switches-lists all the switches that are included in the current Filter definition.

Telephony Items Tab

The Telephony Items tab is where you specify which telephony items and which items within those item types are included for each switch. Information in this tab such as extensions, hunt groups, or trunk groups are maintained by the Configuration Management application.

Each Item Type tab contains two scrolled lists together with four selection buttons that allow the items to be moved between the two lists. There is also a range selection mechanism for specifying multiple items and unlisted items.

The Telephony Items tab is normally enabled. However, it is disabled if there are no switches in the Selected Switches list on the Switches Tab

.

Call Types Tab

The Call Types tab is where you specify call types and call directions--both of which can be included in reports that use the filter.

This tab is valid both for **Telephony** filter items and **Organisational** filter items.

Filter Summary Tab

The Filter Summary is a read-only table, listing all the telephony items currently defined for the filter. It is a helpful reminder on a single list.

Available Items (Attendant Consoles, AC Groups, and so on)

This list contains the names of all the Telephony Item Types that are known to the PM database but excludes any that are in the **Selected Items** list. This list is always enabled.

If PM has the PM Basic package, the Available Items list contains only the identity of the switch to which PM is directly connected. The system prompts you to select one or more items and use the > button to transfer them to the Selected Items list.

Depending on activation or deactivation of the transformation of a Virtual Node Access Code (VNAC) for a Virtual Switch, the available extensions are listed either in long or in short format. The long format includes a VNAC number, appended at the beginning of each extension which belongs to this Virtual Switch. This additional information is retrieved by CM tables.

Input: required. At least one item must be in the **Selected Items** list.

Possible abbreviations in the list: 2Q - AC 2 Queue groups MQ - AC Multiple Queue groups 2Q / GNo. 0 - AC 2 Queue group type, group number zero (0). MQ / GNo. 3 - AC Multiple Queue group type, group number three (3)

NOTICE: The available Attendant Consoles must be assigned to an Attendant Group, in order to be displayed, because an Attendant Console can function on the switch only when it is assigned to an AC-Group. Otherwise the Operator is inactive and will not show up in the list.

Selected Items (Attendant Consoles, AC Groups, and so on)

This list contains the names of all the switches that are included in the current Filter definition. This list is always enabled.

The system prompts you to select one or more items and use the **<** button to transfer them to the **Available Switches** list. If all the switches are removed from the **Selected Items** list on the Switches tab, the Telephony Items tab is disabled. It becomes enabled again when one or more switches are added to the **Selected Items** list.

NOTICE: After entering a number or range in the 'Attendant Console' or 'AC Group' sub tab manually with the Add (only available in some of the Telephony Items Tab) the corresponding items in the list are marked with '(manual entry)'.

Input required.

>, >>, <, and <<

These buttons:

- Add one or more switches to the Selected Items (Attendant Consoles, AC Groups, and so on) list by highlighting the required switch(es) in the Available Items (Attendant Consoles, AC Groups, and so on) list and click the > button.
- Add all the switches to the Selected Items (Attendant Consoles, AC Groups, and so on) list by clicking the >> button.
- To remove one or more switches from the Selected Items (Attendant Consoles, AC Groups, and so on) list by highlighting the required switch(es) in the Selected Items (Attendant Consoles, AC Groups, and so on) list and clicking the < button.
- To remove all the switches from the Selected Items (Attendant Consoles, AC Groups, and so on) list by clicking the << button

Enter the number range (only available in some of the Telephony Items Tab)

This text field is present on each of the Telephony Item Type tabs and allows you to specify a range of contiguous items by typing it in. It functions in conjunction with the Add button.

- This field is enabled whenever the Telephony Items tabs are enabled.
- Only the following characters are valid in this field:
  - numerical characters (0 to 9)
  - a single hyphen (-)
  - any number of spaces
- All characters are echoed to the screen.
- If an invalid character is detected, the following actions occur:
  - the warning message "Only the digits '0' to '9' and '-' are allowed" is displayed
  - The Add button is disabled
  - The warning message persists until the user corrects the invalid character(s), whereupon it is removed and the Add button is enabled (subject to validation as described in Step 5 below))
- As characters are entered in this text field, its contents are validated. If they represent a valid entry according to the following criteria, the Add button is enabled:
  - they form a single string of two or more digits with no intermediate spaces (but leading and trailing spaces are allowed)
  - they form two strings of two or more digits (as specified in (a) above) separated by one hyphen (that may have any number of leading and/or trailing spaces) and for which the second string is numerically equal to or greater than the first string.

Add (only available in some of the Telephony Items Tab)

This button allows you to add the range of items indicated in **Enter number or range** text field to the Selected Items list manually. Refer to Available Items (Attendant Consoles, AC Groups, and so on) list.

The **Add** button is only enabled if a valid entry is contained in the **Enter number or range** text field.

When the **Add** button is clicked, the following actions occur:

- The values represented by the range displayed in the **Enter Number or Range** text field are added to the **Selected Items** list as a series of sequential entries.

  For example, the Range 2300-2303 would be added to the **Selected Items** list as:
  ```
  2300
  2301
  2302
  2303
  ```
- The new item is marked with '(manual entry) in the **Selected Items** list.
- Any items within the entered Range that already appear in the **Selected Items** list are ignored, so that no item appears in the **Selected Items** list more than once.
- Any items within the specified Range that appear in the **Available Items** list are removed from it.

When the Add operation has been processed:

- The **Enter number or range** text field is cleared
- The **Add** button is disabled.

4.5.1.1 Fields in the Switches Tab (Telephony Filters)

Available Items (Attendant Consoles, AC Groups, and so on)

Selected Items (Attendant Consoles, AC Groups, and so on)

>, >>, <, and <<

4.5.1.2 Fields and Control in the Telephony Items Tab

Switch:

Available Items (Attendant Consoles, AC Groups, and so on)

Selected Items (Attendant Consoles, AC Groups, and so on)

>, >>, <, and <<

Enter the number range (only available in some of the Telephony Items Tab)

Add (only available in some of the Telephony Items Tab)

Switch:

The switches in this list come from the Selected Items (Attendant Consoles, AC Groups, and so on) on the Switches tab. Their telephony item types are available for selection.

Input: required.

Fields and Control in the Attendant Consoles Sub Tab

Switch:

Enter number or range (valid numbers: up to 17 digits)

Add

Switch:

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required-

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Attendant Consoles list.

Fields and Control in the AC Groups Sub Tab

Switch

Enter number or range (valid numbers: 0-15)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required.

Enter number or range (valid numbers: 0-15)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected AC Groups list.

Fields and Control in the Base Stations Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required.

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Base Stations list.

Fields and Control in the SLC Cards Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected SLC cards list.

Fields and Control in the Cordless Extensions Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Extensions list.

Fields and Control in the Cordless Hunt Groups Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Hunt Groups list.

Fields and Control in the Extensions Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Extensions list.

Fields and Control in the Hunt Groups Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Hunt Groups list.

Fields and Control in the Trunks Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Trunks list.

Fields and Control in the Trunk Groups Sub Tab

Switch

Enter number or range (valid numbers: 1-512)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: 1-512)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected Trunk Groups list.

Fields and Control in the ACD Groups Sub Tab

Switch

Enter number or range (valid numbers: 1-255)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: 1-255)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected ACD Groups list.

Fields and Control in the CMI Com. Extensions Groups Sub Tab

Switch

Enter number or range (valid numbers: up to 17 digits)

Add

Switch

The switches in this list come from the Selected Switches on the Switches tab. Their telephony item types are available for selection.

Input: required

Enter number or range (valid numbers: up to 17 digits)

Lets you enter a specific number or a range of numbers (digits separated by a hyphen) that are not in the Available Items list.

Add

Adds the number or range to the Selected CMI Com. Extensions Groups list.

4.5.2 Fields and Controls - "Organisational" Filter Type

Items in Object View:

Organisational Items Tab

Call Types Tab

Filter Summary Tab

Organisational Items Tab

In this tab you specify the data for the organisational structure of a company, similar to an hierarchical tree structure to set up the organisational filter for report production.

Filter Summary Tab

The Filter Summary is a read-only table, listing all the Organisational items currently defined for the filter. It is a helpful reminder on a single list.

4.5.2.1 Fields and Controls in the Organisational Items Tab

Items (list)

Item Definition

Add Item

Remove Item

Items (list)

List of already defined opganisational items. Selecting an entry displays the corresponding item name and item definition in the **Item Definition** box to enable you to delete the complete item or edit the item definition.

Item Definition

The read-only field **Item Name** reflects the selected organisational item from the **Items** list.

Use the eight dropdown lists (**Country**, **Company**, **Organisational Level 1**: ... **6:**) to select the part of the organisation you wish to add to the organisational filter.

The selections must be made hierarchically, starting with the **Country** level and working down to **Organisation Level 6**.

Note that at each level there is a **<none>** option! If this option is selected, all the boxes downwards in the organisation hierarchy will automatically be set to **<none>** also. This allows you to select all personnel at a given level in the organisation. If you set e.g. **Organisation Level 3** to **<none>**, all subsequent Organisation Levels are automatically set to **<none>** also. This results in selecting *all* personnel starting from Level 2 downwards in this filter.

Add Item

Click the **Add Item** button to add a new organisational item in the **Items** list. This will enable the 8 dropdown lists in the **Item Definition** box.

Remove Item

Click the **Remove Item** button to delete a selected organisational item from the **Items** list.

4.5.3 Fields in the Call Types Tab

Call Types

Directions

Internal

External

Transit

Incoming

Outgoing

Call Types

The following Call Types are provided for filtering:

Internal

External

Transit

Directions

The following Directions are provided for filtering:

Incoming

Outgoing

Internal

This checkbox controls whether Internal calls should be included in the filter definition.

Depending on the network configuration, internal calls may be either:

- Calls that both originate and terminate within the network (within a switch or between switches) or
- Calls that both originate or terminate within a single switch.

Depending on the network configuration, external calls may be either:

- Calls that both originate and terminate in the public network or
- Calls that originate or terminate outside the switch (on another switch or in the public network).

The Internal checkbox is always enabled.

When one of the Internal and External checkboxes is selected, you cannot clear the selected checkbox and have both checkboxes empty.

External

This checkbox controls whether External calls should be included in the filter definition.

External calls are defined as calls that either originate outside the network or terminate outside the network.

The External checkbox is always enabled.

If the External checkbox is checked, external calls for all selected telephony items on all selected switches will be included in any report that uses this filter definition.

Attempting to uncheck the External checkbox when the Internal checkbox is also unchecked, is ignored (i.e. it is not possible to have both the External and Internal checkboxes unchecked simultaneously).

Transit

This checkbox controls whether transit calls should be included in the filter definition and is enabled only for Trunk Groups and Trunks.

If the Transit checkbox is checked, transit calls for all selected telephony items on all selected switches are included in any report that uses this filter definition.

When the Transit checkbox is selected, you cannot clear the selected checkbox and have all three checkboxes empty.

Transit calls are defined as calls that neither originate nor terminate on the monitored telephony item and are only relevant for Trunk or Trunk Group telephony items (the setting is ignored for other telephony items). So, if a non-trunk filter item (e.g. Extensions, Attendants) is selected, this option is greyed-out and unchecked.

The following reports categories and reports are compatible with filters with the Transit option enabled:

- **Call Timings**
  - Average Waiting+Ringing and Answering times
  - Average Waiting, Ringing and Conversation time
  - Call Statuses (time in Hold, Ringing, Conversation and Idle
  - Conversation Times (Minimum, Average and Maximum)

  In a **Call Flow** scenario, **Conversation Time**means the connection duration of the scenario. A Call Flow report displays all the CDR rows of one call scenario (one globseq). So the report registers, how the call has been handled during its life cycle.

  In a **Call By Call** scenario, **Conversation Time** means the talking duration between two ends. In a Call By Call report all the regarding CDR rows are evaluated and only the final statement about the call scenario is plotted.

  - Ringing Times of Answered and Not Answered calls
  - Ringing Times (Minimum, Anerage and Maximum)
  - Sum of Ringing and Waiting time of Answered and Not Answered calls
  - Waiting Times (Minimum, Average and Maximum)
- **Call Tracking**
  - Call Flow
  - Call by Call
- **Call Volumes**
  - Answered, Not Answered and Lost because Busy
  - Availability(%)
  - Busy Hour
  - Total Number of Calls
- **Call to External**
  - Call to External Destination
- **Hit Parade / Top Usage**
  - Highest Load By Trunk Group
  - Highest Number of Answered Calls
  - Highest Number of Calls
  - Highest Number of Lost because Busy
  - Highest Number of Not Answered Calls

- **Trunk Group Metering / CDR**
  - Availability by Trunk Group
  - Availability over Time
  - Busy Hour
  - Load by Trunk Group
  - Load over Time(%)
  - Load over Time(erlangs)
- **Trunk Group Metering / TG-Check**
  - Availability by Trunk Group
  - Availability over Time
  - Busy Hour
  - Load by Trunk Group
  - Load over Time(%)
  - Load over Time(erlangs)
- **AC-Common**
  - Service Level
  - Branch Statistics

Incoming

This checkbox controls whether incoming calls should be included in the filter definition.

Incoming calls are defined as calls that terminate on the monitored telephony item.

The Incoming checkbox is always enabled.

When one of the Incoming, Outgoing, or Transit checkboxes is selected, you cannot clear the selected checkbox and have all three checkboxes empty.

Outgoing

This controls whether outgoing calls will be included in the filter definition.

Outgoing calls are defined as calls that originate from the monitored telephony item.

The Outgoing checkbox is normally enabled; it is only disabled immediately following a Delete Filter operation.

If the Outgoing checkbox is checked, outgoing calls for all selected telephony items on all selected switches are included in any report that uses this filter definition.

When the Outgoing checkbox is selected, you cannot clear the selected checkbox and have all three checkboxes empty.

4.5.4 Fields in Filter Summary Tab ("Telephony" Filter Type)

Switch

Item Type

Item

Switch

This is the Switch to which the defined telephony item refers (up to four characters).

Item Type

This identifies the type of Telephony Item as follows:

- Extension
- Trunk
- Trunk Group
- Hunt Group
- Attendant Console
- AC Group
- Cordless Base
- Cordless SLC

Item

This is the specific number, or range, of items in the Item Type

4.5.5 Fields in Filter Summary Tab ("Organisational" Filter Type)

Item

Country

Company

Org 1 ... Org 6

Item

Read-only field: Shows all Organisational Items for which this filter is applied to.

Please refer to Fields and Controls in the Organisational Items Tab.

Country

Read-only field: Country of the Organisational Item. If one of the organisational items is set to "Unassigned", this is displayed under the "Country" column in the summary, all the other columns are blank in this case.

Please refer to Fields and Controls in the Organisational Items Tab.

Company

Read-only field: Company name of the Organisational Item.

Please refer to Fields and Controls in the Organisational Items Tab.

Org 1 ... Org 6

Read-only field: Shows the order of the Organisational levels for each item within the Item for this row.Blank cells in the table show the point at which the selection in the organisational hierarchy.

Please refer to Fields and Controls in the Organisational Items Tab.

4.6 Fields and Controls in Administration

The Administration web page consists of the following tabs:

4.6.1 Fields and Controls in the Archive/Delete Tab

Archive/Delete

This tab allows you to archive or delete stored PM data automatically or manually so as not to fill up the database, and set the option for automatically removing deleted filter extensions.

You may also maintain the CDR table which is used for generating reports.

The following operations are possible:

- Control the length of time that collected data is retained in the database
- Delete or archive the collected data after the retention period is exceeded.
- Manually delete or archive data from the PM database
- Keep the database table **pm_cdrdatatbl** with call data records (CDR) compact and regain disk space by deleting old records from the CDR table. Older records than a date which is to be set during the procedure, will be deleted from the CDR table and the table will be reconstructed.
- Set the option for automatically removing the deleted extensions from the existing PM filters, if they are a part of any filter.

Current State

The current state of the Auto-archive/Delete feature.

Change State

You have three selections:

- Off-allows you to switch the Auto Archive/Delete feature off, so that data is retained in the PM database indefinitely. No further options in the **Select Data Retention Period** panel are selectable.
- Auto-delete-allows you to switch the Auto-delete feature on, so that data persisting after the retention period are removed automatically from the PM database and deleted. You may set time options for retaining and deleting data in the **Select Data Retention Period** panel.
- Auto-archive-allows you to switch the Auto-archive feature on, so that data persisting after the retention period are removed automatically from the PM database and archived. Activating the **Daily** checkbox, auto-archiving will be performed daily. You may set the option(s) for retaining data in the **Select Data Retention Period** panel.

Select Data Retention Period

Specifies the period (backwards from the current date), data are to be retained in the database. Older data will be automatically archived/deleted.

Depending on your selection, different additional options for specifying time periods and a time of day become selectable or not.

The following options may be provided:

- Calendar months: Allows you to specify how many calendar months data are to be retained in the database.
- 2 weeks: Data will be retained up to two weeks
- 1 week: Data will be retained up to one week
- Daily: Data will be retained for a range of days, which is selectable from the spinner box.

Start of deletion

Allows you to specify te point of time, when the deletion process should start:

- the day of deletion is selectable from the drop-down list **Day**
- the time of day can be selected from the spinner box **Time**.

Options here are selectable or deactivated depending on your selection for Change State and the selected period for data retention under Select Data Retention Period.

Auto Extension Remove

You have two options:

- **Off**--Allows you to **disable** the automated removal of filter extensions that don't exist on the system.
- **On**--Allows you to **enable** automated removal of filter extensions that don't exist on the system. If this option is selected, the deleted extensions from the existing PM filters will be removed from those filters at the scheduled time and period.

Apply changes

This saves and applies the specified Auto-archive/Auto-delete feature setting and data retention period.

Discard changes

Discards any changes to the Change State option buttons and Data Retention period settings which have not been applied, and re-instates the values which are currently in force.

Delete data collected before the following date:

A date selector control that accepts a date from an associated calendar display. The entered/selected date applies also for the 'compact of pm_cdtdatable' function.

Delete Data Now

Allows the user to manually delete any data in the PM database which has been collected before the date displayed in the Manual Deletion Date data entry control.

Number of records in pm_cdrdatatbl table

The text field displays the number of available records in the CDR table **pm_cdrdatatbl**.

NOTICE: The functionality "Compact CDR Data table" is *not* available for the **Assistant**!

Compact now

Allows you to keep the database table **pm_cdrdatatbl** with call data records (CDR) compact and to regain disk space. Select the threshold date for records to be deleted from the 'Delete data collected before the following date:' in the 'Manual Data Deletion' section above.

By pressing this button a message box with a note will be opened. After confirming the this message box with the **Yes** button the operation will start; to abort the operation click **No**.

NOTICE: The functionality "Compact CDR Data table" is *not* available for the **Assistant**!

Archive data from:

A date selector control that accepts a date from an associated calendar display

Archive data to:

A date selector control that accepts a date from an associated calendar display.

Save archive data in file:

Enter the filename for the archive.

Split file in smaller files

Activating this checkbox option allows splitting the archive files into several files comprising a selectable number of days. The files will be named as entered in the **Save archive in file** and counted up, e.g. 'archive_1', archive_2', 'archive_3',..., 'archive_n'.

Number of days in one file

The **Split in smaller files** option activated, the number of days comprising one archive file. may be entered or selected here.

Archive Data Now

Allows the user to manually archive any data in the PM database which has been collected before the date displayed in the Manual Deletion Date data entry control.

4.6.2 Fields and Controls in the Calls Maintenance Tab

Activate Reconstruction of Calling and Destination Parties through modifications to get more accurate results in PM-Reports

This checkbox activates or deactivates the feature. At deactivating the feature, a warning message is displayed, that this may result in inaccurate PM reports.

Start time of reconstruction

Time of day, when the reconstruction of the call data records should start; selectable from the spinner box.

Period of reconstruction

Interval for the reconstruction of the call data records:

- Daily
- 12 Hours
- 8 Hours

CO Incoming Access Code

In this panel you can assign the codes for the incoming prefixes for each switch.

List of Switches

In this table all switches are listed which are available for selecton and assignment.

- Select: Checkbox to select the corresponding switch for assignment to a specific code.
- Switch ID: Displays the code of the switch ID (read only)
- Switch Name: Displays the name of the switch (read only).

Select All

Clicking this button sets checkmarks in the checkbox **Select** for all switches in the list.

Deselect

Clicking this button unchecks all checkboxes **Select** for all switches in the list.

Assigned Codes (text box)

Enter in the "Code" text-field the common international prefixes and/or national prefix for all of the selected (checked) switches in the list. At least one code should be entered for a switch.

Add >>

Adds the checkmarked switches together with the assigned code to the Assigned Codes table.

Assigned Codes (table)

- Switch ID: Displays the code of the switch ID (read only)
- Switch Name: Displays the name of the switch (read only).
- Code: Displays the assigned code (read only).

Remove

Breaks the assignment of a selected switch in the Assigned Codes table and removes the switch from this table.

Apply Changes

Clicking this button, all changes in Calls Maintenance Tab-sheet will be saved and applied.

Discard Changes

Clicking this button, all unsaved changes in Calls Maintenance Tab-sheet will be abolished.

4.6.3 Fields and Controls in the Restore Data Tab

Archive filename

Last modified

Restore

Archive filename

The actual filename by which the file is known in the server. A file-naming convention of: "autoarchive-yyyy-mm-dd" - for automatically archived files or "manarchive-yyyy-mm-dd" - for manually archived files is supported (but is not enforced for manually archived files).

Last modified

Date when the file was last modified.

Restore

Restores the selected file of data from the file system and stores its contents in the PM database.

4.6.4 Field and Control in the Statistics Tab

Statistics

Threshold above which a warning will be given:

Send email notification if threshold is exceeded

Select email recepients

Apply

Statistics

This tab allows you to see what proportion of the OpenScape 4000 Manager database is occupied by PM data (PM Reports, PM Report Groups, PM Filters). It also allows you to set a threshold value for the PM database size and lists how many of each of PM records are defined in the database and to send automated reports to selectable email recipients, if database threshold is exceed.

Threshold above which a warning will be given:

Allows you to set an upper limit on the proportion of the System database that is occupied by PM data.

Send email notification if threshold is exceeded

If this option is enabeled, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator Manual; V6 (English)
- Report Generator Manual; V6 (German)

Select email recepients

By clicking the selection button on the right of the text input field, the list with possible recipients of subscribers defined in the Report Generator (RepGen), respectively with information provided by the `persdat` CM database table, is displayed. The recepicients can be selected from this list.

For details, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator Manual; V6 (English)
- Report Generator Manual; V6 (German)

Apply

Applies the value that has been entered in the Threshold above which a warning will be given: text field.

4.6.5 Field and Control in the Configuration Tab

Directory into which PM will store archived data

Apply (changes done in the Directory definition)

Organisational data collection status

Apply (changes done in the Organisational Data Collection Status area)

Configuration Tab

In this tab you are able to specify the directory where the PM data files (the files previously specified in the Save archive data in file: field of the Fields and Controls in the Archive/Delete Tab) are to be saved.

Furthermore, the tab provides an area with controls for enabling and disabling the collection of organisational data reports.

Directory into which PM will store archived data

Directory into which PM archives data. These files are all stored in the same directory (referred to by the system environment $PMARCHIVE).

Apply (changes done in the Directory definition)

If the specified directory is valid, and exists on the server, the directory in which PM stores the archived data is carried out.

Organisational data collection status

This area is used for controlling the collection of organisational data reports.

- Collection ACTIVE: organisational data reports are saved in the PM database.
- Collection INACTIVE: organisational data reports are not saved in the PM database.

Press the adjacent **Apply** button to make the changes come into effect.

Apply (changes done in the Organisational Data Collection Status area)

Press this button to confirm the changes done in the adjacent checkboxes for the configuration of the organisational data collection status.

4.6.6 Fields in the Database Summary Tab

Database Summary

Weekly period in PM database

Number of data records

Database Summary

Provides a summary of data records within a weekly period.

Weekly period in PM database

A list of all the weeks between the oldest and the current date of the generated data. This also includes the Number of data records column.

Number of data records

The number of data records currently in the CDR table for a given week. If there are no data records for a particular week, the week is retained in the list with a value of 0.

The default ordering of the information displayed is the oldest date at the top of the list and the current date at the bottom. The values in the list are updated whenever you reselect the tab sheet.

4.6.7 Field and Control in the Advanced Reports Tab

Download Drive

Download Templates Now

Download Logo Now

Advanced Reports

This tab allows you to download the advanced report templates.

Download Drive

Enter the letter of the drive where the templates and logo will be downloaded.

Download Templates Now

Downloads templates from the OpenScape 4000 Manager to the appropriate directory on the PC. If the directory does not exist, a directory is automatically created. If the template already exists in the PC directory, it is automatically overwritten by the downloaded version.

Download Logo Now

Downloads the company logo from the OpenScape 4000 Manager to the appropriate directory on the PC. If the directory does not exist, it is automatically created. If the logo already exists in the PC directory, it is automatically overwritten by the download version.

4.7 Fields and Controls for Metering Settings

These fields are shown in the PM Tab sheet in System Management:

"View" Area

Search Criteria

Object

Object List

(New Object)

"Metered Items" Area

Selected Items

All Items

"Collect System Data" Area

SWU/ADP Load

Feature Usage

"Collect Cordless Data" Area

Cordless Statistic Counters

With Refresh Of Cordless List when settings are saved

Cordless Overload Duration

Cordless Stay Statistics

List Area displaying the available and the selected telephony items

Available Items List

Selected Items List

>

>>

<

<<

Enter Number or Range

Add

Buttons

Save

Discard

New

Delete

Search Criteria

Opens the Search Criteria view that enables you to search for and retrieve instances of the current network object type from the server. Search by date is not supported.

You can enter text, text with placeholders, or leave the fields blank. You can combine several search criteria to refine your search by entering data into several fields in the view.

Usage of Wildcards and special characters in the search process:

- * Matches zero or more characters.
- ? Matches any single character.
- [...] Matches any or all of the enclosed characters, including character ranges as in [a-z]. Characters inside the square brackets cannot be escaped.
- ^ As the first character within the square brackets, "^" matches any character that is not listed. Hence [^abc] matches any character that is not a, b, or c.
- \ Removes the special significance of the next character (used to match * or ? by writing * or \?)

Object

The Object view page allows the user to create or modify a metering setting.

Object List

When the Metering Setting page is first opened in Object List View, the page shows a list of user-defined metering settings. The metering settings are listed in ascending alphabetical order of the names.

You can alter the order in which the metering setting are displayed by clicking the appropriate column heading. This causes the name of the metering setting to be listed in ascending alphabetical order of the selected column's contents. A second click causes the metering setting names to be listed in descending alphabetical order of the selected column's contents. Further clicks toggle between these two display modes.

You cannot edit any of the table entries. These tables are read-only.

New Object

Only available, when a new, unsaved metering setting is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the newly-created metering setting definition to be displayed.

Selected Items

When this button is selected, only the selected items are metered.

All Items

When this button is selected, all items are metered.

The All Items option button is enabled or disabled under the following conditions:

- If the All Items option button is selected, the Item Type tabs are disabled but the currently selected tab remains selected and its entries remain unchanged.

> **NOTICE:** If the All Items option button is selected, all items are going to be metered, therefore, they may be a degradation in the performance of the switch.

Collect System Data (area)

The check boxes in this area are used to enable/disable the data collection of **SWU/ADP Load** and **Feature Usage** for PM metering.

SWU/ADP Load

If this checkbox is checked, SWU/ADP load data collection is turned on for the specified switch.

If this checkbox is not checked, SWU/ADP load data collected is turned off for the specified switch.

Feature Usage

If this checkbox is checked, feature usage data collection is turned on for the specified switch.

If this checkbox is not checked, feature usage data collected is turned off for the specified switch.

Cordless Statistic Counters

This check box is used to enable/disable the collecting of specific Cordless data for PM.

If this check box is checked, the additional check box **With Refresh Of Cordless List when settings are saved** is activated and can be enabled/ disabled.

See also With Refresh Of Cordless List when settings are saved.

With Refresh Of Cordless List when settings are saved

This check box is only activated and can be enabled/disabled if the **Cordless Statistic Counters** check box in the **Collect Cordless Data** area is enabled.

See also Cordless Statistic Counters.

Cordless Overload Duration

If this check box is enabled, the metering of the Base Station Overload Duration is activated and performed by Fault Management (AFR - Alarm Fault Report).

Cordless Stay Statistics

Enables the collection of cordless stays data metering for all SLC cards in the selected switch(es).

By means of this data, a statistic on the usage of base stations per CMI subscriber can be generated (i.e. a statistic telling which base station is mostly used by a CMI user).

With this statistics you are able to detect the SLC on which the highest load is caused and to move the subscriber to this SLC, in order to reduce tie-line traffic (i.e. to reduce the connections that are necessary between the actual SLC and the home SLC).

Available Items List

The Available items list appears on each of the Telephony Item Type tabs and allows the user to select which items of the selected Item Type is going to be metered.

The Available Items list is enabled whenever the Telephony Items tabs is enabled.

For an existing Switch definition

- The Available Items list is populated with those items relevant to the selected Telephony Item type for the selected switch that are not already included in the metering definition for the switch.
- The items are displayed in alphabetical/numerical order

For a new Switch Definition:

- The **Available Items** list is populated with all items of the selected Telephony item type for the selected switch.
- The items are displayed in alphabetical/numerical order

Selected Items List

The Selected items list appears on each of the Telephony Item Type tabs and indicates which items of a selected Item Type is going to be metered.

The **Selected Items** list is enabled whenever the Telephony Items tab is enabled.

For a new Switch Definition, the **Selected Items** list is empty

For an existing Switch definition

- The **Selected Items** list is populated with those items relevant to the selected Telephony Item type for the selected switch that are not already included in the metering definition for the switch (if any)

- The items are displayed in numerical order

>

Adds one or more items to the **Selected Items** list by selecting the required item(s) in the **Available Items** list and clicking the > button. The following actions occur:

- The selected item(s) are removed from the **Available Items** list
- The selected item(s) are added to the **Selected Items** list in their correct alphabetical/numerical position.

>>

Adds all the items to the **Selected Items** list (regardless of which item is highlighted in the **Available Items** list). The following actions occur:

- All items will be removed from the **Available Items** list
- All items will be placed on the **Selected Items** list, in alphabetical/numerical order

---

NOTICE: The user is not prompted for confirmation.

<

Removes one or more items from the **Selected Items** list by selecting the required item(s) in the **Selected Items** list and clicking on the < button. The following actions occur:

- The selected item(s) are removed from the **Selected Items** list
- The selected item(s) are added to the **Available Items** list, in their correct alphabetical/numerical position.
- Any 'Range' items that are included in the items that were selected from the **Selected Items** list, are processed as follows:
  – The constituent items of the Range(s) are returned to the **Available Items** list as a series of discrete items
  – All items in the Range(s) are added to the **Available Items** list, even those that did not initially appear in the **Available Items** list.

<<

Removes all the items from the **Selected Items** list (regardless of which item is highlighted in the **Selected Items** list. The following actions occur:

- All items are removed from the **Selected Items** list
- All items are placed on the **Available Items** list, in alphabetical/numerical order
- Any Range items that were contained in the **Selected Items** list, are processed as follows:
  – The constituent items of the Range(s) are returned to the **Available Items** list as a series of discrete items
  – All items in the Range(s) are added to the **Available Items** list, even those that did not initially appear in the **Available Items** list

---

NOTICE: The user is not prompted for confirmation.

Enter Number or Range

This text field appears on each of the Telephony Item Type tabs. It also allows you to specify a range of contiguous items by typing it in. This field functions in conjunction with the **Add** button.

Only the following characters are valid in this text field:

- Numerical characters (0 to 9)
- A single hyphen (-)
- Any number of spaces

This text field can contain a maximum of 20 characters.

Add

The Add button appears on each of the Telephony Item Type tabs and enables the user to add the Range of items indicated in **Enter number or range** text field to the **Selected Items** list. Refer to Enter Number or Range, page 4-317 for a full description.

When the **Add** button is clicked, the following actions occur:

- The values represented by the Range displayed in the **Enter Number or Range** text field are added to the **Selected Items** list as a series of sequential entries.

  For example, the Range 2300-2303 would be added to the **Selected Items** list as:
  ```
  2300
  2301
  2302
  2303
  ```

Save

Saves the data entered into the displayed fields. Allows you to send the displayed metering settings to the selected switch.

Discard

Removes a switch from the system.

New

Opens the New Object view. If the data of an existing network object has been displayed before opening the New Object view, the contents of certain fields are not deleted, but kept from the previously displayed object in order to ease the creation of the next/new one.

Delete

Removes the selected item.

4.8 Fields and Controls for Branch Definition

Branch Definition Page

Views of the Branch Definition Page:

New Object

Object

Object List

Fields in the Object View:

Branch name

Select Switch with ASCs

Select Branch Switch

Branch Criteria

Branch Definition Trunk Group Assignment

Enter number or range (valid numbers 1-512)

Add

Columns in the Object List View:

Name

Criteria

User ID

Created

Last Modified

Buttons:

New

Copy

Save

Delete

Cancel

Branch Definition Page

Allows you to create or modify a branch.

New Object

Only available, when a new, unsaved branch definition is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the newly-created branch definition to be displayed.

Object

Shows a single branch definition.

Object List

Shows a list of branch definitions in a table form. If a new branch definition is being created the view bar also shows a **New** radio button.

Branch name

Allows you to enter a name for the branch definition. Branch definitions are uniquely identified by their branch names.

Mandatory.

Select Switch with ASCs

Allows you to select the switch with ASCs attached. It lists all configured switches in the network.

ASC branch switches must not be the same switch. PM does not know which switches have ASCs attached.

The ASC switch, must be selected first and the branch switch second.

> **NOTICE:** If you have assigned trunk groups for a particular pair of switches then selected a new ASC or branch switch, a dialog appears informing you that there are unsaved changes and that you should save or cancel the changes before continuing. When you cancel the changes, the branch definition page is still displayed with Use Node IDs selected, ASC and branch switches unaltered, and no assigned trunk groups.

Select Branch Switch

Allows you to select a branch switch. It lists all configured switches in the network.

The branch switch is selected second after the ASC switch. Refer to Select Switch with ASCs.

> **NOTICE:** If you have assigned trunk groups for a particular pair of switches then selected a new ASC or branch switch, a dialog appears informing you that there are unsaved changes and that you should save or cancel the changes before continuing. When you cancel the changes, the branch definition page is still displayed with Use Node IDs selected, ASC and branch switches unaltered, and no assigned trunk groups.

Branch Criteria

Allows you to use physical node IDs and assign trunk groups to the branch definition;

When you select **Assign Trunk Groups** for the first time, for each new pair of switches, the **Selected Trunk Groups** is automatically populated with the list of trunk group numbers and their names between the two switches. The list is loaded from the CM tab; **buend**. If there is no trunk group name in CM, only the number is displayed. It is assumed that you will assign all trunk groups between the two switches to the branch definition.

Whenever you select **Assign Trunk Groups** for the same pair of switches, the available and selected trunk groups are loaded with the list of trunk group numbers and their names that you previously assigned. If there is no trunk group name in CM or you manually entered the trunk group, only the number is displayed. The lists are not reloaded from the CM table **buend**.

Branch Definition Trunk Group Assignment

Use the "<", "<<", ">", and ">>" buttons to move one or more trunk groups between **Available Trunk Groups** and **Selected Trunk Groups**.

When **Assign Trunk Groups** is selected, the **Selected Trunk Groups** is mandatory. It must have at least one trunk group.

NOTICE: When you select **Assign Trunk Groups**, the assignment of trunk groups for branch statistics must correspond with the current configuration of the PABX with ASCs attached in order to produce meaningful data.

Enter number or range (valid numbers 1-512)

Allows you to manually enter an individual trunk group number or a range of trunk group numbers.

This enter mechanism is displayed when **Assign Trunk Groups** is selected and removed when **Assign Trunk Groups** is deselected.

Add

When you select **Assign Trunk Groups**, the input field is blanked and the **Add** button is grayed out.

When you enter a valid number or a valid number range, the **Add** button is enabled. Valid numbers are in the range 1 to 512. A valid number range consists of two valid numbers separated by a dash "-". The second number must be greater than the first number.

When you click the Add button, the contents of the input field are automatically transferred into **Selected Trunk Groups**, the input field is blanked, and the **Add** button is grayed out.

NOTICE: The user can only enter a trunk group number. They can not enter a name for the trunk group.

Name

Branch name.

Criteria

Criteria for identifying ASC-handled calls between the ASC and branch switches.

User ID

Identity of the user creating the branch definition.

Created

Date the branch definition was created.

Last Modified

Date the branch definition was last modified.

New

Allows you to define a new branch in a "2/3" format with arrow keys that allow the user to select the first, next, previous, or last branch definition.

In Object list, when **New** is pressed the page changes to the new Object View display with all fields left blank and no switches selected.

Copy

Allows an existing branch definition to be copied and then changed. When **Copy** is pressed, **Copy of** is added to the branch name and all other fields are unchanged.

In Object list, when **Copy** is pressed, the page changes to the Object view display.

Save

Allows you to save the branch definition in the database. The button is enabled when information is selected or entered in each area of the page. The button is disabled if the branch name is removed, the same switch is selected twice, or there are no trunk groups in "Selected Trunk Groups".

In Object list, this button is always greyed out.

When you press the Save button, the mandatory fields are checked. If any mandatory fields are missing or incorrect, a dialog displays informing you of the error and corrective action. The branch definition is not saved until all mandatory fields are correct.

Delete

Removes the branch definition from the set of branch definitions stored in the database.

In Object list, this button removes the branch definition from the set of branch definitions stored in the database.

Cancel

Allows you to cancel the Branch Definition page and return to the previous page without creating a new branch definition or modifying an existing branch definition.

In Object list, this button is greyed out.

4.9 Fields and Controls for One-Off Report

Tabs of the One-Off Reports Page

Set Parameters Tab

Select Items Tab

Set Thresholds Tab

Items of the Set Parameters Tab

Name

Scale Interval

Number of Hits in the result displayed (One-Off Report)

Controls for Ignoring Report Values (One-Off Report)

Foreign Stays Only (One-Off Report)

Foreign Switch Stays Only (One-Off Report)

Service Level

Report Mode

Reporting Days

Daily time periods

Period

Import

Selected Items

Template

Type

Direction

Report Output

Items of the Select Items Tab

Filter Type

Available Switches (when "Telephony" Filter Type is set)

Selected Switches (when "Telephony" Filter Type is set)

Item (when "Organisational" Filter Type is set)

Item Definition (when "Organisational" Filter Type is set)

Refer also to Fields and Control in the Telephony Items Tab and Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Items of the Set Thresholds Tab

Fields and Controls in the Set Thresholds Tab (One-Off Report)

Set Parameters Tab

Allows you to set all of the parameters required for a One-Off report. This tab is based on the existing Report Definition, Run Report, and Filter Definition pages.

Select Items Tab

Allows you to select the telephony items for the One-Off report. From V2.2, a new tab, Branches has been added for Branch Statistic reports. These are required for ASC 3.0 Parity.

You can select one or many items by pulling in an existing filter in the Set Parameters tab. This tab is based on the existing Telephony items tab in the Filter Definition page.

Refer to Fields and Control in the Telephony Items Tab and Organisational Items Tab and sub-sections.

Set Thresholds Tab

By setting thresholds via this tab, you are able to define reports that display only values exceeding these thresholds. Furthermore, you are able to define whether an alarm should be sent to the Fault Management, if one of the thresholds is exceeded.

The thresholds are applicable only for One-Off Advanced reports. For One-Off Flexible reports it is not possible to set thresholds.

Name

Allows you to enter a name for the One-Off report (up to 100 characters). The name is optional.

Scale Interval

Input required.

It must be between 1 and 1440 minutes for non-cordless reports and 15 to 1440 minutes in 15-minute intervals for cordless reports.

Default: 15 minutes.

Allows you to set the scale interval for the One-Off report.

The Scale interval field does not apply to the following templates:

- ACD Automatic Call Distribution - General Statistics
- Call Timings - Ringing Times of Answered and Not Answered Calls
- Call Timings - Sum of Ringing and Waiting Times of Answered and Not Answered Calls
- Call Timings - Call Statuses
- Cordless Statistics - Cordless Stays
- Cordless Statistics - Overload Duration
- Hit Parade / Top Usage
- Trunk Groups - Availability by Trunk Group
- Trunk Groups - Busy Hour
- Trunk Groups - Load by Trunk Group
- Attendant Consoles - General Statistics
- System Statistics - Feature Usage Data

When any of these templates are selected, the Scale Interval field is disabled and the value remains the same.

Number of Hits in the result displayed (One-Off Report)

The meaning of this checkbox is identical to the one already described for the Report Definition page. See Number of Hits in the result displayed.

Controls for Ignoring Report Values (One-Off Report)

Depending on the currently selected template type, different controls for excluding report values are displayed in the One-Off Report page.

The controls are identical to those in the Report Definition window. See Controls for Ignoring Report Values.

Foreign Stays Only (One-Off Report)

The meaning of this checkbox is identical to the one described in the Report Definition page. See Foreign Stays Only.

Foreign Switch Stays Only (One-Off Report)

The meaning of this checkbox is identical to the one described in the Report Definition page. See Foreign Switch Stays Only.

Service Level

Allows you to set acceptable waiting time for answered incoming calls and comparison value displayed on the generated advanced report as a line drawn across the report

Preassigned values:

First set - 20 seconds and a line at 80%

Second set - 30 seconds and a line at 98%. You can also enter other values.

The service level selection mechanism only applies to Attendant Consoles - Service Level Statistics template. It is only enabled when one of the service level statistic report templates is selected.

Report Mode

Allows you to choose between Full or Summary report modes.

A full report is continuous from the start date and time to the end date and time.

The summary report may not be a contiguous report from the start time on the start date to the end time on the end date. There may be overnight gaps in the summary report.

The schedule option should be selected before the report mode option.

Summary reports are required for ASC 3.0 Parity.

Reporting Days

Allows you to set the **From** and **To** days.

The **From** day must be earlier than the **To** day. The default values for both the **From** and **To** days is the current date on the server.

Input required.

Daily time periods

TAllows you to set the From and To times for each day in the reporting period. The From time must be earlier than the To time. The default values for both the **From** and **To** times is the current time on the server.

When **Periodic schedule** and **Summary** report mode options are selected, the drop down list of available frequencies only contains Weekly and Monthly.

These are the only frequencies that can have periodic summary reports. The other frequencies; quarter hourly, half hourly, hourly, every n hours, and daily can not have periodic summary reports. They can only have periodic full reports.

Input required.

Period

Allows you to select the reporting period as follows:

1) **From: Date:**

Input required.

Must be earlier than the To: date.

Default value is the current date on the server

The length of the reporting period must be equal or greater than the scale interval. For cordless reports, the length must be a multiple of the scale interval.

1) **To: Date**:

Input required.

Default value is the current date on the server

The length of the reporting period must be equal or greater than the scale interval. For cordless reports, the length must be a multiple of the scale interval.

1) **From: Time**:

Input required.

Must be earlier than the To: time.

Default value is the current time on the server

The length of the reporting period must be equal or greater than the scale interval. For cordless reports, the length must be a multiple of the scale interval.

1) **To: Time**:

Input required.

Default value is the current time on the server

The length of the reporting period must be equal or greater than the scale interval. For cordless reports, the length must be a multiple of the scale interval.

Import

Allows you to import an existing filter. When this checkbox is unchecked the filter selection is disabled.

Default: Unchecked

Select from the list of available filters in the drop-down list.

You may also select an Organisational Filter Type, as defined in the Organisational Items Tab of the Filter Definition Page. There are two types of reports, which can be generated, using an Organisational filter:

1) Organisational Summary reports:
2) These reports use the standard templates for report generation, but with an Organisational filter. In the Report Definition page you may select a

standard report template, for example a 'Table' or 'Column Chart' and then set an Organisational filter in the filter selection box. When the report is run, its appearance will be the same as for a report run for example on a single extension, but the statistics presented will be for all extensions in the selected organisation.

NOTICE: Not all reports will produce meaningful results if an organisational filter is selected, for example if a Trunk Group report template is chosen, selecting an Organisational Filter is not appropriate as organisational information does not define Trunk Groups. If the user to use an Organisational Filter with a report template where it is not appropriate, then the user will be informed of the inappropriate selection when they attempt to save the report, and the report will not be saved.

3) Organisational Detail reports:

4) These reports use special templates which are specifically designed to present a detailed report, which will show statistics at each level of the organisation below the point(s) selected in the organisational filter. The templates are identified at "Organisational Detail" in the template selection tree. The breakdown of the statistics in the report will include all departments, sub-departments, sections and sub-sections below the selected point(s) in the organisation and will include statistics for individual extensions at the lowest level.

The "Organisational Detail" reporting template applies to all the Call Timings and Call Volumes reports, but not the Attendant Consoles, Cordless, System statistics and Trunk Group reports. If the "Organisational Detail" template option has been for for a report then when the "Save" button is pressed a check will be performed to ensure that the filter defined for the report is an "Organisational Filter". If not, a dialog will be displayed informing the user of the inappropriate selection and the Report will not be saved.

NOTICE: The "Organisational Detail" reports are presented in a table format only.

Selected Items

Provides a summary list of the selected items. The list is automatically filled with definitions for the selected telephony filter or organisational filter or the changes made in the Select Items tab.

Template

- The selection box 'Templates' shows all available one-off report templates as a tree structure.
- You can select the report template and its display format (column, table, pie chart) by succeeding clicks onto the folder symbols.
- The blue highlighted format is selected when clicking the button 'Run'.

For detailed description of the templates and their features see Report Templates.

Type

Three check boxes allow to define the call type(s) to be recorded in the report. At least one type has to be selected.

- **Internal**
- **External**
- **Transit**
- Transit calls are defined as calls that neither originate nor terminate on the monitored telephony item and are only relevant for Trunk or Trunk Group telephony items (the setting is ignored for other telephony items). So, if a

non-trunk filter item (e.g. Extensions, Attendants) is selected, this option is greyed-out and unchecked.

The following reports categories and reports are compatible with filters with the Transit option enabled:

Call Timings

– Average Waiting+Ringing and Answering times
– Average Waiting, Ringing and Conversation time
– Call Statuses (time in Hold, Ringing, Conversation and Idle
– Conversation Times (Minimum, Average and Maximum)
– Ringing Times of Answered and Not Answered calls
– Ringing Times (Minimum, Anerage and Maximum)
– Sum of Ringing and Waiting time of Answered and Not Answered calls
– Waiting Times (Minimum, Average and Maximum)

Call Tracking

– Call Flow
– Call by Call

Call Volumes

– Answered, Not Answered and Lost because Busy
– Availability(%)
– Busy Hour
– Total Number of Calls

Call to External

– Call to External Destination

Hit Parade / Top Usage

– Highest Load By Trunk Group
– Highest Number of Answered Calls
– Highest Number of Calls
– Highest Number of Lost because Busy
– Highest Number of Not Answered Calls

Trunk Group Metering / CDR

– Availability by Trunk Group
– Availability over Time
– Busy Hour
– Load by Trunk Group
– Load over Time(%)
– Load over Time(erlangs)

Trunk Group Metering / TG-Check

– Availability by Trunk Group
– Availability over Time
– Busy Hour
– Load by Trunk Group
– Load over Time(%)
– Load over Time(erlangs)

AC-Common

– Service Level
– Branch Statistics

NOTICE: Platform dependent (i.e. Manager or Assistant) the amount of listed reports will vary.

Direction

Two check boxes allow to define the call direction(s) to be recorded in the report. At least one direction has to be selected.

- Incoming
- Outgoing

Report Output

Allows you to choose a report output to run:

- Flexible. You may configure output media (screen, printer), various file formats for the report output (html, pdf, csv, xml), and send the report to e-mail recipients after clicking the **Run** button.
- Advanced. If you select Advanced, your output is directly sent to Report Generator or to MS Excel.

Filter Type

Shows filter type option elements:

- Telephony
- Organisational

You may also select an Organisational Filter Type, as defined in the Organisational Items Tab of the Filter Definition Page. There are two types of reports, which can be generated, using an Organisational filter:

1) Organisational Summary reports:

2) These reports use the standard templates for report generation, but with an Organisational filter. In the Report Definition page you may select a standard report template, for example a 'Table' or 'Column Chart' and then set an Organisational filter in the filter selection box. When the report is run, its appearance will be the same as for a report run for example on a single extension, but the statistics presented will be for all extensions in the selected organisation.

NOTICE: Not all reports will produce meaningful results if an organisational filter is selected, for example if a Trunk Group report template is chosen, selecting an Organisational Filter is not appropriate as organisational information does not define Trunk Groups. If the user to use an Organisational Filter with a report template where it is not appropriate, then the user will be informed of the inappropriate selection when they attempt to save the report, and the report will not be saved.

3) Organisational Detail reports:

4) These reports use special templates which are specifically designed to present a detailed report, which will show statistics at each level of the organisation below the point(s) selected in the organisational filter. The templates are identified at "Organisational Detail" in the template selection tree. The breakdown of the statistics in the report will include all departments, sub-departments, sections and sub-sections below the selected point(s) in the organisation and will include statistics for individual extensions at the lowest level.

The "Organisational Detail" reporting template applies to all the Call Timings and Call Volumes reports, but not the Attendant Consoles, Cordless, System statistics and Trunk Group reports.

NOTICE: The "Organisational Detail" reports are presented in a table format only.

Activating one of these options toggles the page for displaying a Telephony Filter Item, respectively for an Organisational Filter Item.

Available Switches (when "Telephony" Filter Type is set)

Relates to the switch that is selected in the Selected Switches drop-down list box.

Selected Switches (when "Telephony" Filter Type is set)

Allows you to select a particular switch from a complete list of available switches in the drop-down list. You are not required to pre-select switches.

If the user selects some of the items, chooses an alternative switch, makes further selections, then returns to a previous switch, the previous selection applies.

If only switches are selected, the Selected Items list shows the switch in the Switch column and the remaining column are left blank.

Item (when "Organisational" Filter Type is set)

Please refer to Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Item Definition (when "Organisational" Filter Type is set)

Please refer to Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Add Item (when "Organisational" Filter Type is set)

Please refer to Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Remove Item (when "Organisational" Filter Type is set)

Please refer to Fields and Controls in the Organisational Items Tab in the Filter Definition section.

Fields and Controls in the Set Thresholds Tab (One-Off Report)

These are the same as already described in the "Define Thresholds" Tab of the Report Definition Page:

Threshold Definition Area

Display Exceeded Values / Send Alarm to FM

Send email notification if threshold is exceeded

Select email recepients

Run

This button is only enabled when a scale interval, reporting period, report type, and a least one metered item is entered. If any of the mandatory information is missing this button is disabled. Any invalid information that is entered displays an error message and asks you to correct the information before the report is run.

Having selected the 'Flexible' report output option, the Run Report Dialog is displayed (see also Downloading Flexible Reports, page 249).

4.10 Fields and Controls for Schedule Report

(New Object)

Object

Object List

Report or Group

Schedule

Report mode

Reporting days

Daily time periods

Run Report at:

New

Copy

Save

Delete

Cancel

New Object

Only available, when a new, unsaved schedule definition is created (e.g. via menu "Object>New", button "New" or by copying). Clicking this option causes the newly-created schedule definition to be displayed.

Object

The Object view page allows the user to create or modify a schedule.

Object List

Shows the current list of scheduled reports in a table format. The table has columns with the following headings: Next Run At, Name, Type, Freq, Reporting Period, and User ID.

Report or Group

Allows you to select a particular Report or Report Group from the drop-down list.

Schedule

Allows you to select between Single Instance, Periodic, and summation scheduling.

The schedule option should be selected before the report mode option.

1) Single Instance

Allows you to schedule a report at a designated date and time.

1) Periodic

The periodic report can be scheduled; hourly, every 2, 3, 4, 6, 8, or 12 hours, daily (every day, on a single day, or on several days of the week), weekly, and monthly (on a particular date in the month, the last day of the month, or the last day minus 1 to 7 days).

Summation

Refer to Schedule Report Setup Page - Object View for Summation.

Frequency

With every hourly schedules, the time difference between the **from** and **to** times for both reporting period selection mechanisms must be less than or equal to an hour. It cannot be greater than an hour.

With every n hours schedules, the time difference between the **from** and **to** times for both reporting period selection mechanisms must be less than or equal to 24 hours. It cannot be greater than n hours.

With daily schedules, the time difference the time difference between the **from** and **to** times for both reporting period selection mechanisms must be less than or equal to 24 hours. It cannot be greater than a day.

Report mode

Allows you to choose between Full or Summary report modes.

A full report is continuous from the start date and time to the end date and time.

The summary report may not be a contiguous report from the start time on the start date to the end time on the end date. There may be overnight gaps in the summary report.

The schedule option should be selected before the report mode option.

Summary reports are required for ASC 3.0 Parity.

Reporting days

Allows you to set the **From** and **To** days.

The **From** day must be earlier than the **To** day. The default values for both the **From** and **To** days is the current date on the server.

Input required.

Daily time periods

Allows you to set the **From** and **To** times for each day in the reporting period. The From time must be earlier than the To time. The default values for both the **From** and **To** times is the current time on the server.

When **Periodic schedule** and **Summary** report mode options are selected, the drop down list of available frequencies only contains Weekly and Monthly. These are the only frequencies that can have periodic summary reports. The other frequencies; quarter hourly, half hourly, hourly, every n hours, and daily can not have periodic summary reports. They can only have periodic full reports.

Input required.

Run Report at:

Input required.

Allows you to set the date and time the first report is run. The date and time must be set in the future. The default values for both the **From** and **To** dates and times is the current time of the server.

Normally, the **Run Report At** date and time should be later than the Reporting Period From and To and Times. However, to allow OpenScape 4000 Managers, Assistants, and switches to be in different time zones the From and To date and times may be later than the Run Report At date and time.

If the **Fully specified dates** checkbox is checked (for Smaller Periodic Frequencies) and the **From** and **To** date and times or just the **To** date and time are in advance of the **Run Report At** date and time when you click the **Save** button, a warning dialog is displayed.

The **Run Report At** date and time for single instance scheduling must be coordinated with the COL collection times to ensure that all of the data required for the report is collected before the report is run otherwise the report will be wrong because it does not contain all of the data.

Hourly

Use the same values similar to Define Schedule. Values are daily, weekly, monthly, quarterly. For example if the frequency of the periodic report is set to hourly the summation can only be done for daily, weekly, monthly or quarterly.

Reporting Period

Use the same values similar to Define Schedule.

The reporting period for an hourly schedule with **Fully specified dates** unchecked is **from** and **to** particular times. The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The **from** and **to** times must be entered. The **from** time must be earlier than the **to** time. The default times are the current times on the server.

The reporting period for an hourly schedule with **Fully specified dates** checked is **from** and to particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (i.e. 00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered.With **hourly schedules**, the time difference between the **from** and **to** times for both reporting period selection mechanisms must be less than or equal to an hour. It can not be greater than an hour.

The reporting period for an **every n hours schedule** with **Fully specified dates** checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is, 00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered.

The reporting period for a daily schedule with Fully specified dates checked is **from** and **to** particular date and times. The dates are selected from a calendar. The times are specified in hours and minutes, AM and PM (that is. 00:00 AM to 00:00 AM). The **from** and **to** date and times must be entered.

The **from** date and time must be earlier than the "to" date and time. The default values for both the "from" and "to" date and times is the current date and time on the server.

Retain Intermediate Results

Allows the user to indicate whether the hourly scheduled results, scheduled results every n hours, are retained or not. These results are intermediate files that are used to update the summation reports. When the checkbox is checked, the intermediate results are retained, listed on the **Schedule Results page**, and may be downloaded or displayed on the client PC. When the checkbox is unchecked, the intermediate results are deleted when the summation reports have been updated.

> **NOTICE:** If the intermediate results are deleted, the summation reports can not be recalculated using **Recalculate** button on **Schedules Results** page.

Restrict runs to between

Enable the checkbox "Restrict runs to between" for restricting the scheduled results to the period of time defined in the adjacent spin controls.

Fully Specified Dates

When defining the reporting period over which the data is to be gathered, you are either able

=> to define the "From and To" period only by defining the "From" and "To" time ("fully specified dates" unckecked),

=> or by defining the reporting period with "From" and "To" days and times ("fully specified dates" checked).

If "fully specified dates" is checked, then additional controls for defining the days become visible and you are able to specify full dates that is, day, month, and year, by selecting the dates from a calendar.

New

Defines a new scheduled port. When you press New, the default values are set: Single instance radio button is selected, Reporting Period - From is set to the current date and time, Reporting Period - To is set to the current date and time, and Run Report At is set to the current date and time.

displayed informing the user and requesting their correction.

When the hourly schedule has been added to the list of reports that are scheduled to run, the first intermediate report is run on the specified date at the specified time covering the specified period. The summation reports is created with the initial results. Subsequent intermediate reports run an hour later and cover the specified period an hour later. The subsequent results are appended or accumulated in the existing summation reports.

When the every n hours schedule has been added to the list of reports that are scheduled to run, the first intermediate report is run on the specified date at the specified time covering the specified period. The summation reports is created with the initial results. Subsequent intermediate reports will run n hours later and cover the specified period n hours later. The subsequent results will be appended or accumulated in the existing summation reports.

Copy

Allows you to copy an existing scheduled report and modify it.

Save

Allows you to add the report to the list of reports that are scheduled to run. If a schedule single instance report is subsequently edited before its Run Report At date and time, the Save button allows you to change the existing report in the list of reports that are scheduled to run. The scheduled single instance report is not removed from the list of reports while it is being edited.

If a scheduled single instance report is subsequently edited before it's Run Report At date and time, the Save button allows the user to change an existing report in the list of reports that are scheduled to run. When the page is initially displayed, the Save button is disabled. The button is enabled when the information is changed in any area of the page.

The scheduled single instance report is not removed from the list of reports while it is being edited. If the Run Report At date and time occurs whilst, it is being edited, the report still runs with the original settings.

A scheduled single instance report can not be subsequently edited after it's Run Report At date and time have passed.

When you press the **Save** button, consistency checks are performed between frequency, reporting period, and Run Report At. If there are any inconsistencies or overlaps, a dialog is displayed informing the user and requesting their correction.

When the hourly schedule has been added to the list of reports that are scheduled to run, the first intermediate report is run on the specified date at the specified time covering the specified period. The summation reports is created with the initial results. Subsequent intermediate reports run an hour later and cover the specified period an hour later. The subsequent results are appended or accumulated in the existing summation reports.

When the every n hours schedule has been added to the list of reports that are scheduled to run, the first intermediate report is run on the specified date at the specified time covering the specified period. The summation reports is created with the initial results. Subsequent intermediate reports will run n hours later and cover the specified period n hours later. The subsequent results will be appended or accumulated in the existing summation reports.

Delete

Removes the scheduled report from the set of scheduled reports stored in the database.

Cancel

Cancels the Schedule Report Setup page and return to the previous page without creating a new scheduled single instance report or modify an existing scheduled single instance report. This button is always enabled.

4.11 Fields and Controls for Schedule Results page

Status

Abort

Delete

Display

Current State

Change State

Select Data Retention Period

Recalculate

Download

Download Client Tool

Download Format

Browse

Download Directory

Status

Provides information about the scheduled results such as when the results were ran, the name of the scheduled result, type of frequency, reporting period, the user id of the requestor, and the status of the scheduled result.

Abort

Stops the running of a report or report group and results on no entry in the table. When this button is clicked, a warning dialog displays confirming your desire to stop the running of the selected report or report group.

This button is enabled when an entry in the Running state is selected in the table.

Delete

Deletes the selected output file, located on the server. When this button is clicked, a warning dialog displays confirming your desire to delete the output file(s).

This button is enabled when an entry in either the Complete or Failed state is selected in the table.

Display

Sends the contents of the output file, located on the server to MS Excel on the client PC. This button is enabled when entries in either the Complete state is selected in the table.

Current State

Notifies you whether the auto-detection is switched off, running, or in standby mode. The text Off (in red lettering) signifies switched off. The text Deleting (in green lettering) signifies that the auto-delete is running and Delete (in yellow lettering) signifies the standby mode.

Change State

Allows you to switch the auto-deletion either to on or off. Consists of two radio buttons: Off and Auto-delete.

Select Data Retention Period

Allows you to set how long the files are retained on the server before they are automatically deleted. There are three choices; 1 week, 2 weeks, and calendar months.

Calendar months has an additional spin control to select the number of calendar months.

The user's selection is not applied until the Apply Changes button is clicked.

The default value is 1 calendar month.

The Select File Retention Period is disabled when Off is selected in Change State. It is enabled when Auto-delete is selected in Change State.

Recalculate

Allows you to immediately rerun the scheduled result. The results of the summation report is displayed in the same tab sheet as the normal report results.

This button is only enabled when an entry in either the **Complete** or **Failed** state is selected in the table.

When you click this button, the report is immediately rerun using the original report parameters stored in the PM database. The user can not enter or change any of the parameters before the report is rerun. While the report is being rerun, a progress dialog is displayed. The progress dialog is removed when the report is successfully (or unsuccessfully) completed. The user must refresh the Schedule Results page to view the outcome.

Download

Allows you to download the scheduled results, summation reports (that is, accumulate, append, and intermediate), and ASC data export reports to the client PC and automatically save them on the client PC in the specified file format in the specified directory.

The format of the saved file is ASCII text, xls, csv, or csv with no report header.

The downloading of the xls and csv files require a supported version of MS Excel to be installed on the client PC. Whilst, the downloading of ASCII text files does not.

The ASC data export reports can only be downloaded to ASCII text files.

Download Client Tool

Pressing this button will download the **Scheduled Report Downloader** application to the directory, specified in the **Download Directory** text entry field of the **Schedule Results** page.

Scheduled Report Downloader is a Java standalone client application that enables automatic/manual download of scheduled PM reports results to any client PC.

The application provides downloading and scheduling mechanisms for reports. It connects to a specified OpenScape 4000 Manager and retrieves and renders the previously generated PM reports. The application runs only on client side and downloads only advanced PM reports from any HiPath 4000 Manager V3 and higher or OpenScape 4000 Manager respectively.

See also: Section 6.35, "Downloading Reports with 'Scheduled Report Downloader'" on page 614.

Download Directory

Allows you to manually enter the name of a directory or browse through the file systems accessible to the client PC.

When the Schedule Results page is first displayed, the Download Directory text field shows the default directory "C:\[company name]\PM\SavedReports". When the user has specified a particular directory, the text field shows the user specified directory.

Browse

Allows the user to manually enter the name of a directory or browse through the file systems accessible to the client PC.

When you click the Browse button, a new file browser window pops up. You can browse the file system, select a directory, and click the **Save** button. Subsequently, the contents of the Download Directory text entry field is updated with the user's selection.

If you click the **Browse** button followed by the **Cancel** button, the contents of the **Download Directory** text entry field are unchanged.

Download Format

This button, associated download directory, and file format selection mechanisms are only enabled when an entry in either the **Complete** or **Pending** state is selected in the table.

The default value for the file format selection mechanism is xls.

If MS Excel is not installed on the client PC, the file format selection mechanism is greyed out and the file format is automatically set to ASCII text.

If the selected entry is an ASC data export report, the file format selection mechanism is greyed out and the file format is automatically set to ASCII text.

Whenever, the file format selection mechanism is enabled, it is automatically set to the default value.

When you click the **Download** button, the download directory information is retained on the client PC so that the next time the **Schedule Results** page is displayed, the **Download Directory** text entry field is updated with you last used directory. Finally, the contents of the output file held on the server is sent to and saved on the client PC in the specified directory. The output file is not automatically deleted.

You may specify different directories for the immediate and scheduled advanced reports. They are stored separately on the client PC.

4.12 Fields and Controls in the Run Report Dialog

The Run Report output dialog consists of the following items:

Items in the Output Tab

Report Object:

Choose template

Display Report on Screen

Send File to Printer

Send Report as Email

Export Report to the following formats

Items in the E-mail Tab

To

CCs

Subject

Body

Items in the Exports Tab

Exports *(HTML , PDF , CSV , XML)*

Automatic overwrite of existing export files

Button

Run

Items in the Status Window

Export Format

Status

Refresh

Abort

Save As...

Report Object:

Indicates the selected report type to be generated (read only).

Choose template

You may select the report template from a drop down list of the available report templates for the selected report.

By default the report template file previously specified in the RepGen Report Designing Page is displayed.

The report template name has the following structure:

template filename {(Predefined)}

The notation "predefined" is indicated in parentheses at the end of template name only if the template is a predefined one.

Display Report on Screen

The report will be displayed in a browser window.

Send File to Printer

The report will be sent to your configured printer.

Send Report as Email

Activating the e-mail option activates the E-mail tab to select e-mail recipients for the report and to enter the subject and a comment.

Export Report to the following formats

It is possible to export from the server and save the report in the following formats on your local computer; multiple selection is possible:

- html
- pdf
- csv
- xml (MS Excel)

NOTICE: If you have chosen a template which generates a report in chart form, **xml** and **csv** options are disabled, because chart form is not supported for these formats. This is due to limitations of Microsoft Excel application itself and its xml document format.

To

By default the field is automatically filled with the default main address previously specified in the RepGen Administration Page.

By clicking the Lookup button (**...**) button on the right of the **To** input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator-Handbuch; V6 (Englisch)
- Report Generator-Handbuch; V6 (German)

CCs

By default the field is automatically filled with the CC address previously specified in the RepGen Administration Page.

By clicking the Look-up button (**...**) button on the right of the **CC** input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- Report Generator-Handbuch; V6 (Englisch)
- Report Generator-Handbuch; V6 (German)

Subject

Subject field of the e-mail - default: name of the report.

Body

E-mail body for entering the e-mail text.

Exports

Displays the export directory for each output file format. You may select for each desired output format a different file location by clicking the Lookup button (**...**) on the right of the path name for

- HTML
- PDF
- CSV
- XML

Automatic overwrite of existing export files

Option activated: Existing files in the selected export directories will be overwritten automatically.

Option deactivated: If a report is to be downloaded in a directory in which a report with the same filename exists, the download process is aborted. The report files to be downloaded remain on the server and will not be lost.

Run

Clicking this button finally confirms your selections and settings of the Flexible Report Output dialog and initiates the generation and export of the report. The Status window is displayed, informing about the status of the export.

Export Format

Displays the output formats from the selection in the Output tab to be generated/exported.

Status

Information about the status of the export of each selected output format separately. The possible status values are:

- Not started: The exporting of this format has been enqueued but not yet started.
- Error: An error has occurred while exporting to this format.
- Running: The exporting has been started, but is not yet completed.
- Complete - Saved: The exporting has been completed and the result has been downloaded to the export path indicated in the export tabsheet of the Run Report dialog.
- Complete - Not Saved: The exporting has been completed, but the result has not been downloaded. The cause is that the checkbox "overwrite existing export files" has not been checked, and a file with the intended name already exists in the specified local export path.

Refresh

Clicking the Refresh button displays the current status of the running export/ generation immediately instead of waiting for the automatic cyclic refresh.

Abort

In case an export file has not been produced due to some error, clicking the **Abort** button closes this window.

Save As...

Copy the downloaded report(s) to a another directory (e.g. to a flash card) than defined before in the Exports tab of the Run Report Dialog. Select a directory in which the file(s) will be copied.

5 Reports

This chapter describes the following report types and their sub-types:

- Calculation of Average Timing Values in PM Reports
- Calculating Timing Values in AC - General Statistic Reports
- General Comparison Rule
- No Count of internal Calls between Attendant Consoles
- ACD - Automatic Call Distribution Reports
- Attendant Consoles Reports
- Call Timings Reports
- Call Tracking Reports
- Call Volumes Reports
- Cordless Statistics - Cordless Base Stations Reports
- Cordless Statistics - Cordless SLC Cards Reports
- Cordless Statistics - Cordless Stays
- Cordless Statistics - Overload Duration

NOTICE: Cordless report generation in Assistant PM is also possible.

- Hit Parade/Top Usage
- System Statistics Reports
- Trunk Groups - CDR Trunk Group Reports
- Trunk Groups - CDR Trunk Group Reports with B-Channel Availability Check

5.1 Calculation of Average Timing Values in PM Reports

PM uses different methods for calculating average timing values in Attendant Console reports compared with Call Timing reports. Attendant Consoles Reports and Call Timings Reports explain how these calculations differ and the expected results in each case.

Related Topics

Calculating Timing Values in AC - General Statistic Reports

General Comparison Rule

No Count of internal Calls between Attendant Consoles

5.1.1 Calculating Timing Values in AC - General Statistic Reports

This section explains how values are calculated in AC - General Statistics reports:

- Placing time
- Conversation Time
- Hold Time
- Total Call Time

5.1.1.1 Placing time

The average placing times are calculated by dividing the sum of conversation and hold times by the number of answered calls for each of the lines.

The exact calculations are:

Exchange Line	=	(exchangeLine_conversationTime + exchangeLine_holdTime) / exchangeLine_callsAnswered
Attendant Line	=	(attendantLine_conversationTime + attendantLine_holdTime) / attendantLine_callsAnswered
Incoming Lines	=	(exchangeLine_conversationTime + exchangeLine_holdTime + attendantLine_conversationTime + attendantLine_holdTime + personalLine_conversationTime) / (exchangeLine_callsAnswered + attendantLine_callsAnswered + personalLine_callsAnswered)
All lines	=	(exchangeLine_conversationTime + exchangeLine_holdTime + attendantLine_conversationTime + attendantLine_holdTime + personalLine_conversationTime + outgoingLine_conversationTime) / (exchangeLine_callsAnswered + attendantLine_callsAnswered + personalLine_callsAnswered + outgoingLine_callsAnswered)

Related Topics

Conversation Time

Hold Time

Total Call Time

5.1.1.2 Conversation Time

The average conversation times are calculated by dividing the conversation time by the number of answered calls for each of the lines.

The exact calculations are:

Exchange Line	=	exchangeLine_conversationTime / exchangeLine_callsAnswered
Attendant Line	=	attendantLine_conversationTime / attendantLine_callsAnswered
Personal Line	=	personalLine_conversationTime / personalLine_callsAnswered
Outgoing LIne	=	outgoingLine_conversationTime / outgoingLine_callsAnswered
Incoming Lines	=	(exchangeLine_conversationTime + attendantLine_conversationTime + personalLine_conversationTime) / (exchangeLine_callsAnswered + attendantLine_callsAnswered + personalLine_callsAnswered)
All lines	=	(exchangeLine_conversationTime + attendantLine_conversationTime + personalLine_conversationTime + outgoingLine_conversationTime) / (exchangeLine_callsAnswered + attendantLine_callsAnswered + personalLine_callsAnswered + outgoingLine_callsAnswered)

In a **Call Flow** scenario, **Conversation Time**means the connection duration of the scenario. A Call Flow report displays all the CDR rows of one call scenario (one globseq). So the report registers, how the call has been handled during its life cycle.

In a **Call By Call** scenario, **Conversation Time** means the talking duration between two ends. In a Call By Call report all the regarding CDR rows are evaluated and only the final statement about the call scenario is plotted

Related Topics

Placing time

Hold Time

Total Call Time

5.1.1.3 Hold Time

The average hold times are calculated by dividing the hold time by the number of calls that were put on hold (calls that had a non-zero hold duration). Hold time only applies to the exchange and attendant lines. In this case the *All Lines* value is the same as the *Incoming Lines* value.

The exact calculations are:

Exchange Line	=	exchangeLine_holdTime / exchangeLine_callsPutOnHold
Attendant Line	=	attendantLine_holdTime / attendantLine_callsPutOnHold
Incoming Lines	=	(exchangeLine_holdTime + attendantLine_holdTime) / (exchang + attendantLine_callsPutOnHold)
All lines	=	incoming Lines

Related Topics

Placing time

Conversation Time

Total Call Time

5.1.1.4 Total Call Time

The average total call times are calculated by dividing the sum of conversation, hold, ring and queuing times by the total number of calls for each of the lines.

The exact calculations are:

Exchange Line	=	(exchangeLine_conversationTime + exchangeLine_holdTime)+exchangeLine_ringTime+exchangeLir exchangeLine_callsPerLine
Attendant Line	=	(attendantLine_conversationTime + attendantLine_holdTime + a + attendantLine_queueTime) / attendantLine_callsPerLine

Incoming Lines	=	(exchangeLine_conversationTime + exchangeLine_holdTime + exchangeLine_ringTime + exchangeLine_queueTime + attendantLine_conversationTime + attendantLine_holdTime + attendar + attendantLine_queueTime + personalLine_conversationTime + personalLine_ringTime) / (exchangeLine_callsPerLine + attendantLine personalLine_callsPerLine)
All lines	=	(exchangeLine_conversationTime + exchangeLine_holdTime + exchangeLine_ringTime + exchangeLine_queueTime + attendantLine_conversationTime + attendantLine_holdTime + attendar + attendantLine_queueTime + personalLine_conversationTime + personalLine_ringTime + outgoingLine_conversationTime + outgoingLine_ringTime) / (exchangeLine_callsPerLine + attendantLine personalLine_callsPerLine + outgoingLine_callsPerLine)

Related Topics

Placing time

Conversation Time

Hold Time

5.2 General Comparison Rule

It is difficult to compare the AC reports with the Call Volume and Call Timing reports because the calculation for the AC reports differ from the Call Volume and Call Timing Reports. Deselecting the filter item *outgoing* reduces the difference between the AC reports and the Call Volume and Call Time reports. This can be done by getting only the incoming calls in the Call Volume or Call Timing reports to appear. By deselecting, the information of the whole call scenario gets lost. In this case for some call scenarios where two AC's are involved, two calls are counted in the Call Volume or Call Timing reports.

Related Topics

Calculation of Average Timing Values in PM Reports

Calculating Timing Values in AC - General Statistic Reports

No Count of internal Calls between Attendant Consoles

5.3 No Count of internal Calls between Attendant Consoles

The internal calls between Attendant Consoles are not counted in any report. There is not enough information available There is no difference in the counting between the AC Reports, Call Volume Reports, and Call Time Reports for AC internal calls.

Other internal calls to the Attendant are counted without any restriction.

Related Topics

Calculation of Average Timing Values in PM Reports

Calculating Timing Values in AC - General Statistic Reports

General Comparison Rule

5.4 ACD - Automatic Call Distribution Reports

Automatic Call Distribution (ACD) Reports can be used to track activity of automatic call distribution centers.

The following reports are supported for this purpose:

- Average Call Waiting and Conversation times
- First Calls / Recalls
- General Statistics
- Number of Answered Calls per Line Type
- Number of Calls per Call Type

5.4.1 Average Call Waiting and Conversation times

This report provides information about two different average times in call scenarios where an ACD group participates. The user is able to define which participating ACD groups are to be considered for this report (by filter settings).The output of this report is given in intervals, which can be also specified by the user. The report values are in seconds.

The report provides two columns:

1) Average waiting and ringing time
2) Average conversation time

The report may be displayed either in a column chart or in a table.

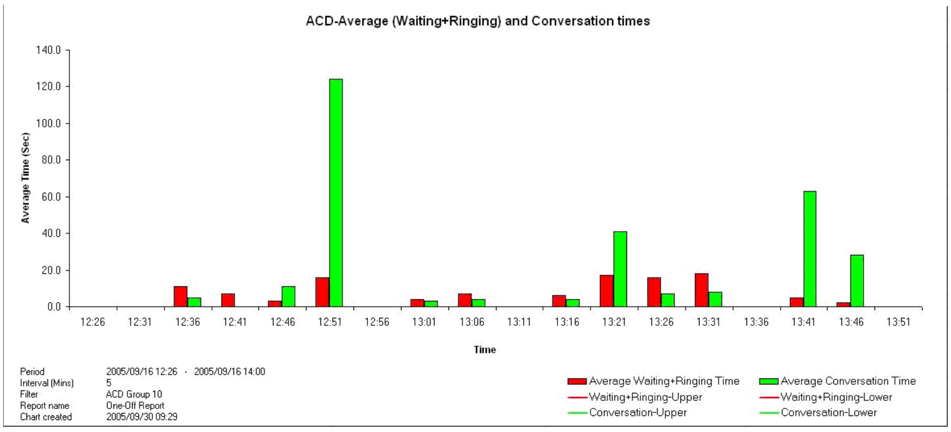


Figure 113: ACD - Average Call Waiting and Conversation Times Report in Column Chart Format

ACD-Average (Waiting+Ringing) and Conversation times					
Period	2005/09/16 12:26 - 2005/09/16 14:00		Threshold	Upper No.	Lower No.
Interval (Mins)	5		Waiting+Ringing	N/A	N/A
Filter	ACD Group 10		Conversation	N/A	N/A
Report name	One-Off Report				
Chart created	2005/09/30 09:27				
Time	Date	Average Waiting+Ringing	Average Conversation Time		
12:26	09/16/05	0	0		
12:31	09/16/05	0	0		
12:36	09/16/05	11	5		
12:41	09/16/05	7	0		
12:46	09/16/05	3	11		
12:51	09/16/05	16	124		
12:56	09/16/05	0	0		
13:01	09/16/05	4	3		
13:06	09/16/05	7	4		
13:11	09/16/05	0	0		
13:16	09/16/05	6	4		
13:21	09/16/05	17	41		
13:26	09/16/05	16	7		
13:31	09/16/05	18	8		
13:36	09/16/05	0	0		
13:41	09/16/05	5	63		
13:46	09/16/05	2	28		
13:51	09/16/05	0	0		

Figure 114: ACD - Average Call Waiting and Conversation Times Report in Table Format

Related Topics

First Calls / Recalls

General Statistics

Number of Answered Calls per Line Type

Number of Calls per Call Type

5.4.2 First Calls / Recalls

This report provides information about the number of first calls and recalls in call scenarios where an ACD group participates. The user is able to define which participating ACD groups are to be considered for this report (by filter settings). The output of this report is given in intervals, which can be also specified by the user. The report values are given in "number of calls".

The report provides two columns:

1) First Calls: A First Call is an incoming call received by the ACD group. First Call counts consider all types of calls: - calls coming from the public network - or calls coming from a different (or from the same) switch within the customer area.
2) Recalls: A recall describes the following scenario: "calling part A" is connected to an ACD agent and the ACD agent redirects the call from "part A" to to "part B". If "part B" does not answer the call, then a recall is initiated and the call is returned again to the ACD agent.

The report may be displayed either in a column chart or in a table.

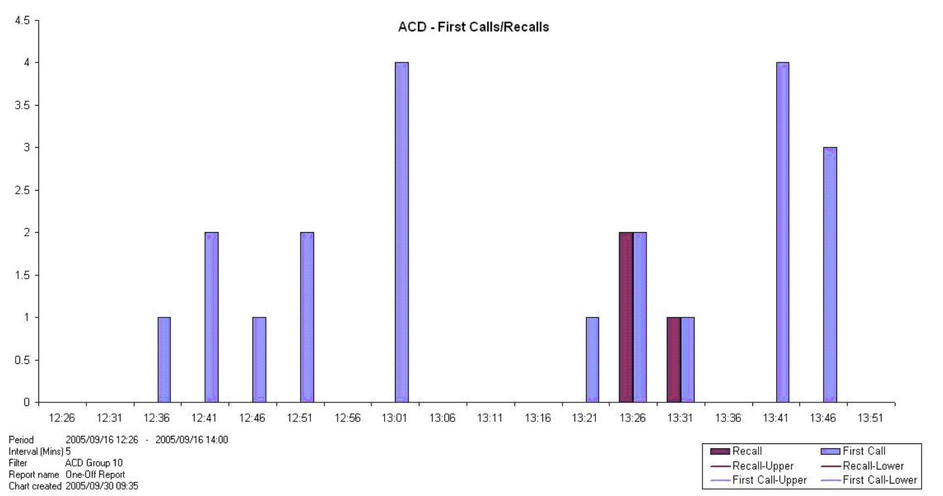


Figure 115: ACD - First Calls / Recalls Report in Column Chart Format

ACD - First Calls/Recalls					
Period	2005/09/16 12:26 - 2005/09/16 14:00		**Threshold**	**Upper No.**	**Lower No.**
Interval (Mins)	5		**Recall**	N/A	N/A
Filter	ACD Group 10		**First Call**	N/A	N/A
Report name	One-Off Report				
Chart created	2005/09/30 09:34				
Time	**Date**	**Recall**	**First Call**		
12:26	16/09/2005	0	0		
12:31	16/09/2005	0	0		
12:36	16/09/2005	0	1		
12:41	16/09/2005	0	2		
12:46	16/09/2005	0	1		
12:51	16/09/2005	0	2		
12:56	16/09/2005	0	0		
13:01	16/09/2005	0	4		
13:06	16/09/2005	0	0		
13:11	16/09/2005	0	0		
13:16	16/09/2005	0	0		
13:21	16/09/2005	0	1		
13:26	16/09/2005	2	2		
13:31	16/09/2005	1	1		
13:36	16/09/2005	0	0		
13:41	16/09/2005	0	4		
13:46	16/09/2005	0	3		
13:51	16/09/2005	0	0		
Sum		**3**	**21**		

Figure 116: ACD - First Calls / Recalls Report in Table Format

Related Topics

Average Call Waiting and Conversation times

General Statistics

Number of Answered Calls per Line Type

Number of Calls per Call Type

5.4.3 General Statistics

The report gives a "total picture" of ACD activity by including statistics that are provided also by the other four Reports.

The following information is given in this report:

1) Exchange Line:

2) This column provides the number of ACD Calls per interval for call scenarios in which a call was dialed from the external environment to the ACD Group, i.e. the counted calls are calls addressed from external access points (either from a public network or from another switch) to the ACD group.

3) ACD Line:

4) This column provides the number of ACD Calls per interval in call scenarios where a call was initiated from the same switch and the dialed number was an ACD Group. So, these calls are addressed to the ACD Group and are internal (i.e., from the same node).

5) Personal Line:

6) This column provides the number of Personal Calls per interval in call scenarios where a direct call to an ACD Agent took place. A direct call to an ACD Agent means that the ACD Agent (which is part of an ACD group) is called directly, instead of being called via an ACD Group which redirects this call automatically to any ACD Agent within this ACD Group.

7) Outgoing Line:

8) This column provides the number of Personal Calls per interval in call scenarios where a direct call to an ACD Agent took place. So, these calls are addressed directly to an Agent without the participation of any ACD Group.

9) Incoming Lines:

10) This column displays the sum of - exchange lines - ACD lines - and personal lines

11) All Lines:

12) This column displays the sum of - exchange lines - ACD lines - personal lines - and outgoing lines

This report is displayed in table format.

ACD - General Statistics

Period	2005/09/16 12:26 - 2005/09/16
Filter	ACD Group 10
Report name	One-Off Report
Chart created	2005/09/30 09:35

Number of Calls	
Calls per Line	
Calls Answered	
Calls Not Answered	Total
	Signalled at ACD group
	Signalled at ACD Agent
First Calls	
Recalls	

Times (average - seconds)	
Waiting Time (call queue)	Total
	Calls Answered
	Calls Not Answered
Ringing Time	Total
	Calls Answered
	Calls Not Answered
Sum of Waiting and Ringing	Total
	Calls Answered
	Calls Not Answered
Placing Time (Conversation+Hold)	
Conversation Time	
Hold Time	
Total of Call Time (Wait+Ring+Conversation+Hold)	

Figure 117: ACD - General Statistics Report in Table Format

Related Topics

Average Call Waiting and Conversation times

First Calls / Recalls

Number of Answered Calls per Line Type

Number of Calls per Call Type

5.4.4 Number of Answered Calls per Line Type

This report provides information about calls taking place in the Exchange Line, in the ACD Line and in the Personal Line, for call scenarios where an ACD group (or a directly called ACD Agent) participates. The output of this report is given in intervals, which have been previously specified by the user. The report values are given in "number of calls".

The report provides the following columns:

1) Total Personal:

This column provides the number of Personal Calls per interval in call scenarios where a direct call to an ACD Agent took place. So, these calls are addressed directly to an Agent without the participation of any ACD Group.

2) Total ACD:

This column provides the number of ACD Calls per interval in call scenarios where a call was initiated from the same switch and the dialed number was an ACD Group. So, these calls are addressed to the ACD Group and are internal (from the same node).

3) Total Exchange:

This column provides the number of ACD Calls per interval in call scenarios where a call was initiated from the external environment and the dialed number was an ACD Group. So, these calls are addressed to the ACD Group and are initiated by external access points (either from the public network or from another switch).

4) Answered Personal:

This column provides the Personal calls that were actually answered by an ACD Agent.

5) Answered ACD:

This figure provides the ACD calls that reached an ACD Group and were answered afterwards by an ACD agent.

6) Answered Exchange:

This column provides the Exchange calls that reached an ACD Group and were answered afterwards by an ACD agent.

The report may be displayed either in a column chart or in a table.

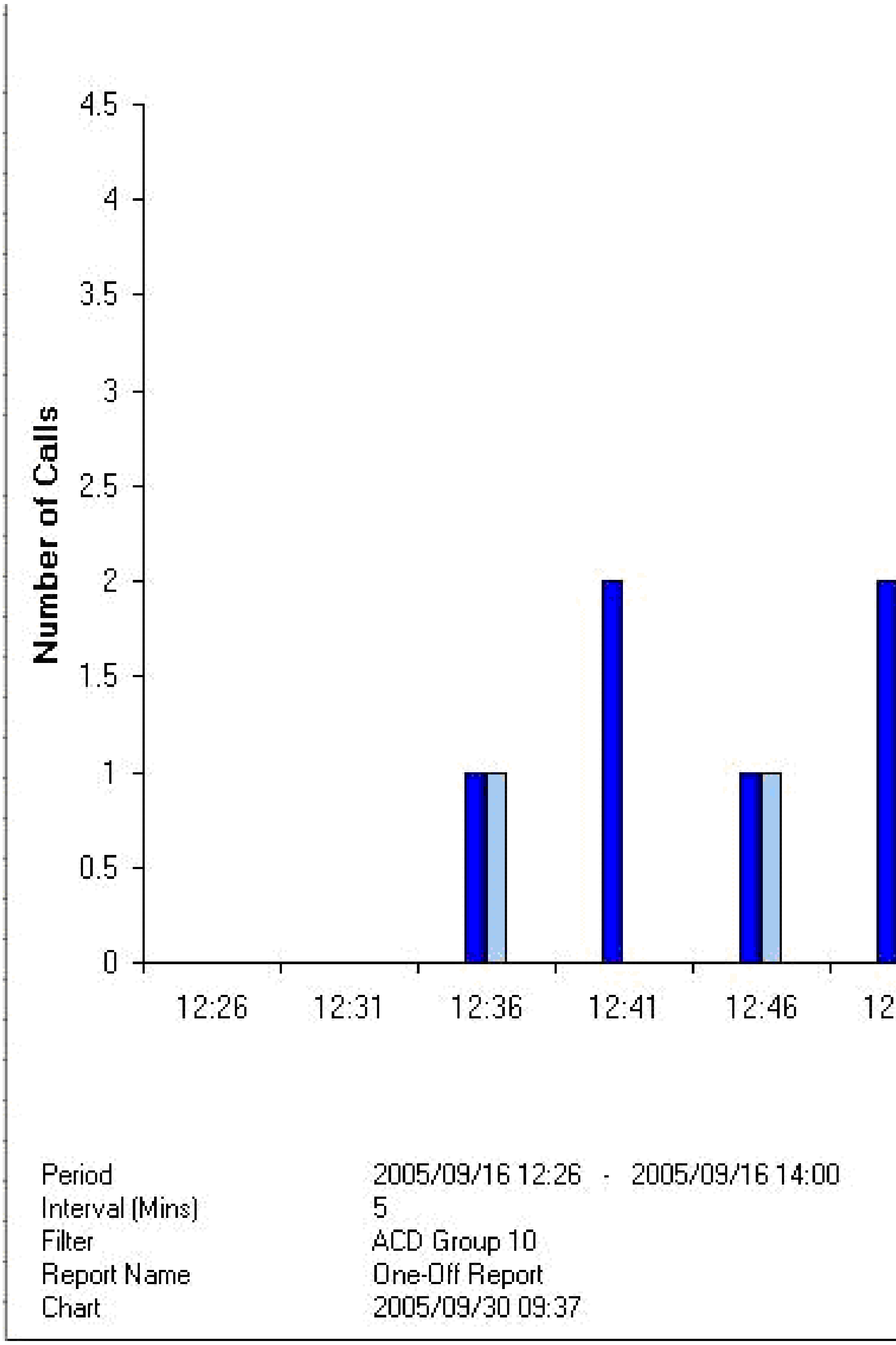


Figure 118: ACD - Number of Answered Calls per Line Type Report in a Column Chart

ACD - Number of Answered Calls per Line			
Period	2005/09/16 12:26 - 2005/09/16 14:00		
Interval (Mins)	5		
Filter	ACD Group 10		
Report name	One-Off Report		
Chart created	2005/09/30 09:37		
Time	**Date**	**Total Personal**	**T**
12:26	16/09/2005	0	
12:31	16/09/2005	0	
12:36	16/09/2005	0	
12:41	16/09/2005	0	
12:46	16/09/2005	0	
12:51	16/09/2005	0	
12:56	16/09/2005	0	
13:01	16/09/2005	0	
13:06	16/09/2005	4	
13:11	16/09/2005	0	
13:16	16/09/2005	0	
13:21	16/09/2005	0	
13:26	16/09/2005	0	
13:31	16/09/2005	0	
13:36	16/09/2005	0	
13:41	16/09/2005	0	
13:46	16/09/2005	0	
13:51	16/09/2005	0	
Sum		**4**	

Figure 119: ACD - Number of Answered Calls per Line Type Report in Table Format

Related Topics

Average Call Waiting and Conversation times

First Calls / Recalls

General Statistics

Number of Calls per Call Type

5.4.5 Number of Calls per Call Type

This PM report provides information about calls that took place in the Exchange line, ACD line, Personal line and Outgoing line, for call scenarios where an ACD group (or a directly called ACD Agent) participates. The output of this report is given in intervals, which have been previously specified by the user. All values are given in "number of calls".

The report provides the following columns:

1) Exchange Line:

This column provides the number of ACD Calls per interval in call scenarios where a call was initiated from the external environment and the dialed number was an ACD Group. So, these calls are addressed to the ACD Group and are initiated by external access points (either from the public network or from another switch).

2) ACD Line:

This column provides the number of ACD Calls per interval in call scenarios where a call was initiated from the same switch and the dialed number was an ACD Group. So, these calls are addressed to the ACD Group and are internal (from the same node).

3) Personal Line:

This column provides the number of Personal Calls per interval in call scenarios where a direct call to an ACD Agent took place. So, these calls are addressed directly to an Agent without the participation of any ACD Group.

4) Outgoing Line:

This column provides the number of Outgoing Calls per interval in call scenarios where a call from an ACD Agent to a non ACD Agent destination party takes place. So, these calls are originated from an ACD Agent.

The report may be displayed either in a column chart or in a table.

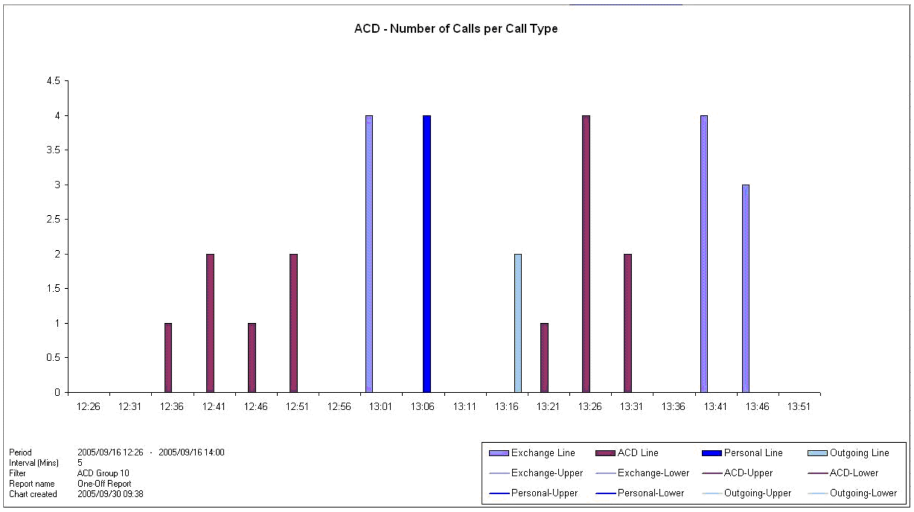


Figure 120: ACD -Number of Calls per Call Type Report in Column Chart Format

ACD - Number of Calls per Call Type					
Period	2005/09/16 12:26 - 2005/09/16 14:00		**Threshold**	**Upper No.**	**Lower No.**
Interval (Mins)	5		**Exchange**	N/A	N/A
Filter	ACD Group 10		**ACD**	N/A	N/A
Report name	One-Off Report		**Personal**	N/A	N/A
Chart created	2005/09/30 09:39		**Outgoing**	N/A	N/A
Time	**Date**	**Exchange Line**	**ACD Line**	**Personal Line**	**Outgoing Line**
12:26	16/09/2005	0	0	0	0
12:31	16/09/2005	0	0	0	0
12:36	16/09/2005	0	1	0	0
12:41	16/09/2005	0	2	0	0
12:46	16/09/2005	0	1	0	0
12:51	16/09/2005	0	2	0	0
12:56	16/09/2005	0	0	0	0
13:01	16/09/2005	4	0	0	0
13:06	16/09/2005	0	0	4	0
13:11	16/09/2005	0	0	0	0
13:16	16/09/2005	0	0	0	2
13:21	16/09/2005	0	1	0	0
13:26	16/09/2005	0	4	0	0
13:31	16/09/2005	0	2	0	0
13:36	16/09/2005	0	0	0	0
13:41	16/09/2005	4	0	0	0
13:46	16/09/2005	3	0	0	0
13:51	16/09/2005	0	0	0	0
Sum		**11**	**13**	**4**	**2**

Figure 121: ACD - Number of Calls per Call Type Report in Table Format

Related Topics

Average Call Waiting and Conversation times

First Calls / Recalls

General Statistics

Number of Answered Calls per Line Type

5.5 Attendant Consoles Reports

The main difference in the Attendant Consoles report is that the switching actions of an Attendant is not counted. So only the number of incoming handled/picked up calls are counted in the Attendant Consoles Reports. The switching, for example, consultation, which create new calls are not counted in the Attendant Consoles report opposite the Call Volumes or Call Timing reports where all calls are counted.

The values, Waiting Time, Ringing Time, and Conversation Time have an additional rule.

For Attendants, a customer find it useful to know what the average time that an incoming party waited in the queue, waited while the attendant was ringing, and spent time in conversation. These average values are not based on all the calls handled but rather on the number of calls where the time in question was non-zero. In effect the values are:

Waiting Time	Average queuing time of call in call queue (QUEUED
Ringing Time	Average ringing time of calls that rang an Attendant
Hold Time	The average time of calls on hold, e.g. AC is in cons
Conversation Time	The average time of calls that were answered by an

Table 21 lists the timings for five individual incoming calls and averages:

Table 21: Timings for Individual Incoming Calls Example

Call	Waiting Time	Ringing Time	Conversation Time	Call Description
1	0	10	20	Call rang AC and answered
2	15	0	0	Call queued and originator hur
3	10	15	0	Call queued, rang AC and orig
4	0	20	0	Call rang AC and originator hu
5	10	20	30	Call queued, rang AC and ansv
Average	12	16	25	

The average calculations use the number of non-zero values for each statistic as the divisor, so the divisor values are as follows:

• waiting calls = 3	Three calls with non-zero queuing duration
• ringing calls = 4	Four calls with non-zero ringing duration
• conversation calls = 2	Two calls with non-zero conversation time

The calculations of the averages are performed as follows:

Average Waiting	= (15+10+10) / 3	= 12 (rounded to the r

Average Ringing	= (10+15+20+20) / 4	= 16 (rounded to the neare
Average Conversation	= (20+30) / 2	= 25 (rounded to the neare

This method of calculation is used in the timing values in the following Attendant Consoles reports:

- General Statistics
- Average Call Waiting and Conversation time

For the General Statistics and the Call Type per Line Type, deselecting the filter item *incoming* or *outgoing* does not affect the call scenario because the query always run with incoming and outgoing set to do the correct calculation.

5.5.1 AC 2 Reports

This section contains the following AC 2 report examples:

- AC 2 Queue - Average Call Waiting and Conversation Time Report
- AC 2 Queue - First Call/Recalls Report
- AC2 Queue - General Statistics
- AC 2 Queue - Number of Answered Calls per Line Type Report
- AC 2 Queue - Number of Calls per Call Type Report

5.5.1.1 AC 2 Queue - Average Call Waiting and Conversation Time Report

This report show the average call waiting and conversation time for the specified attendant console at a given report period. The new waiting time is the caller's time spent in the call queue including the ring time at the attendant console. The report displays both accepted and un-accepted calls.

This report is available in column and table formats.

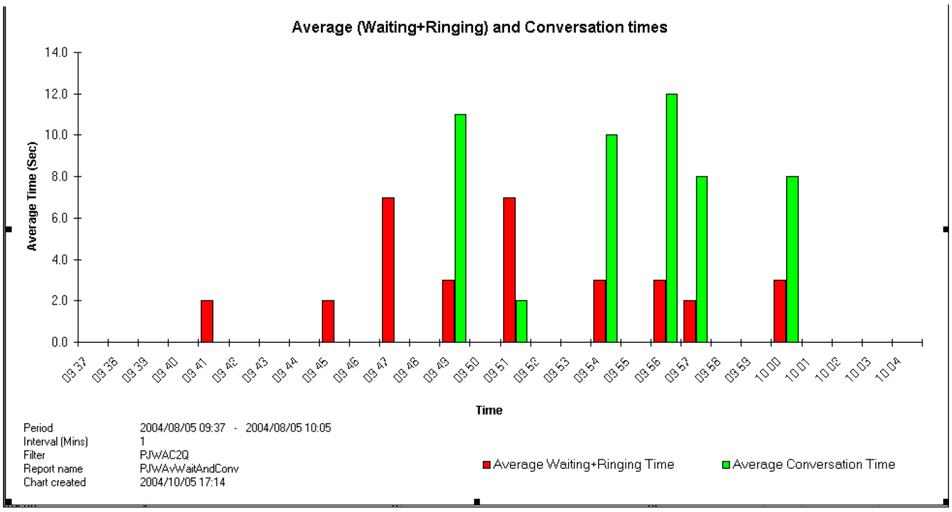


Figure 122: AC 2 Queue - Average Call Waiting and Conversation Time Report in Column Chart Format

Average (Waiting+Ringing) and Conversation times			
Period	2004/08/05 09:37 - 2004/08/05 10:05		
Interval (Mins)	1		
Filter	PJWAC2Q		
Report name	PJWAvWaitAndConvTbl		
Chart created	2004/10/05 17:14		
Time	**Date**	**Average Waiting+Ringing**	**Average Conversation Time**
9:37	8/5/2004	0	0
9:38	8/5/2004	0	0
9:39	8/5/2004	0	0
9:40	8/5/2004	0	0
9:41	8/5/2004	2	0
9:42	8/5/2004	0	0
9:43	8/5/2004	0	0
9:44	8/5/2004	0	0
9:45	8/5/2004	2	0
9:46	8/5/2004	0	0
9:47	8/5/2004	7	0
9:48	8/5/2004	0	0
9:49	8/5/2004	3	11
9:50	8/5/2004	0	0
9:51	8/5/2004	7	2
9:52	8/5/2004	0	0
9:53	8/5/2004	0	0
9:54	8/5/2004	3	10
9:55	8/5/2004	0	0

Figure 123: AC2 Queue - Average Call Waiting and Conversation Time Report in Table Format

Related Topics

AC 2 Queue - First Call/Recalls Report

AC2 Queue - General Statistics

AC 2 Queue - Number of Answered Calls per Line Type Report

AC 2 Queue - Number of Calls per Call Type Report

5.5.1.2 AC 2 Queue - First Call/Recalls Report

This report shows the number of first calls and recalls of the specified attendant console or AC groups in a given period. This report is available in column chart and table formats.

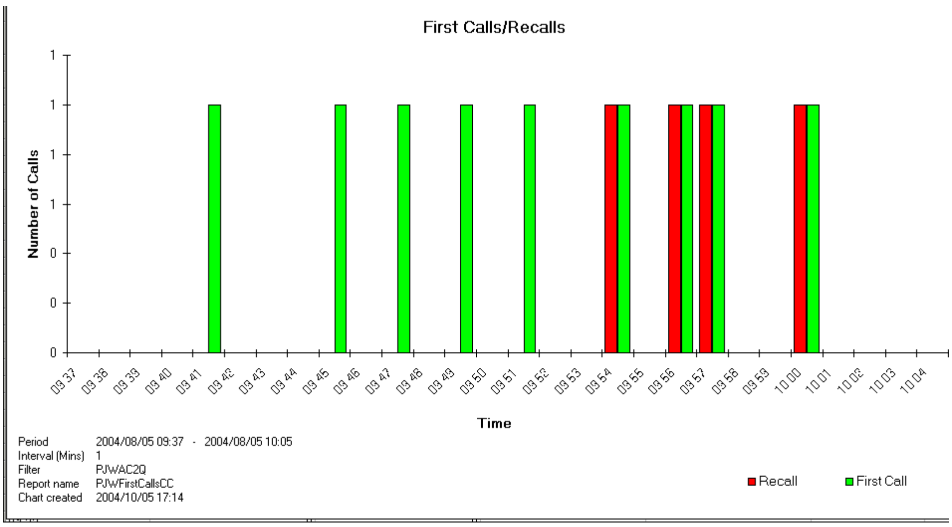


Figure 124: AC 2 Queue - First Call/Recalls Report in Column Chart Format

First Calls/Recalls			
Period	2004/08/05 09:37 - 2004/08/05 10:05		
Interval (Mins)	1		
Filter	PJWAC2Q		
Report name	PJWFirstCallsTbl		
Chart created	2004/10/05 17:14		
Time	**Date**	**Recall**	**First Call**
9:37	8/5/2004	0	0
9:38	8/5/2004	0	0
9:39	8/5/2004	0	0
9:40	8/5/2004	0	0
9:41	8/5/2004	0	1
9:42	8/5/2004	0	0
9:43	8/5/2004	0	0
9:44	8/5/2004	0	0
9:45	8/5/2004	0	1
9:46	8/5/2004	0	0
9:47	8/5/2004	0	1
9:48	8/5/2004	0	0
9:49	8/5/2004	0	1
9:50	8/5/2004	0	0
9:51	8/5/2004	0	1
9:52	8/5/2004	0	0
9:53	8/5/2004	0	0
9:54	8/5/2004	1	1
9:55	8/5/2004	0	0

Figure 125: AC 2 Queue - First Calls/Recalls Report in Table Format

Related Topics

AC 2 Queue - Average Call Waiting and Conversation Time Report

AC2 Queue - General Statistics

AC 2 Queue - Number of Answered Calls per Line Type Report

AC 2 Queue - Number of Calls per Call Type Report

5.5.1.3 AC2 Queue - General Statistics

General statistics provide a summary of statistics for Attendant consoles (ACs) on a single sheet. These statistics are:

- Number of call per call type
- Number of calls per line
- Number of answer calls
- Number of not answered calls
- Number of initial calls
- Number of recalls
- Waiting, ringing, sum of waiting time and ringing time, and placing time, Times (average - seconds)
- Number of answered calls per line type
- Number of calls per call type
- Call priorities

- Number of calls per queue

General Statistics

Period	2004/08/05 09:37 - 2004/08/05 10:05
Filter	PJWAC2Q
Report name	PJWGenStatsTbl
Chart created	2004/10/05 17:14

		Exchange Line	Attendant Line	Personal Line	Outgoing Line	Incoming Lines	All Lines
Number of Calls							
Calls per Line		13	0	0	0	13	13
Calls Answered		8	0	0	0	8	8
Calls Not Answered	Total	5	0	0	0	5	5
	Signalled in call queue only	0	0			0	0
	Signalled at AC	5	0	0	0	5	5
First Calls		9	0			9	
Recalls		4	0			4	
Times (average - seconds)							
Waiting Time (call queue)	Total	0	0			0	0
	Calls Answered	0	0			0	0
	Calls Not Answered	0	0			0	0
Ringing Time	Total	3	0	0	0	3	3
	Calls Answered	4	0	0	0	4	4
	Calls Not Answered	2	0	0	0	2	2
Sum of Waiting and Ringing	Total	3	0	0	0	3	3
	Calls Answered	4	0	0	0	4	4
	Calls Not Answered	2	0	0	0	2	2
Placing Time (Conversation+Hold)		8	0			8	8
Conversation Time		8	0	0	0	8	8
Hold Time		0				0	0

Figure 126: AC2 Queue - General Statistics Report

Related Topics

AC 2 Queue - Average Call Waiting and Conversation Time Report

AC 2 Queue - First Call/Recalls Report

AC 2 Queue - Number of Answered Calls per Line Type Report

AC 2 Queue - Number of Calls per Call Type Report

5.5.1.4 AC 2 Queue - Number of Answered Calls per Line Type Report

This report show the total number of calls for each incoming line (exchange line, attendant line, and personal line) are displayed together with the number of answered calls for each line. The report may be viewed as a table or as a column chart. The table displays, for each line, a column with the total number and a column with the answered calls. The column chart shows the total number of calls for each line and the answered calls for the line in different colors in the same column. Calls may be unanswered because the caller hung up before the call could be answered (excessively long waiting time). The sum of the unanswered calls of all the attendant consoles in a group may differ from the number of unanswered calls of an AC group, as the attendant console group also contains calls which have hung up in the call queue. These were not yet assigned to an attendant console and only appear in the attendant console group statistics.

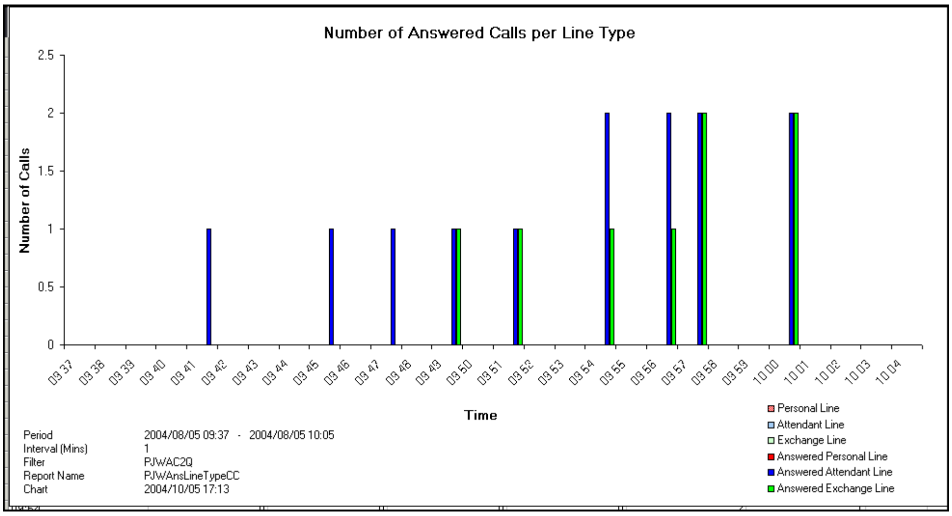


Figure 127: AC 2 Queue - Number of Answered Calls per Line Type Report in Column Chart Format

Number of Answered Calls per Line Type							
Period	2004/08/05 09:37 - 2004/08/05 10:05						
Interval (Mins)	1						
Filter	PJWAC2Q						
Report name	PJWAnsCallsTypeTbl						
Chart created	2004/10/05 17:13						
Time	**Date**	**Total Personal**	**Total Attendant**	**Total Exchange**	**Answered Personal**	**Answered Attendant**	**Answered Exchange**
9:37	8/5/2004	0	0	0	0	0	0
9:38	8/5/2004	0	0	0	0	0	0
9:39	8/5/2004	0	0	0	0	0	0
9:40	8/5/2004	0	0	0	0	0	0
9:41	8/5/2004	0	0	1	0	0	0
9:42	8/5/2004	0	0	0	0	0	0
9:43	8/5/2004	0	0	0	0	0	0
9:44	8/5/2004	0	0	0	0	0	0
9:45	8/5/2004	0	0	1	0	0	0
9:46	8/5/2004	0	0	0	0	0	0
9:47	8/5/2004	0	0	1	0	0	0
9:48	8/5/2004	0	0	0	0	0	0
9:49	8/5/2004	0	0	1	0	0	1
9:50	8/5/2004	0	0	0	0	0	0
9:51	8/5/2004	0	0	1	0	0	1
9:52	8/5/2004	0	0	0	0	0	0
9:53	8/5/2004	0	0	0	0	0	0

Figure 128: AC 2 Queue - Number of Answered Calls per Line Type Report in Table Format

Related Topics

AC 2 Queue - Average Call Waiting and Conversation Time Report

AC 2 Queue - First Call/Recalls Report

AC2 Queue - General Statistics

AC 2 Queue - Number of Calls per Call Type Report

5.5.1.5 AC 2 Queue - Number of Calls per Call Type Report

This report shows the number of calls for each line (Exchange Line, Attendant Line, Personal Line, Outgoing Line) are displayed. The report may be viewed as a table or as a column chart. The total number of calls for each line of all the ACs in a group may differ from the number of calls for each line of the AC group. This could be due to the fact that the AC

group also contains the calls which have hung up in the call queue. These were not yet assigned to an AC and only appear in the AC group statistics.

These statistics are only possible for attendant consoles and attendant console groups.

This report is available in column chart and table formats.

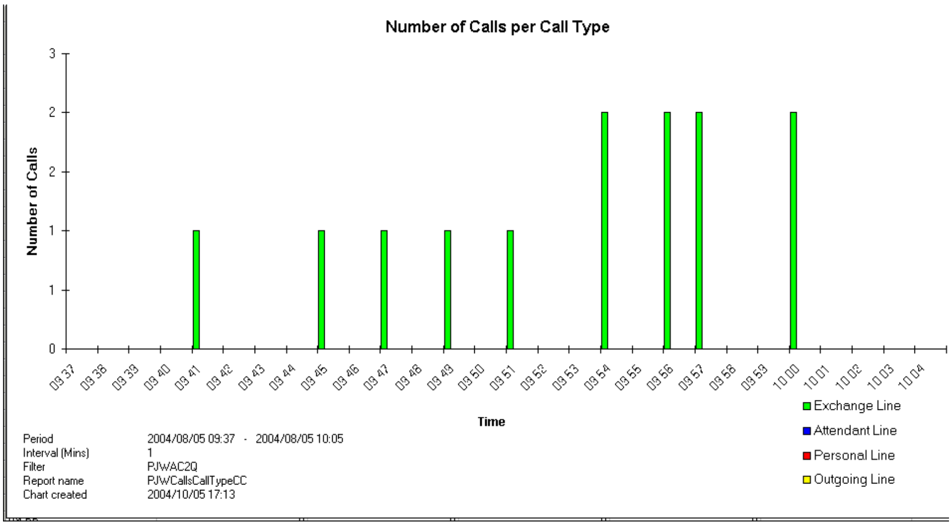


Figure 129: AC 2 Queue - Number of Calls per Call Type Report in Column Chart Format

Number of Calls per Call Type

Period	2004/08/05 09:37 - 2004/08/05 10:05				
Interval (Mins)	1				
Filter	PJWAC2Q				
Report name	PJWCallsCallTypeTbl				
Chart created	2004/10/05 17:13				
Time	**Date**	**Exchange Line**	**Attendant Line**	**Personal Line**	**Outgoing Line**
9:37	8/5/2004	0	0	0	0
9:38	8/5/2004	0	0	0	0
9:39	8/5/2004	0	0	0	0
9:40	8/5/2004	0	0	0	0
9:41	8/5/2004	1	0	0	0
9:42	8/5/2004	0	0	0	0
9:43	8/5/2004	0	0	0	0
9:44	8/5/2004	0	0	0	0
9:45	8/5/2004	1	0	0	0
9:46	8/5/2004	0	0	0	0
9:47	8/5/2004	1	0	0	0
9:48	8/5/2004	0	0	0	0
9:49	8/5/2004	1	0	0	0
9:50	8/5/2004	0	0	0	0
9:51	8/5/2004	1	0	0	0
9:52	8/5/2004	0	0	0	0
9:53	8/5/2004	0	0	0	0
9:54	8/5/2004	2	0	0	0
9:55	8/5/2004	0	0	0	0

Figure 130: AC 2 Queue - Number of Calls per Call Type Report in Table Format

Related Topics

AC 2 Queue - Average Call Waiting and Conversation Time Report

AC 2 Queue - First Call/Recalls Report

AC2 Queue - General Statistics

AC 2 Queue - Number of Answered Calls per Line Type Report

5.5.2 AC Multiple Queue Reports

This section describes the layout and content of the new reports that are required to support AC-Win MQ on PM. Only the reports that differ from the existing reports are described here. These are modified versions of the *First Calls/Recalls* and *General Statistics* reports, a new report for *Call Priorities*, a modified version of the existing *Answered Calls per Line Type* report called *Answered Calls per Queue*, and a modified version of the existing *Calls per Line* report called *Calls per Queue*.

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - Call Priorities Report

AC Multiple Queue - First Calls/Recalls Report

AC Multiple Queue - General Statistics Report

AC Multiple Queue - Number of Calls per Queue Report

AC Multiple Queue - Number of Answered Calls per Queue Report

5.5.2.1 AC Multiple Queue - Average Call Waiting and Conversation Time Reports

This report shows the Average Call Waiting and Conversation times per Attendant Console group. The report format and calculations are similar to that of the existing AC 2 Queue version of Average Call Waiting & Conversation times. The major difference is the removal of the ringing period from the waiting time. This is due to calls into AC Win MQ does not have a ringing period. All calls are automatically answered and then placed into an appropriate queue.

The column chart view contains two columns for every interval. The first column has the average waiting time and the second column has the average conversation time. The number of columns presented in the column chart report is governed by the Scale Interval value and the Reporting Service Level of the report. Thus, a report with a 15 minute Scale Interval and a Reporting Period of 1 hour will have eight columns.

The table view shows two columns, one for the Average Waiting time and one for the Average Conversation times. The number of rows depend upon the Scale Interval value set and the Reporting Service Level applied to the report. For example a report with a Scale Interval value of 15 minutes and a Reporting Period of one hour produces 4 rows of data.

This report is also available in Summary and Accumulation modes through the advanced reports mechanism.

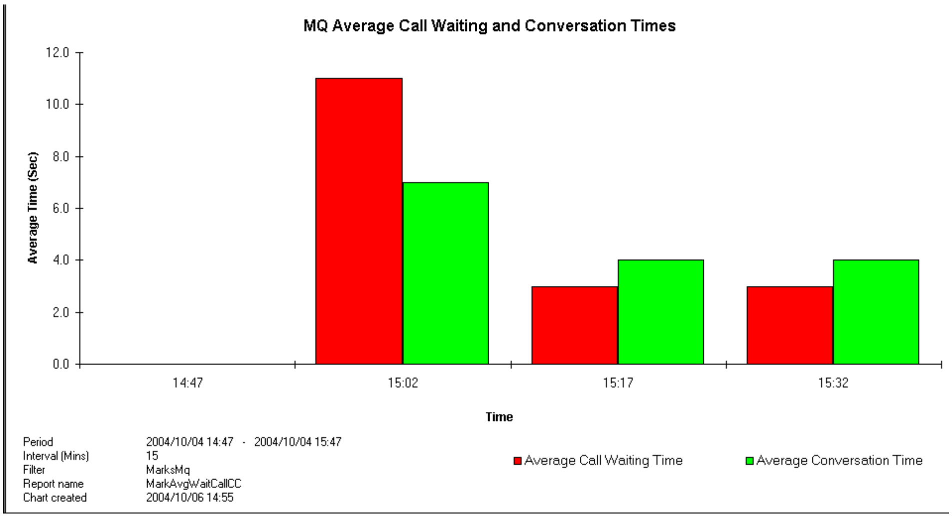


Figure 131: AC Multiple Queue - Average Call Waiting and Conversation Times Report in Column Chart Format

MQ Average Call Waiting and Conversation Times			
Period	2004/10/04 14:47 - 2004/10/04 15:47		
Interval (Mins)	15		
Filter	MarksMq		
Report name	MarkAvgWaitCalltbl		
Chart created	2004/10/06 14:55		
Time	**Date**	**Average Call Waiting Time**	**Average Conversation Time**
14:47	10/4/2004	0	0
15:02	10/4/2004	11	7
15:17	10/4/2004	3	4
15:32	10/4/2004	3	4

Figure 132: AC Multiple Queue - Average Call Waiting and Conversation Time Report in Table Format

Related Topics

AC Multiple Queue - Call Priorities Report, page 388

AC Multiple Queue - First Calls/Recalls Report, page 389

AC Multiple Queue - General Statistics Report, page 391

AC Multiple Queue - Number of Calls per Queue Report, page 394

AC Multiple Queue - Number of Answered Calls per Queue Report, page 396

5.5.2.2 AC Multiple Queue - Call Priorities Report

The report shows the priorities of calls made to the 12 Queues on the AC-Win MQ. If the report is requested for an AC Group, the values shown include the answered and not answered calls. If the report is requested for a single AC (or set of individual ACs), the values shown are for answered calls only.

The report may be displayed in a table view only, as the number of data values is 576.It is not possible to present this in a chart view. The table view shows 12 columns with the column headings of the form "Q-1", "Q-2", "Q-3", and so on. The number of rows is 48 to cover the 48 different priority levels. The value in each cell is the number of calls to the given queue with the given priority during the reporting period. The *Scale Interval* is not used for the Call Priorities report.

Call Priorities

Period	2004/10/04 14:47 - 2004/10/04 15:47
Filter	MarksMq
Report name	MarkCallPrios
Chart created	2004/10/06 14:54

	Calls per Queue											
Priority	Q-1	Q-2	Q-3	Q-4	Q-5	Q-6	Q-7	Q-8	Q-9	Q-10	Q-11	Q-12
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0

Figure 133: AC Multiple Queue - Call Priorities Report in Table Format

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - First Calls/Recalls Report

AC Multiple Queue - General Statistics Report

AC Multiple Queue - Number of Calls per Queue Report

AC Multiple Queue - Number of Answered Calls per Queue Report

5.5.2.3 AC Multiple Queue - First Calls/Recalls Report

This report shows the number of calls made to the 12 Queues on the AC-Win MQ that are configured to receive First Calls and also the number of recalls made to the queue configured for recalls. Although all 12 queues have a column for First Calls, the queue that is configured as the recall queue for the period of the report shows no calls in the First Calls column. Any calls to this queue are Recalls and therefore, counted in the Recall column and not the queue's First Call column.

If the report is requested for an AC Group, the values shown include the answered and not answered First calls and Recalls. If the report is requested for a single AC (or set of individual ACs), the values shown are for answered calls only.

The report may be displayed in a table view or a column chart.

The column chart view shows 13 columns in each interval, one column for each queue showing the First Calls count and a single column containing the count of Recalls. Thus the 1-hour report with a 15-minute Scale Interval mentioned above produces a chart with 52 columns.

The table view shows 13 columns, one column for each Queue that receives First Calls and a single column for the Recall Queue. The Column headings are Q-1, Q-2, Q-3 ....Q-12 with the Recall queue having the heading Q-Recall. The number of rows depend on the *Scale Interval* and *Reporting Period* applied to the report. For example a report with a Scale Interval of 15 minutes and a Reporting Period of 1 hour produce 4 rows of data.

This report is also available in Summary and Accumulation modes through the advanced reports mechanism.

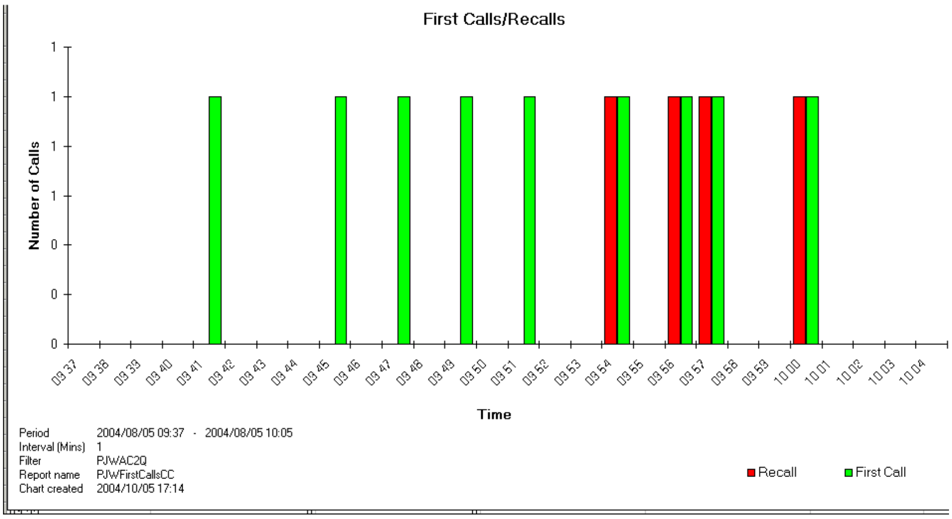


Figure 134: AC Multiple Queue - First Calls / Recalls Report in Column Chart Format

In this example Queue 8 is configured as the Recall Queue and therefore there are no first calls on Queue 8 for the period of the report.

MQ First Calls/Recalls

Period	2004/10/04 14:47 - 2004/10/04 15:47
Interval (Mins)	15
Filter	MarksMq
Report name	MarkAvgWaitCallCCFirstRecallstbl
Chart created	2004/10/06 14:53

		Q1		Q2		Q3		Q4		Q5		Q6		Q7		Q8		Q9		Q10		Q11		Q12	
Time	**Date**	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R
14:47	10/4/2004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:02	10/4/2004	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
15:17	10/4/2004	0	0	0	0	0	0	0	4	0	0	0	7	0	0	0	0	0	0	8	6	0	0	5	0
15:32	10/4/2004	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	3	0
Sum		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**6**	**0**	**0**	**8**	**0**

Figure 135: AC Multiple Queue - First Calls/Recalls Report in Table Format

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - Call Priorities Report

AC Multiple Queue - General Statistics Report

AC Multiple Queue - Number of Calls per Queue Report

AC Multiple Queue - Number of Answered Calls per Queue Report

5.5.2.4 AC Multiple Queue - General Statistics Report

The General Statistics report shows values for each of the 12 queues on the AC-Win MQ including statistics for Outgoing calls, Incoming Calls, and All Calls. The statistics presented are follows:

Total Calls	The total number of calls presented during the reporting period on each AC-Win MQ Queue and for sums for outgoing, incoming, and all calls. Note for report requested for a single AC or set of individual ACs only answered calls is counted in this value.
Calls Answered	The number of answered calls in the reporting period.
Calls Not Answered	The number of not answered calls in the reporting period. This is equivalent to calls that are only signalled in a queue, or outgoing calls that are not answered. Note for a report requested for a single AC or set of individual ACs this value is zero.
First Calls	The sum of Answered and Not Answered calls. Note for a report requested for a single AC or set of individual ACs this value is based on Answered calls only. Note for the queue that is configured to receive recalls this value is zero.
Recalls	The number of recalls. Note that this statistic will only have a value for the queue that is configured to receive recalls, in all other queues the value will be zero.
Average waiting time total	The average time spent in the queue for both answered and not answered calls. Note for a report that is requested for a single AC or set of individual ACs this value will be based on Answered calls only.
Average waiting time for Answered calls	The average time spent in the queue for calls that were answered.
Average waiting time for Not Answered calls	The average time spent in the queue for calls that were not answered. Note for a report is requested for a single AC or set of individual ACs this statistic will be zero.
Conversation time	The average conversation time for answered calls.
Hold time	The average hold time for calls that were put on hold.
Total Call Time (waiting +conversation+hold)	The average total call time for both answered and not answered calls. Note for a report requested for a single AC or set of individual ACs this value will be based on answered calls only.

The General Statistics report for AC-Win MQ does not include any statistics concerning ringing durations, this is because with the MQ calls are either in a queue or answered by an Attendant, there is no ringing state as such.

Calls that are Not Answered only got as far as a queue, it is not possible for a call to be Not Answered once it has been selected by an Attendant.

The General Statistics report makes most sense when it is requested for an AC Group. When the report is requested for a single AC or set of individual ACs the statistics must be interpreted carefully.

MQ General Statistics

Period 2004/10/04 14:47 - 2004/10/04 15:47
Filter MarksMq
Report name MarkGenStatsAll
Chart created 2004/10/06 14:54

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Out	In	All
Number of Calls																
Total Calls		0	0	0	8	0	12	0	0	0	19	0	8	1	47	48
Calls Answered		0	0	0	4	0	8	0	0	0	16	0	8	0	36	36
Calls Not Answered (signalled in queue only)		0	0	0	4	0	4	0	0	0	3	0	0	1	11	12
First Calls		0	0	0	0	0	0	0	0	0	13	0	8		21	
Recalls		0	0	0	8	0	12	0	0	0	6	0	0		26	
Times (average seconds)																
Waiting Time (call queue)	Total	0	0	0	2	0	2	0	0	0	4	0	3		3	3
	Calls Answered	0	0	0	5	0	3	0	0	0	2	0	3		3	3
	Calls Not Answered	0	0	0	0	0	0	0	0	0	16	0	0		4	4
Placing Time (Conversation+hold)		0	0	0	9	0	3	0	0	0	5	0	4		5	5
Conversation Time		0	0	0	9	0	3	0	0	0	5	0	4	0	5	5
Hold Time		0	0	0	0	0	0	0	0	0	0		0	0	0	0
Total of Call Time (Waiting+Conversation+Hold)		0	0	0	7	0	4	0	0	0	8	0	7		7	7

Figure 136: AC Multiple Queue - General Statistics Report in Table Format

MQ First Calls Statistics

Period 2004/10/04 14:47 - 2004/10/04 15:47
Filter MarksMq
Report name MarkGenStatsFirst
Chart created 2004/10/06 14:53

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	All
Number of Calls														
Total Calls		0	0	0	0	0	0	0	0	0	13	0	8	22
Calls Answered		0	0	0	0	0	0	0	0	0	12	0	8	20
Calls Not Answered (signalled in queue only)		0	0	0	0	0	0	0	0	0	1	0	0	2
Times (average seconds)														
Waiting Time (call queue)	Total	0	0	0	0	0	0	0	0	0	6	0	3	5
	Calls Answered	0	0	0	0	0	0	0	0	0	3	0	3	3
	Calls Not Answered	0	0	0	0	0	0	0	0	0	48	0	0	24
Placing Time (Conversation+hold)		0	0	0	0	0	0	0	0	0	4	0	4	4
Conversation Time		0	0	0	0	0	0	0	0	0	4	0	4	4
Hold Time		0	0	0	0	0	0	0	0	0	0	0	0	0
Total of Call Time (Waiting+Conversation+Hold)		0	0	0	0	0	0	0	0	0	10	0	7	9

Figure 137: AC Multiple Queue - First Calls Statistics Report in Table Format

MQ Recalls Statistics

Period 2004/10/04 14:47 - 2004/10/04 15:47
Filter MarksMq
Report name MarkGenStatsRecalls
Chart created 2004/10/06 14:54

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	All
Number of Calls														
Total Calls		0	0	0	8	0	12	0	0	0	6	0	0	26
Calls Answered		0	0	0	2	0	8	0	0	0	4	0	0	14
Calls Not Answered (signalled in queue only)		0	0	0	8	0	4	0	0	0	2	0	0	14
Times (average seconds)														
Waiting Time (call queue)	Total	0	0	0	2	0	2	0	0	0	0	0	0	2
	Calls Answered	0	0	0	5	0	3	0	0	0	0	0	0	2
	Calls Not Answered	0	0	0	1	0	0	0	0	0	0	0	0	1
Placing Time (Conversation+hold)		0	0	0	14	0	4	0	0	0	6	0	0	6
Conversation Time		0	0	0	14	0	4	0	0	0	6	0	0	6
Hold Time		0	0	0	0	0	0	0	0	0	0	0	0	0
Total of Call Time (Waiting+Conversation+Hold)		0	0	0	6	0	5	0	0	0	4	0	0	5

Figure 138: AC Multiple Queue - Recalls Statistics Report in Table Format

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - Call Priorities Report

AC Multiple Queue - First Calls/Recalls Report

AC Multiple Queue - Number of Calls per Queue Report

AC Multiple Queue - Number of Answered Calls per Queue Report

5.5.2.5 AC Multiple Queue - Number of Calls per Queue Report

This report shows the total number of calls made to the 12 Queues on the AC-Win MQ. If the report is requested for a single AC (or set of individual ACs) the values shown will be for answered calls only.

The report may be displayed in a table view or a column chart.

The column chart view shows 12 columns in each interval, showing Total Calls. A one hour report with a 15-minute Scale Interval mentioned above produces a chart with 48 columns.

The table view shows 12 columns, showing the total calls to each Queue, and 1 column for the Answered calls in that queue. The Column headings are Q-1, Q-2, Q-3 and so on. The number of rows depend on the *Scale Interval* and *Reporting Period* applied to the report. For example a report with a Scale Interval of 15 minutes and a Reporting Period of 1 hour produces 4 rows of data.

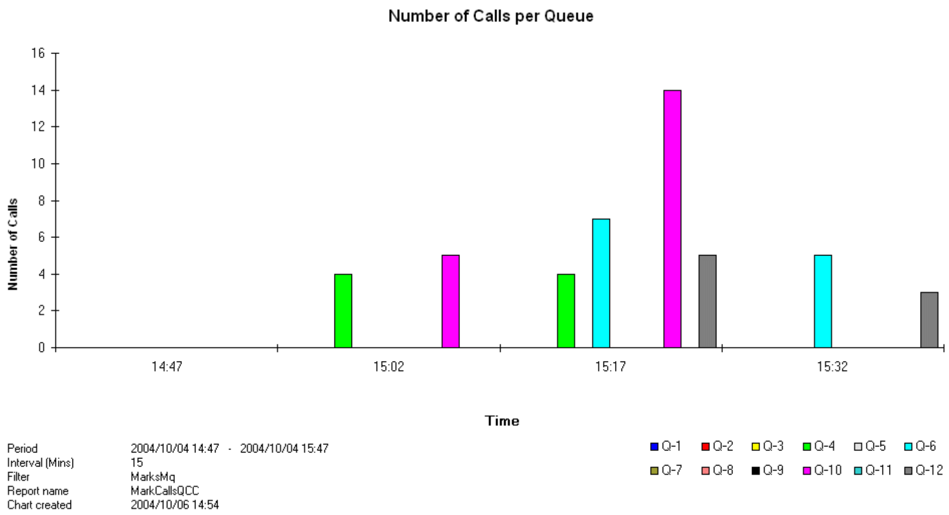


Figure 139: AC Multiple Queue - Number of Calls per Queue Report in Column Chart Format

Number of Calls per Queue													
Period	2004/10/04 14:47 - 2004/10/04 15:47												
Interval (Mins)	15												
Filter	MarksMq												
Report name	MarkCallsQtbl												
Chart created	2004/10/06 14:53												
Time	**Date**	**Q-1**	**Q-2**	**Q-3**	**Q-4**	**Q-5**	**Q-6**	**Q-7**	**Q-8**	**Q-9**	**Q-10**	**Q-11**	**Q-12**
14:47	10/4/2004	0	0	0	0	0	0	0	0	0	0	0	0
15:02	10/4/2004	0	0	0	4	0	0	0	0	0	5	0	0
15:17	10/4/2004	0	0	0	4	0	7	0	0	0	14	0	5
15:32	10/4/2004	0	0	0	0	0	5	0	0	0	0	0	3
Sum		**0**	**0**	**0**	**8**	**0**	**12**	**0**	**0**	**0**	**19**	**0**	**8**

Figure 140: AC Multiple Queue - Number of Calls per Queue Report in Table Format

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - Call Priorities Report

AC Multiple Queue - First Calls/Recalls Report

AC Multiple Queue - General Statistics Report

AC Multiple Queue - Number of Answered Calls per Queue Report

5.5.2.6 AC Multiple Queue - Number of Answered Calls per Queue Report

This report shows the total number of calls made to the 12 Queues on the AC-Win MQ, and the number of those calls that were answered. If the report is requested for a single AC (or set of individual ACs) the values shown are for answered calls only (that is the *total* and *answered* statistics are the same.

The report may be displayed in a table view or a column chart.

The column chart view shows 24 columns in each interval, two columns for each queue showing Total and Answered Calls. A one-hour report with a 15-minute Scale Interval mentioned above produces a chart with 96 columns.

The table view shows 24 columns, one column for the total calls to each Queue, and one column for the Answered calls in that queue. The Column headings are Q-1 Total, Q-1 Ans., Q-2 Total, Q-2 Ans., Q-3 Total, Q-3 Ans., and so on. The number of rows depend on the Scale Interval and Reporting Service Level applied to the report. For example, a report with a Scale Interval of 15 minutes and a Reporting Period of 1 hour produces 4 rows of data.

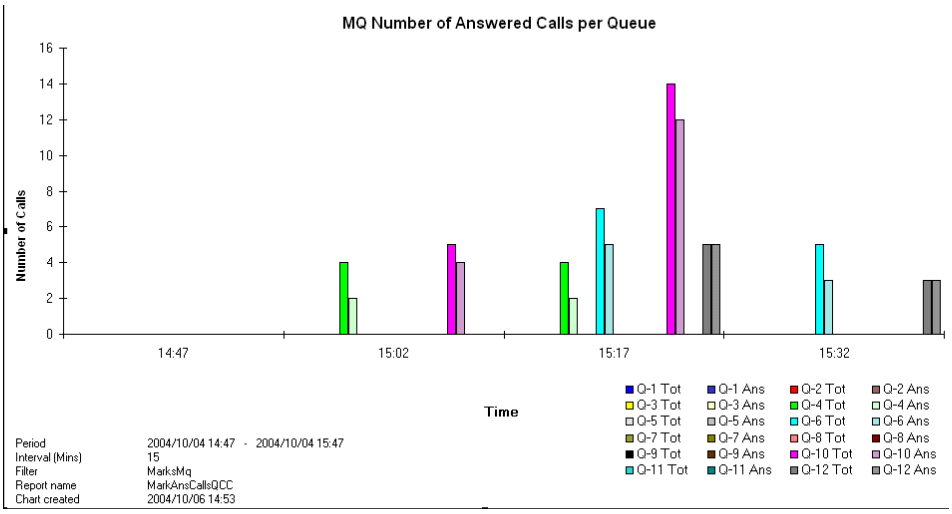


Figure 141: AC Multiple Queue - Number of Answered Calls per Queue Report in Column Chart Format

MQ Number of Answered Calls per Queue

Period	2004/10/04 14:47 - 2004/10/04 15:47
Interval (Mins)	15
Filter	MarksMq
Report name	MarkAnsCallsQtbl
Chart created	2004/10/06 14:55

		Q1		Q2		Q3		Q4		Q5		Q6		Q7		Q8		Q9		Q10		Q11		Q12	
Time	Date	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans	Tot	Ans
14:47	10/4/2004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:02	10/4/2004	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0	0
15:17	10/4/2004	0	0	0	0	0	0	4	2	0	0	7	5	0	0	0	0	0	0	14	12	0	0	5	5
15:32	10/4/2004	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	3	3
Sum		0	0	0	0	0	0	8	4	0	0	12	8	0	0	0	0	0	0	19	16	0	0	8	8

Figure 142: AC Multiple Queue - Number of Answered Calls per Queue Report in Table Format

Related Topics

AC Multiple Queue - Average Call Waiting and Conversation Time Reports

AC Multiple Queue - Call Priorities Report

AC Multiple Queue - First Calls/Recalls Report

AC Multiple Queue - General Statistics Report

AC Multiple Queue - Number of Calls per Queue Report

5.5.3 Common Reports

This section describes the following reports:

- Common - ASC Report
- Common - Branch Statistics Report
- Common - Jack On Report
- Common - Out of Service, Night Service, Jack Pulled, Active Report
- Common - Service Level Statistic Report

5.5.3.1 Common - ASC Report

In V2.2 and higher, ASC 3.0 has been enhanced to periodically export the ASC data into two ASCII format files on the PC running ASC 3.0. One file acts as a data backup and the other provides a rolling history. The basic format of the two files are identical.

In V.2.2 and higher, PM has been enhanced to periodically schedule the ASC data export into two ASCII format files on the OpenScape 4000 Manager or Assistant. The reports must be moved from the OpenScape 4000 Manager Server to a special network drive or client PC. This may have to be set up for individual customers.

In ASC 3.0, the data is created each half hour starting from 7:00 AM to 7:00 PM. The data is exported every half hour from 7:30 AM to 7:30 PM with a reporting interval of 30 minutes. The exported data is appended to the rolling history file and written to the backup file. The printed report layout and the report schedule are customer specific.

The PM enhancements use a new report template and the existing scheduling mechanism to schedule the export every 30 minutes. There are no restrictions on the start and end times for the reporting period or the **Run Report At** date and time.

To ensure comparable results with the existing ASC 3.0 customer specific enhancement, the **Run Report At** time should be 7:40 not 7:30 to allow the data to be collected from the switches in order that real data rather than null data is exported to the data backup and rolling history files.

The data export facility does not use MS Excel to generate the ASCII format files. This facility becomes available when MS Excel is not installed on the client PC.

Table 22 defines the format of the data backup and rolling history ASCII files for ASC.

NOTICE: The latest version of the ASC export source code must be used to determine the exact format of the data backup and rolling history ASCII files to ensure that the existing file formats do remain unchanged.

Table 22: ASC Data Export ASCII File Definition

No	Field	Format	Width (Number of Characters)	Description
1.	Name		50	Name of the report
2.	Date	mm/dd/yy	14	Date of the report
3.	Time	hh:mm	20	Interval/Reporting period
4.	ACD Group	0-15	6	Number of the AC Group
5.	Handled Calls	0-9999	10	Number of answered calls
6.	Abandoned Calls	0-9999	11	Number of not answered
7.	Average Talk Time	seconds	11	Average of conversation a calls
8.	Average Work Time	0	11	Always 0, this field can no the PM database
9.	Average Speed of Answer	seconds	11	Average of ringing and wa
10.	Percent Service Level	percent	11	The service level is the pe calls which have been an acceptable waiting time.

No	Field	Format	Width (Number of Characters)	Description
11.	Average Positions Staffed	percent	11	The number of seconds in whic active divided by the number of interval. The attendant is active when th service, in night service, or jack This is the same value as the **A** in Attendants Console - Comm Service/ Night Service/Jack Pulled repo
12.	Footer	$END OF ASC		End of report footer marker

ASC FORECAST REPORT

DATE: 01/22/01
TIME: 11:00-11:30 AM

ACD GROUP	HANDLED CALLS	ABADONED CALLS	AVERAGE TALK TIME	AVERAGE WORK TIME	AVERAGE SPEED OF ANS	PERCENT SERVICE LEVEL	AVERAGE POSITIONS STAFFED
0	0	0	0.00	0.00	0.00	0.00	0.00
1	3	2	77.67	0.00	20.20	40.00	33.33
2	36	3	45.00	0.00	18.72	61.54	56.67
3	0	0	0.00	0.00	0.00	0.00	0.00
4	8	3	25.00	0.00	5.82	90.91	100.00
5	0	0	0.00	0.00	0.00	0.00	0.00
6	0	0	0.00	0.00	0.00	0.00	0.00
7	0	0	0.00	0.00	0.00	0.00	0.00
8	0	0	0.00	0.00	0.00	0.00	0.00
9	0	0	0.00	0.00	0.00	0.00	0.00
10	0	0	0.00	0.00	0.00	0.00	0.00
11	0	0	0.00	0.00	0.00	0.00	0.00
12	0	0	0.00	0.00	0.00	0.00	0.00
13	0	0	0.00	0.00	0.00	0.00	0.00
14	0	0	0.00	0.00	0.00	0.00	0.00
15	490	169	72.60	0.00	34.05	19.27	41.07

$END OF ASC

Figure 143: Common - ASC Data Export ASCII File for One Interval Report

Related Topics

Common - Branch Statistics Report

Common - Jack On Report

Common - Out of Service, Night Service, Jack Pulled, Active Report

Common - Service Level Statistic Report

5.5.3.2 Common - Branch Statistics Report

The branch statistic report displays the call data from one, several or all branches.

The Branch Statistics report consists of the following areas:

- The standard header including; corporate logo, product logo (for example, OpenScape), the report type, period, interval, filter name, report name, and chart created date and time.
- An additional optional header and appropriate value for the call ignoring parameter. The header and value are omitted when call ignoring is deactivated.
- A multi column table including; calls, branch processes, and branch names.
- One row in the table is generated for each branch in the filter.

  The table may contain two additional rows (labeled **Extern** and **Intern**) for calls not assigned to branches. These rows are generated if the external and internal call types are set in the filter, respectively.

  Calls consist of:

  – Incoming - total number of incoming calls to the attendants on the ASC switch
  – Answered - total number of calls answered by the attendants on the ASC switch
- For Extern row - from the public network, not the ASC switch or to/from a branch.
- For Intern row - from within the ASC switch.
- For branch rows when node ids are used - from the branch switch
- For branch rows when trunk groups assigned - carried by the specified trunk groups between the ASC and branch switches.

  – Branch processes consist of:

    – No forwards - attendant-handled calls that have not been transferred to or involved consultation with any other party. The CDR records for these calls does not contain any SupplServ **Consult** or SupplServ **Transfer**.
    – Quick Forwards - attendant-handled calls that have been transferred to a destination party and the attendant has not waited for that party to answer. Also known as speed transferred. As there is no connection duration, CONTOT in the CDR record representing the transferred call will be 0.

      NOTICE: The attendant handled call may have involved consultation with another party before it was speed transferred. If so, it is still counted as a quick forward. The additional consultation calls are included in 'Number of Consultations'

    – Comfort Forwards - attendant- handled calls that have involved at least one consultation and have been transferred to a destination party after that party has answered the consultation call. Also known as call transfer with announcement. As there is a connection between the attendant and the destination party, CONTOT in the CDR record representing the transferred call will be greater than 0.
    – Number of Consultations - total number of CDR records with SupplServ 'Consult' for the attendant handled calls.
    – Waiting Time in seconds - the average value of the length of time taken by the destination parties at the branch or ASC switch (for [Extern] and [Intern]) to answer or (not answer) the attendant transferred call. The average value does not include any speed

transferred or untransferred calls. The value includes the ringing time at the destination party and any waiting time in the hunt groups.

- For Extern row - all calls from the public network (not the ASC switch or to/ from a branch) handled by the attendant are included in the calculations for the branch processes.
- For Intern row - all calls from within the ASC switch handled by the attendant are included in the calculations for the branch processes.
- For branch rows when node ids are used, all attendant handled calls between the ASC and branch switches are included in the calculations for the branch processes.
- For branch rows when trunk groups are assigned, only those attendant handled calls carried by the specific trunk groups between the ASC and branch switches are included in the calculations for the branch processes.
- Individual sheets for the daily statistics and an additional sheet for the overall results.

Branch Statistics

Period	2004/01/19 - 2004/01/23 08:00 - 17:00
Interval (Mins)	60
Filter	JCS Test Filter
Report name	JCS Branch Stats
Chart created	2004/01/27 13:12

Calls		Branch processes					
							Branch
Incoming	Answered	No forwards	Quick forwards	Comfort forwards	Number of consultations	Waiting times [sec]	
163	109	109	0	0	0	0	[Extern]
131	92	92	0	0	0	0	[Intern]
0	0	0	0	0	0	0	DB Beeston
0	0	0	0	0	0	0	DB Stuttgart
0	0	0	0	0	0	0	DB Vienna
294	201	201	0	0	0	0	Total

Figure 144: Common - Branch Statistics Report

Related Topics

Common - ASC Report

Common - Jack On Report

Common - Out of Service, Night Service, Jack Pulled, Active Report

Common - Service Level Statistic Report

5.5.3.3 Common - Jack On Report

The Jack On report shows the length of time that the jack was connected or unplugged for the specified attendant console in a given period. This report is available in area chart and table format.

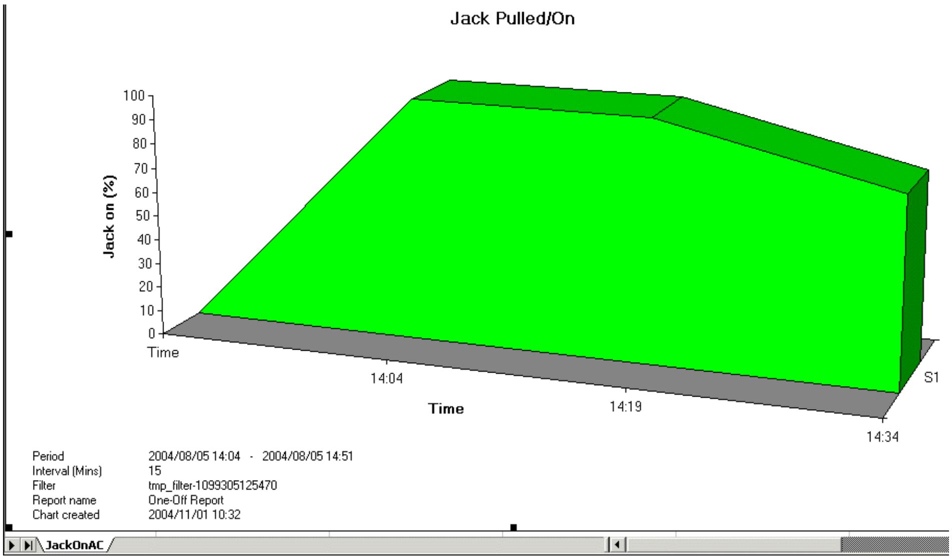


Figure 145: Common - Jack On Report in area chart format

Jack Pulled/On

Period	2004/08/05 14:04 - 2004/08/05 14:51	
Interval (Mins)	15	
Filter	tmp_filter-1099305145579	
Report name	One-Off Report	
Chart created	2004/11/01 10:32	
Time	**Date**	**Jack on (%)**
14:04	8/5/2004	100.00
14:19	8/5/2004	100.00
14:34	8/5/2004	78.33

JackOnTbl

Figure 146: Common - Jack On Report in Table Format

Related Topics

Common - ASC Report

Common - Branch Statistics Report

Common - Out of Service, Night Service, Jack Pulled, Active Report

Common - Service Level Statistic Report

5.5.3.4 Common - Out of Service, Night Service, Jack Pulled, Active Report

The Out of Service, Night Service, Jack Pulled, Active report shows the activity (out-of-service, jack pulled, night switch option) for the specified attendant console in a given report period. This report is available in 3D area chart or table.

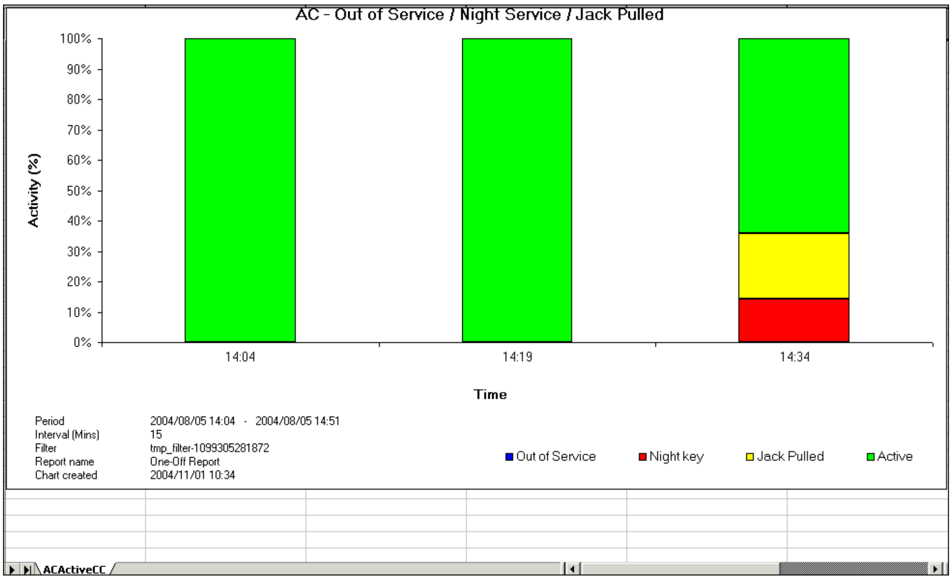


Figure 147: Common - Out of Service, Night Service, Jack Pulled, Active Report in Column Chart Format

AC - Out of Service / Night Service / Jack Pulled

Period	2004/08/05 14:04 - 2004/08/05 14:51
Interval (Mins)	15
Filter	tmp_filter-1099305269372
Report name	One-Off Report
Chart created	2004/11/01 10:34

Time	Date	Out of Service	Night Key	Jack pulled	Active
14:04	8/5/2004	0.00	0.00	0.00	100.00
14:19	8/5/2004	0.00	0.00	0.00	100.00
14:34	8/5/2004	0.00	14.33	21.67	64.00

ACActiveTbl

Figure 148: Common - Out of Service, Night Service, Jack Pulled, Active Report in Table Format

Related Topics

Common - ASC Report

Common - Branch Statistics Report

Common - Jack On Report

Common - Service Level Statistic Report

5.5.3.5 Common - Service Level Statistic Report

The service level statistic report displays the percentage of incoming calls which have been answered within an acceptable waiting time.

The Service Level Statistic consists of the following areas:

- The standard header including; corporate logo, product logo (for example, OpenScape), the report type, period, interval, filter name, report name, and chart created date and time.
- An additional header and appropriate value for the call ignoring parameter (table only). The header and value are omitted when call ignoring is deactivated.
- Additional headers and appropriate values for the acceptable waiting time and comparative service level threshold. The comparison value is shown as a orange line on the column chart.
- A four column table including; time, service level threshold, % answered within acceptable waiting time, and % answered outside acceptable waiting time.

  The formulae are as follows:

  – % answered within acceptable waiting time is...

  (number of answered calls with a waiting time of <= acceptable waiting time) * 100 / number of incoming calls

  – % answered outside acceptable waiting time is...

  (number of answered calls with a waiting time > acceptable waiting time) * 100 / number of incoming calls

  The percentages are calculated and displayed at each interval in the specified time period.
- The waiting time is the sum of RINGDUR, HOLDDUR, and QUEUEDUR in the CDR records.
- For intervals without incoming calls, the values for % answered within acceptable waiting time and % answered outside acceptable waiting time will both be 0.

- Individual sheets for the daily statistics and an additional sheet for the overall results.

Figure 149: Common - Service Level Statistics Report in Column Chart Format

Service Level Statistic			
Period	2004/01/19 - 2004/01/23 08:00 - 17:00		
Interval (Mins)	60		
Filter	JCS Test Filter	**Call Ignoring**	5 sec
Report name	JCS Service Level Stats	**Acceptable waiting time**	20 sec
Chart created	2004/01/28 09:09	**Comparison value**	80%
Service Level (%)			
Time	**Service level threshold**	**% answered within acceptable waiting time**	**% answered outside acceptable waiting time**
08:00	80	0	0
09:00	80	85	15
10:00	80	93	7
11:00	80	0	0
12:00	80	92	8
13:00	80	83	17
14:00	80	94	6
15:00	80	0	0
16:00	80	0	0

Figure 150: Common - Service Level Statistics Report in Table Format

Related Topics

Common - ASC Report

Common - Branch Statistics Report

Common - Jack On Report

Common - Out of Service, Night Service, Jack Pulled, Active Report

5.6 Call Timings Reports

This section describes the following reports:

- Average Waiting+Ringing and Answering Times Report
- Average Waiting, Ringing and Conversation Times Report

- Call Status (Time in Hold, Ringing, Conversation, and Idle) Report
- Conversation Times for Answered Number of Calls
- Conversation Times for Total Number of Calls Report
- Ringing Times of Answered and Not Answered Calls Report
- Ringing Times (Minimum, Average, and Maximum) Report
- Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report
- Waiting Times (Minimum, Average, Maximum) Report

Usage

The call timing reports using a telephony filter type are not limited to a particular telephony item type, they can be run for Extensions, Hunt Groups, Attendants, and Attendant groups. These reports use a simpler approach to the calculation of averages, using the total number of calls handled.

Table 23 lists an example of a series of five separate calls to a Hunt Group.

Table 23: Timings for Separate Calls to a Hunt Group Example

Call	Waiting Time	Ringing Time	Conversation Time	Call Description
1	0	14	18	Call rang AC and answered
2	12	0	0	Call queued and originator hu up
3	8	16	0	Call queued, rang AC and originator hung-up
4	0	24	0	Call rang AC and originator h up
5	13	22	17	Call queued, rang AC and answered
Average	7	15	7	

Average Calculations

The average calculations use the total number of calls (5) as the divisor in all cases, that is:

Average Waiting	= (12+8+13) / 5)	= 7 (rounded to the nearest second)
Average Ringing	= (14+16+24+22) / 5	= 15 (rounded to the nearest second)
Average Conversation	= (18+17) / 5	= 7 (rounded to the nearest second)

In general the average values in the call timings reports are smaller than those in the Attendant reports due to the different method of calculation.

This method of calculation is used for the average values in the following Call Timings reports:

- Average Waiting+Ringing and Answering times
- Average Waiting, Ringing and Conversation times
- Conversation Times for Answered Number of Calls (Minimum, Average, Maximum)
- Conversation Times for Total Number of Calls (Minimum, Average, Maximum)
- Ringing Times (Minimum, Average, Maximum)
- Waiting Times (Minimum, Average, Maximum)

5.6.1 Average Waiting+Ringing and Answering Times Report

This report provides statistics about the average sum of ringing and wait time for accepted and rejected external calls and the average time taken for acceptance by the called party. The report may be viewed as a column chart or table or as an Organisational Detailed report in table format.

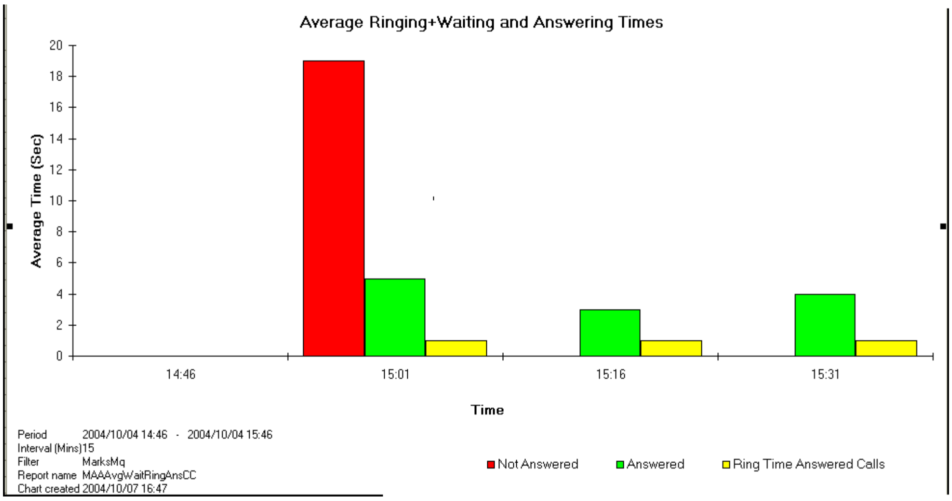


Figure 151: Call Timings - Average Waiting+Ringing and Answering Times Report in Column Chart Format

Average Ringing+Waiting and Answering Times				
Period	2004/10/04 14:46 - 2004/10/04 15:46			
Interval (Mins)	15			
Filter	MarksMq			
Report name	MAAAvgWaitRingAnstbl			
Chart created	2004/10/07 16:47			
		Ringing + Waiting Times (sec)		
Time	**Date**	**Not Answered**	**Answered**	**Ring Time Answered Calls (sec)**
14:46	10/4/2004	0	0	0
15:01	10/4/2004	19	5	1
15:16	10/4/2004	0	3	1
15:31	10/4/2004	0	4	1

Figure 152: Call Timings - Average Waiting+Ringing and Answering Times Report in Table Format

Average Ringing+Waiting and Answering Times - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10		
Interval (Mins)	15						
Filter	tmp_filter-1182168996940						
					Ringing + Waiting Times (sec)		
			Time	**Date**	**Not Answered**	**Answered**	**Answering Time (sec)**
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	6	2	2
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	6	2	2
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	6	2	2

Figure 153: Call Timings - Average Waiting+Ringing and Answering Times Report (Orgaisational Detail)

Related Topics

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.2 Average Waiting, Ringing and Conversation Times Report

This report provides statistics about average wait, ringing, and call times at selected monitored objects. The report may be viewed as a column chart, pie chart, or table or as an Organisational Detailed report in table format.

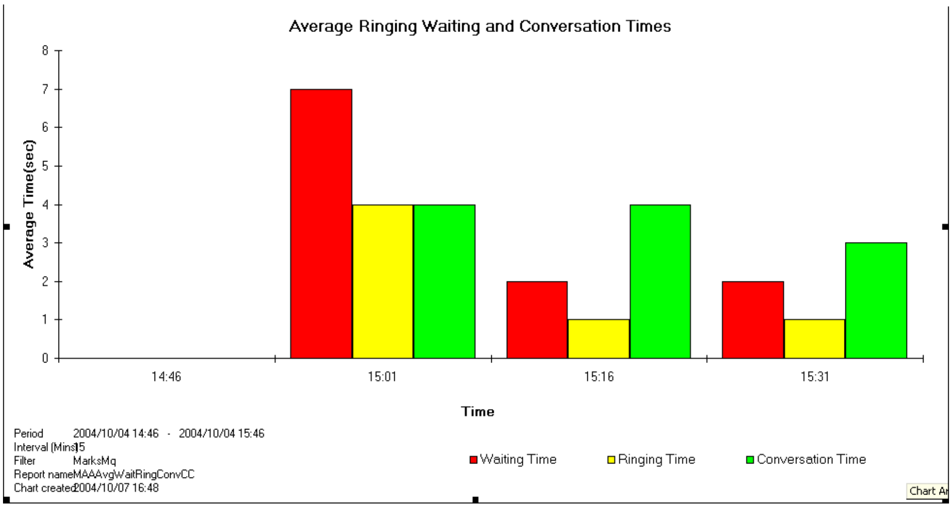


Figure 154: Call Timings - Average Waiting, Ringing and Conversation Times Report in Column Chart Format

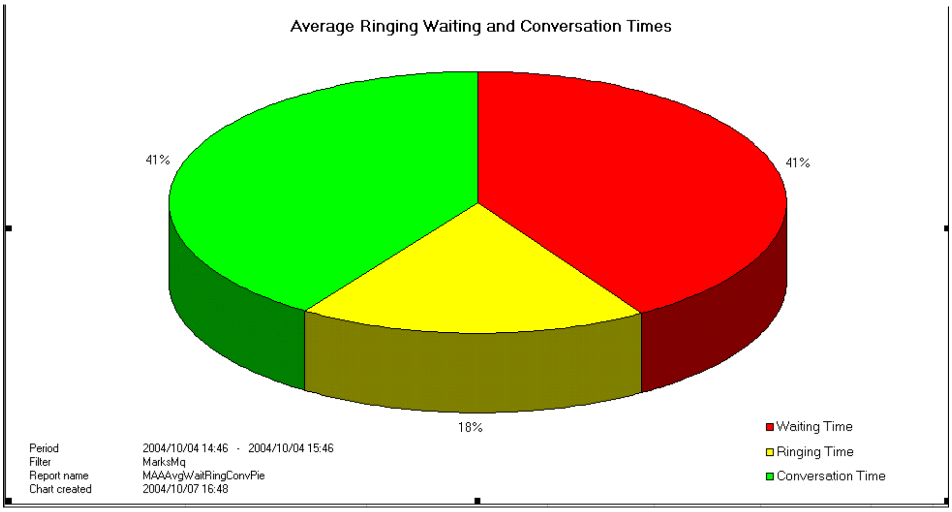


Figure 155: Call Timings - Average Waiting, Ringing, and Conversation Times Report in Pie Chart Format

Average Ringing Waiting and Conversation Times				
Period	2004/10/04 14:46 - 2004/10/04 15:46			
Interval (Mins)	15			
Filter	MarksMq			
Report name	MAAAvgWaitRingConvTbl			
Chart created	2004/10/07 16:48			
Time	**Date**	**Waiting Time (sec)**	**Ringing Time (sec)**	**Conversation Time (sec)**
14:46	10/4/2004	0	0	0
15:01	10/4/2004	7	4	4
15:16	10/4/2004	2	1	4
15:31	10/4/2004	2	1	3

Figure 156: Call Timings - Average Waiting, Ringing, and Conversation Times Report in Table Format

Average Ringing Waiting and Conversation Times - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10
Interval (Mins)	15.00				
Filter	tmp_filter-1182169060322				

			Time	**Date**	**Waiting Time (sec)**	**Ringing Time (sec)**	**Conversation Time (sec)**
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	4	2
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	4	2
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	4	2

Figure 157: Call Timings - Average Waiting, Ringing and Conversation Times Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.3 Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

This report provides statistics about connection statuses of selected monitored objects (on hold, busy or blocked, digit input, call, ringing, and idle). The report may be viewed as a table, horizontal bar chart or pie chart or as an Organisational Detailed report in table format.

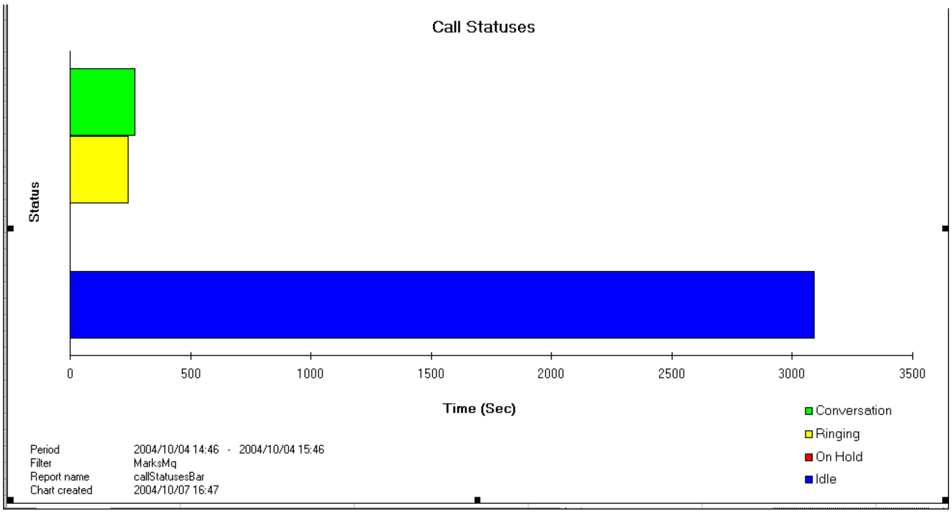


Figure 158: Call Timings - Call Statuses (Time On Hold, Ringing, Conversation, and Idle) Report in Bar Chart Format

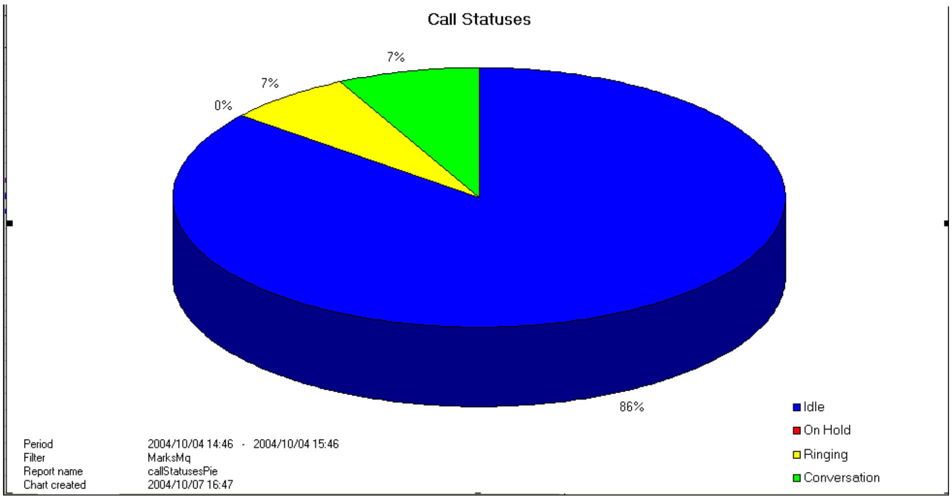
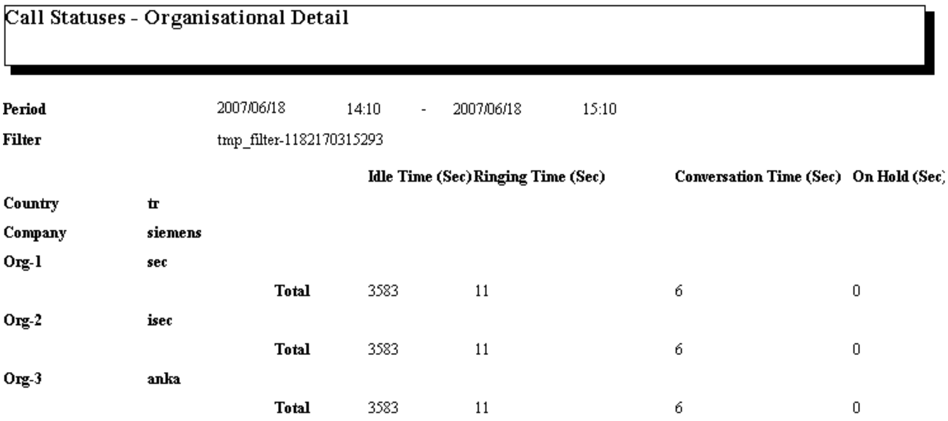


Figure 159: Call Timings - Call Statuses (Time On Hold, Ringing, Conversation, and Idle) Report in Pie Chart Format

Call Statuses			
Period	2004/10/04 14:46 - 2004/10/04 15:46		
Filter	MarksMq		
Report name	callStatusesTbl		
Chart created	2004/10/07 16:47		
Idle Time (Sec)	**Ringing Time (Sec)**	**Conversation Time (Sec)**	**On Hold (Sec)**
3092	240	268	0

Figure 160: Call Timings - Call Status (Time On Hold, Ringing, Conversation, and Idle) Report in Table Format



Call Statuses - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10	
Filter	tmp_filter-1182170315293					

			Idle Time (Sec)	Ringing Time (Sec)	Conversation Time (Sec)	On Hold (Sec)
Country	**tr**					
Company	**siemens**					
Org-1	**sec**					
		Total	3583	11	6	0
Org-2	**isec**					
		Total	3583	11	6	0
Org-3	**anka**					
		Total	3583	11	6	0

Figure 161: Call Timings - Call StatusReport (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.4 Conversation Times for Answered Number of Calls

This report calculates the minimum, average and maximum values per time interval, regarding the conversation time for a selected filter item, in a specified reporting period. So, for a specific interval (e.g. 09:00 - 09:15) you can see the value of the minimum conversation time, the maximum and also the average time for the answered calls.

This report can be viewed as 3D area chart or as a table or as an Organisational Detailed report in table format.

The figures in the report are:

- Minimum: At this figure we check, per time interval, which the smallest value of conversation time was and we assign it.
- Average: At this figure we divide, per time interval, the total number in seconds of the conversation time by the total number of answered calls that happened on this interval.

- Maximum: At this figure we check, per time interval, which the largest value of conversation time was and we assign it.

Conversation Times for Answered Number of Calls

Period	11/01/2005 09:00 AM - 11/01/2005 02:00 PM		**Threshold**	**Upper No.**
Interval (Mins)	15		**Minimum(sec)**	N/A
Filter	EXTN_sw1		**Average(sec)**	N/A
Report name	One-Off Report		**Maximum(sec)**	N/A
Chart created	12/21/2006 12:09			

Time	Date	Minimum(sec)	Average(sec)	Maximum(sec)
9:00	01.11.2005	8	14	22
9:15	01.11.2005	1	12	34
9:30	01.11.2005	2	5	11
9:45	01.11.2005	3	6	13
10:00	01.11.2005	4	7	8
10:15	01.11.2005	6	9	16
10:30	01.11.2005	12	17	25
10:45	01.11.2005	67	98	120
11:00	01.11.2005	89	89	89
11:15	01.11.2005	22	50	67
11:30	01.11.2005	34	44	58
11:45	01.11.2005	22	33	60
12:00	01.11.2005	21	32	45
12:15	01.11.2005	18	22	40
12:30	01.11.2005	37	67	80
12:45	01.11.2005	8	14	25
13:00	01.11.2005	16	23	35
13:15	01.11.2005	10	15	70
13:30	01.11.2005	5	27	140
13:45	01.11.2005	15	22	46
14:00	01.11.2005	20	27	70

Figure 162: Call Volumes - Conversation Times for Answered Number of Calls Report in Table Format

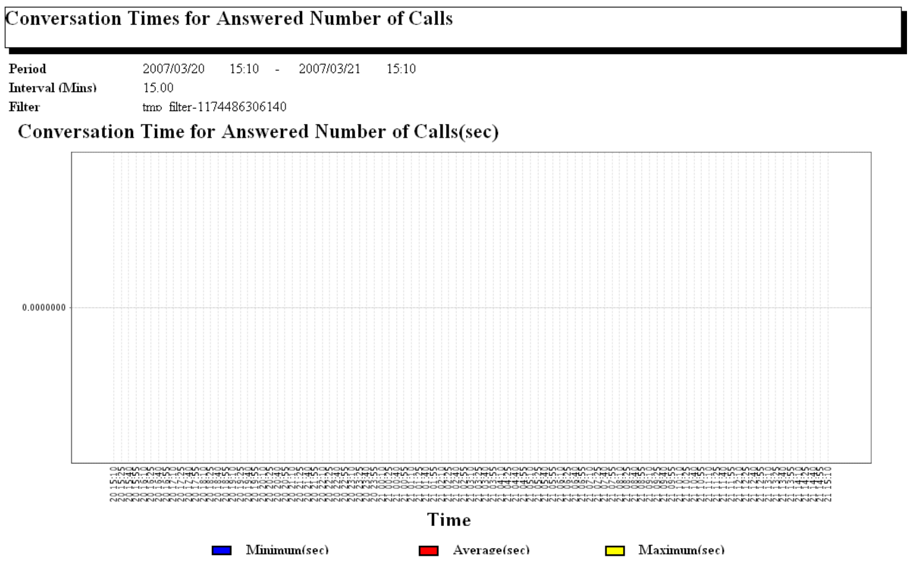


Figure 163: Call Volumes - Conversation Times for Answered Number of Calls Report in 3D area Format

Conversation Times for Answered Number of Calls - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10		
Interval (Mins)	15						
Filter	tmp_filter-1182170382284						
			Time	**Date**	**Minimum(sec)**	**Average(sec)**	**Maximum(sec)**
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	3	4
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	3	4
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	3	4

Figure 164: Call Timings - Conversation Times for Answered Number of Calls (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.5 Conversation Times for Total Number of Calls Report

This report provides statistics about minimum, average, and maximum values of call times to the monitored objects. The report may be viewed as a table or as an 3D area chart or as an Organisational Detailed report in table format.

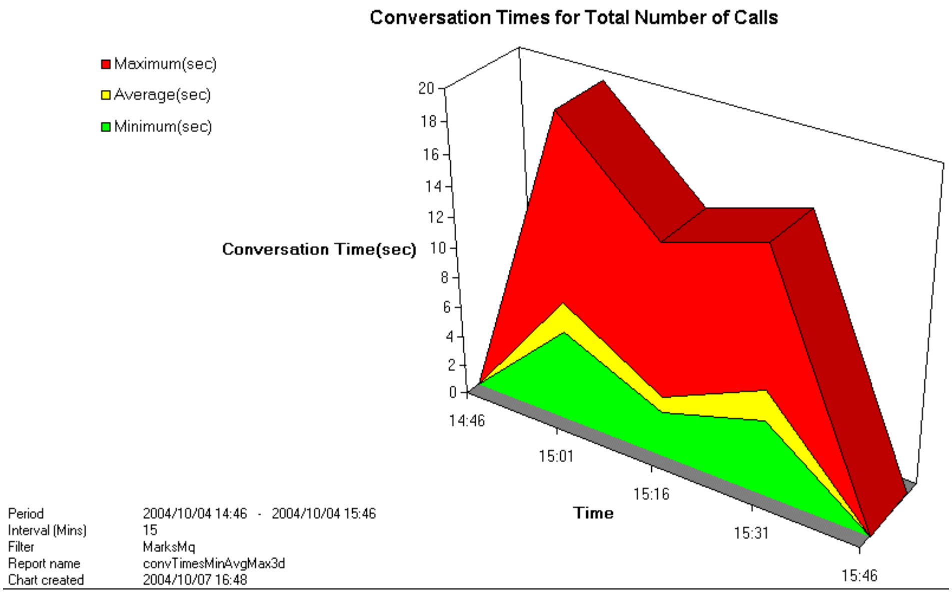


Figure 165: Call Timings - Conversation Times for Total Number of Calls (Minimum, Average, and Maximum) Report in 3D Area Chart Format

Conversation Times for Total Number of Calls				
Period	2004/10/04 14:46 - 2004/10/04 15:46			
Interval (Mins)	15			
Filter	MarksMq			
Report name	convTimesMinAvgMaxTbl			
Chart created	2004/10/07 16:47			
Time	**Date**	**Minimum(sec)**	**Average(sec)**	**Maximum(sec)**
14:46	10/4/2004	0	0	0
15:01	10/4/2004	6	4	17
15:16	10/4/2004	3	4	13
15:31	10/4/2004	5	3	13

Figure 166: Call Timings - Conversation Times for Total Number of Calls (Minimum, Average, and Maximum) Report in Table Format

Conversation Times for Total Number of Calls - Organisational Detail

Period		2007/06/18	14:10	-	2007/06/18	15:10	
Interval (Mins)		15					
Filter		tmp_filter-1182170446557					

			Time	Date	Minimum(sec)	Average(sec)	Maximum(sec)
Country	tr						
Company	siemens						
Org-1	sec						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	2	4
Org-2	isec						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	2	4
Org-3	anka						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	2	4

Figure 167: Call Timings - Conversation Times for Total Number of Calls Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.6 Ringing Times of Answered and Not Answered Calls Report

This report provides statistics on the minimum, average, and maximum ringing times of calls to selected monitored objects. The report may be viewed as a column chart or table or as an Organisational Detailed report in table format.

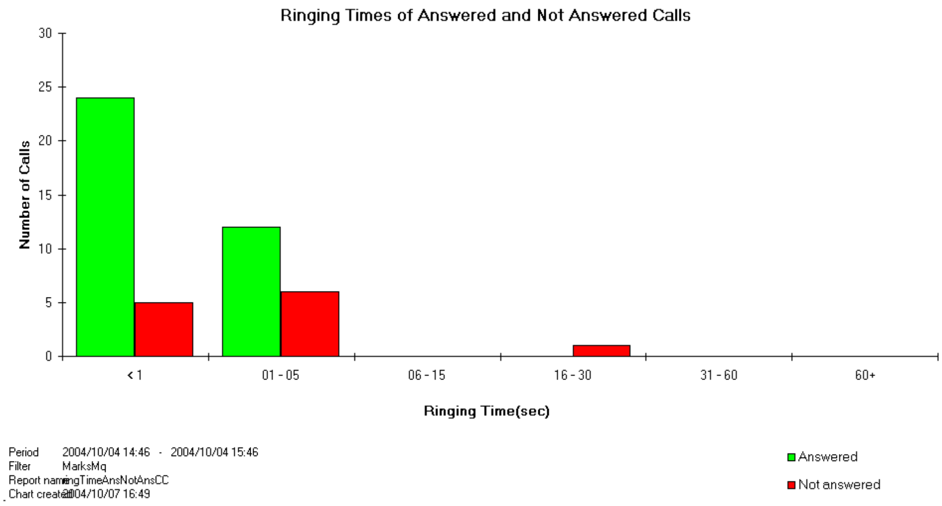


Figure 168: Call Timings - Ringing Times of Answered and Not Answered Calls Report in Column Chart Format

Ringing Times of Answered and Not Answered Calls		
Period	2004/10/04 14:46 - 2004/10/04 15:46	
Filter	MarksMq	
Report name	ringTimeAnsNotAnsTbl	
Chart created	2004/10/07 16:49	
Ringing Time(sec)	**Answered**	**Not answered**
< 1	24	5
01 - 05	12	6
06 - 15	0	0
16 - 30	0	1
31 - 60	0	0
60+	0	0
Sum	**36**	**12**

Figure 169: Call Timings - Ringing Times of Answered and Not Answered Calls Report in Table Format

Ringing Times of Answered and Not Answered Calls - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10
Filter	tmp_filter-1182170503455				

			Ringing Time(sec)	Answered	Not answered
Country	**tr**				
Company	**siemens**				
Org-1	**sec**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1
Org-2	**isec**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1
Org-3	**anka**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1

Figure 170: Call Timings - Ringing Times of Answered and Not Answered Calls Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.7 Ringing Times (Minimum, Average, and Maximum) Report

This report provides statistics on the ringing times of accepted and rejected calls to selected monitored objects. The report is divided into five groups according to their respective ringing time. The report may be viewed as an 3D area chart or table format or as an Organisational Detailed report in table format.

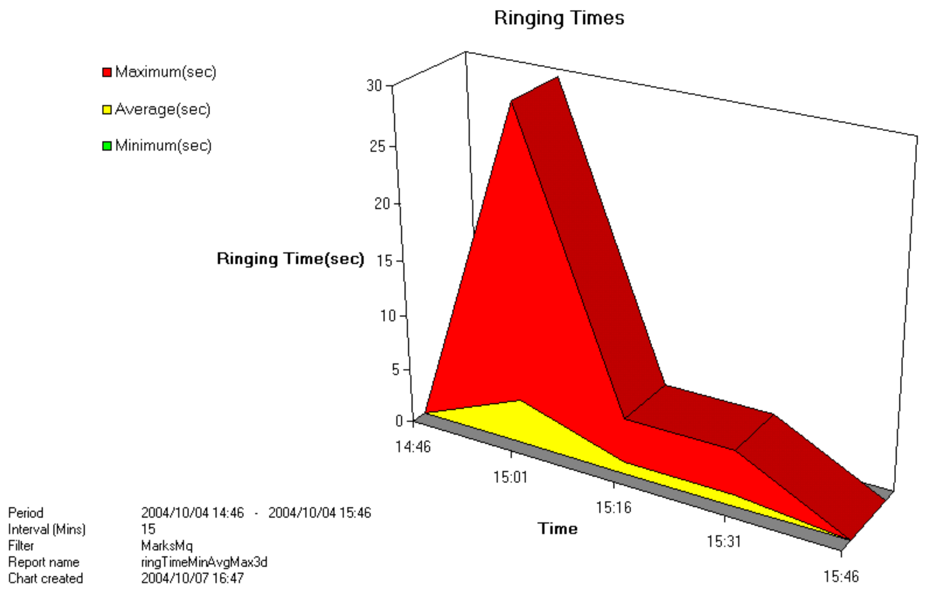


Figure 171: Call Timings - Ringing Times (Minimum, Average, and Maximum) Report in 3D Area Chart Format

Ringing Times				
Period	2004/10/04 14:46 - 2004/10/04 15:46			
Interval (Mins)	15			
Filter	MarksMq			
Report name	ringTimeMinAvgMaxTbl			
Chart created	2004/10/07 16:47			
Time	**Date**	**Minimum(sec)**	**Average(sec)**	**Maximum(sec)**
14:46	10/4/2004	0	0	0
15:01	10/4/2004	0	4	29
15:16	10/4/2004	0	1	5
15:31	10/4/2004	0	1	5

Figure 172: Call Timings - Ringing Times (Minimum, Average, and Maximum) Report in Table Format

Ringing Times - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10		
Interval (Mins)	15.00						
Filter	tmp_filter-1182170604153						

			Time	**Date**	**Minimum(sec)**	**Average(sec)**	**Maximum(sec)**
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	1	4	6
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	1	4	6
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	1	4	6

Figure 173: Call Timings - Ringing Times Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.8 Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

This report provides statistics about the sum of ringing and wait times of accepted and rejected calls to selected monitored objects. The calls are divided into five groups in accordance with the total time. The report may be viewed as a column chart or a table or as an Organisational Detailed report in table format.

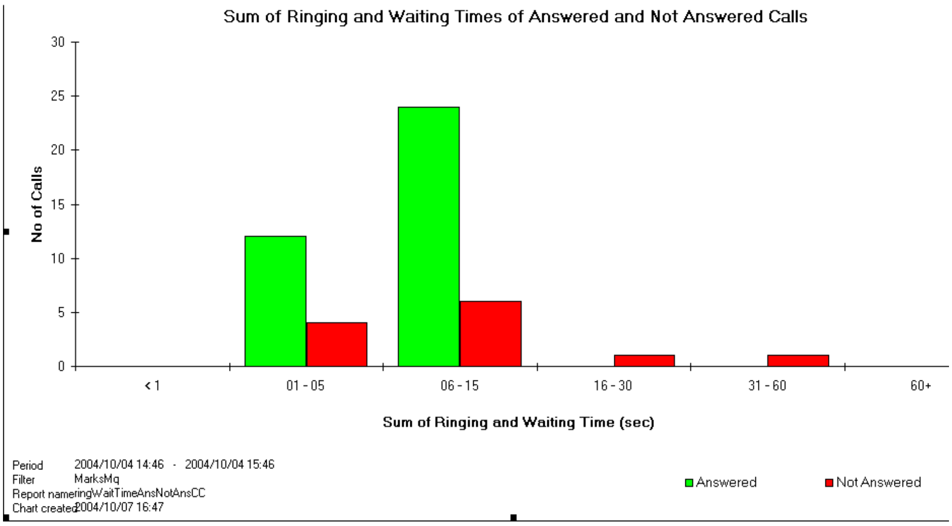


Figure 174: Call Timings - Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report in Column Chart Format

Sum of Ringing and Waiting Times of Answered and Not Answered Calls			
Period	2004/10/04 14:46 - 2004/10/04 15:46		
Filter	MarksMq		
Report name	ringWaitTimeAnsNotAnsTbl		
Chart created	2004/10/07 16:47		
Sum of Ringing and Waiting Time(sec)		**Answered**	**Not Answered**
< 1		0	0
01 - 05		12	4
06 - 15		24	6
16 - 30		0	1
31 - 60		0	1
60+		0	0
Sum		**36**	**12**

Figure 175: Call Timings - Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report in Table Format

Sum of Ringing and Waiting Times of Answered and Not Answered Calls - Organisational Detail

Period	2007/06/18 14:10 - 2007/06/18 15:10				
Filter	tmp_filter-1182170653288				
			Sum of Ringing and Waiting Time	**Answered**	**Not Answered**
Country	**tr**				
Company	**siemens**				
Org-1	**sec**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1
Org-2	**isec**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1
Org-3	**anka**				
		Total	< 1	0	0
			01 - 05	2	0
			06 - 15	0	1
			16 - 30	0	0
			31 - 60	0	0
			60+	0	0
			Sum	2	1

Figure 176: Call Timings - Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Waiting Times (Minimum, Average, Maximum) Report

5.6.9 Waiting Times (Minimum, Average, Maximum) Report

This report provides statistics about minimum, average, and maximum values of waiting times to the monitored objects. The report may be viewed as a 3D area chart and table or as an Organisational Detailed report in table format.

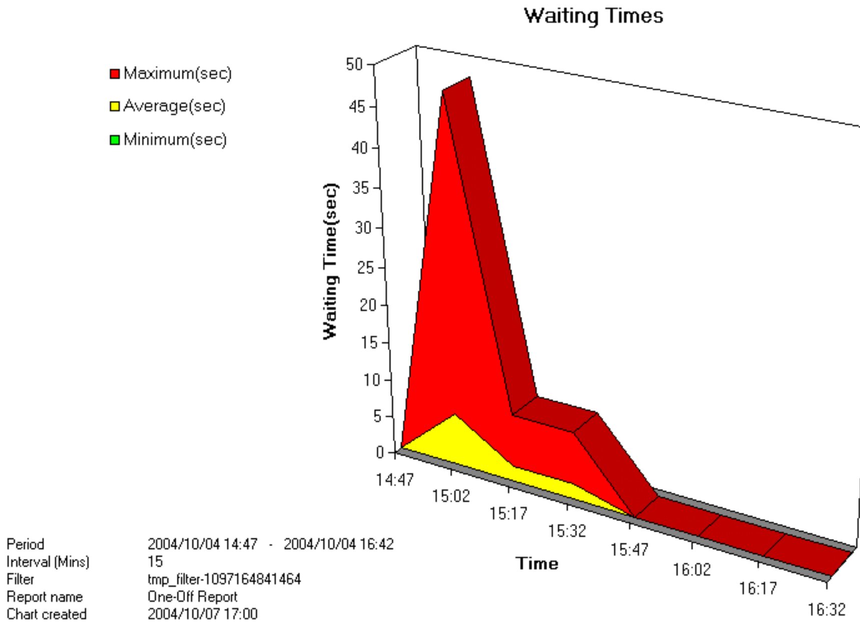


Figure 177: Call Timings - Waiting Times (Minimum, Average, Maximum) Report in 3D Area Chart Format

Waiting Times				
Period	2004/10/04 14:46 - 2004/10/04 15:46			
Interval (Mins)	15			
Filter	MarksMq			
Report name	waitTimeMinAveMaxTbl			
Chart created	2004/10/07 16:48			
Time	**Date**	**Minimum(sec)**	**Average(sec)**	**Maximum(sec)**
14:46	10/4/2004	0	0	0
15:01	10/4/2004	0	7	48
15:16	10/4/2004	0	2	9
15:31	10/4/2004	0	2	9

Figure 178: Call Timings - Waiting Times (Minimum, Average, Maximum) Report in Table Format

Waiting Times - Organisational Detail

Period	2007/06/18 14:10	-	2007/06/18 15:10
Interval (Mins)	15.00		
Filter	tmp_filter-1182170724300		

			Time	Date	Minimum(sec)	Average(sec)	Maximum(sec)
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	0	0
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	0	0
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	0	0	0

Figure 179: Call Timings - Waiting Times Report (Organisational Detail)

Related Topics

Average Waiting+Ringing and Answering Times Report

Average Waiting, Ringing and Conversation Times Report

Call Status (Time in Hold, Ringing, Conversation, and Idle) Report

Conversation Times for Answered Number of Calls

Conversation Times for Total Number of Calls Report

Ringing Times of Answered and Not Answered Calls Report

Ringing Times (Minimum, Average, and Maximum) Report

Sum of Ringing and Waiting Time of Answered and Not Answered Calls Report

5.7 Call Tracking Reports

Call Tracking reports display call data made on a "Call-by-Call" basis (in effect a summary of the statistics for each complete 'call'), or data of a "Call-Flow", that is the component data records that show the full progress of the call.

Call Tracking reports are available as standard (Crystal Reports based) reports, and as Advanced (MS-Excel based) reports in table format.

NOTICE: In reports for a **Call-Flow** scenario, **Conversation Time** means the connection duration of the - scenario. A Call Flow report displays all the CDR rows of one call scenario (one globseq). So the report registers, how the call has been handled during its life cycle. In a **Call By Call** scenario, **Conversation Time** means the talking duration between two ends. In a Call-by-Call report all the regarding CDR rows are evaluated and only the final statement about the call scenario is plotted.

There are four categories of Call Tracking Reports:

Call-by-Call Report

Call-Flow Report

History about PM-Monitoring Switched Off Report

Unsuccessful Call Attempts Report

5.7.1 Call-by-Call Report

This report shows summary information for a particular call or set of calls. Each line in the report output represents one call as listed by PM. This summary will include the Global Node and Global Sequence numbers as statistics in the report.

Call by Call

Period	2009/06/18	16:22	2009/06/29	16:22
Filter	tmp_filter-1246280565706			
Report name	PMCallByCallTbl.rpt			

Time	Date	Supplementary Service	
Destination Node		Destination Party	
Calling Node		Calling Party	
Connection Type		Conversation Time	0
Ring Duration	0	Result State	
Global Node		Global Sequence No	

Figure 180: Call Tracking - Call-by-Call Report

'Time' and 'Date' in the report are derived from the maximum 'ENDDATE' value in the CDR records that make up a call. 'ENDDATE' holds the date and time as a single field, for the report output this is split into its 'Time' and 'Date' components.

'Result State' in the report does not exist as a specific field in the CDR records. This value is derived during the production of the report. The possible values for this are:

- 'Answered' - a call where some conversation time occurred in the call
- 'Not Answered' - a call where there was ringing duration but no conversation time
- 'Busy' - a call that received busy.

'Connection Type' in the report may take one of these five different CDR CONNTYPE values:

- Outgoing call - CONNTYPE: OUTGO(0)
- Incoming call - CONNTYPE: INCO(1)
- Internal call - CONNTYPE: INTERN(3)
- Attendant activity - CONNTYPE: ACACT(4)

- Load data - CONNTYPE: LOAD(5).

'Conversation Time' in a Call-by-Call report means the talking duration between two ends. All the CDR rows in concern are evaluated and only the final statement about the call scenario is plotted.

'Supplementary service' is represented by one of the following AMO text elements (see also Collecting Agent online help) - the corresponding 'SUPLSERV' number is given in the right hand column:

Table 24: Supplementary service

Supplementary service	SUPLSERV' number
Not defined	0
Normal call	1
Consultation Call	2
Call transfer	3
Call back	4
Call forward busy	5
Call forward unconditional	6
Call forward no reply	7
Call pickup	8
Conference	9
Override	10
Hunting group	11
Mail box	12
Paging	13
Dictation	14
Credit card charge	15
Reverse charging	16
Call deflection	17
Door opening	18
Ring back	19
Hang up on hold	20
Hang up on queuing	21
End of queuing	22
Begin of queuing	23

Supplementary service	SUPLSERV' number
Master transfer	24
Recall	25
Intercept	26
ZVF	27
No CDR with eos	28
Busy	29
CDR lost buffer	30
Attendant activated Night service	31
Attendant deactivated Night service	32
Attendant pulled jack	33
Attendant reconnected jack	34
Attendant console out of order	35
Attendant console restarted	36
Hang up while queued at hunt groups	37
Hunt group busy	38
Record with SWU and ADP load	39
Call transits a node	40
Call rerouting	41
Incoming call barred	42
Destination party out of service	43
Resource unavailable	44
Call rejected	45
Unassigned number	46
Account code	47
The paying convenor is active in conference	48
The paying convenor has already left the conference	49
A party put on hold	50
B party put on hold	51
A party back from hold	52
B party back from hold	53

Supplementary service	SUPLSERV' number
A party hang up while hold	54
B party hang up while hold	55
Ringing after connect	56

Related Topics

Call-Flow Report

History about PM-Monitoring Switched Off Report

Unsuccessful Call Attempts Report

5.7.2 Call-Flow Report

A Call-Flow report splits calls into their components from the CDR records and shows statistics from CDR records with the same Global Node and Global sequence numbers for all the calls that are referenced by the specified filter. The reports are shown in the order of global node numbers, global sequence numbers and the end date and time of the CDR record. The report shows the full 'track' of the calls from their first origin to their final destination.

There are two versions of Call-Flow reports:

- 'Standard' Call-Flow report and
- 'Enhanced' Call-Flow report (Organisational).

5.7.2.1 Standard Call-Flow Report

With this report it is possible to trace the calls in terms of transfers, diversions etc. during the progress of the call.

This version of the Call-Flow report does **not** include Organisational Information.

Call Flow

Period	2009/06/18	16:22	2009/06/29	16:22
Filter	tmp_filter-1246278600827			
Report name	PMCallFlowTbl.rpt			

Global Node		Queue Duration	0
Global Sequence		End of Call Time	
Calling Node		End of Call Date	
Calling Party		Supplementary Service	
Connection Type		Attendant Group	
Cause	0	Generating Node	
Destination Node		Trunk Group	
Destination Party		Trunk Number	
Conversation Time		PPNODE	
Ring Duration	0	Paypart	
Hold Duration	0	Transfer Node	
		Transfer Party	

Figure 181: Call Tracking - Call-Flow Report (Standard)

'Cause' shows the numeric value from the CDR, there is no text representation.

'End of Call Date' and 'End of Call Time' are derived from the 'ENDDATE' value in the CDR record, 'ENDDATE' holds the date and time in a single field.

'Conversation Time' in a Call Flow scenario means the connection duration of the scenario. A Call Flow report displays all the CDR rows of one call scenario (one globseq). So the report registers, how the call has been handled during its life cycle.

5.7.2.2 Enhanced Call-Flow Report

This report is very similar to the 'Standard' Call-Flow Report, but the output includes the Organisational information for the destination party in the CDR record.

Call Flow Enhanced

Period	2009/06/18	16:22	2009/06/29	16:22
Filter	tmp_filter-1246279054402			
Report name	One-Off Report			

Global Node		Trunk Group
Global Sequence		Trunk Number
Calling Node		PPNODE
Calling Party		Paypart
Connection Type		Transfer Node
Cause	0	Transfer Party
Destination Node		Name
Destination Party		First Name
Conversation Time		Country
Ring Duration	0	Company
Hold Duration	0	Org-1
Queue Duration	0	Org-2
End of Call Time		Org-3
End of Call Date		Org-4
Supplementary Service		Org-5
Attendant Group		Org-6
Generating Node		

Figure 182: Call Tracking - Enhanced Call-Flow Report (Organisational)

Related Topics

Call-by-Call Report

History about PM-Monitoring Switched Off Report

Unsuccessful Call Attempts Report

5.7.3 History about PM-Monitoring Switched Off Report

This report shows switch related data, which were not monitored.

History about PM-Monitoring switched off

Period	2009/06/16	11:45	-	2009/07/03	11:45
Filter	tmp_filter-1246610833866				

PM CDR Recording off

Begin	End	Reason	Switch

Figure 183: Call Tracking - History about PM-Monitoring Switched Off Report

The columns of this report show the following information within the monitored interval:

- 'Begin' - Time when the unmonitoring started
- 'End' - Time when the unmonitoring ended
- 'Reason' - Reason for not monitoring
- 'Switch' - The switch which is not monitored.

Related Topics

Call-by-Call Report

Call-Flow Report

Unsuccessful Call Attempts Report

5.7.4 Unsuccessful Call Attempts Report

An unsuccessful call attempt is a failure of a call attempt that occurs on an extension side because of various reasons such as no trunk, no service, no line, etc. This feature adds capability of reporting these attempts to PM.

For the data of the 'Trunk Group Lost Because Busy' (the number of missed calls since the trunk group was full or out of service), you have to run a different, trunk group related report.

Unsuccessful Call Attempts

Period	16/06/2009 11:45:00 AM	-	03/07/2009 11:45:00 AM
Interval (Mins)	15.00		
Filter	tmp_filter-1246610766641		

Time	Date	No channel on trunk	Switch Equipment Congestion	Service Not Available	Other	Total
11:45	2009/06/16	0	0	0	0	0
12:00	2009/06/16	0	0	0	0	0

Figure 184: Call Tracking - Unsuccessful Call Attempts Report

The columns of this report show the following information for the monitored period and interval:

- 'Time/Date' - Time and date of the call attempt
- 'No Channel on trunk' - Number of failed call attempts since all the B-channels on trunk are busy
- 'Switch Equipment Congestion' - Number of failed call attempts due to the switch equipment.
- 'Service Not Available' - Number of failed call attempts due to the unconnected physical Trunk cable.
- 'Other' - Other reasons
- 'Total' - Number of seek attempts for the 'Trunk Group Lost Because Busy' (the number of missed calls since the trunk group was full or out of service) will be displayed in the 'Total' column of this report.

Related Topics

Call-by-Call Report

Call-Flow Report

History about PM-Monitoring Switched Off Report

5.8 Call Volumes Reports

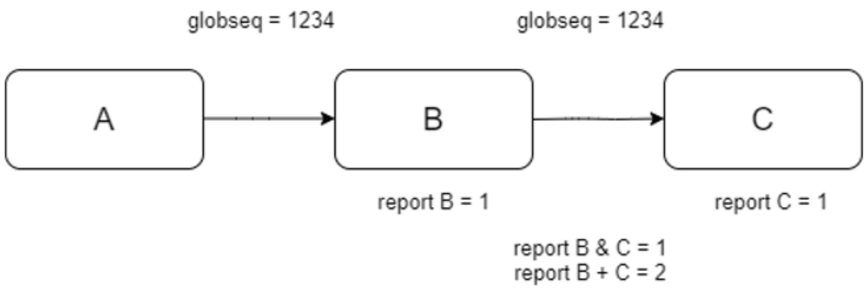
This section describes the following reports:

- Answered, Not Answered and Lost Because Busy Report

NOTICE: Each call is identified by a unique globseq number, even if it goes through different phases, based on the features used, like forward, consultation, transfer, and conference etc. This means that the more selected items in a report, the more precise is the total number of calls statistics, when considering a call is just defined by its globseq. If reports are created separately for each item and then the number of calls for each item is summed up, then it is possible that this sum will be higher than the total number of calls mentioned above, as the same call (based on globseq) might be counted several times, for each item that was involved in that call.

For example, we have a simple scenario:

- Station A calls station B,
- Station B answers,
- Station B initiates consultation to station C,
- Station B transfers the call to station C,
- Station B hangs up,
- Station C answers the call.



Here we have only one call identified by one globseq number, coming to B.

If we do separate reports for station B and station C, we will have one call for each.

If we do a report filtering by station B and station C, we will have only one call.

- Availability (%) Report
- Busy Hour Report
- Total Number of Calls Report

5.8.1 Answered, Not Answered and Lost Because Busy Report

The Answered, Not Answered and Lost Because Busy report is the number of accepted, rejected, and missed calls (busy) for selected telephony items in the given report period. This report is available in a column chart, pie chart, or table or as an Organizational Detailed report in table format.

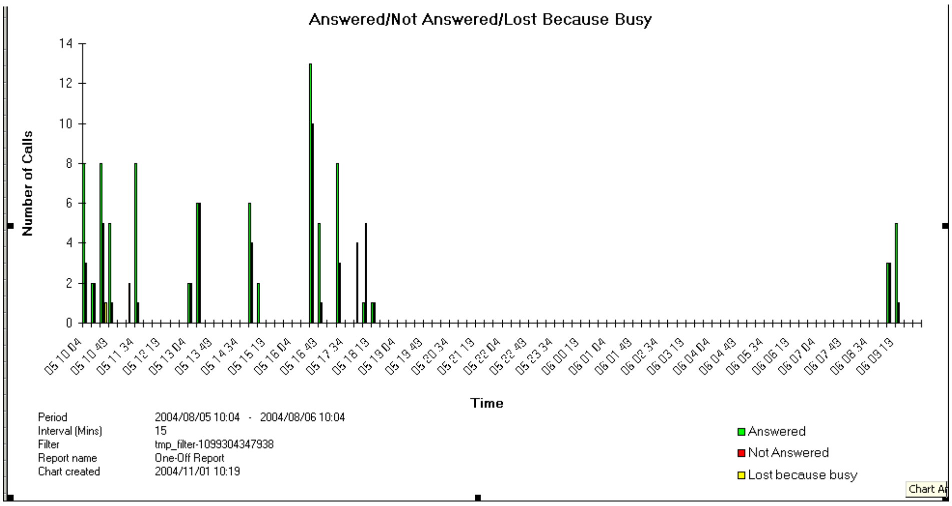


Figure 185: Call Volumes - Answered, Not Answered and Lost Because Busy Report in Column Chart Format

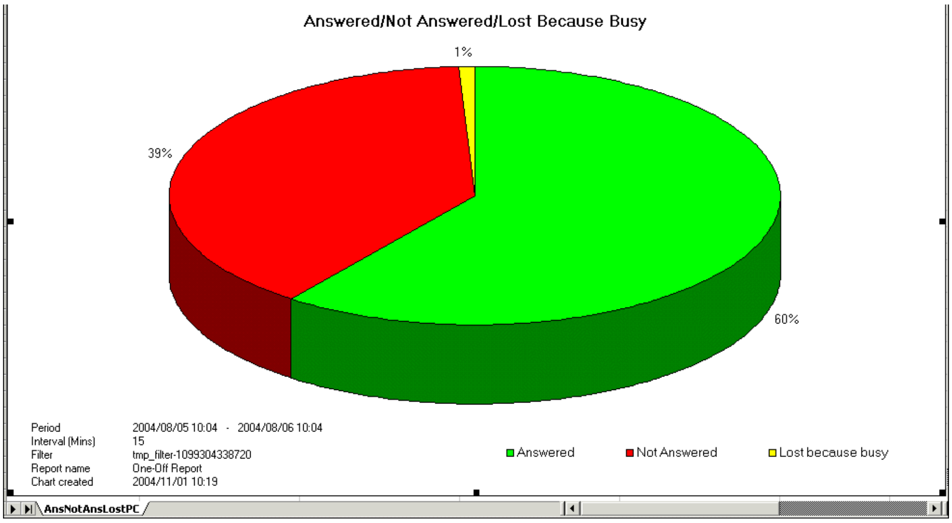


Figure 186: Call Volumes - Answered, Not Answered and Lost Because Busy Report in Pie Chart Format

Answered/Not Answered/Lost Because Busy

Period	2004/08/05 10:04 - 2004/08/06 10:04
Interval (Mins)	15
Filter	tmp_filter-1099304329127
Report name	One-Off Report
Chart created	2004/11/01 10:18

Time	Date	Answered	Not Answered	Lost because busy
10:04	8/5/2004	8	3	0
10:19	8/5/2004	2	2	0
10:34	8/5/2004	8	5	1
10:49	8/5/2004	5	1	0
11:04	8/5/2004	0	0	0
11:19	8/5/2004	0	2	0
11:34	8/5/2004	8	1	0
11:49	8/5/2004	0	0	0
12:04	8/5/2004	0	0	0
12:19	8/5/2004	0	0	0
12:34	8/5/2004	0	0	0
12:49	8/5/2004	0	0	0
13:04	8/5/2004	2	2	0
13:19	8/5/2004	6	6	0
13:34	8/5/2004	0	0	0
13:49	8/5/2004	0	0	0
14:04	8/5/2004	0	0	0
14:19	8/5/2004	0	0	0
14:34	8/5/2004	0	0	0

AnsNotAnsLostTbl

Figure 187: Call Volumes - Answered, Not Answered and Lost Because Busy Report in Table Format

Answered/Not Answered/Lost Because Busy - Organisational Detail

Period	2007/06/18	14:10 -	2007/06/18	15:10
Interval (Mins)	15.00			
Filter	tmp_filter-1182168716340			

			Time	Date	Answered	Not Answered	Lost because busy
Country	**tr**						
Company	**siemens**						
Org-1	**sec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	1	0
			Sum		2	1	0
Org-2	**isec**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	1	0
			Sum		2	1	0
Org-3	**anka**						
		Total	14:10	2007/06/18	0	0	0
			14:25	2007/06/18	0	0	0
			14:40	2007/06/18	0	0	0
			14:55	2007/06/18	2	1	0
			Sum		2	1	0

Figure 188: Call Volumes - Answered, Not Answered and Lost Because Busy Report (Organisational Detail)

Related Topics

Availability (%) Report

Busy Hour Report

Total Number of Calls Report

5.8.2 Availability (%) Report

The percentage availability report is the time that the selected telephony item is available to receive new calls. If an item is busy for 20 minutes over a period of one hour, then the availability if 66.7% and the item was not available for 33.3% of the time. The time spent in queuing, ringing, and connected states is counted as not available.

This report is available in a column chart, pie chart, or table or as an Organisational Detailed report in table format.

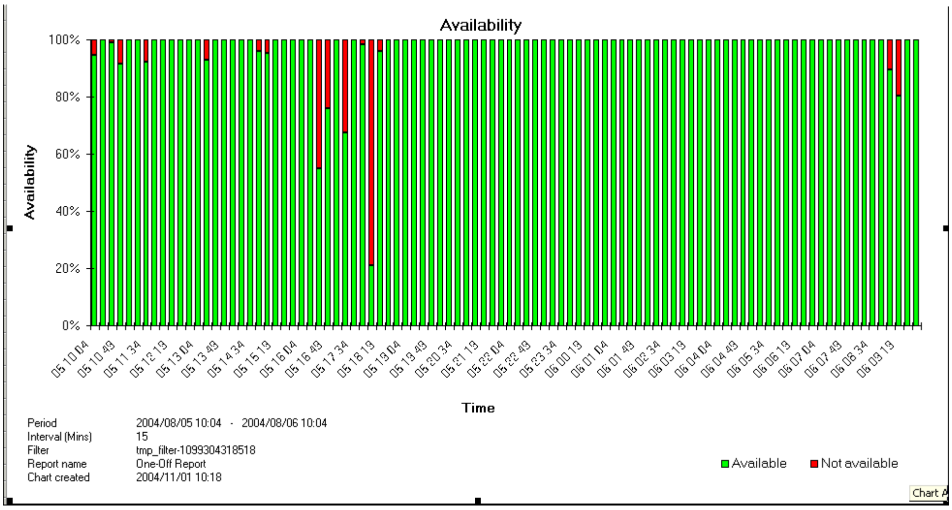


Figure 189: Call Volumes - Availability (%) Report in Column Chart Format

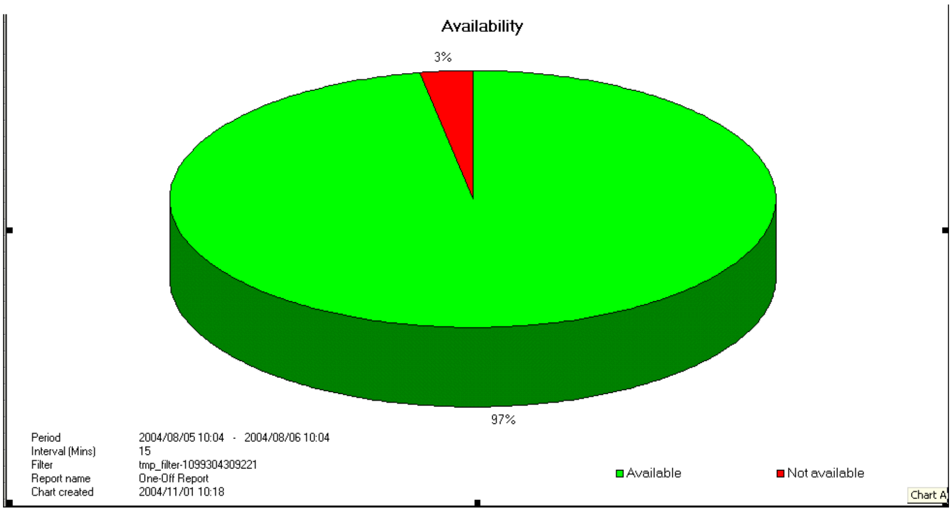


Figure 190: Call Volumes - Availability (%) Report in Pie Chart Format

Availability

Period	2004/08/05 10:04 - 2004/08/06 10:04
Interval (Mins)	15
Filter	tmp_filter-1099304300112
Report name	One-Off Report
Chart created	2004/11/01 10:18

Time	Date	Available (%)	Not available (%)
10:04	8/5/2004	94.67	5.33
10:19	8/5/2004	100.00	0.00
10:34	8/5/2004	99.00	1.00
10:49	8/5/2004	91.56	8.44
11:04	8/5/2004	100.00	0.00
11:19	8/5/2004	100.00	0.00
11:34	8/5/2004	92.22	7.78
11:49	8/5/2004	100.00	0.00
12:04	8/5/2004	100.00	0.00
12:19	8/5/2004	100.00	0.00
12:34	8/5/2004	100.00	0.00
12:49	8/5/2004	100.00	0.00
13:04	8/5/2004	100.00	0.00
13:19	8/5/2004	92.78	7.22
13:34	8/5/2004	100.00	0.00
13:49	8/5/2004	100.00	0.00
14:04	8/5/2004	100.00	0.00
14:19	8/5/2004	100.00	0.00
14:34	8/5/2004	100.00	0.00

AvailTbl

Figure 191: Call Volumes - Availability (%) Report in Table Format

Availability - Organisational Detail

Period	2007/06/18	14:10	- 2007/06/18	15:10
Interval (Mins)	15.00			
Filter	tmp_filter-1182168802499			

			Time	Date	Available (%)	Not available (%)
Country	**tr**					
Company	**siemens**					
Org-1	**sec**					
		Total	14:10	2007/06/18	100	0
			14:25	2007/06/18	100	0
			14:40	2007/06/18	100	0
			14:55	2007/06/18	98	2
Org-2	**isec**					
		Total	14:10	2007/06/18	100	0
			14:25	2007/06/18	100	0
			14:40	2007/06/18	100	0
			14:55	2007/06/18	98	2
Org-3	**anka**					
		Total	14:10	2007/06/18	100	0
			14:25	2007/06/18	100	0
			14:40	2007/06/18	100	0
			14:55	2007/06/18	98	2

Figure 192: Call Volumes - Availability Report (Organisational Detail)

Related Topics

Answered, Not Answered and Lost Because Busy Report

Busy Hour Report

Total Number of Calls Report

5.8.3 Busy Hour Report

The Busy Hour report shows the main traffic hour for the selected telephony items in the given report period following CCITT recommendations. This report is available in a pie chart or a table or as an Organisational Detailed report in table format.

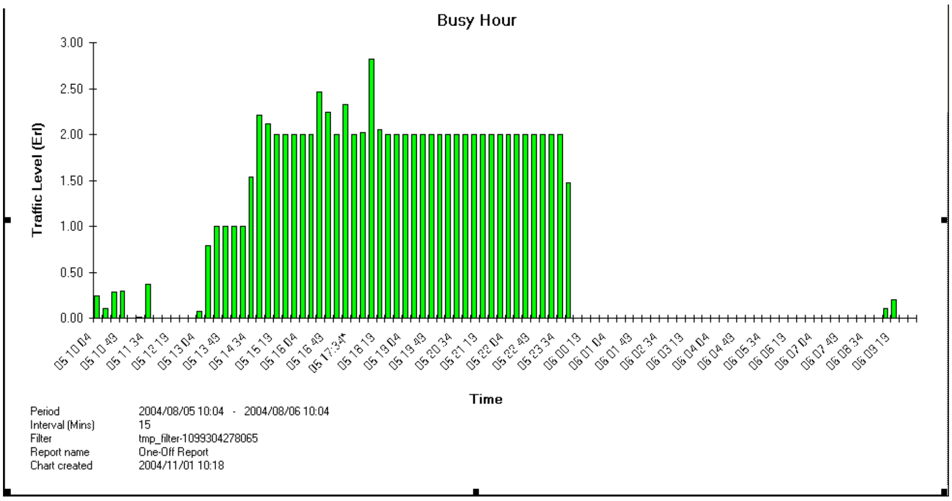


Figure 193: Call Volumes - Busy Hour Report in Column Chart Format

Busy Hour			
Period	2004/08/05 10:04 - 2004/08/06 10:04		
Interval (Mins)	15		
Filter	tmp_filter-1099304288487		
Report name	One-Off Report		
Chart created	2004/11/01 10:18		
Time	**Date**	**Traffic Level (Erl)**	**Busy Hour Indicator**
10:04	8/5/2004	0.24	
10:19	8/5/2004	0.11	
10:34	8/5/2004	0.28	
10:49	8/5/2004	0.29	
11:04	8/5/2004	0.00	
11:19	8/5/2004	0.01	
11:34	8/5/2004	0.37	
11:49	8/5/2004	0.00	
12:04	8/5/2004	0.00	
12:19	8/5/2004	0.00	
12:34	8/5/2004	0.00	
12:49	8/5/2004	0.00	
13:04	8/5/2004	0.07	
13:19	8/5/2004	0.79	
13:34	8/5/2004	1.00	
13:49	8/5/2004	1.00	
14:04	8/5/2004	1.00	
14:19	8/5/2004	1.00	
14:34	8/5/2004	1.54	

BusyHourTbl

Figure 194: Call Volumes - Busy Hour Report in Table Format

Busy Hour - Organisational Detail

Period	2007/06/18	14:10	-	2007/06/18	15:10
Interval (Mins)	15.00				
Filter	tmp_filter-1182168866396				

			Time	**Date**	**Traffic Level (Erl)**	**Busy Hour Indicator**
Country	**tr**					
Company	**siemens**					
Org-1	**sec**					
		Total	14:10	2007/06/18	0	*
			14:25	2007/06/18	0	*
			14:40	2007/06/18	0	*
			14:55	2007/06/18	0	*
Org-2	**isec**					
		Total	14:10	2007/06/18	0	*
			14:25	2007/06/18	0	*
			14:40	2007/06/18	0	*
			14:55	2007/06/18	0	*
Org-3	**anka**					
		Total	14:10	2007/06/18	0	*
			14:25	2007/06/18	0	*
			14:40	2007/06/18	0	*
			14:55	2007/06/18	0	*

Figure 195: Call Volumes - Busy Hour Report (Organisational Detail)

Related Topics

Answered, Not Answered and Lost Because Busy Report

Availability (%) Report

Total Number of Calls Report

5.8.4 Total Number of Calls Report

This report shows the total number of calls for the selected telephony items in the given report period. This report is available in a column chart or a table or as an Organisational Detailed report in table format.

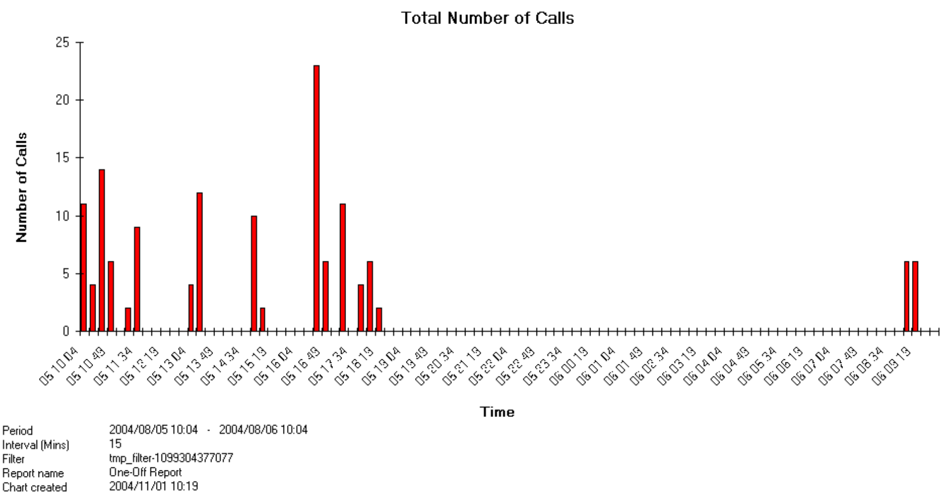


Figure 196: Call Volumes - Total Number of Calls Report in Column Chart Format

Total Number of Calls		
Period	2004/08/05 10:04 - 2004/08/06 10:04	
Interval (Mins)	15	
Filter	tmp_filter-1099304233284	
Report name	One-Off Report	
Chart created	2004/11/01 10:17	
Time	**Date**	**Number of Calls**
10:04	8/5/2004	11
10:19	8/5/2004	4
10:34	8/5/2004	14
10:49	8/5/2004	6
11:04	8/5/2004	0
11:19	8/5/2004	2
11:34	8/5/2004	9
11:49	8/5/2004	0
12:04	8/5/2004	0
12:19	8/5/2004	0
12:34	8/5/2004	0
12:49	8/5/2004	0
13:04	8/5/2004	4
13:19	8/5/2004	12
13:34	8/5/2004	0
13:49	8/5/2004	0

Figure 197: Call Volumes - Total Number of Calls Report in Table Format

Total Number of Calls - Organisational Detail

Period	2007/06/18	14:10 -	2007/06/18	15:10	
Interval (Mins)	15.00				
Filter	tmp_filter-1182168923341				
			Time	**Date**	**Number of Calls**
Country	**tr**				
Company	**siemens**				
Org-1	**sec**				
		Total	14:10	2007/06/18	0
			14:25	2007/06/18	0
			14:40	2007/06/18	0
			14:55	2007/06/18	3
			Sum		3
Org-2	**isec**				
		Total	14:10	2007/06/18	0
			14:25	2007/06/18	0
			14:40	2007/06/18	0
			14:55	2007/06/18	3
			Sum		3
Org-3	**anka**				
		Total	14:10	2007/06/18	0
			14:25	2007/06/18	0
			14:40	2007/06/18	0
			14:55	2007/06/18	3
			Sum		3

Figure 198: Call Volumes - Total Number of Calls Report (Organisational Detail)

Related Topics

Answered, Not Answered and Lost Because Busy Report

Availability (%) Report

Busy Hour Report

Total Number of Calls Report

5.9 Cordless Statistics - Cordless Base Stations Reports

This section describes the following reports:

- Base Station Resets Report
- Bearer Handover Report
- Bearer Handover Successful Report
- Bearer Handover Unsuccessful Report
- Inter SLC Handover Report
- Interrupted Calls Report
- Intra SLC Handover Report
- Layer 1/2 Error Report
- Overload Situation Report
- Total Number of Calls Report
- Overload Situation Top Ten Report
- Total Number of Calls Top Ten Report

5.9.1 Base Station Resets Report

The Base Station Resets report shows the number of resets for the selected base stations in the given report period. This report is available in a column chart or table.

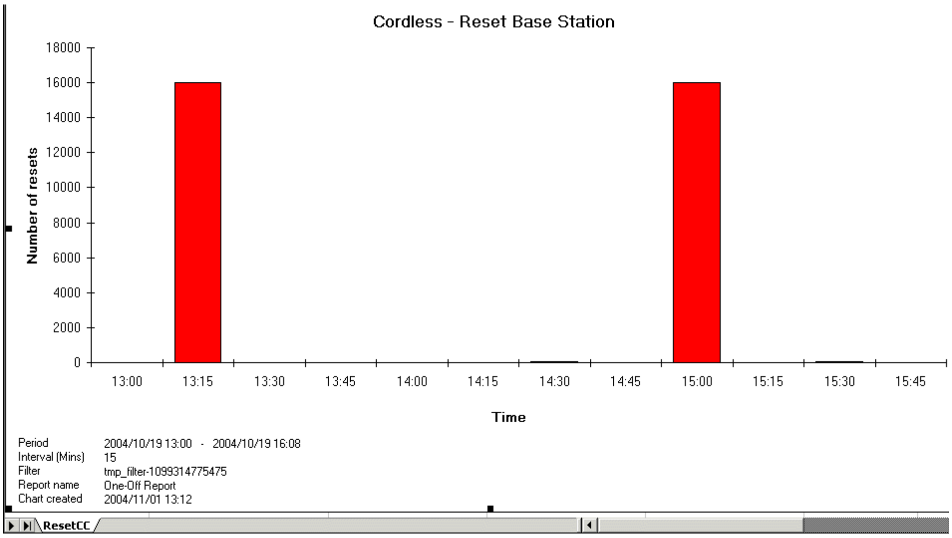


Figure 199: Cordless - Base Station Resets Report in Column Chart Format

Cordless - Reset Base Station		
Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099314826739	
Report name	One-Off Report	
Chart created	2004/11/01 13:13	
Time	Date	Number of resets
13:00	10/19/2004	0
13:15	10/19/2004	16032
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	64
14:45	10/19/2004	0
15:00	10/19/2004	16032
15:15	10/19/2004	0
15:30	10/19/2004	64
15:45	10/19/2004	0
Sum		32192

ResetTbl

Figure 200: Cordless - Base Station Resets Report in Table Format

Related Topics

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.2 Bearer Handover Report

The Bearer Handover report shows the number of internal channel-handovers for the selected base stations in the given report period. This report is available in a column chart or table.

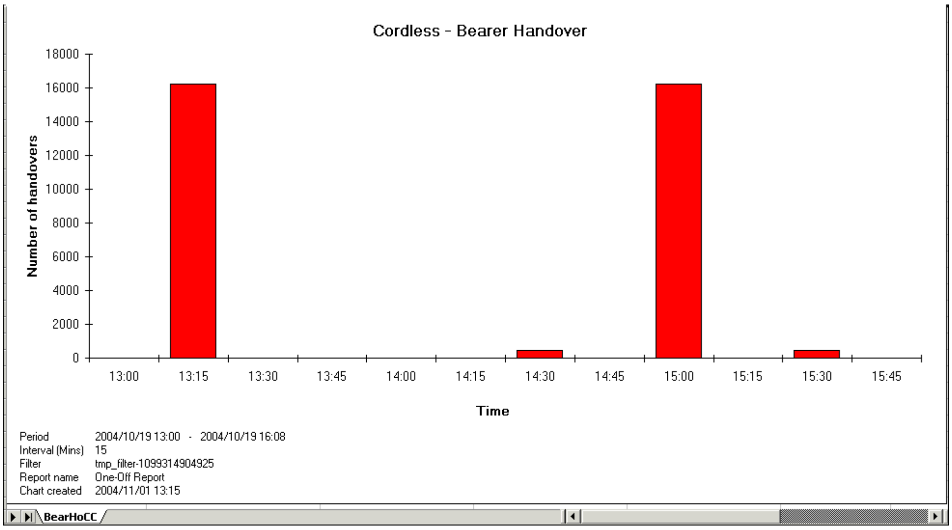


Figure 201: Cordless - Bearer Handover Report in Column Chart Format

Cordless - Bearer Handover

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099314870348	
Report name	One-Off Report	
Chart created	2004/11/01 13:14	
Time	**Date**	**Number of handovers**
13:00	10/19/2004	0
13:15	10/19/2004	16240
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	480
14:45	10/19/2004	0
15:00	10/19/2004	16240
15:15	10/19/2004	0
15:30	10/19/2004	480
15:45	10/19/2004	0
Sum		**33440**

BearHoTbl

Figure 202: Cordless - Bearer Handover Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.3 Bearer Handover Successful Report

The Bearer Handover Successful report shows the number of unsuccessful internal channel-handovers for the selected base stations in the given report period.

This report is available in a column chart or table.

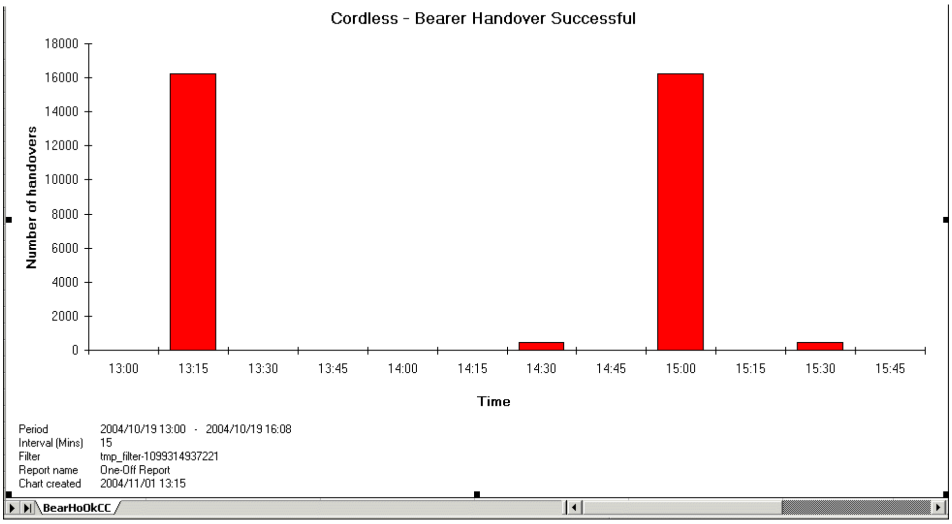


Figure 203: Cordless - Bearer Handover Successful Report in Column Chart Format

Cordless - Bearer Handover Successful

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099314964814	
Report name	One-Off Report	
Chart created	2004/11/01 13:16	

Time	Date	Number of handovers
13:00	10/19/2004	0
13:15	10/19/2004	16240
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	480
14:45	10/19/2004	0
15:00	10/19/2004	16240
15:15	10/19/2004	0
15:30	10/19/2004	480
15:45	10/19/2004	0
Sum		**33440**

BearHoOkTbl

Figure 204: Cordless - Bearer Handover Successful Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.4 Bearer Handover Unsuccessful Report

The Bearer Handover Unsuccessful report shows the number of unsuccessful internal channel-handovers for the selected base stations in the given report period. This report is available in a column chart or table.

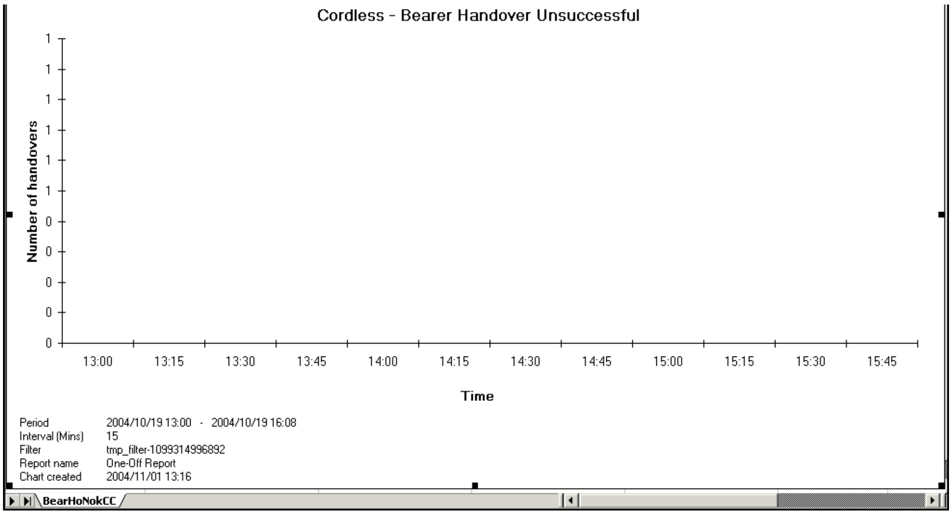


Figure 205: Cordless - Bearer Handover Unsuccessful Report in Column Chart Format

Cordless - Bearer Handover Unsuccessful		
Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315069094	
Report name	One-Off Report	
Chart created	2004/11/01 13:17	
Time	**Date**	**Number of handovers**
13:00	10/19/2004	0
13:15	10/19/2004	0
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	0
14:45	10/19/2004	0
15:00	10/19/2004	0
15:15	10/19/2004	0
15:30	10/19/2004	0
15:45	10/19/2004	0
Sum		**0**

BearHoNokTbl

Figure 206: Cordless - Bearer Handover Unsuccessful Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report
Overload Situation Report
Total Number of Calls Report
Overload Situation Top Ten Report
Total Number of Calls Top Ten Report

5.9.5 Inter SLC Handover Report

The Inter SLC Handover report shows the number of handovers between two base stations in two Inter-SLC groups for the selected base stations in the given report period. This report is available in a column chart or table.

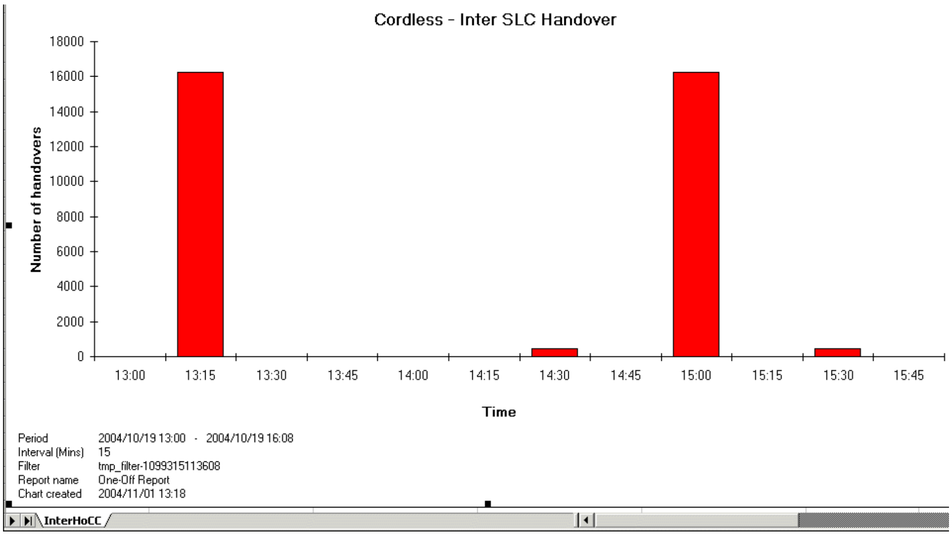


Figure 207: Cordless - Inter SLC Handover Report in Column Chart Format

Cordless - Inter SLC Handover

Period	2004/10/19 13:00 - 2004/10/19 16:08
Interval (Mins)	15
Filter	tmp_filter-1099315143608
Report name	One-Off Report
Chart created	2004/11/01 13:19

Time	Date	Number of handovers
13:00	10/19/2004	0
13:15	10/19/2004	16240
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	480
14:45	10/19/2004	0
15:00	10/19/2004	16240
15:15	10/19/2004	0
15:30	10/19/2004	480
15:45	10/19/2004	0
Sum		**33440**

InterHoTbl

Figure 208: Cordless - Inter SLC Handover Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.6 Interrupted Calls Report

The Interrupted Calls report shows the number of calls that are interrupted in the connection time for the selected base stations in the given report period. This report is available in a column chart or table.

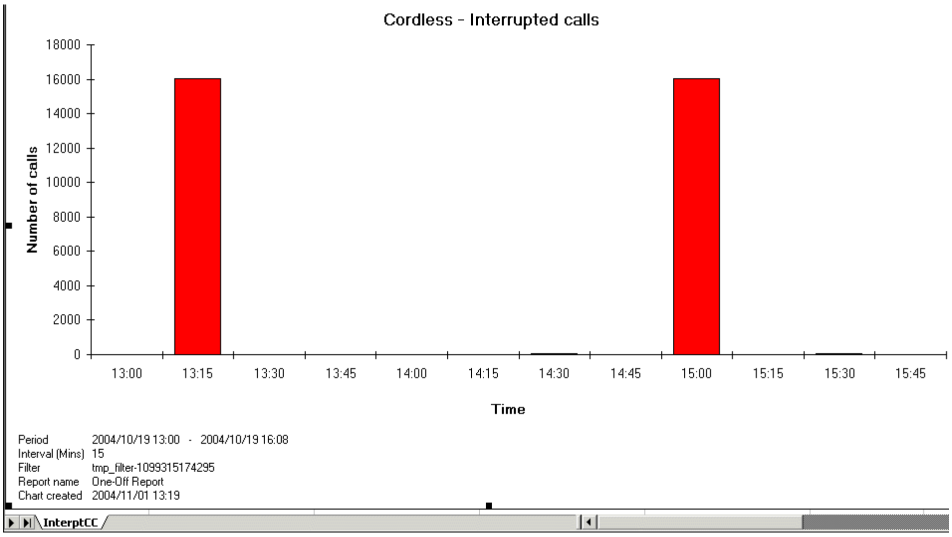


Figure 209: Cordless - Interrupted Calls Report in Column Chart Format

Cordless - Interrupted calls

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315203576	
Report name	One-Off Report	
Chart created	2004/11/01 13:20	
Time	**Date**	**Number of calls**
13:00	10/19/2004	0
13:15	10/19/2004	16032
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	64
14:45	10/19/2004	0
15:00	10/19/2004	16032
15:15	10/19/2004	0
15:30	10/19/2004	64
15:45	10/19/2004	0
Sum		**32192**

InterptTbl

Figure 210: Cordless - Interrupted Calls Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.7 Intra SLC Handover Report

The Intra SLC Handover report shows the number of handovers between two base stations in two Intra-SLC groups for the selected base stations in the given report period. This report is available in a column chart or table.

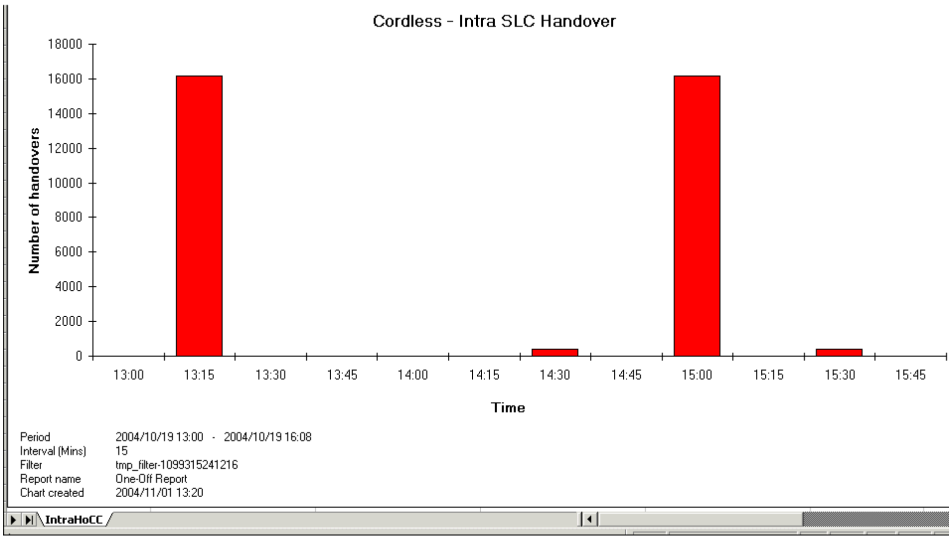


Figure 211: Cordless - Intra SLC Handover Report in Column Chart Format

Cordless - Intra SLC Handover

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315275560	
Report name	One-Off Report	
Chart created	2004/11/01 13:21	

Time	Date	Number of handovers
13:00	10/19/2004	0
13:15	10/19/2004	16192
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	384
14:45	10/19/2004	0
15:00	10/19/2004	16192
15:15	10/19/2004	0
15:30	10/19/2004	384
15:45	10/19/2004	0
Sum		**33152**

IntraHoTbl

Figure 212: Cordless - Intra SLC Handover Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.8 Layer 1/2 Error Report

The Layer 1/2 Error report shows the number of layer 1/2 errors for the selected base station is the given report period. This report is available in a column chart or table.

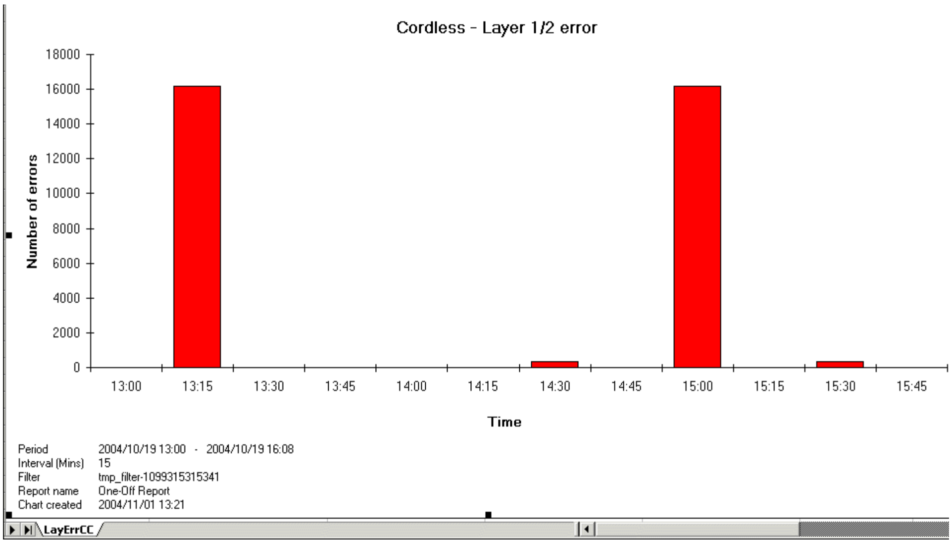


Figure 213: Cordless - Layer /2 Error Report in Column Chart Format

Cordless - Layer 1/2 error

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315342763	
Report name	One-Off Report	
Chart created	2004/11/01 13:22	
Time	**Date**	**Number of errors**
13:00	10/19/2004	0
13:15	10/19/2004	16176
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	352
14:45	10/19/2004	0
15:00	10/19/2004	16176
15:15	10/19/2004	0
15:30	10/19/2004	352
15:45	10/19/2004	0
Sum		**33056**

LayErrTbl

Figure 214: Cordless - Layer /2 Error Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.9 Overload Situation Report

The Overload Situation report shows the number of RSP Busy Flag settings for the selected base stations in the given report period. This report is available in a column chart or table.

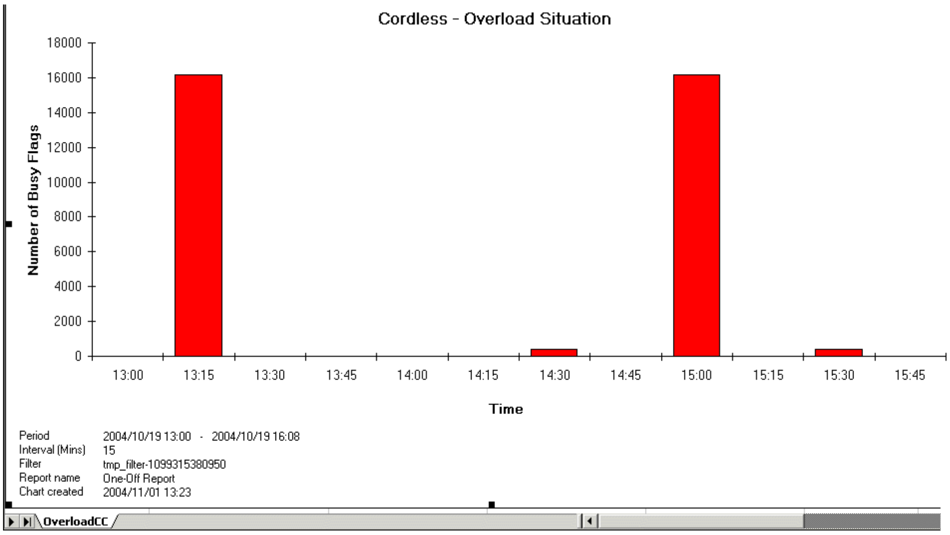


Figure 215: Cordless - Overload Situation Report in Column Chart Format

Cordless - Overload Situation		
Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315422153	
Report name	One-Off Report	
Chart created	2004/11/01 13:23	
Time	Date	Number of Busy Flags
13:00	10/19/2004	0
13:15	10/19/2004	16192
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	384
14:45	10/19/2004	0
15:00	10/19/2004	16192
15:15	10/19/2004	0
15:30	10/19/2004	384
15:45	10/19/2004	0
Sum		33152

OverloadTbl

Figure 216: Cordless - Overload Situation Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Total Number of Calls Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.10 Total Number of Calls Report

The Total Number of Calls report shows the total number of incoming and outgoing calls for the selected base stations in the given report period. This report is available in a column chart or table.

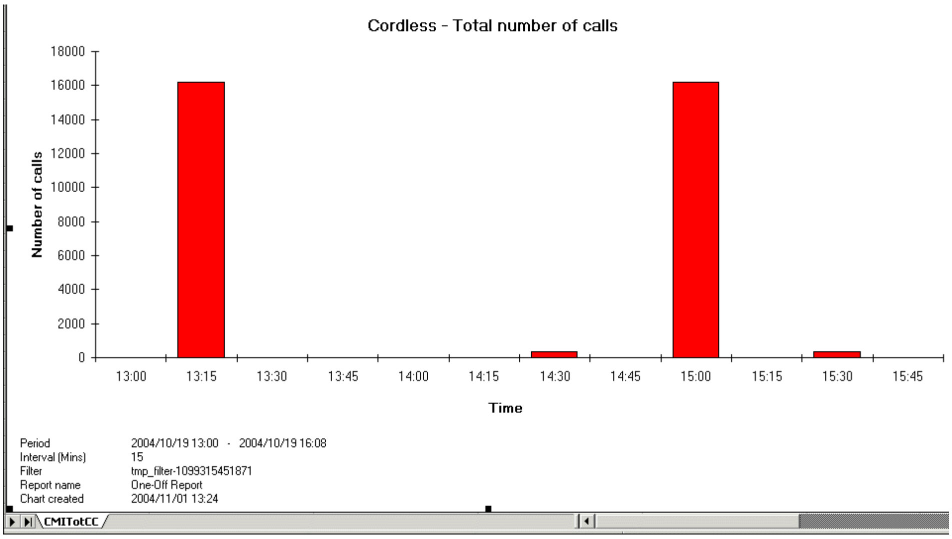


Figure 217: Cordless - Total Number of Calls Report in Column Chart Format

Cordless - Total number of calls

Period	2004/10/19 13:00 - 2004/10/19 16:08	
Interval (Mins)	15	
Filter	tmp_filter-1099315477809	
Report name	One-Off Report	
Chart created	2004/11/01 13:24	

Time	**Date**	**Number of calls**
13:00	10/19/2004	0
13:15	10/19/2004	16176
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	352
14:45	10/19/2004	0
15:00	10/19/2004	16176
15:15	10/19/2004	0
15:30	10/19/2004	352
15:45	10/19/2004	0
Sum		**33056**

CMITotTbl

Figure 218: Cordless - Total Number of Calls Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Overload Situation Top Ten Report

Total Number of Calls Top Ten Report

5.9.11 Overload Situation Top Ten Report

The "Overload Situation Top Ten" report shows the top ten base stations of the selected base stations, according to RSP busy flag settings, in the given report period. This report is available in a column chart or table.

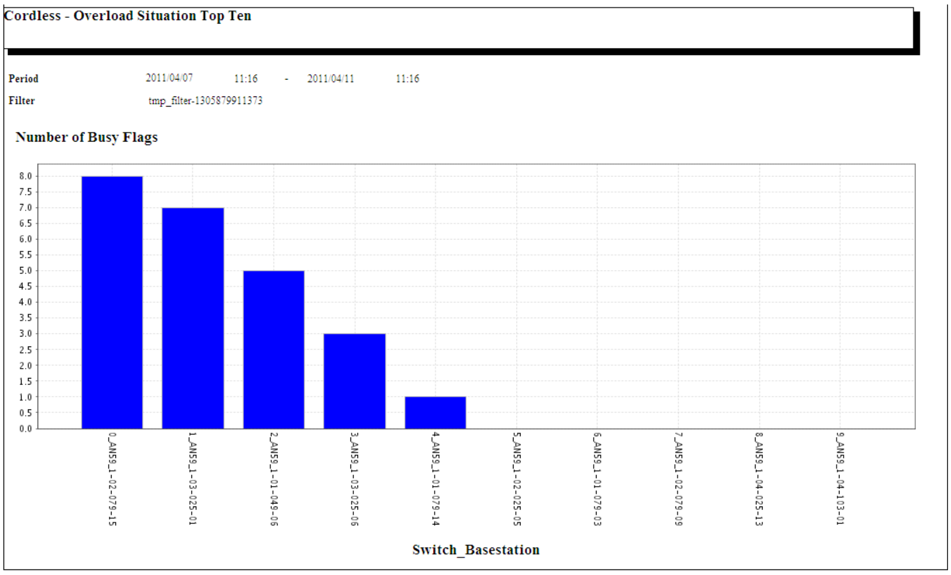
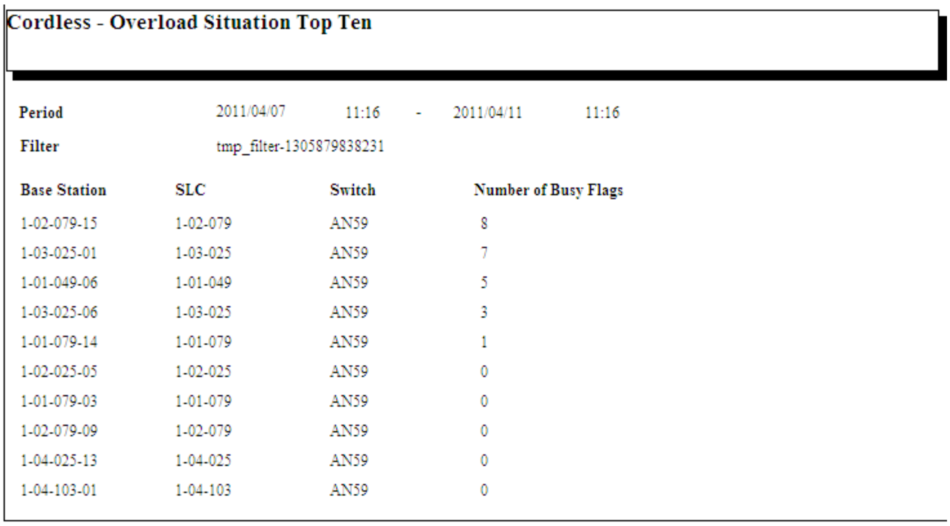


Figure 219: Cordless - Overload Situation Top Ten Report in Column Chart Format



Cordless - Overload Situation Top Ten

Period 2011/04/07 11:16 - 2011/04/11 11:16

Filter tmp_filter-1305879838231

Base Station	SLC	Switch	Number of Busy Flags
1-02-079-15	1-02-079	AN59	8
1-03-025-01	1-03-025	AN59	7
1-01-049-06	1-01-049	AN59	5
1-03-025-06	1-03-025	AN59	3
1-01-079-14	1-01-079	AN59	1
1-02-025-05	1-02-025	AN59	0
1-01-079-03	1-01-079	AN59	0
1-02-079-09	1-02-079	AN59	0
1-04-025-13	1-04-025	AN59	0
1-04-103-01	1-04-103	AN59	0

Figure 220: Cordless - Overload Situation Top Ten Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Total Number of Calls Top Ten Report

5.9.12 Total Number of Calls Top Ten Report

The Total Number of Calls report shows the 10 cordless base stations with the highest call volumes of incoming and outgoing calls in the given report period. This report is available in a column chart or table.

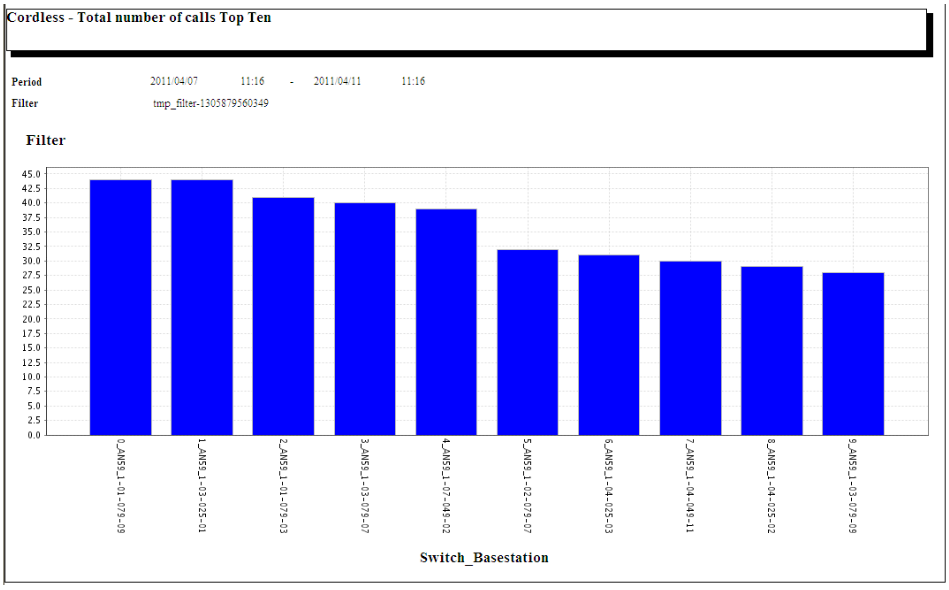


Figure 221: Cordless - Total Number of Calls Top Ten Report in Column Chart Format

Cordless - Total number of calls Top Ten

Period 2011/04/07 11:16 - 2011/04/11 11:16

Filter tmp_filter-1305879764167

Base Station	SLC	Switch	Number of calls
1-01-079-09	1-01-079	AN59	44
1-03-025-01	1-03-025	AN59	44
1-01-079-03	1-01-079	AN59	41
1-03-079-07	1-03-079	AN59	40
1-07-049-02	1-07-049	AN59	39
1-02-079-07	1-02-079	AN59	32
1-04-025-03	1-04-025	AN59	31
1-04-049-11	1-04-049	AN59	30
1-04-025-02	1-04-025	AN59	29
1-03-079-09	1-03-079	AN59	28

Figure 222: Cordless - Total Number of Calls Top Ten Report in Table Format

Related Topics

Base Station Resets Report

Bearer Handover Report

Bearer Handover Successful Report

Bearer Handover Unsuccessful Report

Inter SLC Handover Report

Interrupted Calls Report

Intra SLC Handover Report

Layer 1/2 Error Report

Overload Situation Report

Total Number of Calls Report

Overload Situation Top Ten Report

5.10 Cordless Statistics - Cordless SLC Cards Reports

This section describes the following reports:

- Inter SLC Location Updating Report
- Intra SLC Location Updating
- SLC Module - No Handover Report

5.10.1 Inter SLC Location Updating Report

The Inter SLC Location Updating report shows the number of inter-SLC location updating events for the selected SLC cards in the given report period. This report is available in a column chart and table.

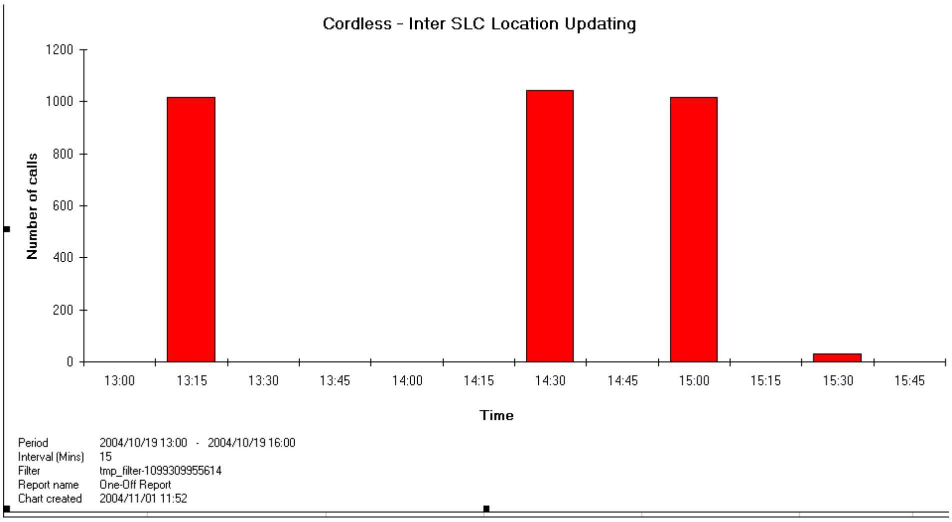


Figure 223: Cordless - Inter SLC Location Updating Report in Column Chart Format

Cordless - Inter SLC Location Updating		
Period	2004/10/19 13:00 - 2004/10/19 16:00	
Interval (Mins)	15	
Filter	tmp_filter-1099309965754	
Report name	One-Off Report	
Chart created	2004/11/01 11:52	
Time	**Date**	**Number of calls**
13:00	10/19/2004	0
13:15	10/19/2004	1015
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	1045
14:45	10/19/2004	0
15:00	10/19/2004	1015
15:15	10/19/2004	0
15:30	10/19/2004	30
15:45	10/19/2004	0
Sum		**3105**

InterLocnTbl

Figure 224: Cordless - Inter SLC Location Updating Report in Table Format

Related Topics

Intra SLC Location Updating

SLC Module - No Handover Report

5.10.2 Intra SLC Location Updating

The Intra SLC Location Updating report shows the number of intra-SLC location updating events for the selected SLC cards in the given report period. This report is available in a column chart and table.

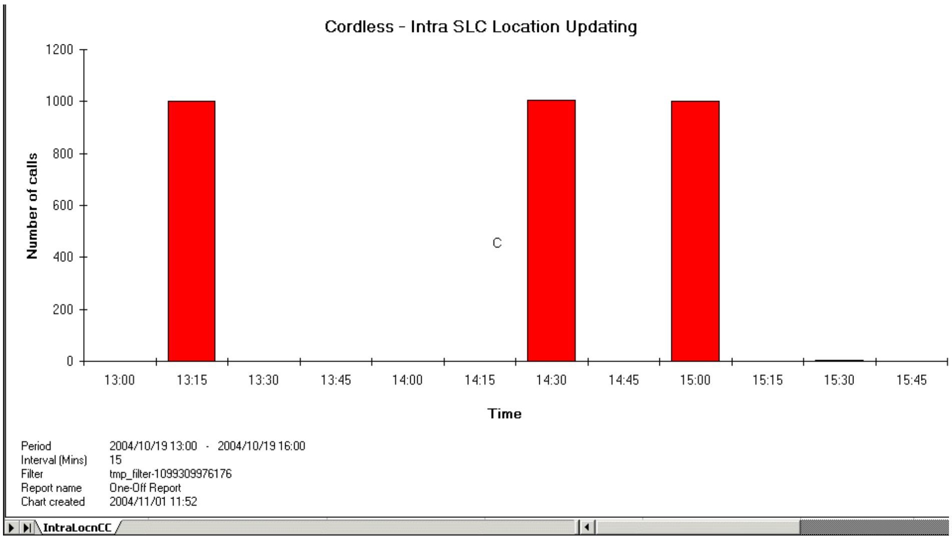


Figure 225: Cordless - Intra SLC Location Updating Report in Column Chart Format

Cordless - Intra SLC Location Updating

Period	2004/10/19 13:00 - 2004/10/19 16:00	
Interval (Mins)	15	
Filter	tmp_filter-1099309985160	
Report name	One-Off Report	
Chart created	2004/11/01 11:53	
Time	**Date**	**Number of calls**
13:00	10/19/2004	0
13:15	10/19/2004	1002
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	1006
14:45	10/19/2004	0
15:00	10/19/2004	1002
15:15	10/19/2004	0
15:30	10/19/2004	4
15:45	10/19/2004	0
Sum		**3014**

IntraLocnTbl

Figure 226: Cordless - Intra SLC Location Updating Report in Table Format

Related Topics

Inter SLC Location Updating Report

SLC Module - No Handover Report

5.10.3 SLC Module - No Handover Report

The SLC Module - No Handover report shows the number of intra-SLC location updating events for the selected SLC cards in the given report period. This report is available in a column chart or table.

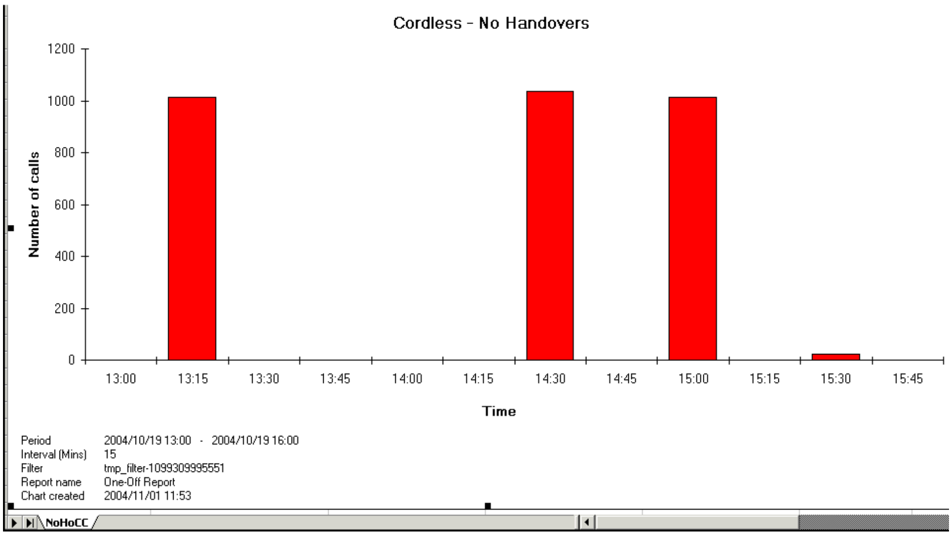


Figure 227: Cordless - Inter SLC Module - No Handover Report in Column Chart Format

Cordless - No Handovers

Period	2004/10/19 13:00 - 2004/10/19 16:00	
Interval (Mins)	15	
Filter	tmp_filter-1099310004691	
Report name	One-Off Report	
Chart created	2004/11/01 11:53	

Time	**Date**	**Number of calls**
13:00	10/19/2004	0
13:15	10/19/2004	1012
13:30	10/19/2004	0
13:45	10/19/2004	0
14:00	10/19/2004	0
14:15	10/19/2004	0
14:30	10/19/2004	1036
14:45	10/19/2004	0
15:00	10/19/2004	1012
15:15	10/19/2004	0
15:30	10/19/2004	24
15:45	10/19/2004	0
Sum		**3084**

NoHotbl

Figure 228: Cordless - Inter SLC Module - No Handover Report in Table Format

Related Topics

Inter SLC Location Updating Report

Intra SLC Location Updating

5.11 Cordless Statistics - Cordless Stays

This section describes the following reports:

- Cordless Stays Detail
- Cordless Stays Per Extension

5.11.1 Cordless Stays Detail

In this report all found single cordless stays entries, are sorted by Extension, Home switch, Home SLC and 'Begin of visit'. Calculations are made in order to find the duration of the specific stay. With this report you can view the History of stays for all filtered items.

The report is provided only as table report.

The report information depends on the previously defined filter settings. You are also able to display only values that exceed a defined threshold, and to ignore short stays.

Cordless Stays Details

Period	2005/01/01 08:00 - 2005/01/01 12:00		**Threshold**	**Upper No.**	**Lower No.**		
Interval (Mins)	-		**Duration of Stay**	N/A	N/A		
Filter	tmp_filter-1133783447773						
Report name	One-Off Report						
Chart created	05.12.2005 13:51						
* Duration of Stay refers to the reporting period							
Extension	**Home Switch**	**Home SLC**	**Current Switch**	**Current SLC**	**Begin of Stay**	**Duration of Stay**	**Foreign Stay**
5000	FP50	1-1-105	FP50	1-1-105	2005-01-01 08:15:00	01:15:00	No
5050	FP50	1-1-106	FP50	1-1-106	2005-01-01 06:15:00	02:20:00	No
5100	FP50	1-1-107	FP50	1-1-105	2005-01-01 08:05:00	00:40:00	Yes
5100	FP50	1-1-107	FP50	1-1-105	2005-01-01 08:50:00	00:10:00	Yes
5200	FP50	1-1-108	FP50	1-1-107	2005-01-01 08:05:00	00:01:00	Yes

Figure 229: Cordless Stays Detail Report in Table Format

Related Topic

Cordless Stays Per Extension

5.11.2 Cordless Stays Per Extension

With this report it is possible to get an overview how long a CMI Subscriber stays on his home SLC or on a foreign SLC and how long a CMI subscriber stays on his home switch or on a foreign switch.

In this report, all found single entries, are sorted by extension, home switch, and home SLC and show the percentage stay per Extension (i.e. the relation between "duration of stay" and "entire reporting period").

When the "Foreign Switch Stay Only" filter was selected in the Report Definition page or in the parameters for the One-Off report, **only** the foreign stays **on the foreign switch** are listed (all marked with "Yes" in the "Foreign Switch Stay" column), the foreign stays on the same switch, due to stays on different SLC boards will not be displayed:

Cordless Stays per Extension

Period	2005/01/01 08:00 - 2005/01/01 12:00	
Interval (Mins)	-	**Dura**
Filter	tmp_filter-1133783638929	**Duratio**
Report name	One-Off Report	
Chart created	05.12.2005 13:54	
* Duration of Stay refers to the reporting period		

Extension	Home Switch	Home SLC	Current S
45166	AN16	1-2-25	AN1
45367	AN16	1-2-25	AN5
45505	AN16	1-2-79	AN1
45610	AN16	1-2-103	AN5

Figure 230: Cordless Stays Extension Report in Table Format

Related Topic

Cordless Stays Detail

5.12 Cordless Statistics - Overload Duration

This section describes the following reports:

- Overload Duration Detail
- Overload Duration over Time
- Overload Duration per Base Station

5.12.1 Overload Duration Detail

Displays all overload situations in the selected reporting period according to the specified filter conditions. It is possible to set a threshold to define the minimum overload duration to be considered for this report.

PM reports related to **Cordless Overload Duration** scenarios require some configuration steps as pre-requisite; for further information, please refer to section "Configuration for Cordless Overload Duration Metering".

If the configuration is changed (e.g. base stations are moved, added or deleted), data about the history of changes are not kept. This results in the loss of data or in the display of incorrect data.

Therefore, if a base station is moved from one PEN (Port Equipment Number) to another, and a filter is set for the new PEN of the base station, in the report there will be no data presented for the period before.

Overload Duration Detail							
Period	2005/11/07 17:00 - 2005/11/08 07:00		**Threshold**	**Upper No.**	**Lower No.**		
Interval	-		**Overload Duration**	02:00:00	00:00:30		
Filter	Base Test						
Report name	OverLoad Duration Detail						
Chart created	2005/12/29 17:28						
Switch ID	**SLC Card**	**Base Station Number**	**Begin of Overload**	**End of Overload**	**Overload Duration**	**DECT Net**	**Location**
DX62	1-1-97	1-1-97-0	2005-11-07 19:20:00	2005-11-07 19:26:00	00:06:00	268454474	nikaia
DX62	1-1-97	1-1-97-0	2005-11-07 19:31:00	2005-11-07 19:36:00	00:05:00	268454474	nikaia
DX62	1-1-97	1-1-97-0	2005-11-07 21:19:20	2005-11-08 01:00:00	03:40:40	268454474	nikaia
DX62	1-1-97	1-1-97-0	2005-11-08 01:16:40	2005-11-08 02:52:40	01:36:00	268454474	nikaia
DX62	1-1-97	1-1-97-1	2005-11-08 02:53:40	2005-11-08 02:54:40	00:01:00	268454474	nikaia
DX62	1-1-97	1-1-97-2	2005-11-08 02:56:40	2005-11-08 02:58:40	00:02:00	268454474	nikaia

Figure 231: Overload Duration Detail Report in Table Format

Related Topics

Overload Duration over Time

Overload Duration per Base Station

5.12.2 Overload Duration over Time

Displays the overload duration over the time interval according to the defined filter conditions. The values are displayed in the format hh:mm:ss. The days of the overload duration are displayed in the format dd, but only if the overload duration exceeds 24 hours.The report displays also the percentage describing the relation between the overload duration and the interval value (e.g. 15 minutes). It is possible to set a threshold to define the minimum overload duration to be considered for this report.

This report is available in a column chart or table.

PM reports related to **Cordless Overload Duration** scenarios require some configuration steps as pre-requisite; for furter information, please refer to section "Configuration for Cordless Overload Duration Metering".

If the configuration is changed (e.g. base stations are moved, added or deleted), data about the history of changes are not kept. This results in the loss of data or in the display of incorrect data.

Therefore, if a base station is moved from one PEN (Port Equipment Number) to another, and a filter is set for the new PEN of the base station, in the report there will be no data presented for the period before.

In the report "Overload duration over time", in order to calculate the percentage of overload for a time interval, the overload duration for every base station is added and divided with the whole period and with the number of base stations.

Overload Duration over Time					
Period	2005/11/07 17:00 - 2005/11/08 07:00		Threshold	Upper No.	Lower No.
Interval (Mins)	15		Overload Duration	02:00:00	00:00:30
Filter	Base Test		Overload in %	N/A	N/A
Report name	OverLoad Duration over Time				
Chart created	2005/12/29 17:33				
Time	Date	Overload Duration	Overload in %		
17:00	07.11.2005	00:00:00	0,00		
17:15	07.11.2005	00:00:00	0,00		
17:30	07.11.2005	00:00:00	0,00		
17:45	07.11.2005	00:00:00	0,00		
18:00	07.11.2005	00:00:00	0,00		
18:15	07.11.2005	00:00:00	0,00		
18:30	07.11.2005	00:00:00	0,00		
18:45	07.11.2005	00:00:00	0,00		
19:00	07.11.2005	00:00:00	0,00		
19:15	07.11.2005	00:06:00	20,00		
19:30	07.11.2005	00:05:00	16,67		
19:45	07.11.2005	00:00:00	0,00		
20:00	07.11.2005	00:00:00	0,00		
20:15	07.11.2005	00:00:00	0,00		
20:30	07.11.2005	00:00:00	0,00		
20:45	07.11.2005	00:00:00	0,00		
21:00	07.11.2005	00:00:00	0,00		
21:15	07.11.2005	00:10:40	35,56		

Figure 232: Overload Duration over Time Report in Table Format

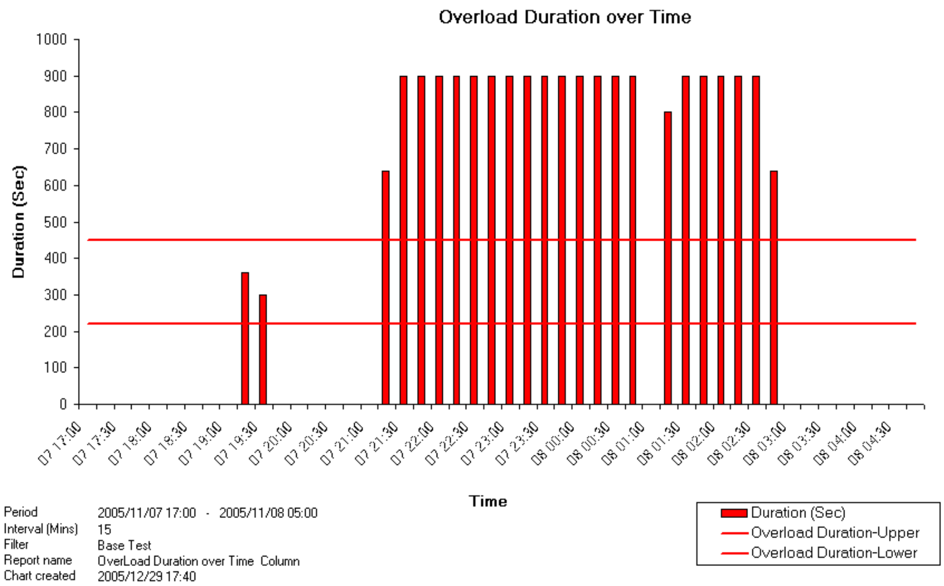


Figure 233: Overload Duration over Time Report in Column Chart Format

Related Topics

[Overload Duration Detail]

[Overload Duration per Base Station]

5.12.3 Overload Duration per Base Station

Displays for the selected reporting period the total overload duration per base station in the format dd hh:mm:ss. The days of the overload duration are displayed in the format dd, but only if the overload duration exceeds 24 hours.

This report includes also a new field "Overload in %" displaying the relation between total overload duration and total reporting period for a specific base station.

It is possible to set a threshold to define the minimum overload duration to be considered for this report.

PM reports related to **Cordless Overload Duration** scenarios require some configuration steps as pre-requisite; for furter information, please refer to section "Configuration for Cordless Overload Duration Metering".

If the configuration is changed (e.g. base stations are moved, added or deleted), data about the history of changes are not kept. This results in the loss of data or in the display of incorrect data.

Therefore, if a base station is moved from one PEN (Port Equipment Number) to another, and a filter is set for the new PEN of the base station, in the report there will be no data presented for the period before.

Overload Duration per Base Station							
Period	2005/11/07 17:00 - 2005/11/08 07:00		Threshold	Upper No.	Lower No.		
Interval	-		Overload Duration	N/A	N/A		
Filter	Base Test		Overload in %	N/A	N/A		
Report name	OverLoad Duration per Base Station						
Chart created	2005/12/29 17:31						
Switch ID	SLC Card	Base Station Number	Overload Duration	Overload in %	DECT Net	Location	
DX62	1-1-97	1-1-97-0	05:27:40	39,01	268454474	nikaia	
DX62	1-1-97	1-1-97-1	00:01:00	0,12	268454474	nikaia	
DX62	1-1-97	1-1-97-2	00:02:00	0,24	268454474	nikaia	

Figure 234: Overload Duration per Base Station in Table Format

Related Topics

Overload Duration Detail

Overload Duration over Time

5.13 Hit Parade/Top Usage

For this group of reports parameter for "Number of Hits in the result displayed" can be set.

This section describes the following reports:

- Highest Load by Trunk Group
- Highest Number of Answered Calls
- Highest Number of Calls
- Highest Number of Lost because Busy
- Highest Number of Not Answered Calls

5.13.1 Highest Load by Trunk Group

Displays the highest load by trunk group, i. e. the highest sum of traffic per trunk group in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

This report should be only used with a Trunk Group Filter.

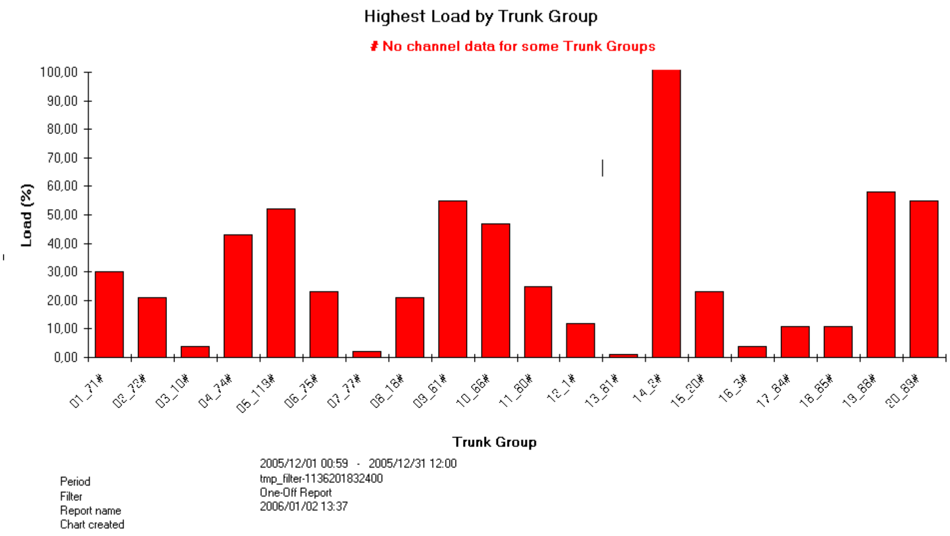


Figure 235: Hit Parade/Top Usage- Highest Load by Trunk Group Report in Column Chart Format

Highest Load by Trunk Group					
Period	2005/12/01 00:59 - 2005/12/31 12:00				
Filter	tmp_filter-1136201948486				
Report name	One-Off Report				
Chart created	2006/01/02 13:39				
			No channel data for some Trunk Groups		
Switch	**Trunk Group**	**Trunk Group Name**	**Load (%)**	**No Of TG Assigned**	**No Of TG Out Of Service**
FP49	71	AMT-DIU-S2	0,00	No Data	No Data
FP49	10	APSE-PSM	0,00	No Data	No Data
FP49	72	QV-DIU-S2 2	0,00	No Data	No Data
FP49	74	QL-DIU-S2 3	0,00	No Data	No Data
FP49	119	WAML	0,00	No Data	No Data
FP49	75	QV-DIU-S2 4	0,00	No Data	No Data
FP49	77	QV-DIU-S2 5	0,00	No Data	No Data
FP49	18	AMT-HKZ	0,00	No Data	No Data
FP49	61	PNECDG4.0	0,00	No Data	No Data
FP49	66	TOP_10_TESTS	0,00	No Data	No Data
FP49	80	LAST-DRIVE	0,00	No Data	No Data
FP49	1	AMT-HKZ	0,00	No Data	No Data
FP49	81	QV-DIU-S2	0,00	No Data	No Data
FP49	2	AMT-IKZ	0,00	No Data	No Data
FP49	20	AMT-IKZ	0,00	No Data	No Data
FP49	3	DIU-N4	0,00	No Data	No Data
FP49	84	QV-DIU-S2	0,00	No Data	No Data
FP49	85	QV-DIU-S2	0,00	No Data	No Data
FP49	88	AMT-TMD	0,00	No Data	No Data
FP49	89	AMT-TMD	0,00	No Data	No Data
Note: Dates are shown as 'Year/Month/Day'.					

Figure 236: Hit Parade/Top Usage- Highest Load by Trunk Group Report in Table Format

Related Topics

Highest Number of Answered Calls

Highest Number of Calls

Highest Number of Lost because Busy

Highest Number of Not Answered Calls

5.13.2 Highest Number of Answered Calls

Displays the highest number of answered calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

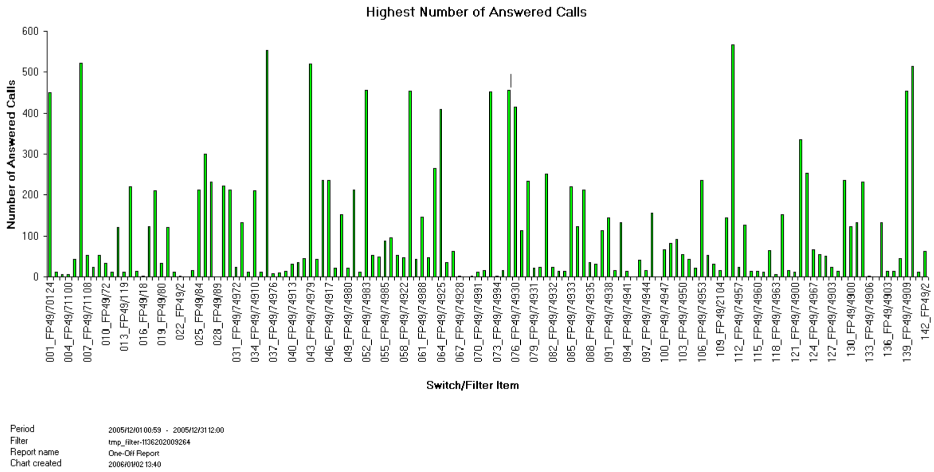


Figure 237: Hit Parade/Top Usage- Highest Number of Answered Calls Report in Column Chart Format

Highest Number of Answered Calls

Period	2005/12/01 00:59 - 2005/12/31 12:00
Filter	tmp_filter-1136202472932
Report name	One-Off Report
Chart created	2006/01/02 13:48

Switch	Filter Item	Number of Answered Calls
FP49	70124	450
FP49	70287	12
FP49	71200	5
FP49	71100	5
FP49	71208	43
FP49	71209	523
FP49	71108	53
FP49	71109	23
FP49	71	52
FP49	2	2
FP49	20	0
FP49	3	15
FP49	84	213
FP49	85	300
FP49	88	231
FP49	89	0
FP49	74970	223
FP49	74971	213
FP49	74972	23
FP49	74973	133
FP49	74974	12

Figure 238: Hit Parade/Top Usage - Highest Number of Answered Calls Report in Table Format

Related Topics

Highest Load by Trunk Group

Highest Number of Calls

Highest Number of Lost because Busy

Highest Number of Not Answered Calls

5.13.3 Highest Number of Calls

Displays the highest number of calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

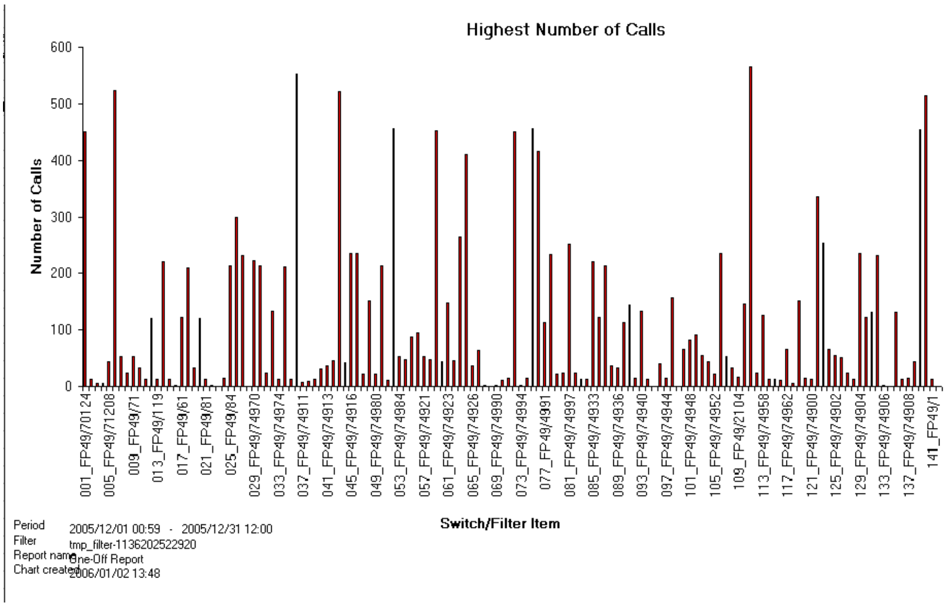


Figure 239: Hit Parade/Top Usage- Highest Number of Calls Report in Column Chart Format

Highest Number of Calls

Period	2005/12/01 00:59 - 2005/12/31 12:00	
Filter	tmp_filter-1136202595707	
Report name	One-Off Report	
Chart created	2006/01/02 13:50	

Switch	Filter Item	Number of Calls
FP49	70124	450
FP49	70287	12
FP49	71200	5
FP49	71100	5
FP49	71208	43
FP49	71209	523
FP49	71108	53
FP49	71109	23
FP49	20	0
FP49	3	15
FP49	84	213
FP49	85	300
FP49	88	231
FP49	89	0
FP49	74970	223
FP49	74971	213
FP49	74972	23
FP49	74973	133
FP49	74974	12

Figure 240: Hit Parade/Top Usage - Highest Number of Calls Report in Table Format

Related Topics

Highest Load by Trunk Group

Highest Number of Answered Calls

Highest Number of Lost because Busy

Highest Number of Not Answered Calls

5.13.4 Highest Number of Lost because Busy

Displays the highest number of missed calls (busy) in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

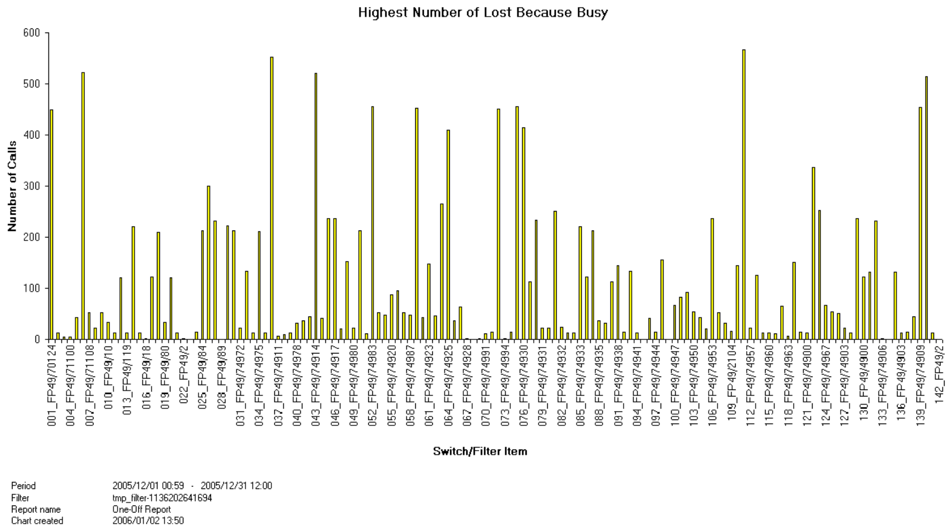


Figure 241: Hit Parade/Top Usage- Highest Number of Lost because Busy Report in Column Chart Format

Highest Number of Lost Because Busy

Period	2005/12/01 00:59 - 2005/12/31 12:00	
Filter	tmp_filter-1136202681774	
Report name	One-Off Report	
Chart created	2006/01/02 13:51	

Switch	Filter Item	Number of Calls
FP49	70124	450
FP49	70287	12
FP49	71200	5
FP49	71100	5
FP49	71208	43
FP49	71209	523
FP49	71108	53
FP49	71109	23
FP49	84	213
FP49	85	300
FP49	88	231
FP49	89	0
FP49	74970	223
FP49	74971	213
FP49	74972	23
FP49	74973	133
FP49	74974	12
FP49	74910	211

Figure 242: Hit Parade/Top Usage - Highest Number of Lost because Busy Report in Table Format

Related Topics

Highest Load by Trunk Group

Highest Number of Answered Calls

Highest Number of Calls

Highest Number of Not Answered Calls

5.13.5 Highest Number of Not Answered Calls

Displays the highest number of not answered calls in the selected reporting period and for the selected filter conditions. The report is available in column chart and in table format.

This report is not provided for summation and summary.

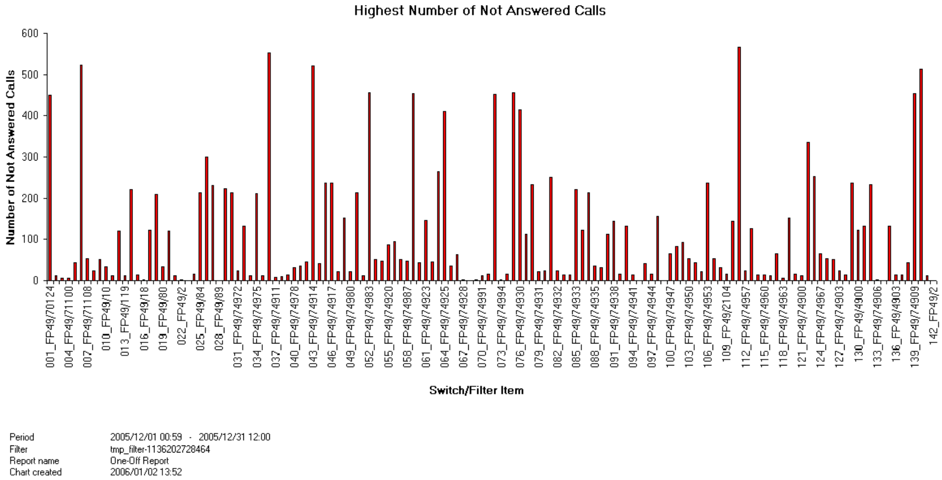


Figure 243: Hit Parade/Top Usage- Highest Number of Not Answered Calls Report in Column Chart Format

Highest Number of Not Answered Calls

Period	2005/12/01 00:59 - 2005/12/31 12:00	
Filter	tmp_filter-1136202815985	
Report name	One-Off Report	
Chart created	2006/01/02 13:53	

Switch	Filter Item	Number of Not Answered Calls
FP49	70124	450
FP49	70287	12
FP49	71200	5
FP49	71100	5
FP49	71208	43
FP49	71209	523
FP49	71108	53
FP49	71109	23
FP49	3	15
FP49	84	213
FP49	85	300
FP49	88	231
FP49	89	0
FP49	74970	223
FP49	74971	213
FP49	74972	23

Figure 244: Hit Parade/Top Usage - Highest Number of Not Answered Calls Report in Table Format

Related Topics

Highest Load by Trunk Group

Highest Number of Answered Calls

Highest Number of Calls

Highest Number of Lost because Busy

5.14 System Statistics Reports

This section describes the following reports:

- ADS/ADP Load (%) Report
- Feature Access Data Report
- SWU Load (%)

5.14.1 ADS/ADP Load (%) Report

The ADS/ADP Load (%) report shows the average ADS?ADP load date for the specified switch(es) in the given report period, displayed as a percentage. This report is available in a column chart or table.

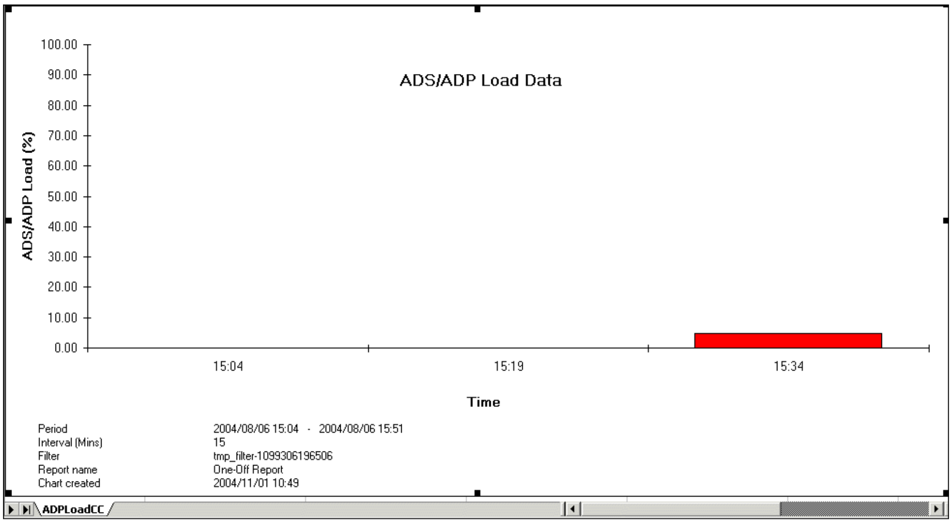


Figure 245: System Statistics - ADS/ADP Load % Report in Column Chart Format

ADS/ADP Load Data

Period	2004/08/06 15:04 - 2004/08/06 15:51	
Interval (Mins)	15	
Filter	tmp_filter-1099306179381	
Report name	One-Off Report	
Chart created	2004/11/01 10:49	
Time	**Date**	**ADS/ADP Load (%)**
15:04	8/6/2004	0.00
15:19	8/6/2004	0.00
15:34	8/6/2004	4.72

ADPLoadTbl

Figure 246: System Statistics - ADS/ADP Load % Report in Table Format

Related Topics

Feature Access Data Report

SWU Load (%)

5.14.2 Feature Access Data Report

The Feature Access Data report shows the number of intra-SLC location updating events for the selected SLC cards in the given report period. This report is available in a bar chart or table.

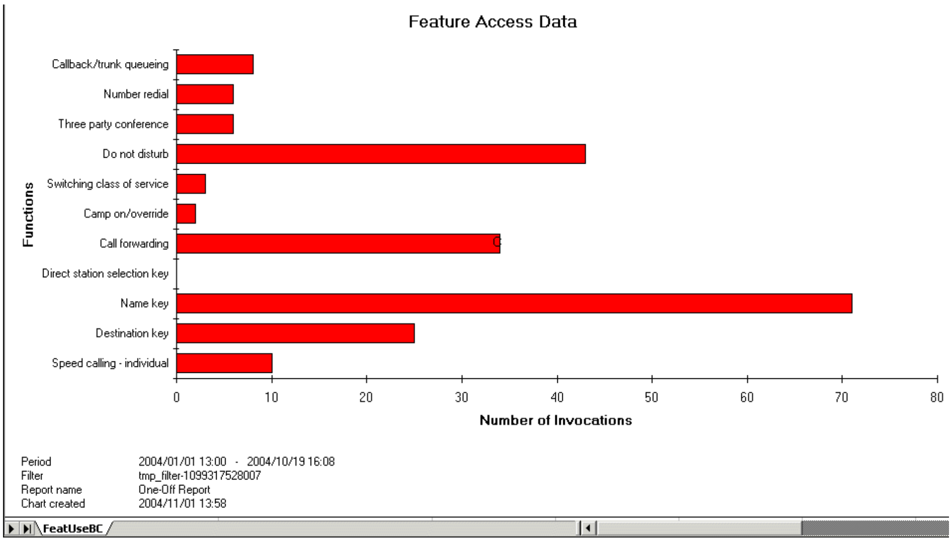


Figure 247: System Statistics - Feature Access Data Report in Bar Chart Format

Feature Access Data

Period	2004/01/01 13:00 - 2004/10/19 16:08
Filter	tmp_filter-1099317421520
Report name	One-Off Report
Chart created	2004/11/01 13:57

Functions	Number of Invocations
Speed calling - individual	10
Destination key	25
Name key	71
Direct station selection key	0
Call forwarding	34
Camp on/override	2
Switching class of service	3
Do not disturb	43
Three party conference	6
Number redial	6
Callback/trunk queueing	8

FeatUseTbl

Figure 248: System Statistics - Feature Access Data Report in Table Format

Related Topics

ADS/ADP Load (%) Report

SWU Load (%)

5.14.3 SWU Load (%)

The SWU Load (%) report shows the average SWU load data for the selected switch(es) in the given report period, displayed as a percentage. This report is available in a column chart or table.

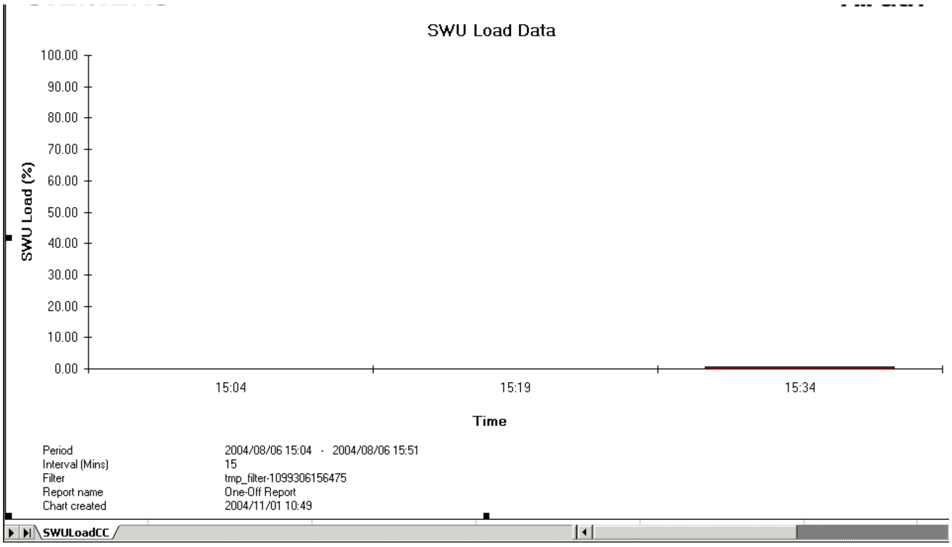


Figure 249: System Statistics - SWU Load (%) Report in Column Chart Format

SWU Load Data

Period	2004/08/06 15:04 - 2004/08/06 15:51	
Interval (Mins)	15	
Filter	tmp_filter-1099306138257	
Report name	One-Off Report	
Chart created	2004/11/01 10:49	
Time	**Date**	**SWU Load (%)**
15:04	8/6/2004	0.00
15:19	8/6/2004	0.00
15:34	8/6/2004	0.65

SWULoadTbl

Figure 250: System Statistics - SWU Load (%) Report in Table Format

Related Topics

ADS/ADP Load (%) Report

Feature Access Data Report

5.15 Trunk Groups - CDR Trunk Group Reports

This section describes the following reports:

- CDR Trunk Group - Trunk Group Availability Report
- CDR Trunk Group - Availability Over Time Report
- CDR Trunk Group - Busy Hour Report
- CDR Trunk Group - Trunk Group Load Report
- CDR Trunk Group - Trunk Group Load Over Time (%) Report
- CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.1 CDR Trunk Group - Trunk Group Availability Report

The CDR Trunk Group Availability report shows the percentage availability for each selected trunk group in the given report period. This report is available in a column chart or table.

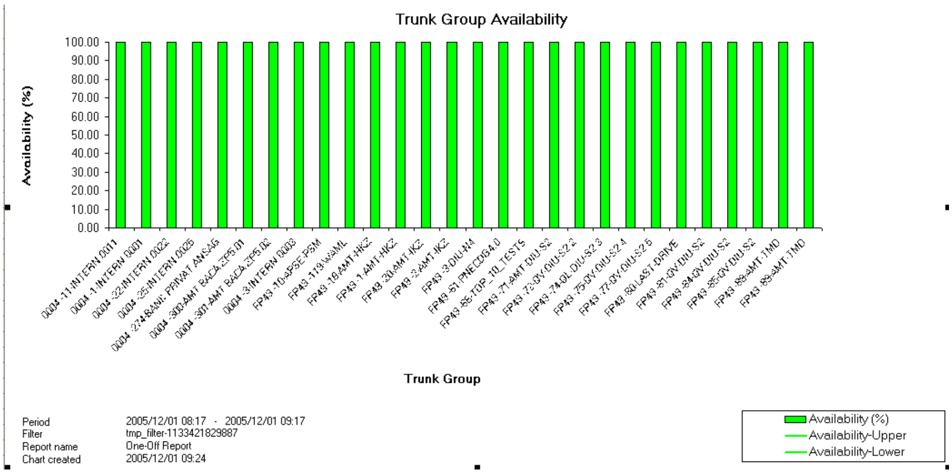


Figure 251: CDR Trunk Group - Availability Report in Column Chart Format

Trunk Group Availability					
Period	2005/08/29 09:19 - 2005/08/29 10:19		Thresholds	Upper No.	Lower No.
Interval (Minutes)	-		Availability (%)	N/A	N/A
Filter	tmp_filter-1125300324449				
Report name	One-Off Report				
Chart created	2005/08/29 10:25				
Trunk Group	Trunk Group Name	Switch	Availability (%)	B-Channels	
1	ATG1	FP49	100	20	
2	ATG2	FP49	100	20	
3	ATG3	FP49	100	120	
10	ATG4	FP49	100	20	
18	ATG5	FP49	100	20	
20	ATG6	FP49	100	20	
61	ATG7	FP49	100	30	
66	ATG8	FP49	100	30	
71	ATG9	FP49	100	60	
72	ATG10	FP49	100	60	
74	ATG11	FP49	100	60	
75	ATG12	FP49	100	60	
77	ATG13	FP49	100	60	
80	ATG14	FP49	100	60	
81	ATG15	FP49	100	60	
84	ATG16	FP49	100	60	
85	ATG17	FP49	100	60	
88	ATG18	FP49	100	20	
89	ATG19	FP49	100	20	
119	ATG20	FP49	100	30	

Figure 252: CDR Trunk Group - Availability Report in Table Format

Related Topics

CDR Trunk Group - Availability Over Time Report

CDR Trunk Group - Busy Hour Report

CDR Trunk Group - Trunk Group Load Report

CDR Trunk Group - Trunk Group Load Over Time (%) Report

CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.2 CDR Trunk Group - Availability Over Time Report

The CDR Trunk Group Availability Over Time report shows the percentage availability for all the selected trunk groups against time in the given report period. This report is available in a column chart, pie chart, or table.

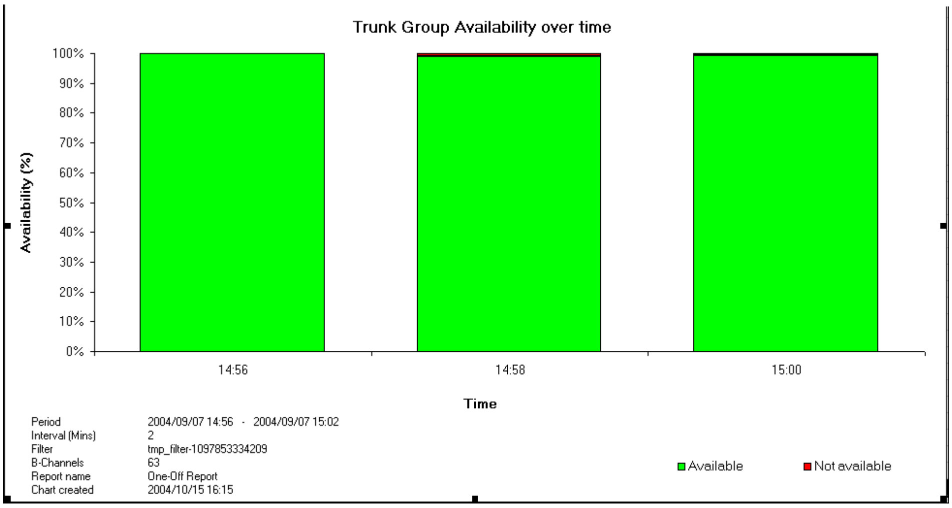


Figure 253: CDR Trunk Group - Availability Over Time Report in Column Chart Format

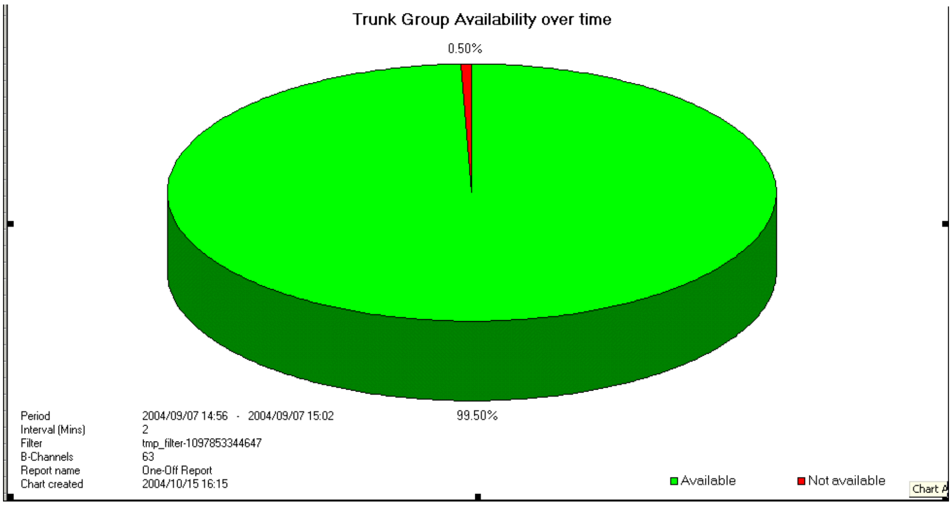


Figure 254: CDR Trunk Group - Availability Over Time Report in Pie Chart Format

Trunk Group Availability over time			
Period	2004/09/07 14:56 - 2004/09/07 15:02		
Interval (Mins)	2		
Filter	tmp_filter-1097853353851		
Report name	One-Off Report		
Chart created	2004/10/15 16:15		
B-Channels	63		
Time	**Date**	**Available (%)**	**Not available (%)**
14:56	9/7/2004	100.00	0.00
14:58	9/7/2004	98.98	1.02
15:00	9/7/2004	99.50	0.50

Figure 255: CDR Trunk Group - Availability Over Time Report in Table Format

Related Topics

CDR Trunk Group - Trunk Group Availability Report

CDR Trunk Group - Busy Hour Report

CDR Trunk Group - Trunk Group Load Report

CDR Trunk Group - Trunk Group Load Over Time (%) Report

CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.3 CDR Trunk Group - Busy Hour Report

The CDR Trunk Group Busy Hour report shows the busy hour for each selected trunk group in the given report period. The percentage load during the busy hour is shown against the start time of the hour. The busy hour is shown as starting on a 15-minute boundary, either on the hour or at 0, 15, 30, or 45 minutes past. If no traffic occurs on a trunk group within the report period, the busy hour is shown as the start time of the report. This report is available in a column chart or table.

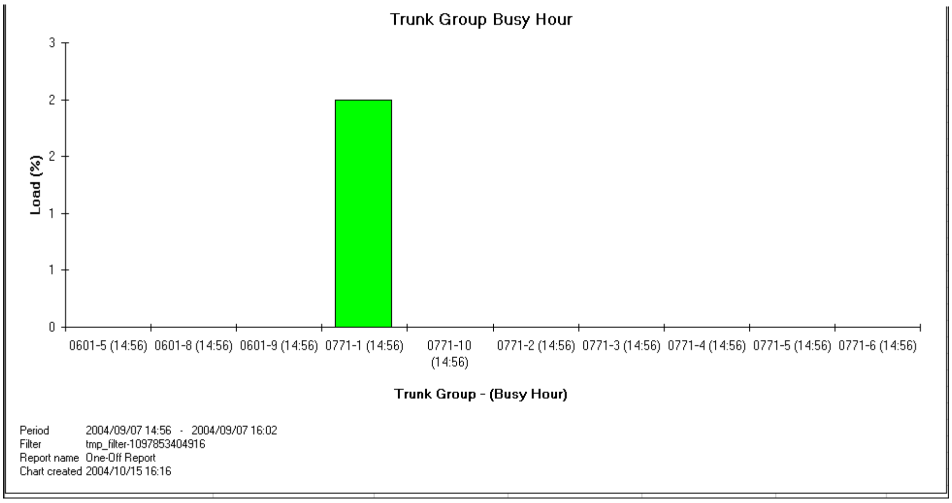


Figure 256: CDR Trunk Group - Busy Hour Report in Column Chart Format

Trunk Group Busy Hour						
Period	2005/08/29 09:19 - 2005/08/29 10:19		Thresholds	Upper No.	Lower No.	
Interval (Minutes)	15		Load (%)	N/A	N/A	
Filter	tmp_filter-1125300405413					
Report name	One-Off Report					
Chart created	2005/08/29 10:27					
Trunk Group	Trunk Group Name	Switch	Busy Hour	Date	Load (%)	B-Channels
1	ATG1	FP49	9:19	29/08/2005	0	20
2	ATG2	FP49	9:19	29/08/2005	0	20
3	ATG3	FP49	9:19	29/08/2005	0	120
10	ATG4	FP49	9:19	29/08/2005	0	20
18	ATG5	FP49	9:19	29/08/2005	0	20
20	ATG6	FP49	9:19	29/08/2005	0	20
61	ATG7	FP49	9:19	29/08/2005	0	30
66	ATG8	FP49	9:19	29/08/2005	0	30
71	ATG9	FP49	9:19	29/08/2005	0	60
72	ATG10	FP49	9:19	29/08/2005	0	60
74	ATG11	FP49	9:19	29/08/2005	0	60
75	ATG12	FP49	9:19	29/08/2005	0	60
77	ATG13	FP49	9:19	29/08/2005	0	60
80	ATG14	FP49	9:19	29/08/2005	0	60
81	ATG15	FP49	9:19	29/08/2005	0	60
84	ATG16	FP49	9:19	29/08/2005	0	60
85	ATG17	FP49	9:19	29/08/2005	0	60
88	ATG18	FP49	9:19	29/08/2005	0	20
89	ATG19	FP49	9:19	29/08/2005	0	20
119	ATG20	FP49	9:19	29/08/2005	0	30

Figure 257: CDR Trunk Group - Busy Hour Report in Table Format

Related Topics

CDR Trunk Group - Trunk Group Availability Report

CDR Trunk Group - Availability Over Time Report

CDR Trunk Group - Trunk Group Load Report

CDR Trunk Group - Trunk Group Load Over Time (%) Report

CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.4 CDR Trunk Group - Trunk Group Load Report

The CDR Trunk Group Load report shows the sum of incoming and outgoing traffic for each selected trunk group in the given report period. The data is displayed as a %. The data is displayed as a percentage.

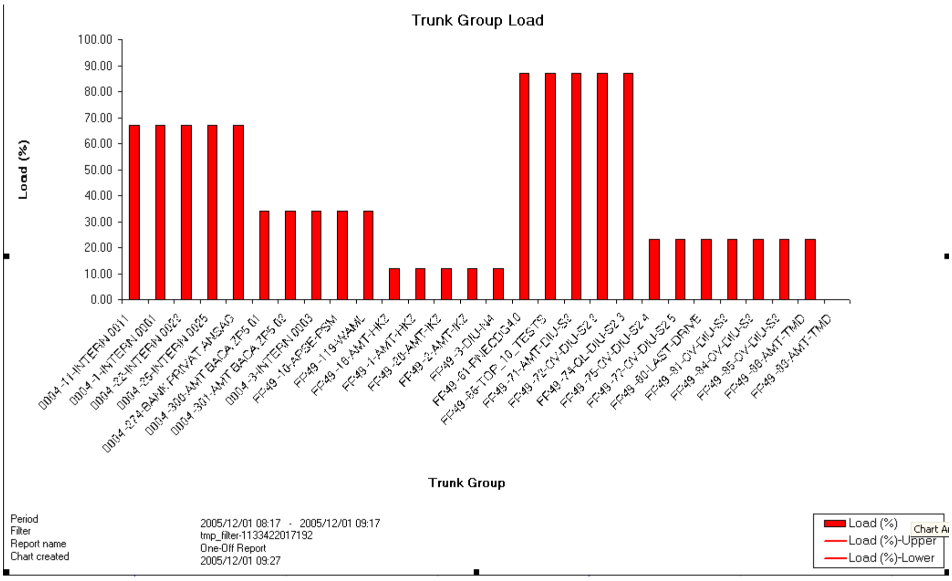


Figure 258: CDR Trunk Group - Load Report in Column Chart Format

Trunk Group Load					
Period	2005/08/29 09:19 - 2005/08/29 10:19		Threshold Load (%)	Upper No. N/A	Lower No. N/A
Interval (Minutes)	-				
Filter	tmp_filter-1125300471563				
Report name	One-Off Report				
Chart created	2005/08/29 10:28				
Trunk Group	Trunk Group Name	Switch	Load (%)	B-Channels	
1	ATG1	FP49	0.00	20	
2	ATG2	FP49	0.00	20	
3	ATG3	FP49	0.00	120	
10	ATG4	FP49	0.00	20	
18	ATG5	FP49	0.00	20	
20	ATG6	FP49	0.00	20	
61	ATG7	FP49	0.00	30	
66	ATG8	FP49	0.00	30	
71	ATG9	FP49	0.00	60	
72	ATG10	FP49	0.00	60	
74	ATG11	FP49	0.00	60	

Figure 259: CDR Trunk Group - Load Report in Table Format

Related Topics

CDR Trunk Group - Trunk Group Availability Report

CDR Trunk Group - Availability Over Time Report

CDR Trunk Group - Busy Hour Report

CDR Trunk Group - Trunk Group Load Over Time (%) Report

CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.5 CDR Trunk Group - Trunk Group Load Over Time (%) Report

The Trunk Group Load/Time (%) report shows the percentage load (of the whole group) against the time of the selected trunk groups in the given report period. This report is available in a column chart or table.

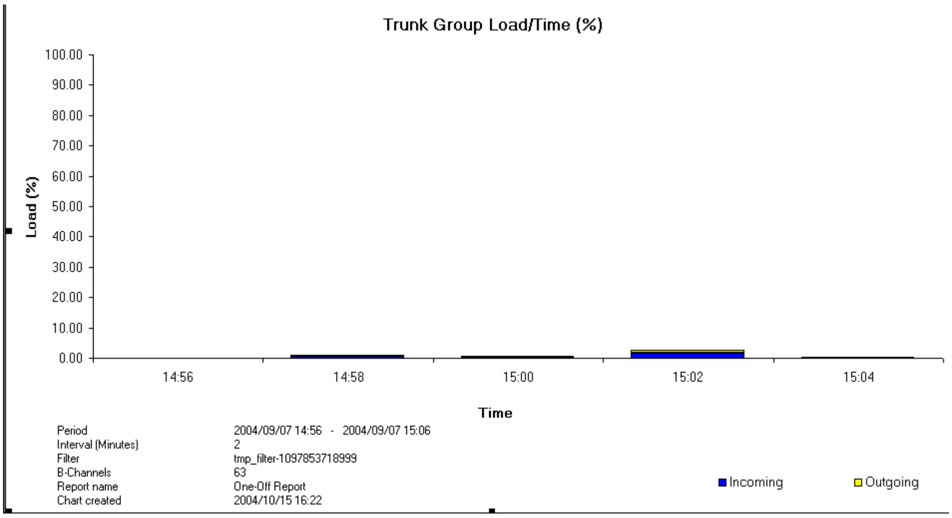


Figure 260: CDR Trunk Group - Load/Time (%) Report in Column Chart Format

Trunk Group Load/Time (%)

Period	2004/09/07 14:56 - 2004/09/07 16:02		
Interval (Minutes)	15		
Filter	tmp_filter-1097853678358		
Report name	One-Off Report		
Chart created	2004/10/15 16:21		
B-Channels	63		
		Load (%)	
Time	**Date**	**Incoming**	**Outgoing**
14:56	9/7/2004	0.38	0.22
15:11	9/7/2004	0.00	0.00
15:26	9/7/2004	0.00	0.00
15:41	9/7/2004	0.00	0.00
Note: Dates are shown as 'Year/Month/Day'.			

Figure 261: CDR Trunk Group - Load/Time (%) Report in Table Format

Related Topics

CDR Trunk Group - Trunk Group Availability Report

CDR Trunk Group - Availability Over Time Report

CDR Trunk Group - Busy Hour Report

CDR Trunk Group - Trunk Group Load Report

CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

5.15.6 CDR Trunk Group - Trunk Group Load Over Time (Erlangs) Report

The CDR Trunk Group Load OverTime (Erlangs) report shows the variation of trunk group traffic load (in erlangs) against time, the load value for both outgoing and incoming traffic is shown for the selected trunk groups in the given report period. This report is available in a column chart or table.

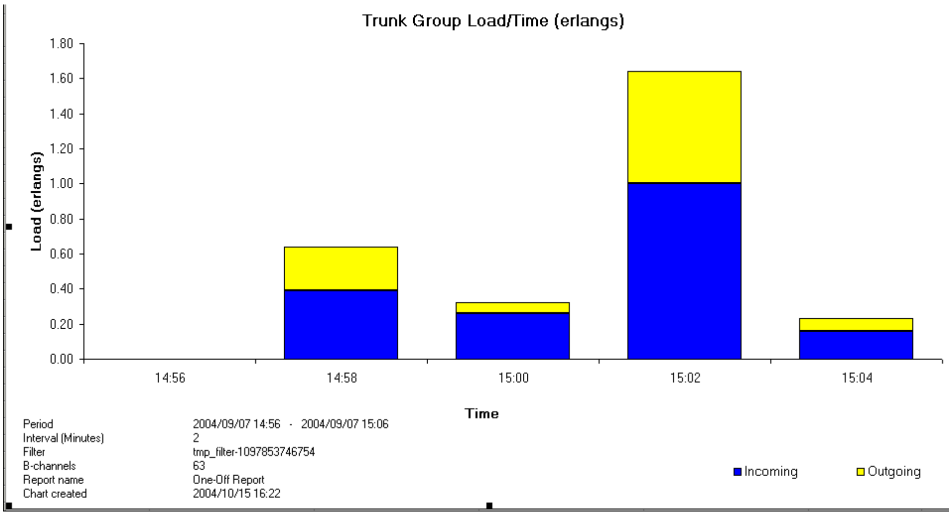


Figure 262: CDR Trunk Group - Load Over Time (Erlangs) Report in Column Chart Format

Trunk Group Load/Time (erlangs)			
Period	2004/09/07 14:56 - 2004/09/07 15:06		
Interval (Minutes)	2		
Filter	tmp_filter-1097853793924		
Report name	One-Off Report		
Chart created	2004/10/15 16:23		
B-Channels	63		
		Load (erlangs)	
Time	**Date**	**Incoming**	**Outgoing**
14:56	9/7/2004	0.00	0.00
14:58	9/7/2004	0.39	0.25
15:00	9/7/2004	0.26	0.06
15:02	9/7/2004	1.00	0.64
15:04	9/7/2004	0.16	0.07
Note: Dates are shown as 'Year/Month/Day'.			

Figure 263: CDR Trunk Group - Load Over Time (Erlangs) Report in Table Format

Related Topics

CDR Trunk Group - Trunk Group Availability Report

CDR Trunk Group - Availability Over Time Report

CDR Trunk Group - Busy Hour Report

CDR Trunk Group - Trunk Group Load Report

CDR Trunk Group - Trunk Group Load Over Time (%) Report

5.16 Trunk Groups - CDR Trunk Group Reports with B-Channel Availability Check

This section describes the following reports:

- CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report
- CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report
- CDR Trunk Group with B-Channel Availability Check - Busy Hour Report
- CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report
- CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report
- CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.1 CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

The CDR Trunk Group Availability report (with B-Channel availability check) shows the percentage availability for each selected trunk group in the given report period. This report is available in a column chart or table.

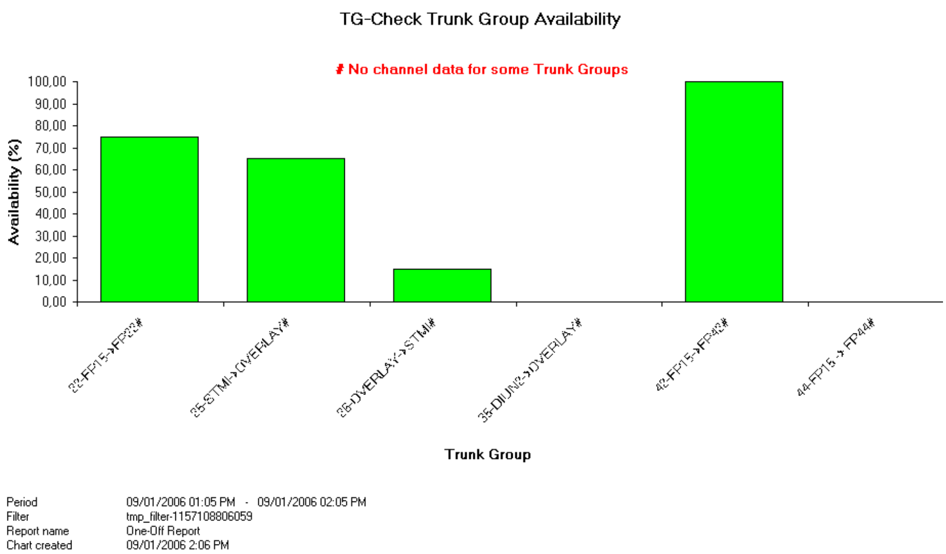


Figure 264: CDR Trunk Group with B-Channel Availability Check - Availability Report in Column Chart Format

TG-Check Trunk Group Availability					
Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM				
Filter	tmp_filter-1157108744438				
Report name	One-Off Report				
Chart created	09/01/2006				
				No channel data for some Trunk Groups	
				No Of B-Channels	No Of B-Channels
Trunk Group	Trunk Group Name	Switch	Availability (%)	Assigned	Out of Service
22	FP15->FP22	FP15	100,00	No Data	No Data
25	STMI->OVERLAY	FP15	100,00	No Data	No Data
26	OVERLAY->STMI	FP15	100,00	No Data	No Data
35	DIUN2->OVERLAY	FP15	100,00	No Data	No Data
42	FP15->FP42	FP15	100,00	No Data	No Data
44	FP15 -> FP44	FP15	100,00	No Data	No Data
Note: Dates are shown as 'Year/Month/Day'.					

Figure 265: CDR Trunk Group with B-Channel Availability Check - Availability Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

CDR Trunk Group with B-Channel Availability Check - Busy Hour Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.2 CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

The CDR Trunk Group Availability Over Time report (with B-Channel availability check) shows the percentage availability for all the selected trunk groups against time in the given report period. This report is available in a column chart, pie chart, or table.

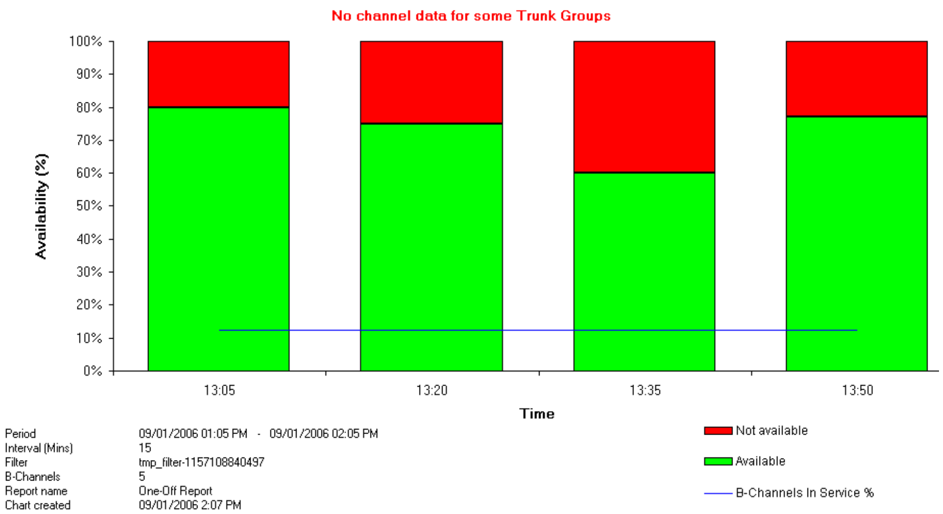


Figure 266: CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report in Column Chart Format

TG-Check Trunk Group Availability over time					
Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM				
Interval (Mins)	15				
Filter	tmp_filter-1157108867946				
Report name	One-Off Report				
Chart created	09/01/2006 2:07 PM		No channel data for some Trunk Groups		
B-Channels	2				
Time	Date	Available (%)	Not available (%)	B-Channels In Service %	No Of B-Channels In Service
13:05	09/01/2006	80,00	20,00	12,20	2
13:20	09/01/2006	65,00	35,00	12,20	2
13:35	09/01/2006	50,00	50,00	12,20	2
13:50	09/01/2006	77,00	23,00	12,20	2
Note: Dates are shown as 'Year/Month/Day'.					

Figure 267: CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

CDR Trunk Group with B-Channel Availability Check - Busy Hour Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.3 CDR Trunk Group with B-Channel Availability Check - Busy Hour Report

The CDR Trunk Group Busy Hour report (with B-Channel availability check) shows the busy hour for each selected trunk group in the given report period. The percentage load during the busy hour is shown against the start time of the hour. The busy hour is shown as starting on a 15-minute boundary, either on the hour or at 0, 15, 30, or 45 minutes past. If no traffic occurs on a trunk group within the report period, the busy hour is show as the start time of the report. This report is available in a column chart or table.

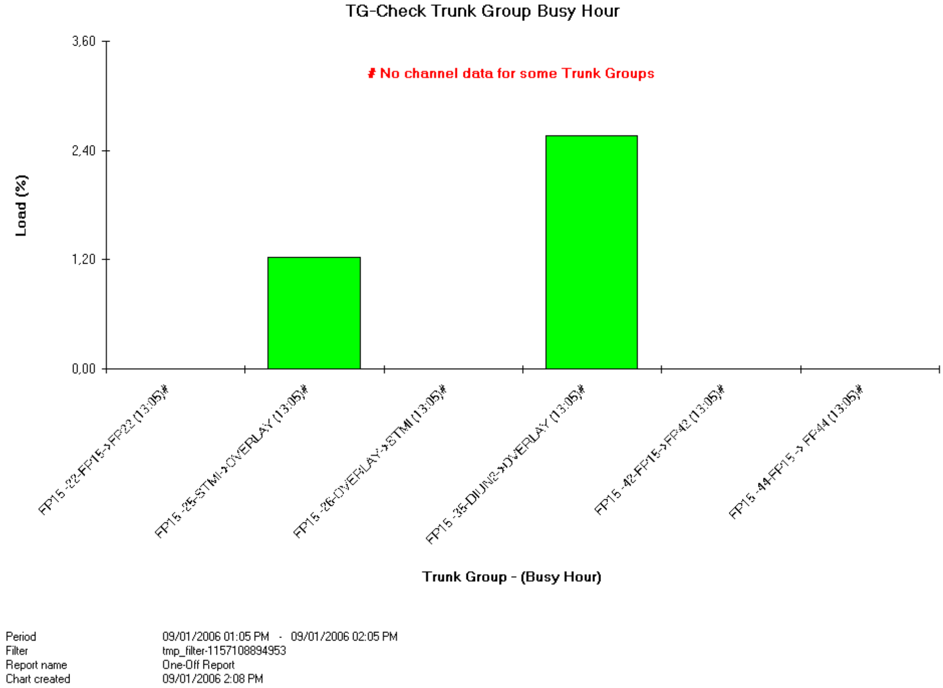


Figure 268: CDR Trunk Group with B-Channel Availability Check - Busy Hour Report in Column Chart Format

TG-Check Trunk Group Busy Hour

Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM
Filter	tmp_filter-1157108921788
Report name	One-Off Report
Chart created	09/01/2006 14:08

No channel data for some Trunk Groups

Trunk Group	Trunk Group Name	Switch	Busy Hour	Date	Load (%)	No Of B-Channels Assigned	No Of B-Channels Out Of Service
22	FP15->FP22	FP15	13:05	09/01/2006	0,00	No Data	No Data
25	STMI->OVERLAY	FP15	13:05	09/01/2006	0,00	No Data	No Data
26	OVERLAY->STMI	FP15	13:05	09/01/2006	0,00	No Data	No Data
35	DIUN2->OVERLAY	FP15	13:05	09/01/2006	0,00	No Data	No Data
42	FP15->FP42	FP15	13:05	09/01/2006	0,00	No Data	No Data
44	FP15 -> FP44	FP15	13:05	09/01/2006	0,00	No Data	No Data

Note: Dates are shown as 'Year/Month/Day'.

Figure 269: CDR Trunk Group with B-Channel Availability Check - Busy Hour Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.4 CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report

The CDR Trunk Group Load report (with B-Channel availability check) shows the sum of incoming and outgoing traffic for each selected trunk group in the given report period. The data is displayed as a %. The data is displayed as a percentage.

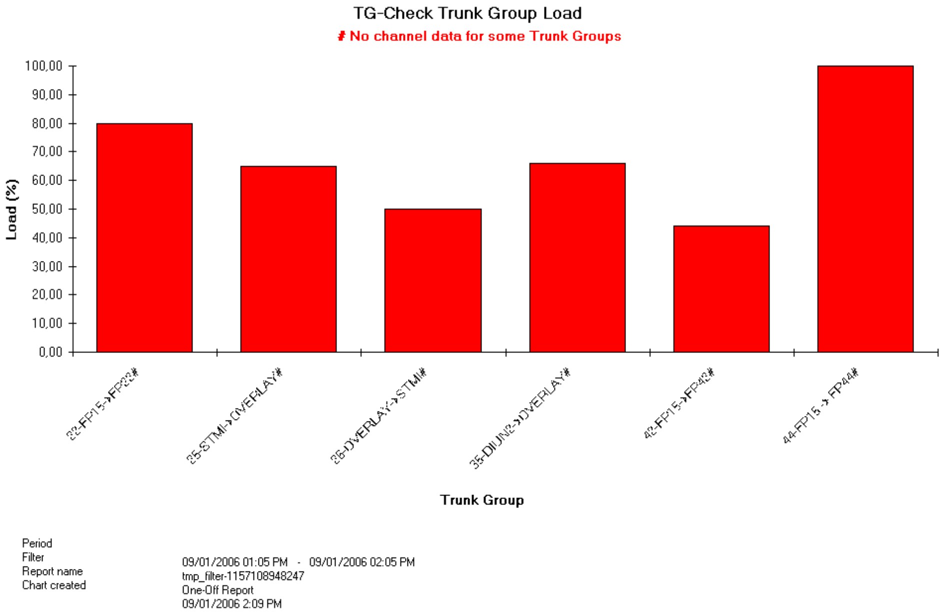


Figure 270: CDR Trunk Group with B-Channel Availability Check - Load Report in Column Chart Format

TG-Check Trunk Group Load

Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM
Filter	tmp_filter-1157108975567
Report name	One-Off Report
Chart created	09/01/2006 2:09 PM

No channel data for some Trunk Groups

Trunk Group	Trunk Group Name	Switch	Load (%)	No Of B-Channels Assigned	No Of B-Channels Out Of Service
22	FP15->FP22	FP15	15,00	No Data	No Data
25	STMI->OVERLAY	FP15	25,45	No Data	No Data
26	OVERLAY->STMI	FP15	66,00	No Data	No Data
35	DIUN2->OVERLAY	FP15	33,24	No Data	No Data
42	FP15->FP42	FP15	0,00	No Data	No Data
44	FP15 -> FP44	FP15	5,00	No Data	No Data

Note: Dates are shown as 'Year/Month/Day'.

Figure 271: CDR Trunk Group with B-Channel Availability Check - Load Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

CDR Trunk Group with B-Channel Availability Check - Busy Hour Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.5 CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

The Trunk Group Load/Time (%) report (with B-Channel availability check) shows the percentage load (of the whole group) against time for the selected trunk groups in the given report period. This report is available in a column chart or table.

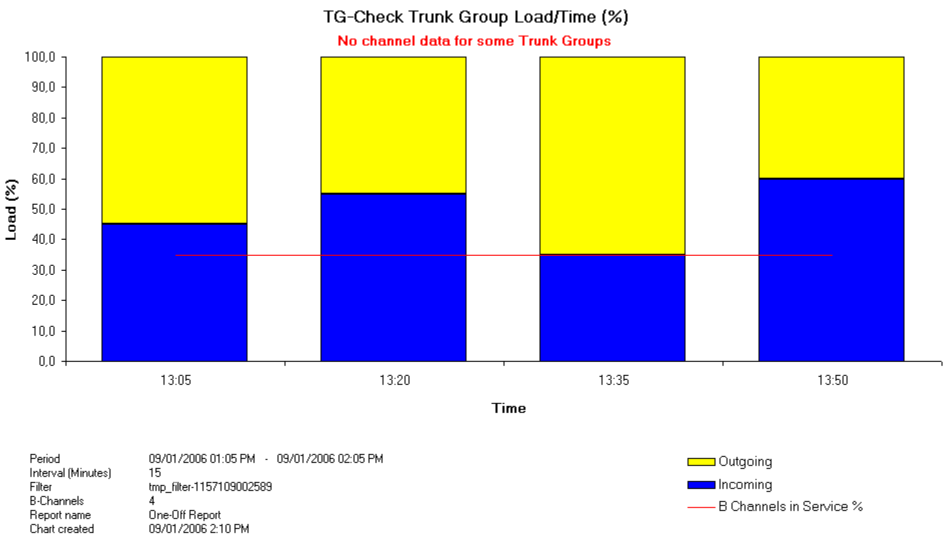


Figure 272: CDR Trunk Group with B-Channel Availability Check - Load/ Time (%) Report in Column Chart Format

TG-Check Trunk Group Load/Time (%)

Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM				
Interval (Minutes)	15				
Filter	tmp_filter-1157109026626				
Report name	One-Off Report				
Chart created	09/01/2006 2:10 PM		No channel data for some Trunk Groups		
B-Channels	0				
		Load (%)		**B-Channels**	**No Of B-Channels**
Time	**Date**	**Incoming**	**Outgoing**	**In Service %**	**In Service**
13:05	09/01/2006	65,00	35,00	15,55	12
13:20	09/01/2006	55,00	45,00	15,55	12
13:35	09/01/2006	35,00	65,00	15,55	12
13:50	09/01/2006	5,00	95,00	15,55	12

Note: Dates are shown as 'Year/Month/Day'.

Figure 273: CDR Trunk Group with B-Channel Availability Check - Load/ Time (%) Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

CDR Trunk Group with B-Channel Availability Check - Busy Hour Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report

CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

5.16.6 CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (Erlangs) Report

The CDR Trunk Group Load OverTime (Erlangs) report (with B-Channel availability check) shows the variation of trunk group traffic load (in erlangs) against time, the load value for both outgoing and incoming traffic is shown for the selected trunk groups in the given report period. This report is available in a column chart or table.

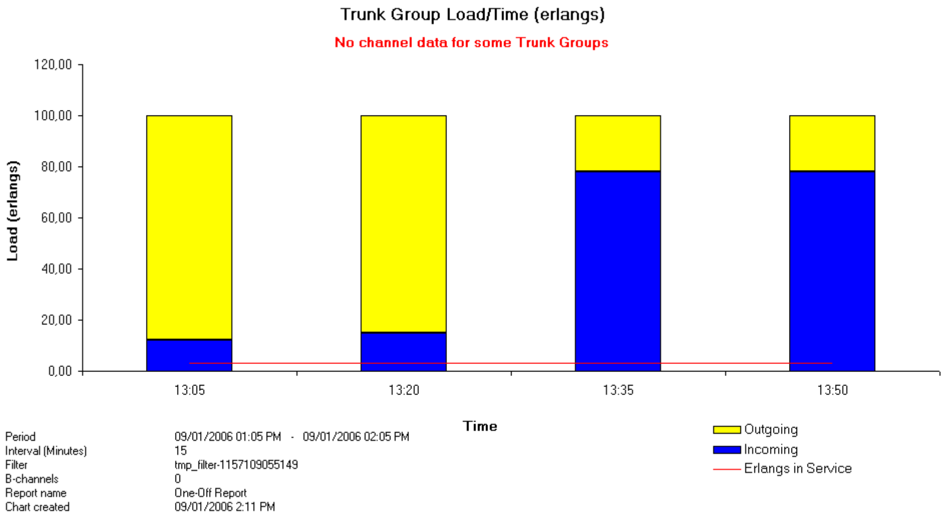


Figure 274: CDR Trunk Group with B-Channel Availability Check - Load Over Time (Erlangs) Report in Column Chart Format

TG-Check Trunk Group Load/Time (erlangs)				
Period	09/01/2006 01:05 PM - 09/01/2006 02:05 PM			
Interval (Minutes)	15			
Filter	tmp_filter-1157109084875			
Report name	One-Off Report			
Chart created	09/01/2006 2:11 PM		No channel data for some Trunk Groups	
B-Channels	4			
		Load (erlangs)		
Time	**Date**	**Incoming**	**Outgoing**	**Erlangs In Service**
13:05	09/01/2006	45,00	55,00	2,00
13:20	09/01/2006	35,00	65,00	2,00
13:35	09/01/2006	66,44	33,56	2,00
13:50	09/01/2006	0,00	100,00	2,00
Note: Dates are shown as 'Year/Month/Day'.				

Figure 275: CDR Trunk Group with B-Channel Availability Check - Load Over Time (Erlangs) Report in Table Format

Related Topics

CDR Trunk Group with B-Channel Availability Check - Trunk Group Availability Report

CDR Trunk Group with B-Channel Availability Check - Availability Over Time Report

CDR Trunk Group with B-Channel Availability Check - Busy Hour Report
CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Report
CDR Trunk Group with B-Channel Availability Check - Trunk Group Load Over Time (%) Report

6 Step-by-Step Instructions

This chapter contains the following PM administration tasks:

Related Topics

PM User Interface

PM Home Page

PM Features

6.1 Producing Reports

To produce reports, follow the instructions in the order shown below:

1) Creating a Telephony Filter

or

Creating an Organisational Filter

2) Creating a Report

3) (Optional) Creating a Report Group

4) Running a Report

5) (Optional) Running a Report Group

6) Listing a Report and Listing a Report Group

7) Selecting Systems to be Metered

8) Administering Performance Management

6.2 Defining Filters

This chapter covers the following topics:

- Creating a Telephony Filter
- Creating an Organisational Filter
- Copying a Filter
- Saving a Filter
- Deleting a Filter
- Editing a Telephony Filter
- Editing an Organisational Filter
- Listing Filters

6.2.1 Creating a Telephony Filter

Clicking the **New** button to start the definition of a new filter, the **Filter Type** radio button is set to **Telephony** by default to define a new telephony filter.

NOTICE: If you create a new Filter and change the type (**Telephony** or **Organisational**), any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then

---

Creating a telephony filter involves selecting the following to be included in the filter:

- A name for the Filter
- The switch or switches to be included in the Report

- For each switch the items defined in the Telephony Items Tab (that is, Extensions, Trunks, Trunk Groups, and so on), which are to be included in the Report.
- Call types and call directions

To create a filter:

1) On the Performance Management Home Page, doubleclick **Filter Definition**. The Filter Definition Page appears.
2) Click **New**.
3) Enter a Filter Name.
4) Select as Filter Type **Telephony**.
5) Identify the switches, the data of which you want to be included in the report. (Refer to Identifying the Switches).
6) For each selected switch, identify the needed items. (Refer to Identifying Items Within Each of the Available Telephony Types).
7) On the Call Types Tab, specify the call types and the call directions to be included in reports that use the filter.
8) Click **Save**.

NOTICE: The Filter Summary tab is read-only. It displays a list of switches, item types, and items selected, respectively the organisational definitions for the filter.

Related Topics

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Editing an Organisational Filter

Listing Filters

6.2.1.1 Identifying the Switches

To identify one or more switches whose data you want to be in the report:

1) Select the **Switches** tab.
2) To add switches to the Selected Switches list, make one or more selections in the Available Switches list and click **>**; to add all, simply click **>>**.
3) To remove switches from the Selected Switches list, make your selections and click <. At least one switch must be in the Selected Switches list.
4) To remove all, click **<<**.

Related Topic

Creating a Telephony Filter, page 528

Identifying Items Within Each of the Available Telephony Types, page 531

6.2.1.2 Identifying Items Within Each of the Available Telephony Types

To identify items within each of the available telephony types for each selected switch:

1) Select the Telephony Items Tab.
2) In the Switch list (it contains the switches you selected in the Switches tab), make a selection. Available telephony items of the switch appear under available **Telephony Item Types**.
3) Select an available telephony item types tab.
4) Depending on activation or deactivation of the transformation of a Virtual Node Access Code (VNAC), the available extensions are listed in the **Available Extensions** list either in long format (i. e. with a shared common extension prefix) or in short format.
5) To add items to the **Selected Extensions** list, make one or more selections in the **Available Extensions** list and click **>**; to add all items, simply click **>>**.
6) To remove items from the **Selected Extensions** list, make your selections and click **<**; to remove all items, simply click **<<**.
7) To add a number that is not in the Available Items list to the Selected Items list, enter the number in the **Enter number or range** box and click **Add**. To add a range of items to the Selected Items list, enter the range (digits separated by a hyphen) in the **Enter number or range** box and click **Add**.
8) Click **Save**.
9) Repeat steps 3-7 until you finish identifying telephony items for each of the available telephony item types.
10) Repeat steps 2-8 until you finish identifying telephony items for each of the switches you selected.

Related Topic

Creating a Telephony Filter, page 528

Identifying the Switches, page 529

6.2.2 Creating an Organisational Filter

Clicking the **New** button to start the definition of a new filter, the **Filter Type** radio button is set to **Telephony** by default to define a new telephony filter. To define an organisational filter, the **Organisational** button has to be activated.

> **NOTICE:** Note that if you create a new Filter and change the type (**Telephony** or **Organisational**), any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

Creating an organisational filter involves selecting the following to be included in the filter:

- A name for the Filter
- The organisational levels to be included in the Report.

- For each organisation the items defined in the Organisational Items Tab are to be included in the Report.
- Call types and call directions

To create a filter:

1) On the Performance Management Home Page, doubleclick **Filter Definition**. The Filter Definition Page appears.
2) Click **New**.
3) Enter a Filter Name.
4) Select as Filter Type **Organisational**.
5) Click the **Add Item** button to generate a new organisational item.
6) In the **Item Definition** list use the dropdown lists to set the organisational hierarchy levels of the company, the data of which you want to be included in the report.
7) On the Call Types Tab, specify the call types and the call directions to be included in reports that use the filter.
8) Click **Save**.

NOTICE: The Filter Summary tab is read-only. It displays a list of switches, item types, and items selected, respectively the organisational definitions for the filter.

Related Topics

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Editing an Organisational Filter

Listing Filters

6.2.3 Copying a Filter

To copy a filter:

1) On the Performance Management Home Page, choose **Filter**. The Filter page appears.
2) Click **>** or **<** to look for the filter you want to copy or use the filter list view to select a filter to copy.
3) After you find the filter, click **Copy**. The copy is displayed.
4) Select the Filter Type (**Telephony** or **Organisational**).

NOTICE: Note that if you create a new Filter and change the type (**Telephony** or **Organisational**), any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

5) Give the copy a name by entering a Filter Name. Click **Save**.
6) To make changes to the copied filter, refer to Editing a Telephony Filter, page 535.

NOTICE: The Filter Summary tab is read-only. It displays a list of switches, item types, and items selected, respectively the organisational definitions for the filter.

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Editing an Organisational Filter

Listing Filters

6.2.4 Saving a Filter

The Save function is performed at the end of defining a filter, when all switches, items on those switches, and call types have been specified.

To save a filter:

1) On the Performance Management Home Page, choose **Filter**. The Filter page appears.
2) Give the filter a name by entering a Filter Name.
3) Click **Save**.

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Copying a Filter

Deleting a Filter

Editing a Telephony Filter

Editing an Organisational Filter

Listing Filters

6.2.5 Deleting a Filter

Before deleting a filter, make sure that it is not referenced in any reports.

To delete a filter:

1) On the Performance Management Home Page, choose **Filter**. The Filter page appears.
2) Click **>** or **<** to look for the filter you want to delete or use the filter list view to select a filter to delete.
3) Once you find the filter, click **Delete**.

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Copying a Filter

Saving a Filter

Editing a Telephony Filter

Editing an Organisational Filter

Listing Filters

6.2.6 Editing a Telephony Filter

NOTICE: Note that if you create a new Filter and change the type (**Telephony** or **Organisational**), any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

Editing a filter involves making the following modifications in the filter:

- Switches or organisations whose data you want to be in the report
- Items within each of the available **Telephony Item Types** of each selected switch.
- Call types and call directions

1) On the Performance Management Home Page, choose **Filter**. The Filter page appears.
2) Click **>** or **<** to look for the filter you want to edit, or list the filters and select one from the list.
3) After you find the filter, identify the switches whose data you want to be in the report. See Identifying the Switches.
4) For each selected switch, identify the wanted items. See Identifying Items Within Each of the Available Telephony Types.
5) On the Call Types Tab, specify the call types and the call directions to be included in reports that use the filter.
6) Click **Save**.

NOTICE: The Filter Summary tab is read-only. It displays a list of switches, item types, and items selected, respectively the organisational definitions for the filter

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Listing Filters

6.2.7 Editing an Organisational Filter

NOTICE: Note that if you create a new Filter and change the type (**Telephony** or **Organisational**), any modification already made, will be lost. You will be warned about this by a message window. Set the appropriate filter type then.

Editing a filter involves making the following modifications in the filter:

- Switches or organisations whose data you want to be in the report
- For each organisation the items defined in the Organisational Items Tab are to be included in the Report.
- Call types and call directions

1) On the Performance Management Home Page, choose **Filter**. The Filter page appears.
2) Click **>** or **<** to look for the filter you want to edit, or list the filters and select one from the list.
3) In the **Items** list select the organisational item to be edited. (To remove the selected item, click the **Remove** button.)
4) In the **Items Definition** list edit the organisational levels using the dropdown lists for each desired level.
5) On the Call Types Tab, specify the call types and the call directions to be included in reports that use the filter.
6) Click **Save**.

NOTICE: The Filter Summary tab is read-only. It displays a list of switches, item types, and items selected, respectively the organisational definitions for the filter.

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Listing Filters

6.2.8 Listing Filters

You can view a list of filters in two ways:

- Object
- Object List

To view a detailed list of filters:

1) On the Performance Management Home Page, choose **Filter Definition**. The Filter Definition page appears.
2) Select the **Object** option button.

3) Click **>** or **<** to look for the filter you want to edit, or list the filters and select one from the list.

4) Select a tab in order to view the corresponding information.

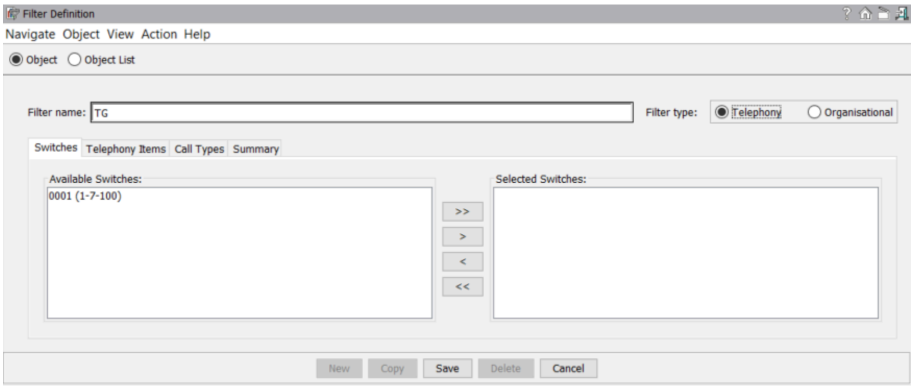


Figure 276: Filter Definition Page - Object View Option

To view a list of filters:

1) On the Performance Management Home Page, choose **Filter Definition**. The Filter Definition page appears.

2) Select the **Object List** option button. A list of defined filters appears.

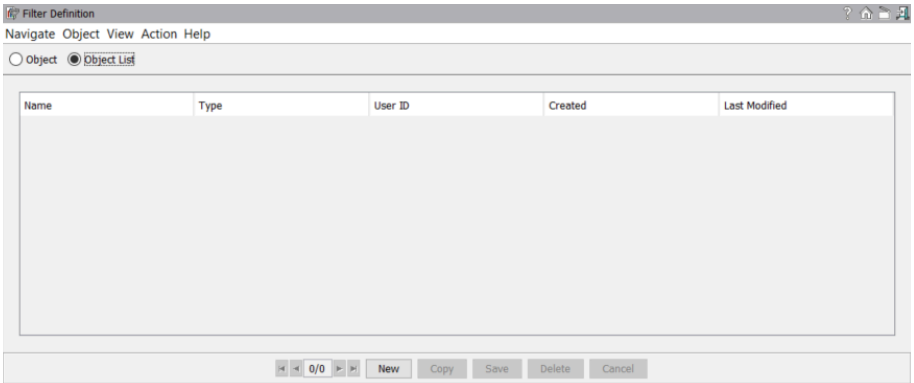


Figure 277: Filter Definition Page - Object List View Option

Related Topics

Creating a Telephony Filter

Creating an Organisational Filter

Copying a Filter

Saving a Filter

Deleting a Filter

Editing a Telephony Filter

Editing an Organisational Filter

6.3 Selecting Systems to be Metered

To select items to be metered:

1) On the Performance Management Home Page, double-click **Metering Settings**. This opens a new window with the System Management, OpenScape 4000 Administration page.

NOTICE: Ensure that the Active Application checkboxes are set to the greyed-out state (that is, neither on nor off). If this is not done the Search function may not find all the switches.

2) Click **Search** (bottom right hand corner of the web page). The OpenScape 4000 Administration, Object List view web page appears.
3) Select the system that you want metered from the list by double-click it.

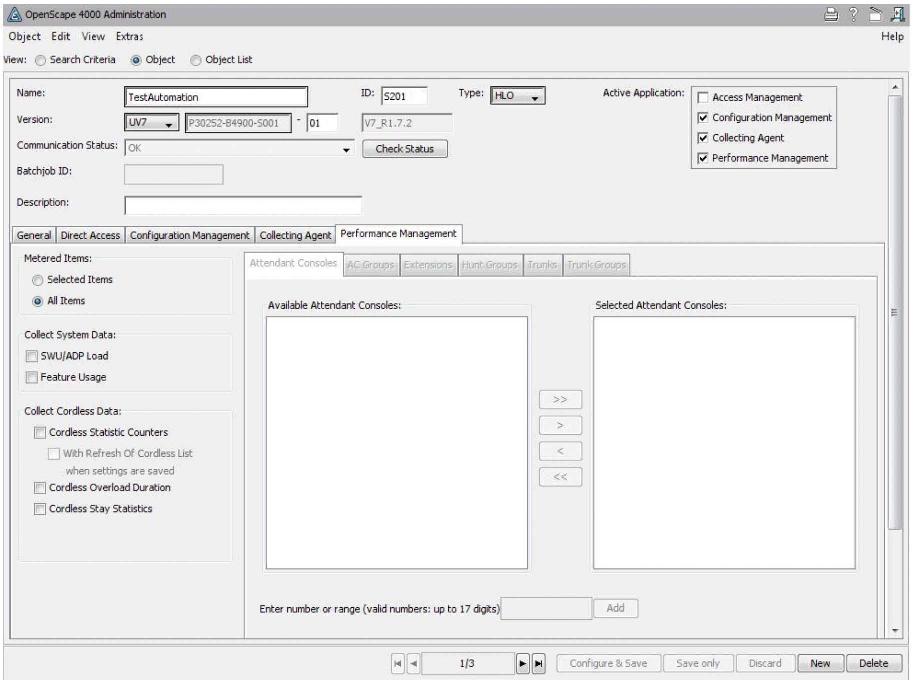


Figure 278: OpenScape 4000 Administration Page (Object View Option) - Performance Management Tab

4) Click the **Object** option button. The OpenScape 4000 Administration Object View web page appears showing the system data.

5) Make sure that the **Performance Management** option is ticked in the Active Application list, then select the **Performance Management** tab sheet.

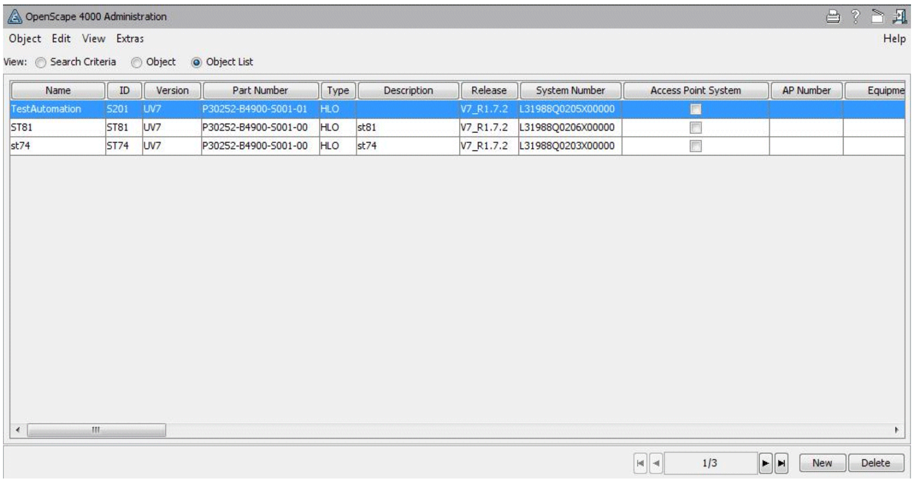


Figure 279: OpenScape 4000 Administration Page (Object List View Option)

Related Topic

Selecting Items to be Metered

6.4 Selecting Items to be Metered

NOTICE: You must select items to be metered on each switch that you want data from.

The PM tab sheet in System Management is where the user specifies the items to be metered for PM for each switch.

To select items to be metered, select the switch to be metered and then setup the items to be metered on this switch. Repeat this step for each switch where metering is required:

- Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data
- Metering Settings for Attendant Consoles
- Metering Settings for AC Groups
- Metering Settings for Extensions
- Metering Settings for Hunt Groups
- Metering Settings for Trunks
- Metering Settings for Trunk Groups
- Metering Settings for Collecting Cordless Overload Duration data

Related Topic

Selecting Systems to be Metered

6.4.1 Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering of SWU/ADP Load, Feature Usage, and Cordless data are configured using the checkboxes in the **Collect System Data** area and **Collect Cordless Data** area.

Select the data to be collected and click **Save**.

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.2 Metering Settings for Attendant Consoles

To configure the metering settings for attendant consoles:

1) On the Performance Management tab page, select the **Attendant Consoles** sub tab.

> **NOTICE:** You must know the attendant console numbers.

2) Enter a valid attendant console number range in the Enter Number Range field and click **Add** The selected attendant consoles appear in the Selected Attendant Consoles table.

3) Ensure that you have made all required metering settings before clicking **Save**.

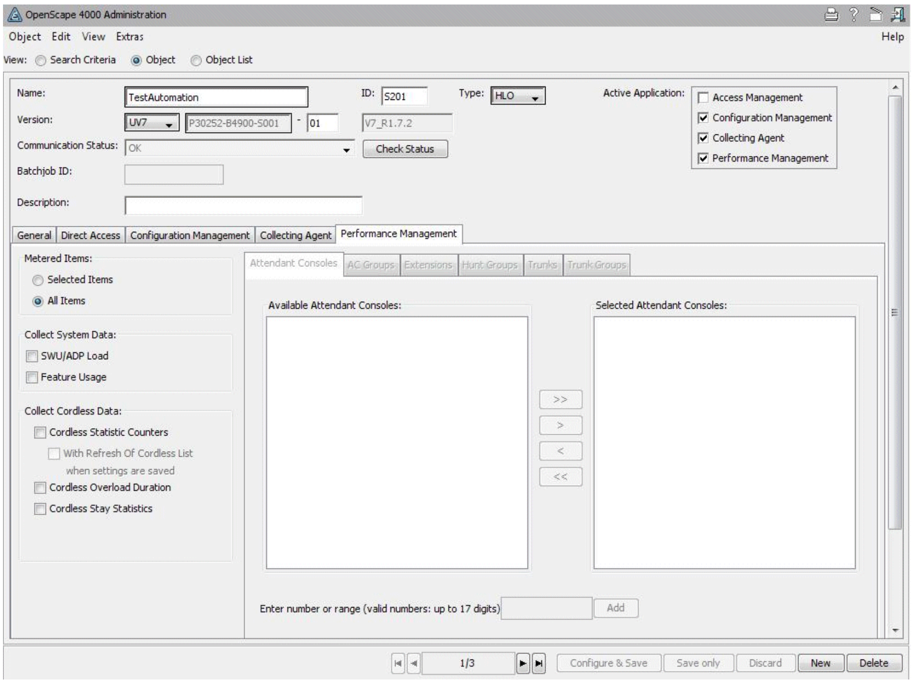


Figure 280: OpenScape 4000 Administration Page - Performance Management Tab - Attendant Consoles Sub Tab

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.3 Metering Settings for AC Groups

To configure the metering settings for AC groups:

1) On the Performance Management tab page, select the **AC Groups** sub tab.

2) Enter the ac groups manually.

3) Ensure that you have made all required metering settings before clicking **Save**.

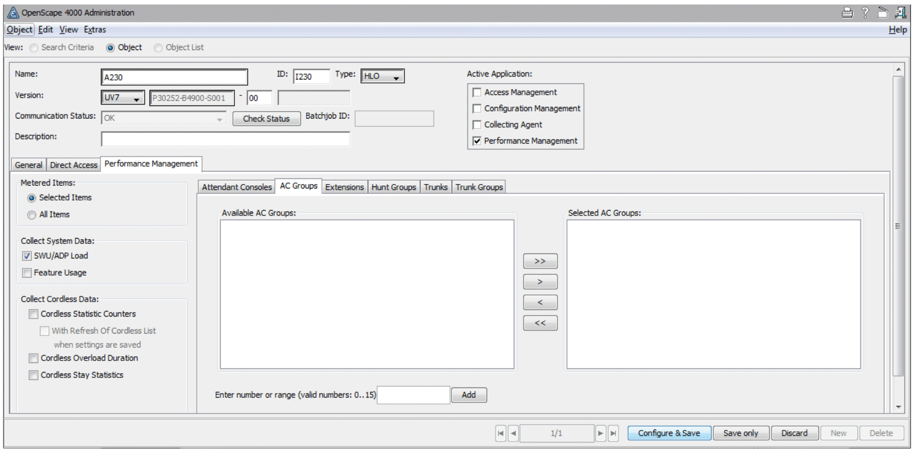


Figure 281: OpenScape 4000 Administration Page - Performance Management Tab - AC Groups Sub Tab

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.4 Metering Settings for Extensions

To get statistics for one attendant console, only select the attendant console extension.

To get statistics for the entire AC group, select the AC group. Do not select the AC number. Statistics for an AC group includes other information such as calls in queue which are not available in AC extension statistics

To configure the metering settings on extensions for Performance Management:

1) On the Performance Management tab page, select the **Extensions** sub tab.
2) Enter the range of extension numbers in the Enter number or range box or select extensions from the Available box.
3) Select the extensions the you want metered by highlighting the extensions and using the > key to move them to the Selected Extensions table or if all extensions are required, use the >> key to move them to the Selected box.

4) Ensure that you have made all required metering settings before clicking **Save**.

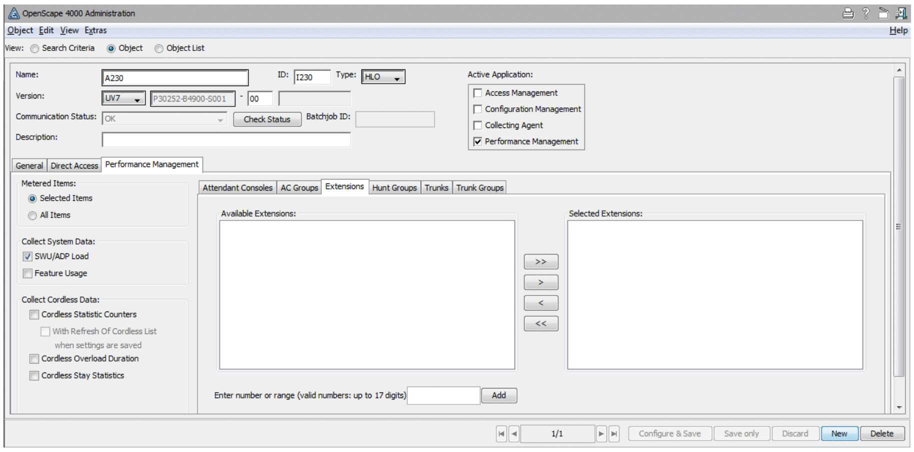


Figure 282: OpenScape 4000 Administration Page - Performance Management Tab - Extensions Sub Tab

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.5 Metering Settings for Hunt Groups

To configure the metering settings on hunt groups for Performance Management:

1) On the Performance Management tab page, select the **Hunt Groups** sub tab.

2) Enter the range of hunt group numbers in the Enter number or range or select extensions from the Available box.

3) Select the extensions the you want metered by highlighting the extensions and use > key to move them to the Selected Extensions table or if all extensions are required, use the >> key to move them to the Selected box.

4) Ensure that you have made all required metering settings before clicking **Save**.

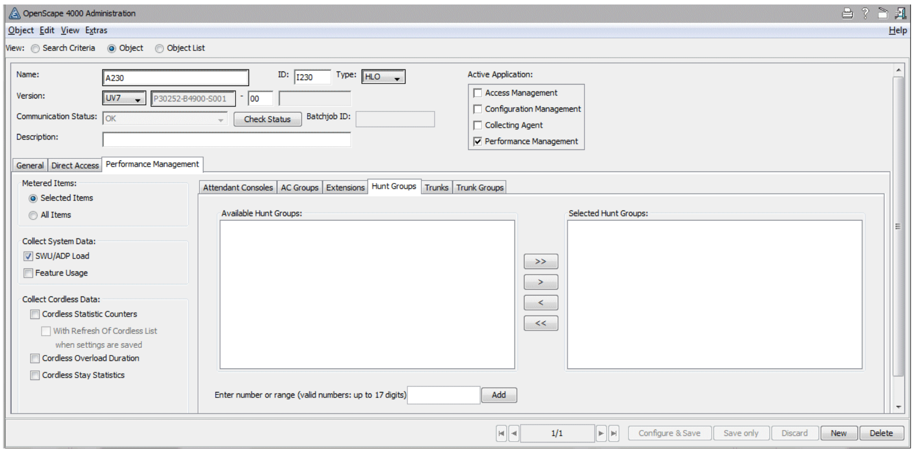


Figure 283: OpenScape 4000 Administration Page - Performance Management Tab - Hunt Groups Sub Tab

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Trunks

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.6 Metering Settings for Trunks

To configure the metering settings on trunks for Performance Management:

1) On the Performance Management tab page, select the **Trunks** sub tab.

2) Select the trunks the you want metered by highlighting the trunks and using the > arrow to move them to the Selected Trunks table. You can also use the three boxes at the bottom of the screen as an alternative. If all trunks are required use the >>key to move them to the Selected box. If trunks are selected from the Available box, you do not have to use the three boxes at the bottom of the screen and the Add button.

3) Fill in the rest of the fields.

4) Ensure that you have made all required metering settings before clicking **Save**.

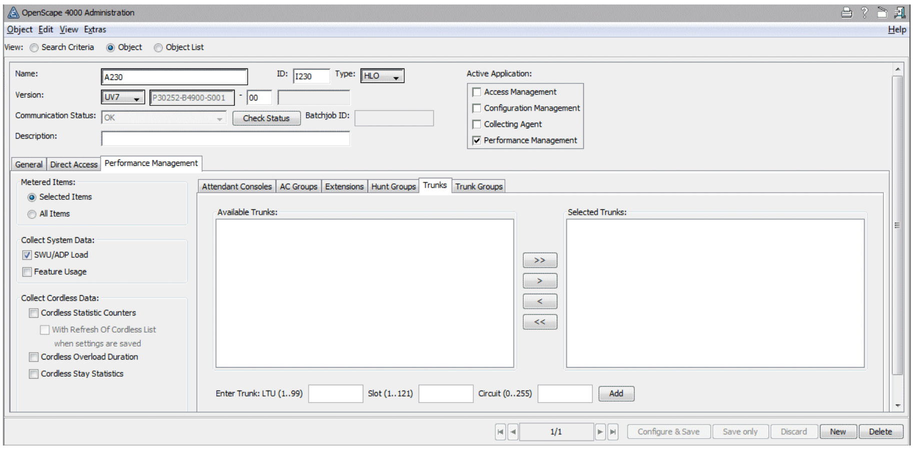


Figure 284: OpenScape 4000 Administration Page - Performance Management Tab - Trunks Sub Tab

Related Topics

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunk Groups

Metering Settings for Collecting Cordless Overload Duration data

6.4.7 Metering Settings for Trunk Groups

To configure the metering settings on trunk groups for Performance Management:

1) On the Performance Management tab page, select the **Trunk Groups** sub tab.

2) Enter the range of trunk group numbers in the Enter number or range box or select trunk groups from the Available box.

3) Select the trunk groups that you want metered by highlighting the trunk groups and use > key to move them to the Selected Trunk Groups table or if all trunk groups are required, use the >> key to move them to the Selected box.

4) Ensure that you have made all required metering settings before clicking **Save**.

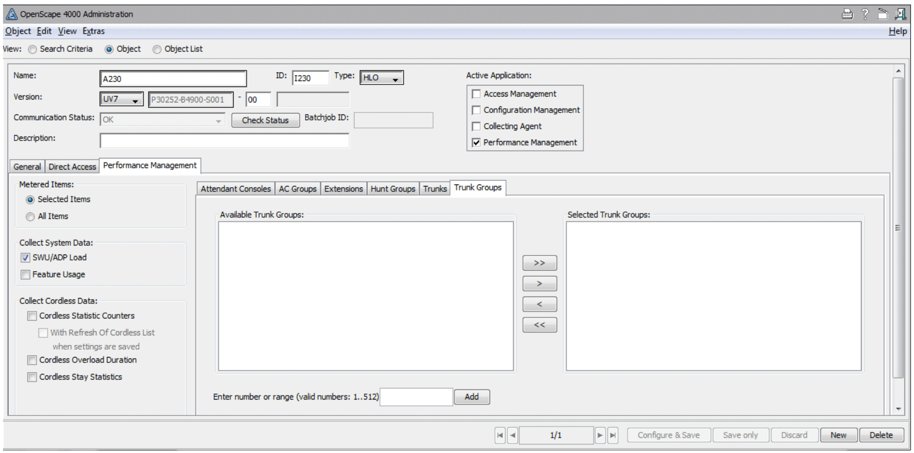


Figure 285: OpenScape 4000 Administration Page - Performance Management Tab - Trunk Groups Sub Tab

Related Topics

Selecting Systems to be Metered

Selecting Items to be Metered

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Collecting Cordless Overload Duration data

6.4.8 Metering Settings for Collecting Cordless Overload Duration data

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NOTICE: For pre-requisites to set up the metering functionality for PM in the **Performance Management** tab sheet in **System Management - OpenScape 4000 Administration**, please refer to section "Configuration for Cordless Overload Duration Metering" .

After the configuration steps on the RMX side of the switch, you must activate the PM metering functionality for collecting cordless duration data in the Performance Management Tab of the Input lines in System Management. Only after that the Manager can start collecting cordless duration data for the CMI Devices of the regarding switch.

1) Select the desired switch.

2) In the **Collect Cordless Duration Data** section, check the **Cordless Overload Duration** checkbox

3) Then press **Save**.

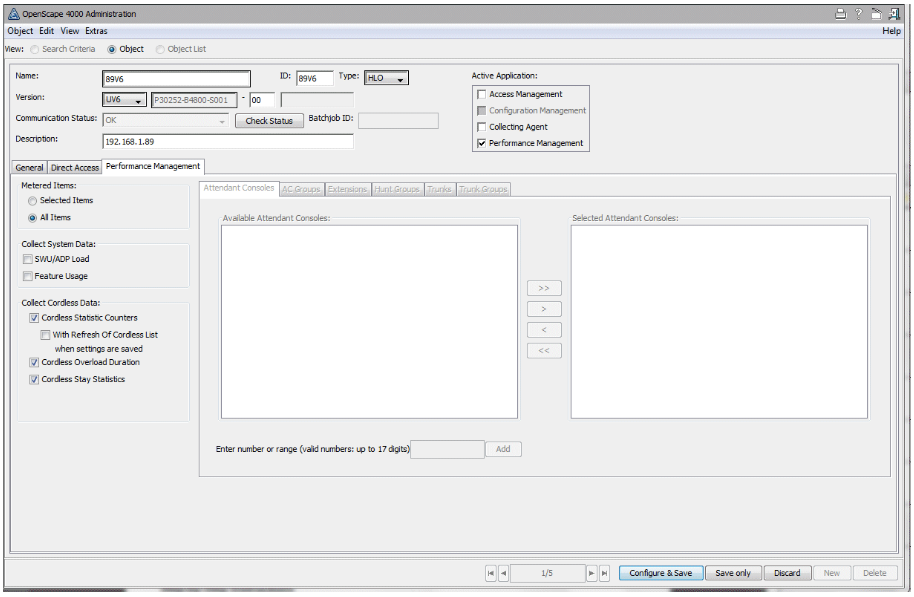


Figure 286: OpenScape 4000 Administration Page - Performance Management Tab - Metering settings for Collecting Cordless Overload Duration data

Related Topics

Metering Settings for SWU/ADP Load and Feature Usage, and Cordless-Data

Metering Settings for Attendant Consoles

Metering Settings for AC Groups

Metering Settings for Extensions

Metering Settings for Hunt Groups

Metering Settings for Trunks

Metering Settings for Trunk Groups

6.5 Creating a Report

To create a report or group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status page appears.
2) To create a new report, click **New Report**.

   This action takes you to the Report Definition page.

   Follow the instructions below.

3) To create a new report group, click **New Report Group**.

   This action takes you to the Report Group page.

   Follow the instructions in Creating a Report Group.

   You can also run a report or group by going directly to the Report Definition or Report Group web pages.

> **NOTICE:** When creating trunk group reports using the Report dialog, select a trunk group filter in the Filter combo box. Trunk group reports require a trunk group filter because the calculations are based on trunk group entries in the filter.

   To create a report using the Report web page:

4) On the Performance Management Home Page, choose **Report**. The Report page appears.
5) Click **New**.
6) Enter a Report Name.
7) Select a Template and a Filter to be applied to the report.
8) If you use a histogram or a table as your template, specify a Scale Interval (1-1440 minutes).
9) Click **Save**.

Related Topics

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

Deleting a Report

6.6 Creating a Report Group

To create a report or group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status page appears.

2) To create a new report, click **New Report**.

This action takes you to the Report Definition page.

Follow the instructions in Creating a Report Group.

3) To create a new report group, click **New Report Group**.

This action takes you to the Report Group page.

Follow the instructions in Creating a Report Group.

You can also run a report or group by going directly to the Report Definition or Report Group web pages.

To create a report group using the Report Group web page:

4) On the Performance Management Home Page, choose Report Group. The Report Group page appears.

5) Click **New**.

6) Enter a Group Name.

7) To add reports to the group, make one or more selections in the Available Reports list and click **>**; to add all the reports to the group, simply click **>>** The selected reports appear in the Selected Reports list.

8) Ensure that you have made all required report group configuration before clicking **Save**.

Related Topics

Creating a Report

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

Deleting a Report

6.7 Saving a Report

The Save function is performed at the end of defining a report. For an existing report, the Save button becomes enabled if the user makes changes to the report definition.

To save a report:

1) On the Performance Management Home Page, choose **Report.** The Report page appears.
2) Enter the Report Name in the Report Name field.
3) Selecting a Template or a Filter to be applied to the report.
4) If you select a histogram or a table as your template, specify a Scale Interval (1-1440 minutes).
5) Make changes to the selected report, then click **Save**.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.8 Saving a Report Group

The Save function is performed at the end of defining a report. For an existing report, the Save button becomes enabled if the user makes changes to the report definition.

To save a report group:

1) On the Performance Management Home Page, choose **Report Group**. The Report Group page appears.
2) Click **>** or **<** to look for the report group you want to save.
3) Make changes to the selected report group, then click **Save**.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.9 Running a Report

To run a report using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status appears.
2) In the Available Reports and Report Groups list, select a report or report group you want to run and click **Run**. The Report page displays the report.

You can select and run either a Report from the Run Report page. You can also run a report from the Report Definition page.In all cases you are directed to the Run Report page to enter the period over which the report is to be run.

To run a report using the Run Report page:

1) On the Performance Management Home Page, choose **Run Report.** The Run Report page appears.
2) Select a report from the Report or Report Group list.
3) Under Reporting Period, set a period of time over which the data for the selected report will be gathered. Open the calendar to select a date and time.
4) Click **Run**.

   When the report appears on the screen, you can send it to print.

   If you have selected the 'Flexible' output format the Run Report dialog is displayed, continue with Creating a 'Flexible' Report.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.10 Running a Report Group

To run a report group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Report Group**. The Report Group page appears.
2) In the Available Reports and Report Groups list, select a report or report group you want to run and click **Run**. The Report page displays the report.

You can also do the following:

1) On the Reporting Status page, in the list of Available Reports and Report Groups, select the report group you want to run.
2) Click **Run**. The Report page displays the report.

You can also run a report or group using the Run Report or Report Group web pages.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.11 Editing a Report

To edit a report or report group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status appears.

2) If you want to edit a report, in the Available Reports and Report Groups list, select a report you want to edit and click **Edit**. The Report page displays the report.

   a) Select a different Template or Filter, if applicable.

   Select a histogram or a table as your template, then specify a Scale Interval (1-1440 minutes).

   After you finish editing, click **Save**.

   If you do not want to save the report, click **Cancel**.

3) If you want to edit a report group, in the Available Reports and Report Groups list, select a report group you want to edit and click **Edit**. The Report page displays the report group.

   a) You can make changes to the copy by adding reports to or removing them from the group.

   To add reports to the group, make one or more selections in the Available Reports list and click **>**; to add all the reports to the group, simply click **>>**. The reports appear in the Selected Reports list.

   To remove reports from the group, make one or more selections in the Selected Reports list and click **<**; to remove all the reports from the group, simply click **<<**. The reports appear in the Available Reports list.

   After you finish editing, click **Save**.

   If you do not want to save the report, click **Cancel**.

   You can also edit a report or group using the Report Definition or Report Group web pages.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Deleting a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.12 Editing a Report Group

To edit a report or report group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status appears.
2) If you want to edit a report, in the Available Reports and Report Groups list, select a report you want to edit and click **Edit**. The Report page displays the report.

   a) Select a different Template or Filter, if applicable.

   Select a histogram or a table as your template, then specify a Scale Interval (1-1440 minutes).

   After you finish editing, click **Save**.

   If you do not want to save the report, click **Cancel**.
3) If you want to edit a report group, in the Available Reports and Report Groups list, select a report group you want to edit and click **Edit**. The Report page displays the report group.

   a) You can make changes to the copy by adding reports to or removing them from the group.

   To add reports to the group, make one or more selections in the Available Reports list and click **>**; to add all the reports to the group, simply click **>>**. The reports appear in the Selected Reports list.

   To remove reports from the group, make one or more selections in the Selected Reports list and click **<**; to remove all the reports from the group, simply click **<<**. The reports appear in the Available Reports list.

   After you finish editing, click **Save**.

   If you do not want to save the report, click **Cancel**.

   You can also edit a report or group using the Report Definition or Report Group web pages.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.13 Listing a Report

You can view a list reports in two ways:

- Object
- Object list

To view a detailed list of a report:

1) On the Performance Management Home Page, choose **Report**. The Report page appears.

2) Click the **Object** option button.

3) Click **>** or **<** to find the required report. The report appears in a table.

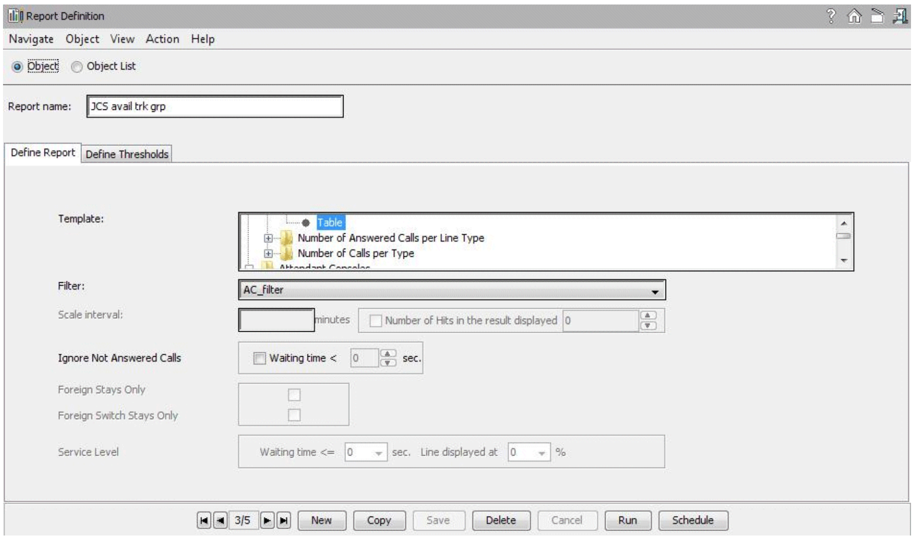


Figure 287: Report Definition Page (Object View Option)

You can also list existing reports by displaying the Reporting Status.

To view a list of reports:

1) On the Performance Management Home Page, choose Report Definition. The Report page appears.

2) Click the **Object List** option button. A list of existing reports appear in a table.

NOTICE: You cannot edit the report groups in the table.

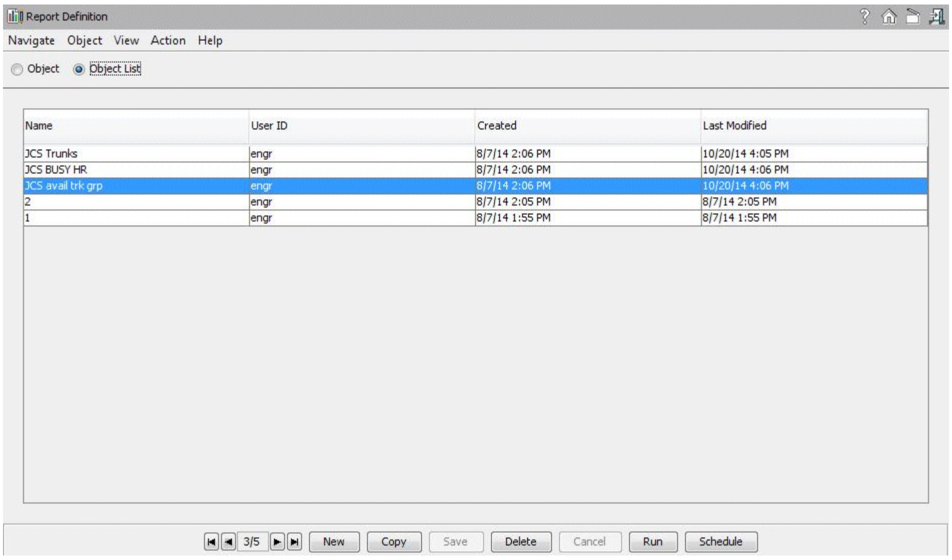


Figure 288: Report Definition Page (Object List View Option)

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

6.14 Listing a Report Group

You can view report groups in the following ways:

- Object

- Object list

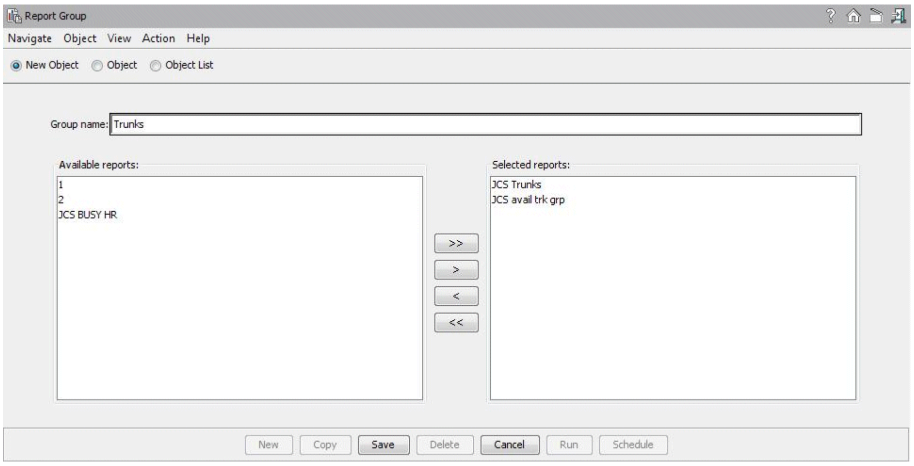


Figure 289: Report Group Page (Object View Option)

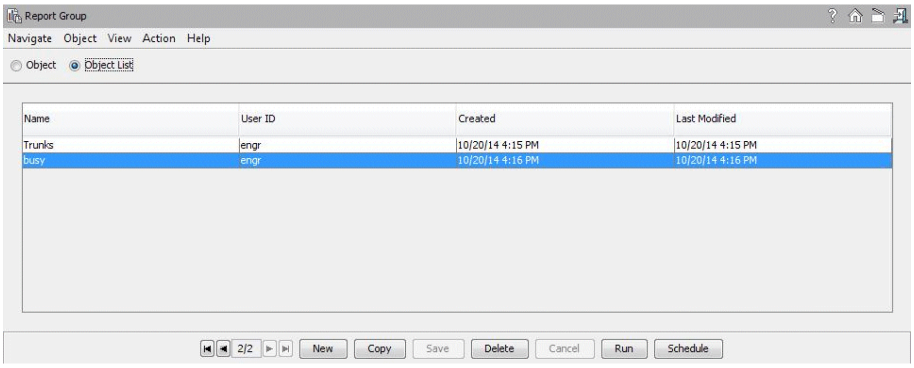


Figure 290: Report Group Page (Object List View Option)

To view a list of report groups:

1) On the Performance Management Home Page, choose **Report Group**. The Report Group page appears.

2) Click the Object List option button.

The report appears in a table. The table lists the following details for each Report Group defined in the system:

- Name
- User ID
- Created
- Last Modified

NOTICE: You cannot edit the report groups in the table.

You can change the order in which the Report Groups are displayed by clicking the appropriate column heading. The Report Groups are listed in ascending alphabetical order of the selected column's contents. A second click causes the Reports Groups to be listed in descending alphabetical order of the selected column's contents.

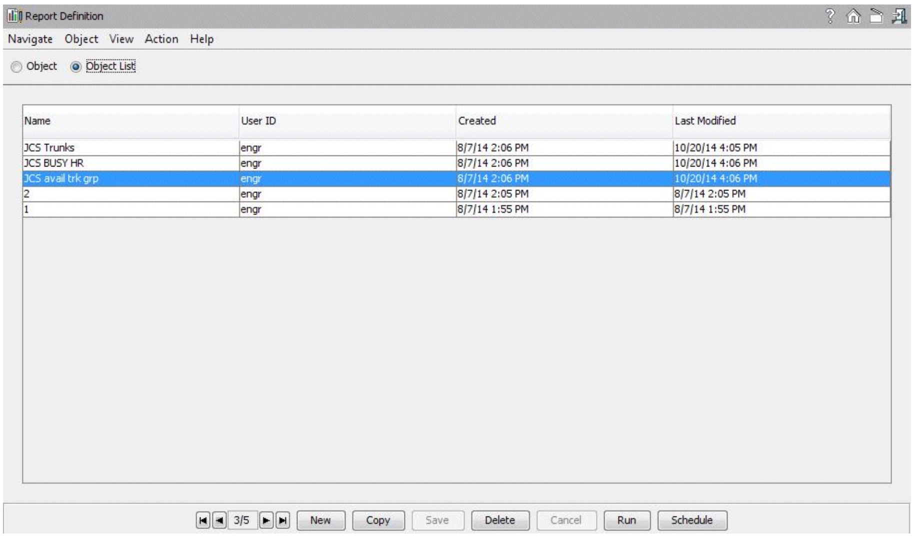


Figure 291: Report Definition Page (Object List View) - Report Group Table

Related Topics

Creating a Report Group

Saving a Report Group

Running a Report Group

Editing a Report Group

Deleting a Report Group

Copying a Report Group

Canceling a Report Group

6.15 Deleting a Report

To delete a report or report group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status appears.
2) In the Available Reports and Report Groups list, select a report you want to delete and click **Delete**.

   If you selected **a Report which is included in a Report Group**, then the system informs you if the report is referenced by a report group. You are prompted to either proceed (in which case, references to the report are automatically removed from the report groups) or cancel the delete request

   If you do not want to delete the report, click **Cancel**.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

Scheduling a Report

Scheduling a Report Group

6.16 Deleting a Report Group

To delete a report or report group using the Reporting Status page:

1) On the Performance Management Home Page, choose **Reporting Status**. The Report Status appears.

2) In the Available Reports and Report Groups list, select a report or report group you want to delete and click **Delete**.

IF you selected **Report**, the system informs you if the report is referenced by a report group. You are prompted to either proceed (in which case, references to the report are automatically removed from the report groups) or cancel the delete request.

If you do not want to delete the report, click **Cancel**

To delete a report using the Report Definition page:

3) On the Performance Management Home Page, choose **Report Definition**. The Report page appears.

4) Click **>** or **<** to look for the report you want to delete.

5) After you find the report, click **Delete**.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

Scheduling a Report

Scheduling a Report Group

6.17 Copying a Report

To copy a report:

1) On the Performance Management Home Page, choose **Report**. The Report page appears.
2) Click **>** or **<** to look for the report you want to copy.
3) After you find the report, click **Copy.** The copy is displayed.
4) Give the copy a name by entering a Report Name.
5) Click **Save**.

   You can modify the copy by selecting a different Template or a Filter to be applied to the copy.
6) If you select a histogram or a table as your template, specify a Scale Interval (1-1440 minutes).
7) Click **Save**.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report Group

Canceling a Report

Canceling a Report Group

Scheduling a Report

Scheduling a Report Group

6.18 Copying a Report Group

To copy a report group:

1) On the Performance Management Home Page, choose **Report Group**. The Group page appears.

2) Click **>** or **<** to look for the report group you want to copy.

3) After you find the report group, click **Copy**. The copy is displayed.

4) Give the copy of the report a name by entering a Group Name. Click **Save**.

5) You can make changes to the copy by adding reports to or removing them from the group.

- To add reports to the group, make one or more selections in the Available Reports list and click **>**; to add all the reports to the group, simply click **>>**. The reports appear in the Selected Reports list.
- To remove reports from the group, make one or more selections in the Selected Reports list and click **<**; to remove all the reports from the group, simply click **<<**. The reports appear in the Available Reports list.

6) Click **Save**.

If you do not want to save the report, click Cancel.

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Copying a Report

Canceling a Report

Canceling a Report Group

Deleting a Report

Deleting a Report Group

Scheduling a Report

Scheduling a Report Group

6.19 Canceling a Report

Canceling is only available if you have made changes to a report and wish to discard the changes.

To cancel a report:

1) On the Performance Management Home Page, choose **Report**. The Report Group page appears.
2) Select a report group that you want to cancel.
3) Click **Cancel.**

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report Group

Scheduling a Report

Scheduling a Report Group

6.20 Canceling a Report Group

Canceling is only available if you have made changes to a report group and wish to discard the changes.

To cancel a report group:

1) On the Performance Management Home Page, choose **Report Group**. The Report Group page appears.
2) Select a report group that you want to cancel.
3) Click **Cancel.**

Related Topics

Creating a Report

Creating a Report Group

Saving a Report
Saving a Report Group
Running a Report
Running a Report Group
Editing a Report
Editing a Report Group
Listing a Report
Listing a Report Group
Deleting a Report
Deleting a Report Group
Copying a Report
Copying a Report Group
Canceling a Report
Scheduling a Report
Scheduling a Report Group

6.21 Scheduling a Report

To schedule a report:

1) On the Performance Management Home Page, choose **Report**. The Report page appears.
2) Select a report that you want to schedule.
3) Click **Schedule.**

Related Topics

Creating a Report
Creating a Report Group
Saving a Report
Saving a Report Group
Running a Report
Running a Report Group
Editing a Report
Editing a Report Group
Listing a Report
Listing a Report Group
Deleting a Report
Deleting a Report Group
Copying a Report
Copying a Report Group

Canceling a Report

Canceling a Report Group

Scheduling a Report Group

6.22 Scheduling a Report Group

To schedule a report: group

1) On the Performance Management Home Page, choose **Report Group**. The Report Group page appears.
2) Select a report group that you want to schedule.
3) Click **Schedule.**

Related Topics

Creating a Report

Creating a Report Group

Saving a Report

Saving a Report Group

Running a Report

Running a Report Group

Editing a Report

Editing a Report Group

Listing a Report

Listing a Report Group

Deleting a Report

Deleting a Report Group

Copying a Report

Copying a Report Group

Canceling a Report

Canceling a Report Group

Scheduling a Report

6.23 Administering Performance Management

This chapter covers the following topics:

- Setting the Data Deletion or Archive Feature
- Restoring Data
- Assigning Codes to Switches
- Displaying PM Statistics
- Storing Archived Data
- Controlling Collection of Organisational Data Reports
- Listing the Database Summary

6.23.1 Setting the Data Deletion or Archive Feature

The data deletion feature allows the administrator to control the amount of historical data kept in the PM database:

- Changing the Current State
- Turning Off Automatic Data Deletion
- Turning On the Delete Feature Automatically
- Turning On Automatic Archiving
- Selecting Data Retention Period and Start for Automatic Deletion
- Deleting the Data Manually
- Deleting old Records from CDR Table and Deallocating Disk Space
- Archiving the Data Manually

6.23.1.1 Changing the Current State

To change the current state of the Archive and Delete feature:

1) On the PM home page, choose **Administration**. The Administration page appears.

2) In the **Archive/Delete** tab under **Change State** select from one of the following states:

- On/Off
- Auto-delete
- Auto-archive.

3) Click **Apply Changes**.

Related Topics

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.2 Turning Off Automatic Data Deletion

To turn off automatic data deletion:

1) On the PM home page, choose **Administration**. The Administration page appears.

2) In the **Archive/Delete** tab under Change State, click **Off**.

3) Click **Apply Changes**.

Automatic data deletion is now turned off; all data will be kept in the database indefinitely.

Related Topics

Changing the Current State

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.3 Turning On the Delete Feature Automatically

To turn on the data deletion automatically:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) In the **Archive/Delete** tab under **Change State** select **Auto-Delete**.
3) Under **Select Data Retention Period**, specify how long you want to keep the data (1 week, 2 weeks, 1-12 individual months) and set the time for the start of deletion.
4) Click **Apply Changes**.

   Automatic data deletion is now active; data older than the retention period will be automatically deleted from the database.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.4 Turning On Automatic Archiving

To turn on automatic archiving:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) In the **Archive/Delete** tab under **Change State**, select **Auto-archive**.
3) If auto-archiving should not be performed every day, deactivate the checkbox **Daily**.
4) Under **Select Data Retention Period**, specify the retention period and the time of day for data deletion.

   If the checkbox **Daily** is activated, only a time of day can be set.
5) Click **Apply Changes**.

6) Automatic data archiving is now active; data older than the retention period will be automatically deleted from the database and archived.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.5 Selecting Data Retention Period and Start for Automatic Deletion

To select the data retention period and the start of data deletion for the Auto-delete function:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) In the **Archive/Delete** tab under **Select Data Retention Period**, select from one of the following options:
   - Calendar Months (select the number of months)
   - 2 weeks
   - 1 week
   - Daily
3) Under **Start of deletion** select in the list for **Day** (not available for Daily) and enter in **Time** a time of day for the erasure to start.
4) Click **Apply Changes**.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.6 Deleting the Data Manually

To delete data manually:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Turn off automatic data deletion (Auto-delete is unselected).

3) In the **Archive/Delete** tab under **Manual Data Deletion**, use the **...** button to select the date.
4) Click **Delete Data Now**.

   All data collected before the selected date will be deleted.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting old Records from CDR Table and Deallocating Disk Space

Archiving the Data Manually

6.23.1.7 Deleting old Records from CDR Table and Deallocating Disk Space

Sole deletion (manually or automatically) of records does not minimize the allocated disk space for the CDR table **pm_cdrdatatbl**.

Important Hints

No other PM operation should be running or be scheduled to run during deletion of CDR records.

When the optimization of the CDR table is to be started, but there is a runnung process for generating a report (from the pages One-Off Reports, Run Report or Reporting Status), a warning message will appear, informing that the optimization cannot take place at the moment and to try again later.

Before starting this procedure, you should delete not needed data from the table (see Deleting the Data Manually, page 590).

In order to acheive a compacted file size, the table has to be reconstructed. This can be reached as follows:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Click the **Archive/Delete** tab.

   Under **Compact of pm_cdrdatatbl** panel the text field **Number of entries in pm_cdrdatatbl** displays the amount of records in the table.
3) In the **Manual Data Deletion** panel above, click the **...** button to open the calendar.
4) Select the date from the calendar, up to which (i.e. older than) records are to be deleted.

   Dates will be displayed in "dd/mm/yyyy" format.
5) Click the **Compact of pm_cdrdatatbl table** button.

   An alert box with an important note is displayed.

6) Click the **Yes** button to execute or the **No** button to abort the operation.

A status window with a progress bar is displayed, which shows the progress and data of the compact process:

- Calculated file sizes, disk usages
- The different stages of the compact procedure and their status. If an error occurs during one of the stages, this is marked with a red X.

While the compact process is running, the status window can neither be closed nor any another action on Performance Manager is possible.

If there is not enough free disk space available for the Informix Database to perform the compact process, a message will appear, informing of the available and required disk space. The compact process will then stop.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Archiving the Data Manually

6.23.1.8 Archiving the Data Manually

To archive data manually:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) In the **Archive/Delete** tab under the **Manual Data Archive** panel, click the **...** button beside the **Archive date from:** field to select the date.
3) In the **Archive data to:** field, select the **...** button to select the date.
4) In the **Save archive data in file:** enter the location of the file where you want to save the archive to.
5) Activate the **Split in smaller files** checkbox and enter in the **Number of days in one file** input field the amount of days which one archive file should comprise.
6) Click **Archive Data Now**.

Related Topics

Changing the Current State

Turning Off Automatic Data Deletion

Turning On the Delete Feature Automatically

Turning On Automatic Archiving

Selecting Data Retention Period and Start for Automatic Deletion

Deleting the Data Manually

Deleting old Records from CDR Table and Deallocating Disk Space

6.23.2 Restoring Data

To restore PM statistics:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Select the **Restore Data** tab. A table appears with the following information:
   - Archive filename
   - Last modified
3) Select the archived file that you want to restore.
4) Click **Restore**.

Related Topics

Setting the Data Deletion or Archive Feature

Assigning Codes to Switches

Displaying PM Statistics

Storing Archived Data

Controlling Collection of Organisational Data Reports

Listing the Database Summary

6.23.3 Assigning Codes to Switches

To assign international code access numbers, international prefixes and/or national prefix of calling parties to switches and to set the time and interval for the reconstruction of the codes for the call data records:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Select the **Call Maintenance** tab.
3) To activate the feature: Set the checkmark in the **Activate Reconstruction of Calling and Destination Parties through modifications to get more accurate results in PM-Reports** checkbox.

   To deactivate the feature: Uncheck the checkbox.
4) Select the time of day, when the reconstruction of the call data records should start from the **Start time of reconstruction** spinner box.
5) Click the interval option for the reconstruction of the call data records from the **Period of reconstruction** (Daily, 12 hours, 8 hours).
6) In the **List of Switches** table click the checkmarks for all switches, which have to be assigned to a common prefix.

   Or click the **Select all** button to set checkmarks for all switches in the list.
7) In the **Assigned Codes** text box enter the prefix for the selected switches.
8) Click **Add >>** to assign the codes.

   The switches with the assigned code are displayed in the **Assigned Codes** table.

   > **NOTICE:** It is recommended to assign all relevant prefixes to all switches step by step.

9) Click **Apply Changes** to save the settings.

To break an assignment of a code to a switch:

1) Select the switch in the **Assigned Codes** table.
2) Click **Remove** to assign the codes.

   The switch will be removed from the **Assigned Codes** table.
3) Click **Apply Changes** to save the settings.

Related Topics

Setting the Data Deletion or Archive Feature

Restoring Data

Displaying PM Statistics

Storing Archived Data

Controlling Collection of Organisational Data Reports

Listing the Database Summary

6.23.4 Displaying PM Statistics

To display PM statistics:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Select the **Statistics** tab. The PM statistics displays the following information:
   - Number of defined reports
   - Number of defined report groups
   - Number of defined filters
   - Percentage of the system database that PM data occupies
3) To set an upper limit on the size of the PM database, select a percentage (5-95, in increments of 5) from the **Threshold above which warning will be given** box.
4) To initiate that an automated e-mail together with a report is to be sent to selected recipients, activate the option **Send email notification if threshold is exceeded**. Then select recipients from a list after clicking the selection button on the right of the text input field.

NOTICE: When PM is started, and a new record is added to the PM database, and if the size of the PM database exceeds the threshold value, an error is logged.

Related Topics

Setting the Data Deletion or Archive Feature

Restoring Data

Assigning Codes to Switches

Storing Archived Data

Controlling Collection of Organisational Data Reports

Listing the Database Summary

6.23.5 Storing Archived Data

To store archived data:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Click the **Configuration** tab.
3) In the **Directory into which PM will store archived data** field, type the directory where you want to store the archived data.
4) Click **Apply**.

   Read the Warning that appears on the screen.

   Related Topics

   Setting the Data Deletion or Archive Feature

   Restoring Data

   Assigning Codes to Switches

   Displaying PM Statistics

   Controlling Collection of Organisational Data Reports

   Listing the Database Summary

6.23.6 Controlling Collection of Organisational Data Reports

To enable/disable the collection of organisational data for generating organisational reports:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Click the **Configuration** tab.
3) In the **Organisational data collection status** field activate the radio button for the desired collecting status:
   - Collection ACTIVE: organisational data reports are saved in the PM database.
   - Collection INACTIVE: organisational data reports are not saved in the PM database.
4) Click **Apply**.

Related Topics

Setting the Data Deletion or Archive Feature

Restoring Data

Assigning Codes to Switches

Displaying PM Statistics

Storing Archived Data

Listing the Database Summary

6.23.7 Listing the Database Summary

To list the database summary:

1) On the PM home page, choose **Administration**. The Administration page appears.
2) Click the Database Summary tab. A table appears with the following information:
   - Weekly period in PM database
   - Number of data records.

   Related Topics

   Setting the Data Deletion or Archive Feature

   Restoring Data

   Assigning Codes to Switches

   Displaying PM Statistics

   Storing Archived Data

   Controlling Collection of Organisational Data Reports

6.24 Defining a One-Off Report

To define a One-Off Report:

1) On the Performance Management Home Page, choose **One-Off Report**. The One-Off Report - Set Parameters page appears.
2) In the Name field, enter a name for the One-Off report.
3) In the Scale Interval field, enter the number of minutes (between 1 to 1440 minutes) for the report. The default is 15 minutes.
4) In the Template selection box, select a template to apply to your report.

   The Scale interval field does not apply to the following templates:
   - ACD Automatic Call Distribution - General Statistics
   - Call Timings - Ringing Times of Answered and Not Answered Calls
   - Call Timings - Sum of Ringing and Waiting Times of Answered and Not Answered Calls
   - Call Timings - Call Statuses
   - Cordless Statistics - Cordless Stays
   - Cordless Statistics - Overload Duration
   - Hit Parade / Top Usage
   - Trunk Groups - Availability by Trunk Group
   - Trunk Groups - Busy Hour
   - Trunk Groups - Load by Trunk Group
   - Attendant Consoles - General Statistics
   - System Statistics - Feature Usage Data

   When any of these templates are selected, the Scale Interval field is disabled and the value remains the same.
5) Fill in the From: Date: and To: Date: fields.
6) Choose a From: Time and To Time.
7) If you want to import an existing filter to your report, check the Import checkbox.
8) To choose the call type check the appropriate Type and Direction box.

9) Click **Run**.

If you have selected the 'Flexible' output format the Run Report window is opened, continue with Creating a 'Flexible' Report.

Fields and Controls Description

Name

Scale Interval

Service Level

Import

Template

Selected Items

Filter Type

Direction

Report Output

Related Topics

One-Off Report

Selecting Items for the One-Off Report

6.25 Selecting Items for the One-Off Report

To select items for the One-Off report:

1) On the Performance Management Home Page, choose **One-Off Report**. The One-Off Report - Set Parameters page appears.
2) Select the **Select Items** tab.
3) In the Available Switches field, select a switch from the drop-down list and click **>** to move the switch into the Selected Switches list.
4) Choose a telephony items sub tab. Refer to Field Help of the Telephony Item sub tabs and to Fields and Control in the Telephony Items Tab in the Filter Definition section to assist you in defining you One-Off report.
5) To select an Advanced output, click the Advanced radio button.

   For an output in selectable file formats, click the Flexible radio button.
6) Click **Run**.

   If you have selected the 'Flexible' output format the Run Report window is opened, continue with Creating a 'Flexible' Report.

   Fields and Controls Description

   Available Switches (when "Telephony" Filter Type is set)

   Selected Switches (when "Telephony" Filter Type is set)

   Report Output

   Related Topics

   One-Off Report

   Downloading Flexible Reports

   Defining a One-Off Report

6.26 Creating a Scheduled Report

To schedule a report:

1) On the Performance Management Home Page, choose **Schedule Report**. The Schedule Report page appears.
2) Click **New**.
3) In the Report or Group field, choose a report or report group from the drop-down list.
4) Select either a Single Instance or Periodic schedule radio button.
5) In the Frequency field, select how often you want to schedule the report from the drop-down list.
6) If you want to select a specific report period, check the Fully specified dates checkbox, otherwise, leave it blank.
7) Set the From: and To: reporting period. Input is required.
8) Set the date and time for the scheduled report.

Fields and Controls Description

Object List

Report or Group

Schedule

Run Report at:

Display

Copy

Save

Delete

Cancel

Related Topics

Schedule Report

Accessing the Schedule Report Page

Viewing the Schedule Results

Copying a Schedule Report

Saving a Schedule Report

Deleting a Schedule Report

Canceling a Schedule Report

6.27 Copying a Schedule Report

To copy a schedule report:

1) On the Performance Management Home Page, choose **Schedule Report**. The Schedule Report page appears.
2) In the Report or Group field, choose an existing report or report group from the drop-down list.
3) Click **Copy**.
4) Modify the report or report group according to your requirements.

Fields and Controls Description

Object List

Report or Group

Schedule

Run Report at:

Display

Copy

Save

Delete

Cancel

Related Topics

Schedule Report

Accessing the Schedule Report Page

Saving a Schedule Report

Deleting a Schedule Report

Canceling a Schedule Report

Viewing the Schedule Results

6.28 Saving a Schedule Report

To save a schedule report:

1) Define a scheduled report (refer to Creating a Scheduled Report).
2) Click **Save**.

Fields and Controls Description

Object List

Report or Group

Schedule

Run Report at:

Display

Copy

Save

Delete

Cancel

Related Topics

Schedule Report

Accessing the Schedule Report Page

Copying a Schedule Report

Deleting a Schedule Report

Canceling a Schedule Report

Viewing the Schedule Results

6.29 Deleting a Schedule Report

To delete a schedule report:

1) On the Performance Management Home Page, choose **Schedule Report**. The Schedule Report page appears.
2) In the Report or Group field, choose an existing report or report group by using the < and > controls until you find the report that you want to delete and click **Delete**.

   OR

   Click the Object List to see the list of scheduled reports, select the wanted scheduled report, and then click **Delete**.

   Fields and Controls Description

   Object List

   Report or Group

   Schedule

   Run Report at:

   Display

   Copy

   Save

   Delete

   Cancel

   Related Topics

   Schedule Report

   Accessing the Schedule Report Page

   Copying a Schedule Report

   Saving a Schedule Report

   Canceling a Schedule Report

   Viewing the Schedule Results

6.30 Canceling a Schedule Report

To cancel changes made to a scheduled report:, click **Cancel** while you are in the process of defining a report.

Fields and Controls Description

Object List

Report or Group

Schedule

Run Report at:

Display

Copy

Save

Delete

Cancel

Related Topics

Schedule Report

Accessing the Schedule Report Page

Copying a Schedule Report

Saving a Schedule Report

Deleting a Schedule Report

Canceling a Schedule Report

Viewing the Schedule Results

6.31 Viewing the Schedule Results

To view the schedule results:

1) On the Performance Management Home Page, choose **Schedule Results**.
   The Schedule Results - Status of Schedule Runs page appears.
2) Select a scheduled report from the table and click **Display**.

Fields and Controls Description

Abort

Delete

Display

Related Topics

Schedule Report

Accessing the Schedule Results Page

Stopping the Schedule Result

Viewing the Schedule Results

Deleting a Schedule Result

Deleting a Schedule Result Automatically

6.32 Stopping the Schedule Result

To stop the schedule result, click **Abort** while the output of a report is running.

Fields and Controls Description

Abort

Delete

Display

Related Topics

Schedule Report

Accessing the Schedule Results Page

Stopping the Schedule Result

Viewing the Schedule Results

Deleting a Schedule Result

Deleting a Schedule Result Automatically

6.33 Deleting a Schedule Result

To delete an output file on the server:

1) On the Performance Management Home Page, choose **Schedule Results**. The Schedule Results - Status of Schedule Runs page appears.
2) Select a scheduled report from the table and click **Delete**.

Fields and Controls Description

Abort

Delete

Display

Related Topics

Schedule Report

Accessing the Schedule Results Page

Stopping the Schedule Result

Viewing the Schedule Results

Deleting a Schedule Result Automatically

6.34 Deleting a Schedule Result Automatically

To delete an output file on the server: automatically:

1) On the Performance Management Home Page, choose **Schedule Results**. The Schedule Results - Status of Schedule Runs page appears.
2) Select the **Automatic Deletion File** tab.
3) In the Change State selection box, click the **Auto-delete** radio button.
4) In the Select File Retention Period, select how long the files should be retained in the server.
5) Click **Apply Changes**.

Fields and Controls Description

Current State

Change State

Select Data Retention Period

Download Directory

Browse

Download Format

Abort

Delete

Recalculate

Display

Download

Download Client Tool

Related Topics

Schedule Report

Accessing the Schedule Results Page

Viewing the Schedule Results

Stopping the Schedule Result

Deleting a Schedule Result

6.35 Downloading Reports with 'Scheduled Report Downloader'

Scheduled Report Downloader is a downloadable Java standalone client application and runs in a seperate user interface. It provides downloading and scheduling mechanisms for reports. It connects to a specified OpenScape 4000 Manager/HiPath 4000 Manager and retrieves and renders the previously generated PM reports. The application runs only on client side and downloads only advanced PM reports from any HiPath 4000 Manager V3 and later or OpenScape 4000 Manager respectively.

Related Topics

Configuring the system to use 'Scheduled Report Downloader'

Using the 'Scheduled Report Downloader'

6.35.1 Configuring the system to use 'Scheduled Report Downloader'

The computer that will use **Scheduled Report Downloader** must have

- installed *Sun Java 1.6 jre* (java runtime environment).
- network access to the managers which are going to be connected.

You should also add the manager's http address to the *Trusted Sites* in Internet Explorer in order to download the **Scheduled Report Downloader** tool.

To manage the *Trusted Sites*:

1) Select **Internet Options** from the **Tools** menu of the Internet Explorer.
2) Select the **Security** tab, there select **Trusted Sites** and press the **Sites** button.

1) The **Trusted Sites** window opens.
2) Enter the desired Managers IP address as a trusted site and press the **Add** button.

3) Save the changes by pressing the **OK** button:

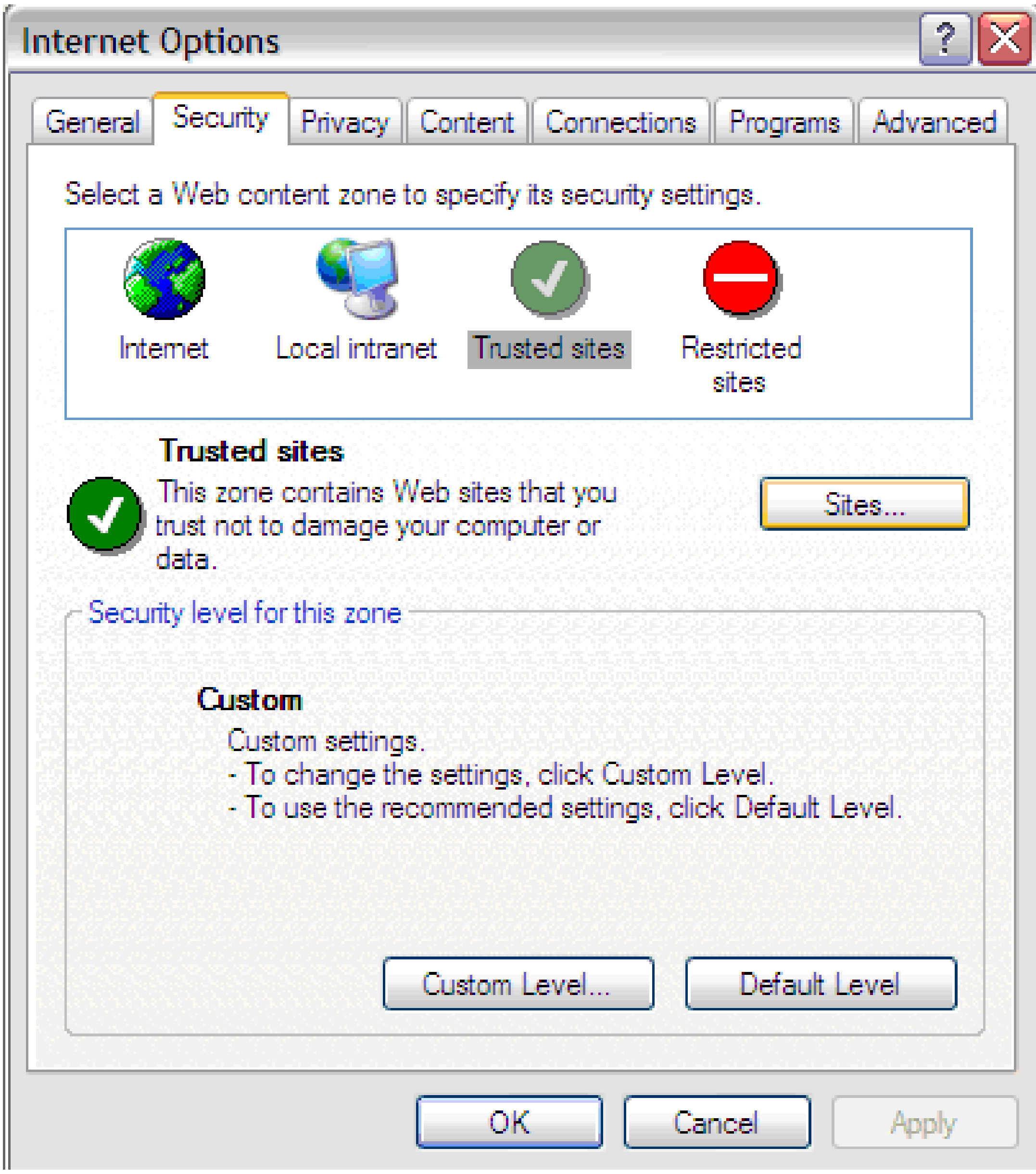


Figure 292: Internet Options - Security tab

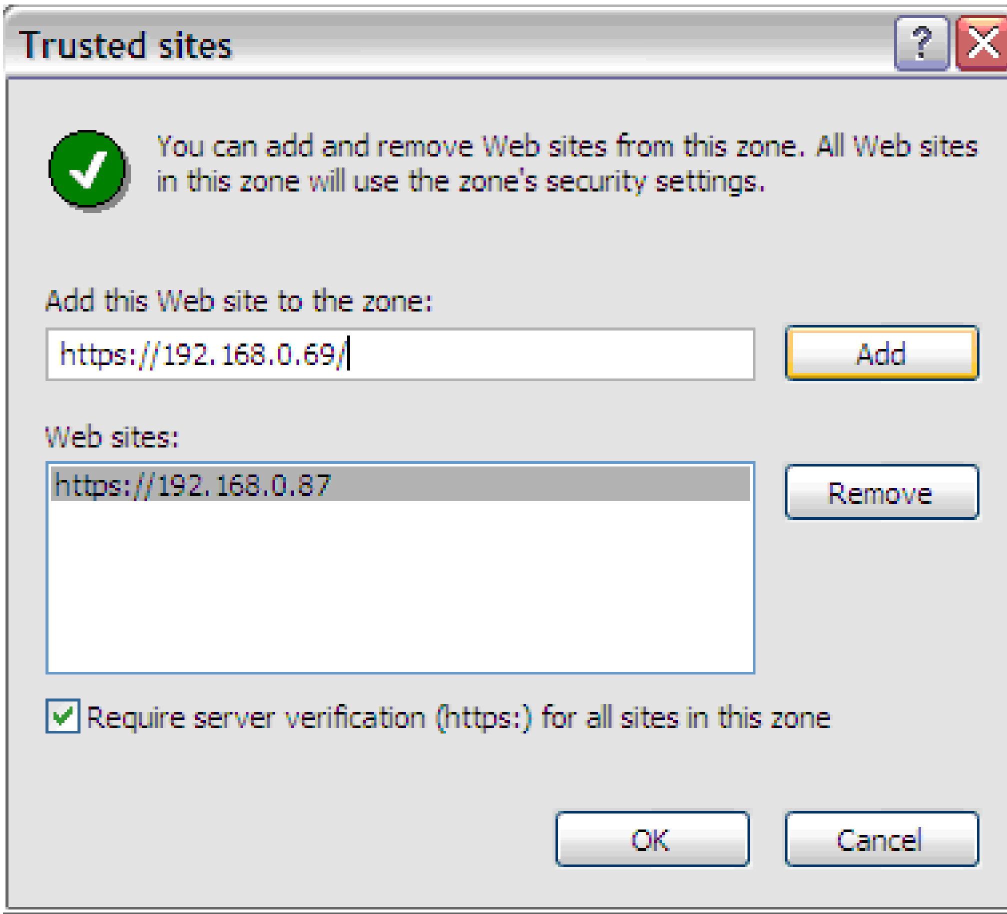


Figure 293: Manager added to 'Trusted Sites' to download the tool

Download the 'Scheduled Report Downloader' tool

To download the tool:

- Press the Download Client Tool button in the **PM Schedule Results** page, see Section 3.11, "Schedule Results Page".

After that, a jar file named `pm_report_downloader.jar` is downloaded to the download directory, that is also specified in the **PM Schedule Results** page.

Related Topics

Downloading Reports with 'Scheduled Report Downloader'

Using the 'Scheduled Report Downloader'

6.35.2 Using the 'Scheduled Report Downloader'

To start the **Scheduled Report Downloader** tool:

1) Select the *pm_downloader.jar* file icon with the right mouse button.

2) Select **Open with â”> JAVA(TM) Platform SE binary** from the context menu:

Start 'Scheduled Report Downloader'

Or use command line:

Select from the windows taskbar **Start** â”> **Run**. The **Command Prompt** window opens.

In the **Command Prompt** window enter: `java -jar pm_scheduler_download.jar`

Press the <Return> key.

The **Scheduled Report Downloader** tool opens.

Scheduled Report Downloader window has two tabs:

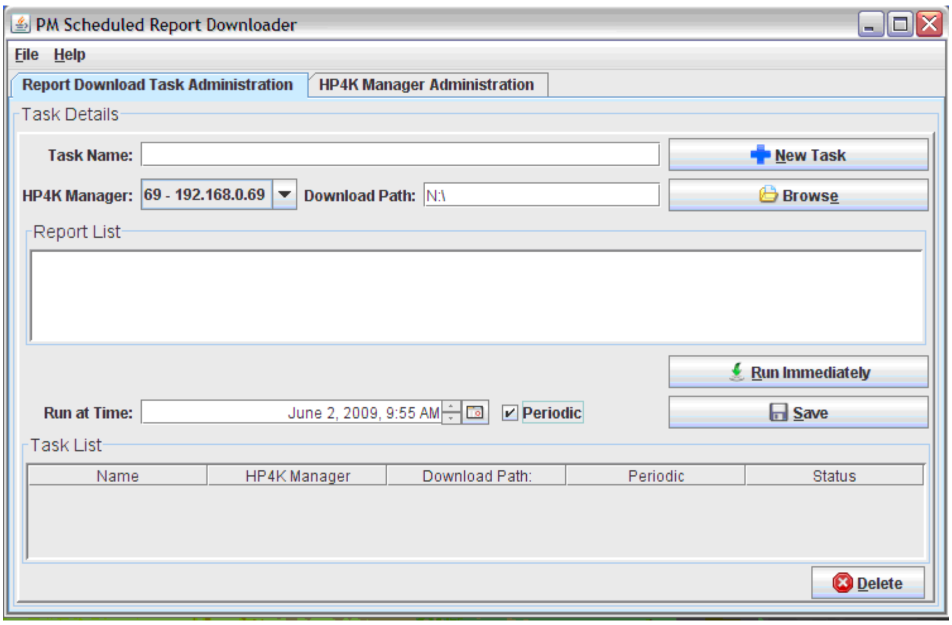


Figure 294: Scheduled Report Downloader interface

- **Report Download Task Administration** tab:

  This tab serves for downloading reports from the defined managers and to create scheduled tasks for automatic download.
- **OpenScape 4000 Manager Administration** tab:

  This tab serves for defining and saving login information for managers, from which the reports should be downloaded.

  Then a report from this manager can be downloaded via the **Report Download Task Administration** tab.

Related Topics

Downloading Reports with 'Scheduled Report Downloader'

Configuring the system to use 'Scheduled Report Downloader'

OpenScape 4000 Manager Administration

Report Download Task Administration

6.35.2.1 OpenScape 4000 Manager Administration

Defining a Manager

1) Press the **New OpenScape 4000 Manager** button in the **OpenScape 4000 Manager Administration** tab.

   The **Name**, **IP Address**, **User** and **Password** text boxes become enabled.
2) Enter the correct values for the desired manager into these text boxes:

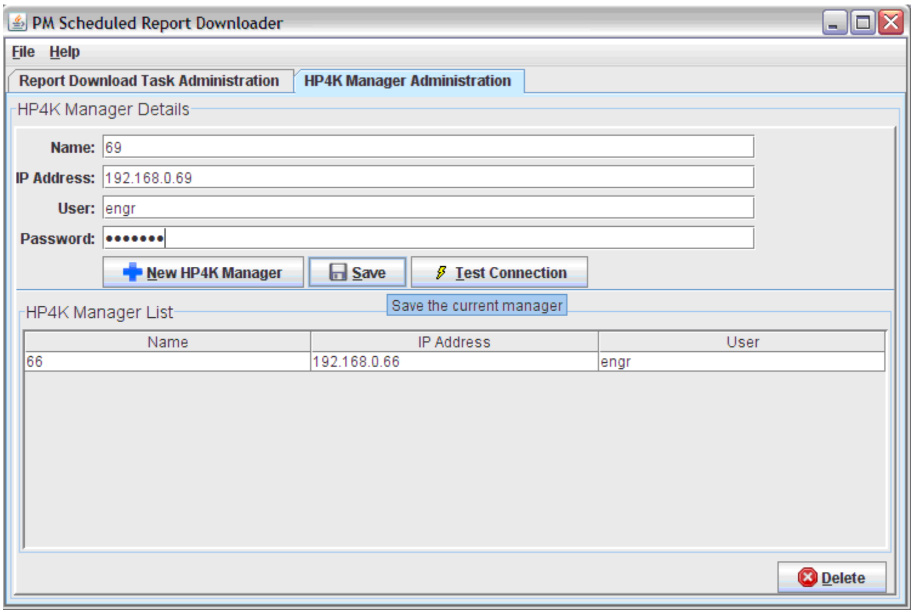


Figure 295: Defining a Manager

3) Press the **Save** button.

The manager is now defined for the **Scheduled Report Downloader** and is added in the **OpenScape 4000 Manager List** of the available managers for report downloads.

Testing the connection

To test the connection to a manager from the list:

1) Select a manager from the **OpenScape 4000 Manager List**.
2) Enter the password of the manager in the **Password** text field of the **OpenScape 4000 Manager Administration** tab.
3) Press the **Test Connection** button.

After that, message box is displayed, indicating whether the connection to the manager is successfully established or not.

Deleting a Manager from the list

If a manager is no longer needed for scheduled report downloads, it can be removed from the list:

1) Select a manager from the **OpenScape 4000 Manager List.**
2) Press the **Delete** button.

   A confirmation window is displayed.
3) To approve the deletion press the **Yes** button. (Or press **No** if you want to cancel the process.)

   The manager is removed from **OpenScape 4000 Manager List** and will no longer be available for scheduled report downloads, unless it is added to the list again.

Related Topics

Downloading Reports with 'Scheduled Report Downloader'

Configuring the system to use 'Scheduled Report Downloader'

Report Download Task Administration

6.35.2.2 Report Download Task Administration

After defining a manager, you may select a manager in the drop-down list of the **Report Download Task Administration** tab. If selected manager does not have any scheduled reports, at least one scheduled report must be defined in the **PM-Schedule Report** page (see Section 3.10, "Schedule Report" on page 164).

There are 3 scenarios for downloading the report(s):

- Downloading reports immediately.
- Downloading reports once at a specific time.
- Downloading reports at a specific time periodically.

For each scenario a download task has to be defined.

Defining a Download Task

1) Press the **New Task**.

   The user interface components of the **Report Download Task Administration** tab become enabled.
2) Enter a name for the task in the **Task Name** text field.
3) Select a manager from the **OpenScape 4000 Manager** drop-down list.

   The available reports of the selected manager now are listed in the **Report List** table.

4) Press the **Browse** button and select a download path, where the reports are going to be downloaded.

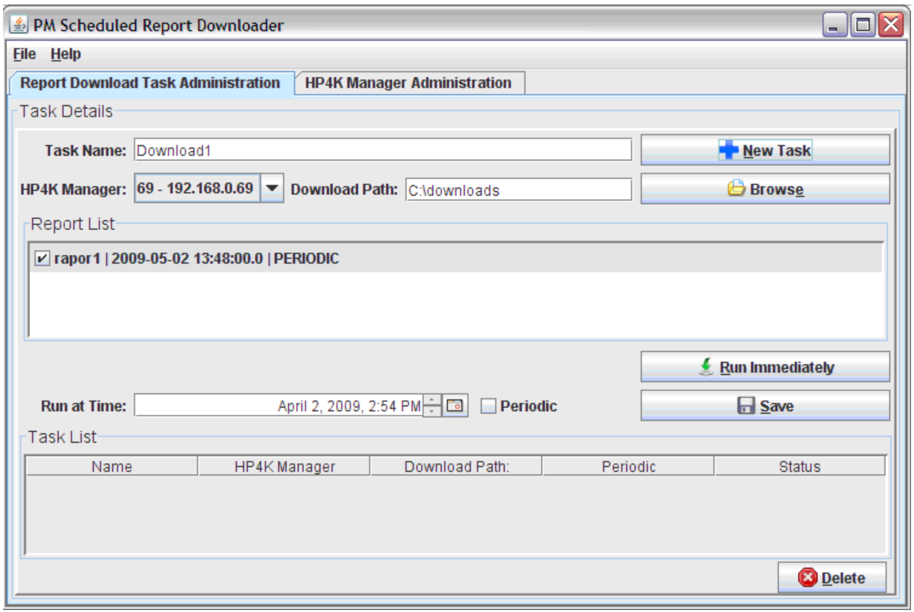


Figure 296: Defining a download task

The naming convention for the reports downloaded into the download directory is as follows: `Report Name_arbitrary string for uniqueness_date_time`.

For report group downloads each report group is placed into a directory under the download path. The report group directory names have the format `Report Group_arbitrary string for uniqueness_date_time`.

Downloading reports immediately

After defining the download task:

1) Press the **Run Immediately** button.

The download process starts immediately. The status of the download is displayed in the Status column of the **Task List** table and the report is saved to the directory, specified in **Download Path**.

Downloading reports once at a specific time

After defining the download task:

1) Click to the calendar symbol on the right hand side of the **Run at time** field. A calendar window opens.

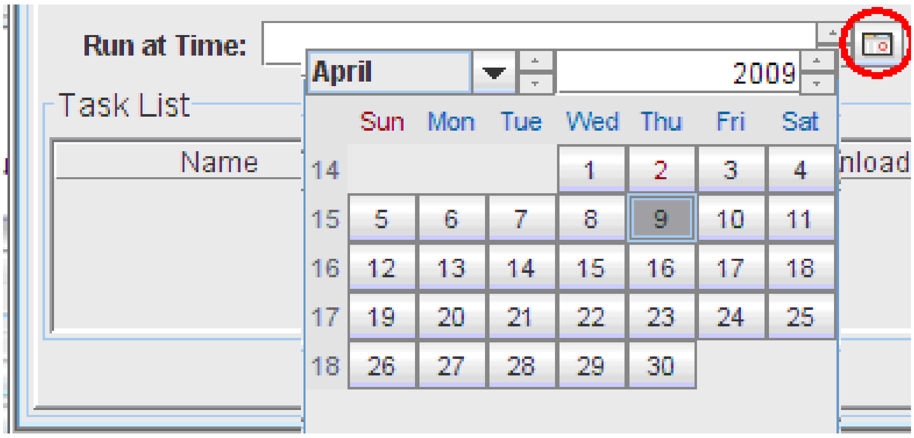


Figure 297: Download task - download report once at a specific time

2) From the calendar select the target day and time for the report download to take place.
3) Press the **Save** button.

The status of the download task is displayed in the **Status** column of the **Task List** table and the report will be saved at the specified time to the directory specified in **Download Path**.

Downloading reports at a specific time periodically (at 15 minutes intervals)

After defining the download task:

1) Click to the calendar symbol on the right hand side of the **Run at time** field. A calendar window opens.

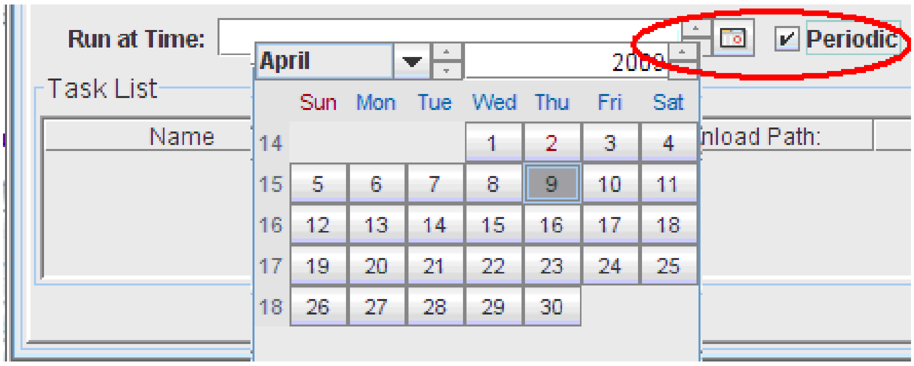


Figure 298: Download task - download report once at a specific time

2) From the calendar select the starting day and time for the periodic report download to take place.
3) Activate the **Periodic** checkbox.
4) Press the **Save** button.

The status of the download task is displayed in the **Status** column of the **Task List** table, showing the Periodic checkbox checked. The report will be saved at 15 minutes intervals, starting from the specified time, to the directory specified in **Download Path**.

Cancelling a Download Task

1) Select a task from the **Task List** table.
2) Press the **Delete** button.

   A confirmation window is displayed.
3) To approve the deletion press the **Yes** button. (Or press **No** if you want to cancel the process.)
4) Close the confirmation window, which is to follow, by pressing the **OK** button.

The **Task List** table is refreshed.

Closing the Client Tool

To close the **Scheduled Report Downloader** tool:

1) Right click to the **Scheduled Report Downloader** icon in the Windows task bar:

   Figure 299: 'Scheduled Report Downloader' icon in the Windows task bar
2) Select **Exit** from the context menu.

Related Topics

Downloading Reports with 'Scheduled Report Downloader'

Configuring the system to use 'Scheduled Report Downloader'

OpenScape 4000 Manager Administration

6.36 Creating a 'Flexible' Report

If you have selected the report output option for Run Report or One-Off Report, after clicking the **Run** button, the Run Report Dialog window is displayed.

In the **Output** tab of the Run Report Dialog window:

1) Select the report template from the **Choose Template** Drop-down list.
2) Check one or more desired output option(s) for displaying the report on screen (i.e. a browser window), sending the report to a printer and/or sending the report as an e-mail attachment.

   Only if you have selected **Send Report as Email**, the **E-Mail** tab becomes active, otherwise it is greyed out as inactive.
3) Check one or more desired output option(s) for the output format (html, pdf, csv, xml).

For sending the report as e-mail attachment:

1) Select the **E-mail** tab. The **E-Mail** tab is active only if you have selected **Send Report as Email** in the **Output** tab.
2) Click the **...** button in the right of the **To** recipient field. A list of predefined possible recipients is displayed.
3) Select the recipient(s) from the list.
4) If desired, click the **...** button in the right of the **CCs** recipient field. A list of predefined possible recipients is displayed.
5) Select the recipient(s) from the list.

6) If desired, edit the text in the **Subject** field (default: name of the report).
7) Add an e-mail text in the **Body** field.

To save the output reports on your local computer, you may define the output directories for the output formats, you have selected in the **Output** tab:

1) Select the **Exports** tab.
2) Click the **...** button in the right of the **HTML/PDF/CSV/XML** path field for each desired format. An exporer window is displayed.

> **NOTICE:** If you have chosen a template which generates a report in chart form, **xml** and **csv** options are disabled, because chart form is not supported for these formats. This is due to limitations of Microsoft Excel application itself and its xml document format.

1) Select the desired output directories for each format.
2) Check or uncheck the option **Automatic overwrite of existing export files**. In case the option is unchecked and a existing file would be overwritten by the export, you will be prompted for defining a different file name.
3) Click **Run**.

7 Incoming billing in the old format

For the incoming billing in the old format, follow the steps below:

1) Use the following commands to configure AMO-GEFE on the switch:

- English: `CHANGE-GEFE:TYPPARAM=INCOLD,INCOLD=Y;`
- German: `AENDERN-GEFE:TYPPARAM=ANKALT,ANKALT=J;`

2) Create a new file pm_environ.sh in /opt/pm/ and add the variables according to customer environment:

Manager: # vi /opt/pm/pm_environ.sh

Manager: # cat /opt/pm/pm_environ.sh

PM_EXCHANGE_DESTPTY=YES

export PM_EXCHANGE_DESTPTY

PM_EXCHANGE_ALL_DESTPTYS=YES

export PM_EXCHANGE_ALL_DESTPTYS

NETWORK_CALLS_INTERNAL=YES

export NETWORK_CALLS_INTERNAL=YES

NOTICE: The original file /opt/pm/bin/pm_col.sh is overwritten after an ASpm VK-installation.

The new created file pm_environ.sh must have 444 access rights:

Manager: # chmod 444 /opt/pm/pm_environ.sh

The changes will be applied only after restart of the PM processes :

Manager:/opt/pm # procadmin -tg PM

Manager:/opt/pm # procadmin -sg PM

Manager:/opt/pm # procadmin -lg PM

pm_sched Active Tue Mar 28 15:53:47 2023 PM 14257

pm_control Active Tue Mar 28 15:53:47 2023 PM 14258

pm_col Active Tue Mar 28 15:53:49 2023 PM **14319**

The new variables can be checked by using the PID of the pm_col process as below :

Manager:/opt/pm # cat /proc/14319/environ | xargs -0 -n1 | grep -iE "pm_|network"

PM_EXCHANGE_ALL_DESTPTYS=YES

NETWORK_CALLS_INTERNAL=YES

PM_EXCHANGE_DESTPTY=YES

Description of the variables:

- PM_EXCHANGE_DESTPTY=YES
- export PM_EXCHANGE_DESTPTY

  In some customer environment, the switch configuration for AMO-GEFE need to include the ANKALT=YES parameter. This means that for incoming calls, the calling party appears in the destination party as well.

  This is an issue for Performance Management, since the calling party and the destination party appear to be the same. Therefore, the ANKALT parameter should be set to YES, in order for Performance Management to provide the correct values for the destination party, for all incoming call scenarios (with exception of the forwarding call scenarios).

– PM_EXCHANGE_ALL_DESTPTYS=YES

export PM_EXCHANGE_ALL_DESTPTYS

This parameter is similar to PM_EXCHANGE_DESTPTY. It also updates the destination party values in case of forwarding call scenarios.

This is an issue for Performance Management, since the configuration of the customer environment provides wrong values for the destination party in forwarding calls scenarios.

If the PM_EXCHANGE_ALL_DESTPTYS parameter is set to YES, there is no need to further configure the PM_EXCHANGE_DESTPTY variable, since it makes the same transformations, with the additional setup for forwarding calls.

– NETWORK_CALLS_INTERNAL=YES

export NETWORK_CALLS_INTERNAL

If this variable is set to YES, then all incoming TIE calls (calls that take place from switch A to switch B) will become internal calls.

Therefore, if this parameter is enabled then the incoming calls between switches will be considered internal call and only the calls that originate from outside customer environment (CO calls) will be seen as external. For example, this can be observed when a Performance Management filter is set up: the incoming calls among Siemens switches will be counted if the internal flag is enabled.

This parameter only works for OpenScape switches since for HiCom switches there is not enough information to make this transformation.

NOTICE: To transform all outgoing TIE calls into internal calls, after setting the NETWORK_CALLS_INTERNAL parameter to YES, an additional step must be done: modify the LDAT AMO command, by adding the parameter INTCHARG on all switches. Only after this step, all outgoing TIE calls will be transformed into internal calls. The customers can assume that their entire switch network is one big internal environment. In this case, the scope of internal is not the switch, but the whole network of switches.

3) The following configuration change must be done on the RMX side to have correct CDR recording for AC calls:

CHANGE-GEFE:ATTNDOUT,Y;

CHANGE-GEFE:ATTNDINC,Y;

8 Loss Factor Table

Correlation of Erlang figures with number of lines (N) and loss factor (B)

N	B= 0.001	B= 0.002	B= 0.005	B= 0.01	B= 0.02	B= 0.05	B =0.10	B= 0.20	B= 0.50
1	0.00	0.00	0.00	0.01	0.02	0.05	0.11	0.25	1.00
2	0.05	0.07	0.11	0.15	0.22	0.38	0.60	1.00	2.73
3	0.19	0.25	0.35	0.46	0.60	0.90	1.27	1.93	4.59
4	0.44	0.54	0.70	0.87	1.09	1.52	2.05	2.95	6.50
5	0.76	0.90	1.13	1.36	1.66	2.22	2.88	4.01	8.44
6	1.15	1.33	1.62	1.91	2.28	2.96	3.76	5.11	10.39
7	1.58	1.80	2.16	2.50	2.94	3.74	4.67	6.23	12.35
8	2.05	2.31	2.73	3.13	3.63	4.54	5.60	7.37	14.32
9	2.56	2.85	3.33	3.78	4.34	5.37	6.55	8.52	16.29
10	3.09	3.43	3.96	4.46	5.08	6.22	7.51	9.68	18.27
11	3.65	4.02	4.61	5.16	5.84	7.08	8.49	10.86	20.25
12	4.23	4.64	5.28	5.88	6.61	7.95	9.47	12.04	22.24
13	4.83	5.27	5.96	6.61	7.40	8.83	10.47	13.22	24.22
14	5.45	5.92	6.66	7.35	8.20	9.73	11.47	14.41	26.21
15	6.08	6.58	7.38	8.11	9.01	10.63	12.48	15.61	28.20
16	6.72	7.26	8.10	8.88	9.83	11.54	13.50	16.81	30.19
17	7.38	7.95	8.83	9.65	10.66	12.46	14.52	18.01	32.18
18	8.05	8.64	9.58	10.44	11.49	13.39	15.55	19.22	34.17
19	8.72	9.35	10.33	11.23	12.33	14.31	16.58	20.42	36.17
20	9.41	10.07	11.09	12.03	13.18	15.25	17.61	21.64	38.16
21	10.11	10.79	11.86	12.84	14.04	16.19	18.65	22.85	40.15
22	10.81	11.53	12.63	13.65	14.90	17.13	19.69	24.06	42.15
23	11.52	12.26	13.42	14.47	15.76	18.08	20.74	25.28	44.14
24	12.24	13.01	14.20	15.30	16.63	19.03	21.78	26.50	46.14
25	12.97	13.76	15.00	16.12	17.50	19.99	22.83	27.72	48.13
26	13.70	14.52	15.79	16.96	18.38	20.94	23.88	28.94	50.13

N	B= 0.001	B= 0.002	B= 0.005	B= 0.01	B= 0.02	B= 0.05	B =0.10	B= 0.20	B 0
27	14.44	15.29	16.60	17.80	19.26	21.90	24.94	30.16	5
28	15.18	16.05	17.41	18.64	20.15	22.87	25.99	31.39	5
29	15.93	16.83	18.22	19.49	21.04	23.83	27.05	32.61	5
30	16.68	17.61	19.03	20.34	21.93	24.80	28.11	33.84	5
31	17.44	18.39	19.85	21.19	22.83	25.77	29.17	35.07	6
32	18.10	19.18	20.68	22.05	23.72	26.75	30.24	36.30	6
33	18.97	19.97	21.50	22.91	24.63	27.72	31.30	37.52	6
34	19.74	20.76	22.34	23.77	25.53	28.70	32.37	38.75	6
35	20.52	21.56	23.17	24.64	26.43	29.68	33.43	39.98	6
36	21.30	22.36	24.01	25.51	27.34	30.66	34.50	41.22	7
37	22.03	23.17	24.85	26.38	28.25	31.64	35.57	42.45	7
38	22.86	23.97	25.69	27.25	29.17	32.62	36.64	43.68	7
39	23.65	24.78	26.53	28.13	30.08	33.6	37.71	44.91	7
40	24.44	25.60	27.38	29.01	31.00	34.60	38.79	46.15	7
41	25.24	26.42	28.23	29.89	31.92	35.58	39.86	47.38	8
42	26.04	27.23	29.08	30.77	32.84	36.57	40.94	48.62	8
43	26.84	28.06	29.94	31.66	33.76	37.56	42.01	49.85	8
44	27.64	28.88	30.80	32.54	34.68	38.56	43.09	51.09	8
45	28.45	29.71	31.66	33.43	35.61	39.55	44.17	52.32	8
46	29.25	30.54	32.52	34.32	36.53	40.54	45.24	53.56	9
47	30.07	31.37	33.38	35.21	37.46	41.54	46.32	54.80	9
48	30.85	32.10	34.25	36.11	38.39	42.54	47.40	56.03	9
49	31.69	33.04	35.11	37.00	39.32	43.53	48.48	57.27	9
50	32.51	33.88	35.98	37.90	40.26	44.53	49.56	58.51	9
51	33.13	34.72	36.85	38.80	41.19	45.53	50.64	59.75	1
52	34.15	35.56	37.72	39.70	42.12	46.53	51.73	60.98	1
53	34.98	36.40	38.60	40.60	43.06	47.53	52.81	62.22	1
54	35.80	37.25	39.47	41.50	44.00	48.54	53.89	63.46	1
55	36.63	38.09	40.35	42.41	44.94	49.54	54.98	64.70	1
56	37.46	38.94	41.23	43.31	45.88	50.54	56.06	65.94	1

Loss Factor Table

N	B= 0.001	B= 0.002	B= 0.005	B= 0.01	B= 0.02	B= 0.05	B =0.10	B= 0.20	B= 0.50
57	38.29	39.79	42.11	44.22	46.82	51.55	57.14	67.18	112.06
58	39.12	40.64	42.99	45.13	47.76	52.55	58.23	68.42	114.06
59	39.96	41.50	43.87	46.04	48.70	53.56	59.32	69.66	116.06
60	40.79	42.35	44.76	46.95	49.64	54.57	60.40	70.90	118.06
61	41.63	43.21	45.64	47.86	50.59	55.57	61.49	72.14	120.06
62	42.47	44.07	46.53	48.77	51.53	56.58	62.58	73.38	122.06
63	43.31	44.93	47.42	49.69	52.48	57.59	63.66	74.63	124.06
64	44.16	45.79	48.30	50.60	53.43	58.60	64.75	75.87	126.06
65	45.00	46.65	49.19	51.52	54.38	59.61	65.84	77.11	128.06
66	45.84	47.51	50.09	52.44	55.33	60.62	66.93	78.35	130.06
67	46.69	48.38	50.98	53.35	56.27	61.63	68.02	79.59	132.06
68	47.54	49.24	51.87	54.27	57.23	62.64	69.11	80.83	134.05
69	48.39	50.11	52.77	55.19	58.18	63.65	70.20	82.08	136.05
70	49.24	50.98	53.66	56.11	59.13	64.67	71.29	83.32	138.05
71	50.09	51.58	54.56	57.03	60.08	65.68	72.38	84.56	140.05
72	50.94	52.71	55.46	57.96	61.04	66.69	73.47	85.80	142.05
73	51.80	53.59	56.35	58.88	61.99	67.71	74.56	87.05	144.05
74	52.65	54.46	57.25	59.80	62.94	68.72	75.65	88.29	146.05
75	53.51	55.34	58.51	60.73	63.90	69.74	76.74	89.53	148.05
76	54.37	56.21	59.05	61.65	64.86	70.75	77.33	90.78	150.05
77	55.23	57.09	59.96	62.53	65.81	71.77	78.93	92.02	152.05
78	56.09	57.96	60.86	63.51	66.77	72.79	80.02	93.26	154.05
79	56.95	53.34	61.76	64.43	67.73	73.80	51.11	94.51	156.05
80	57.81	59.72	62.67	65.36	68.69	74.82	82.20	95.75	158.05
81	58.67	60.60	63.57	66.29	69.65	75.84	83.30	96.99	160.05
82	59.54	61.43	64.48	67.22	70.61	76.86	84.39	98.24	162.05
83	60.40	62.36	65.39	68.15	71.57	77.87	85.48	99.48	164.05
84	61.27	63.24	66.29	69.08	72.53	78.89	86.58	100.73	166.04
85	62.14	64.13	67.20	70.02	73.49	79.91	87.67	101.97	168.04
86	63.00	65.01	68.11	70.95	74.45	80.93	88.77	103.71	170.01

N	B= 0.001	B= 0.002	B= 0.005	B= 0.01	B= 0.02	B= 0.05	B =0.10	B= 0.20	B 0
87	63.87	65.90	69.02	71.88	75.42	81.95	89.86	104.46	1
88	64.74	66.78	69.93	72.81	76.38	82.97	90.96	105.70	1
89	65.61	67.67	70.54	73.75	77.34	83.99	92.05	106.95	1
90	66.48	68.56	71.76	74.68	78.31	85.01	93.15	108.19	1

9 Traffic Measurement

Traffic theory is used for assessing the grade of service. The basis for this is the assessment and interpretation of load measurements using statistical methods.

The objective of traffic measurement activities is to monitor the extent to which a given partner is available and, if necessary, improve this value.

CTM (Call Traffic Measurement) supplies the basic data required to interpret the traffic load (also known as total attempts to set up calls). Statistics ensure the accuracy of the data supplied by CTM.

This chapter covers the following topics:

9.1 Typical Traffic Theory Values

Seizure c

Device switched from idle to active status (call).

Traffic volume Y

Total duration (t) of all calls (c) over the measurement period.

$$Y = t_1 + t_2 + \Re..+ t_{c\text{ ,Äì}} + t_c$$

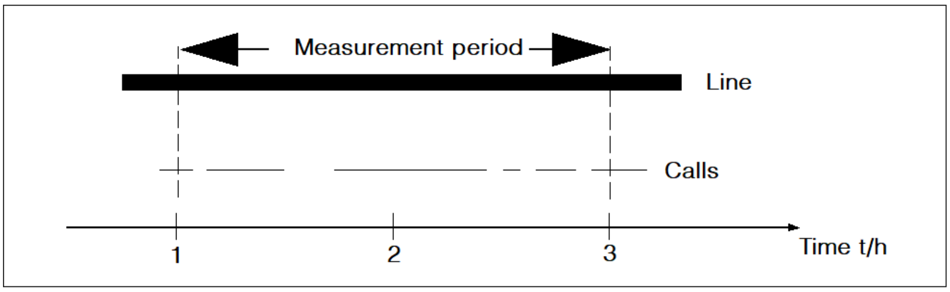


Figure B-1 Traffic Volume

The average call duration tm is obtained from the total call duration and the number of calls:

$$t_m = (t_1 + t_2 + \Re..+ t_{c\text{ ,Äì}} + t_c)\ \Re c$$

The traffic volume can also be calculated with:

$$Y = c\ \Re t_m$$

Y is called an Erlang hour:

$$[Y] = [\mathrm{Erlh}]$$

Traffic value y

Traffic volume per time unit. The defined time unit for traffic measurement is one hour (1h).

The traffic value records the traffic volume per hour.

$$y = c\,\Re t_{in}\,\Re/T = Y)\,\Re T$$

From this, the dimension of y can be calculated in Erlangs.

$$[y] = [Erlh]\,\Re/[1h] = [Erl]$$

Availability K

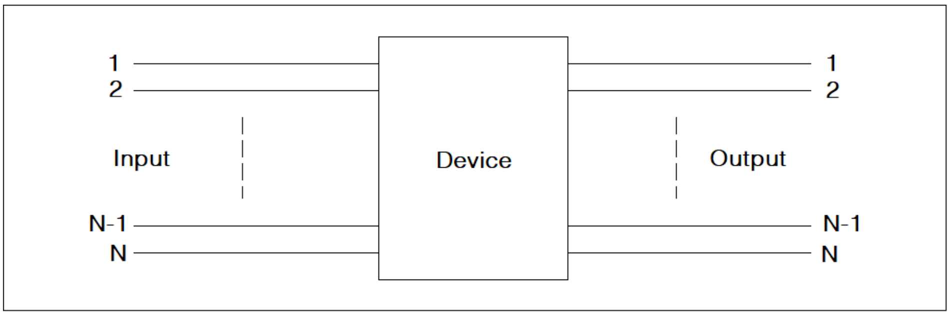


Figure B-2 Graphic Frames Covering the Entire Text Area

Accessibility refers to the number of outlets that can be checked by the inlet to see whether they are seized. In the case of full availability:

$$K = N$$

CO lines via DIU-S2

All 30 channels can be seized. These trunk groups have full availability.

Loss B

Seizure attempts that are rejected on account of a blockage.

A blockage occurs if no outlet lines or operating units are available or free.

The dimension of B is a percentage:

[*B*] = [%]

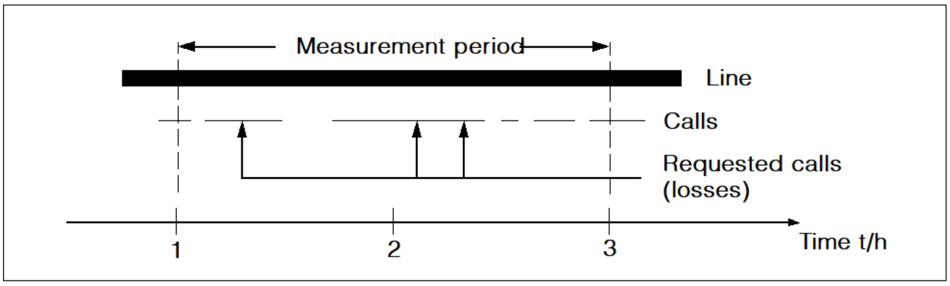


Figure B-3 bss

Maximum value for lines

A line can be seized for a maximum period of one hour. The maximum traffic value for y is:

$$y_{max} = 1 \text{ erl}$$

In the case of trunk groups, the same applies for n lines:

$$y_{max} = n \text{ erl}$$

These values are only theoretical since there are normally gaps between seizures. In addition, blockages can occur (see figure above).

Traffic theory suggests maximum values on the basis of statistically backed-up data, taking availability (as explained in Interpretation of Traffic Values - Measurement Documents, page B-636) and permitted customer-specific loss.

9.2 Interpretation of Traffic Values - Measurement Documents

Loss tables for dimensioning trunk groups are provided by Deutsche Telekom in the FTZ 12TR2 Guideline. Given the anticipated level of loss, these tables show the maximum offering.

Offering A

The offering corresponds to total actual traffic values plus the theoretical traffic value that would have resulted if all losses had been averted.

$$A = Y + c_{losses} \Re k_{in}$$

The following diagram clearly shows a part of these values.

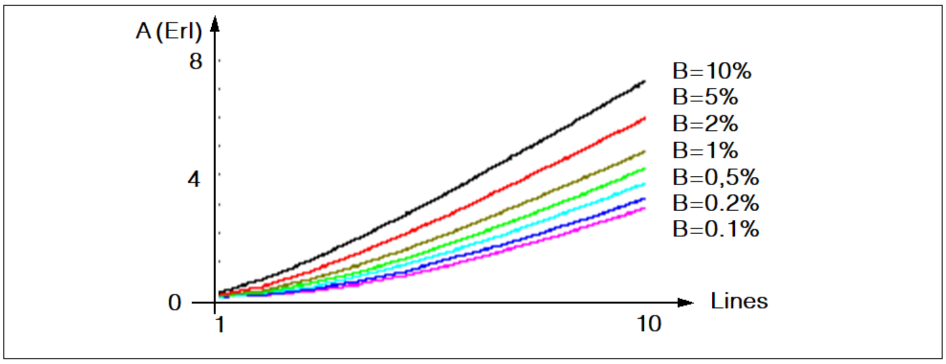


Figure B-4 Offering A

In digital systems loss B has been defined as 1%.

The higher the permitted loss defined, the greater the possible trunk group load!

Peak traffic hour

The peak traffic hour (PTH) is determined on the basis of 4 consecutive 15-minute periods with the highest traffic value during the day.

The measurement time should cover several days for saved data.

A German FTZ standard and a CCITT standard are available for calculating the peak traffic hour over several days.

Table 25: Busy Hour: Finding to CCITT or FTZ Rules

Measurement time	Day					
(15 min)	1	2	3	4	5	CCITT - Day
1	Y_{11}	Y_{21}	Y_{31}	Y_{41}	Y_{51}	Y_{C1}
2	Y_{12}	Y_{22}	Y_{32}	Y_{42}	Y_{52}	Y_{C2}
3	Y_{13}	Y_{23}	Y_{33}	Y_{43}	Y_{53}	Y_{C3}
4	Y_{14}	Y_{24}	Y_{34}	Y_{44}	Y_{54}	Y_{C4}
5	Y_{15}	Y_{25}	Y_{35}	Y_{45}	Y_{55}	Y_{C5}
6	Y_{16}	Y_{26}	Y_{36}	Y_{46}	Y_{56}	Y_{C6}

Measurement time	Day					
(15 min)	1	2	3	4	5	CCITT - Day
7	Y_{17}	Y_{27}	Y_{37}	Y_{47}	Y_{57}	Y_{C7}
8	Y_{18}	Y_{28}	Y_{38}	Y_{48}	Y_{58}	Y_{C8}
FTZ Stand.	Y_{D1}	Y_{D2}	Y_{D3}	Y_{D4}	Y_{D5}	

The following formulae are used for calculating the traffic value in the peak traffic hour:

CCITT standard:

$$Y_{CCITT} = \frac{\sum Y_{iBH\,Week}}{Days}$$

FTZ standard:

$$Y_{FTZ} = \frac{\sum Y_{DiBH\,Days}}{Days}$$

In the case of directed trunk groups (incoming, half duplex, outgoing), the second trunk group must also be taken into consideration.

- Outgoing+half duplex
- Incoming+half duplex

10 Using PM - Examples

This chapter provides three examples of how to create reports using Performance Management.

- Call Timing and Call Volumes explains how to use it for evaluation purposes at terminals.
- Evaluation of Trunk Groups illustrates how trunks are evaluated.
- Evaluation at Attendant Consoles applies the evaluation to attendant consoles.

The examples assume that the COL and PM have been correctly configured.

Explanations and rules of how the columns of statistic figures in PM Reports are calculated (as examples in 'Attendant Consoles' and 'Call Volumes' reports) are given in the following document:

http://apps.g-dms.com:8081/techdoc/en/P31003H3460M1390176A9/P31003H3460M1390176A9.pdf (English)

http://apps.g-dms.com:8081/techdoc/de/P31003H3460M1390100A9/P31003H3460M1390100A9.pdf German)

10.1 Call Timing and Call Volumes

Task: Check the utilization ratio of the telephone with the extension number 7243.

Condition: The extension is connected to the switch K200.

Remark: Any of the evaluations described can be performed not only for subscribers but also for trunk groups.

10.1.1 Defining Telephony Filters

1) Click **Filter** in the tree structure.
2) Click **New**.
3) Type **gutest**.
4) Specify the filter as follows:

5) **a)** Activate the Telephony radio button.

Select a switch: **0785 (1-1-85)** for this example.

Select telephony items: **2231** for this example.

Select Call Types tab: check all call types for this example.

Select Filter Summary tab: The Filter Summary looks like Figure C-1.

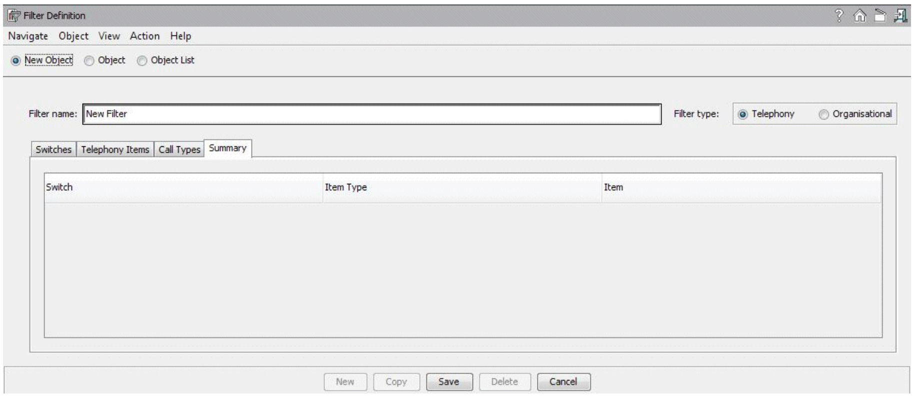


Figure 300: Filter Summary (Telephony filters)

10.1.2 Defining, Running, and Interpreting Reports

1) Click **Report** in the tree structure.

2) Click **New**.

3) In this example, select **Call Timings** > **Average Waiting+Ringing and Answering times** under the Report Templates list.

4) Select the Column Chart template and assign this template to filter.

5) Leave the scale interval at 15 minutes.

6) The report can be run immediately by pressing **Run**.

Alternatively, you can start running the report by selecting **Run Report** in the tree structure. Once the report runs, which requires that both the starting and the finishing time be entered (8:00 to 10:00 in this case), the data is evaluated as soon as it is placed in the database.

The results are displayed immediately. The icons enable the report to be saved and printed.

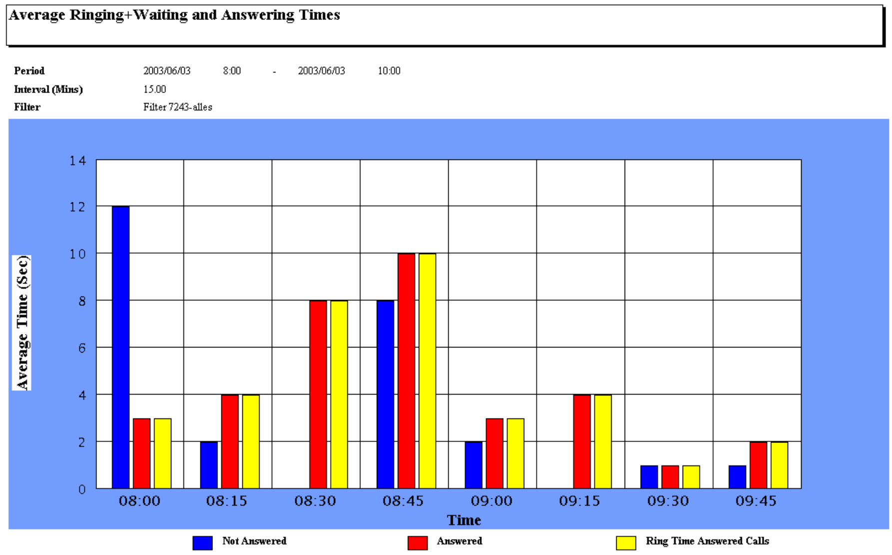


Figure 301: Average Waiting, Ringing and Answering Time Report

The report shows calls not answered, calls answered, and the answering time. The columns for answered calls and for the answering time are identical in this evaluation because there are no waiting times like those that may arise for queues and groups.

The diagram shows that a particularly large number of calls were not answered between 8:00 and 8:15. The reason could be that the line is busy or the call is simply not answered.

It is therefore useful to create a second report with the same filters but a different report definition:

7) Go back to the tree structure and define a new report. In this example, type the report **Call_Status_7243**. The chosen report template was the Call Status bar chart.

8) Select the same filters and scale intervals that were selected in the previous procedure.

When the report is run again with 8:00 and 10:00 as the specified times, the result is as follows:

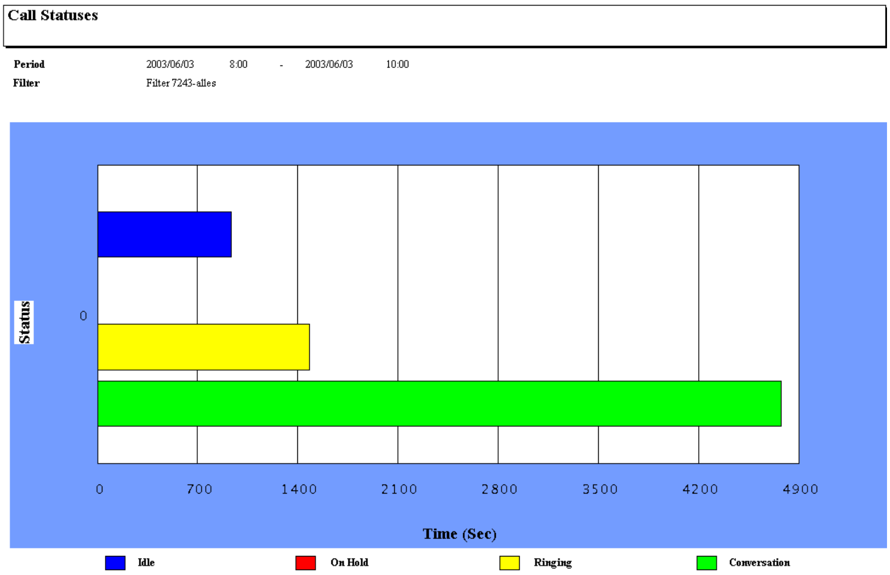


Figure 302: Call Statuses Report

In contrast to the previous report, this one also shows the reasons why calls are not being answered:

Duration of display: 2 hours = 7200 seconds. Time in idle: approximately 900 seconds. Ringing lasted approximately 1450 seconds and conversation approximately 4750 seconds. Subscriber 7243 was in conversation most of the time and was therefore unable to accept any other calls.

Another reason can be deduced from looking at the Answered/Not Answered Call Type. This requires definition of a further report, designated in this case as **Call Volumes_7243**:

9) The same filters are used as described in steps 1-6.

10) Refer to Step 6 to start the report.

11) Pressing **Run** and entering 8:00 to 10:00 as the times produced the following report:

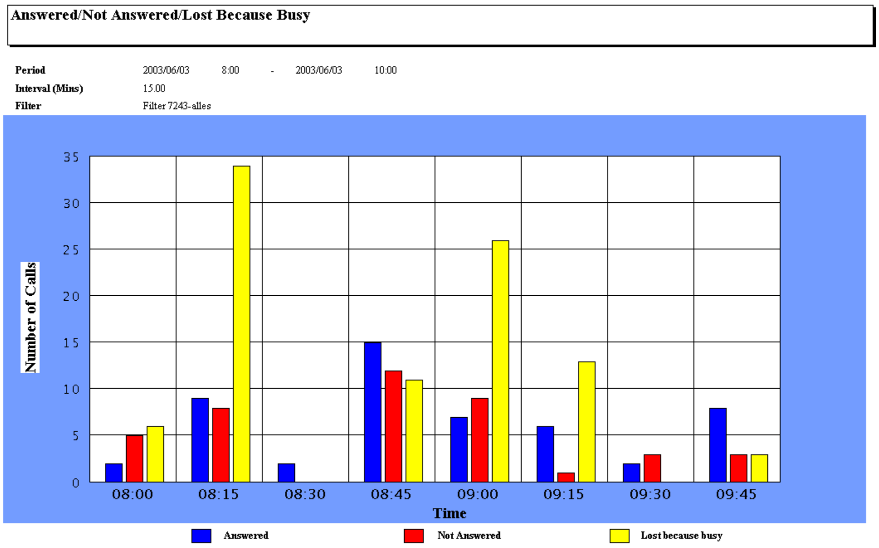


Figure 303: Answered/Not Answered/Lost Because Busy Report

It is evident that a large number of calls were lost between 8:15 and 8:30 and again between 9:00 and 9:15 because the extension was busy. It would make sense to spread the burden of calls over further extensions during this period.

10.2 Evaluation of Trunk Groups

Task: Check the utilization ratio of trunk calls and tie trunks.

Condition: Tie trunk group 10 is configured at node 200 with 10 lines, but only 4 of these are physically provided and thus usable; the other lines are regarded as reserve lines.

Remark: Any of the evaluations described can be performed not only for trunk groups but also for subscribers.

10.2.1 Defining Filters

1) Click **Filter** in the tree structure.

2) Click **New**.

3) Type **gutest** for the filter name.

4) Specify the filter as follows:

a) Select a switch: **0785 (1-1-785)** for this example.

Define telephony items: from switch 0785 (1-1-785), select trunk group **10**.

Select call types: check all call types for this example.

The filter summary shows the choices made.

10.2.2 Defining, Running and Interpreting Reports

The first step to take when monitoring trunk groups is to identify the busy hour. In our example, the report was defined as follows:

1) Click **Report** in the tree structure.

2) Click **New**.

3) Type **Filter Bdl-10 K200** as a report name.

4) Select Column Chart as the template.

5) Leave the scale interval at 15 minutes.

6) If you want to run the report immediately, press **Run**.

Alternatively, you can start running the report by selecting **Run Report** in the tree structure. Once the report runs, which requires that both the starting and the finishing time be entered, the data is evaluated as soon as it is placed in the database.

The results are displayed immediately.

The icons enable the report to be saved and printed.

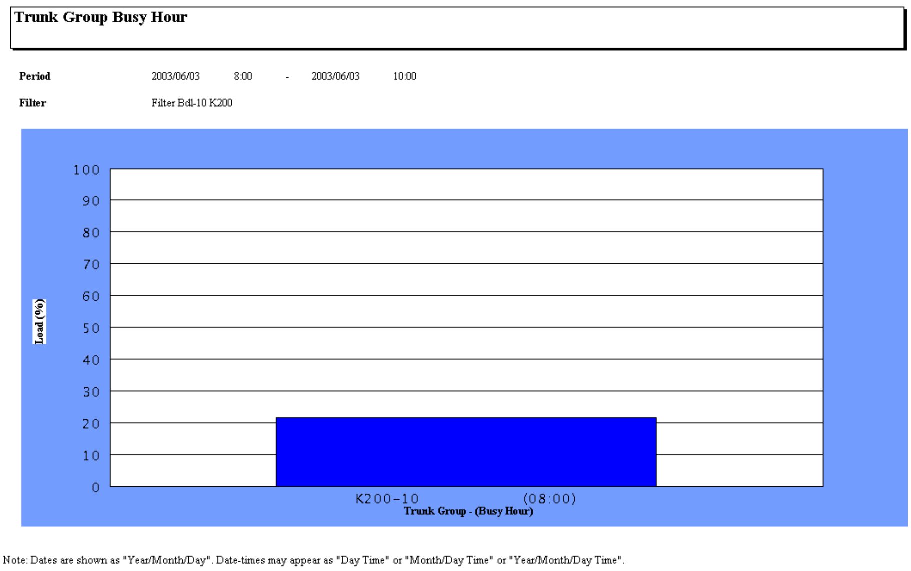


Figure 304: Trunk Group Busy Hour Report

Although the report only covers the period from 8:00 to 10:00, it clearly shows the busy hour from 8:00 to 9:00.

The period of time known as the "busy hour" must be examined in more detail. This requires definition of a further report, in this case initially as a percentage.

7) Start the evaluation by pressing **Run** and entering 8:00 to 10:00 as the times. The following report appears:

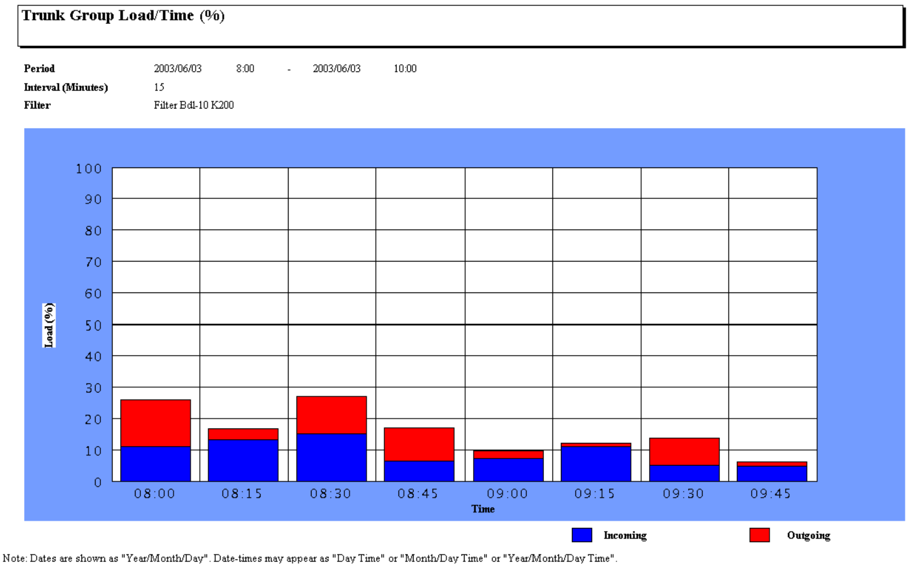


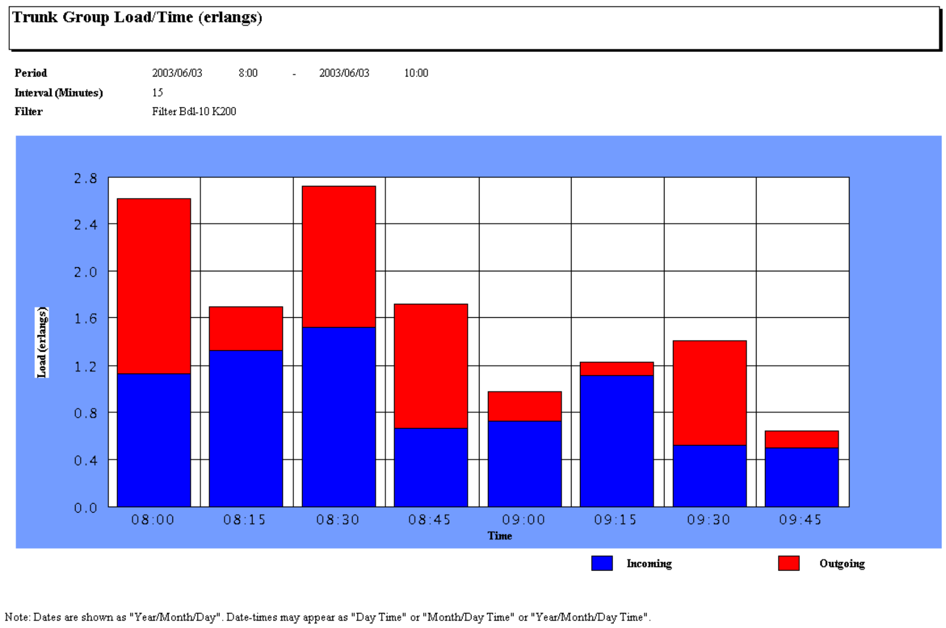
Figure 305: Trunk Group Load/Time (%) Report

The report shows incoming and outgoing connections from 8:00 to 10:00 the time in which the busy hour lies.

The report shows a maximum load of just under 30%. Since only 4 lines of the trunk group have been laid, out of a maximum of 10 (see Conditions), it is theoretically possible for a maximum load of 40% to be reached. Result: The trunks are utilized almost to the full during two measuring intervals. (A 100% utilization can only be achieved if the trunk group is configured on the switch without reserve trunks with the AMO BUEND.)

A presentation in erlangs is sometimes more readily understood.

Running the report for the same time interval (8:00 to 10:00) produces the following diagram:



Trunk Group Load/Time (erlangs) Report

The maximum value for 8:30 to 8:45 reaches almost 2.8 erlangs. This can be interpreted with the aid of the graphs for the maximum supply relative to loss, or perhaps with the Loss Factor Table (Appendix A). The losses table shows that where there is a 20% loss rate (1) at approximately 3 erlangs, 4 trunks must be provided. Conversely, where there are four trunks and 2.8 erlangs there is a loss rate (i.e. busy) of almost 20%. In other words, the trunk group is fully utilized.

A purposeful evaluation of the busy hour can be illustrated even more clearly with a finer scale interval. The following report definition was used for this purpose.

The report generated with this definition is shown below:

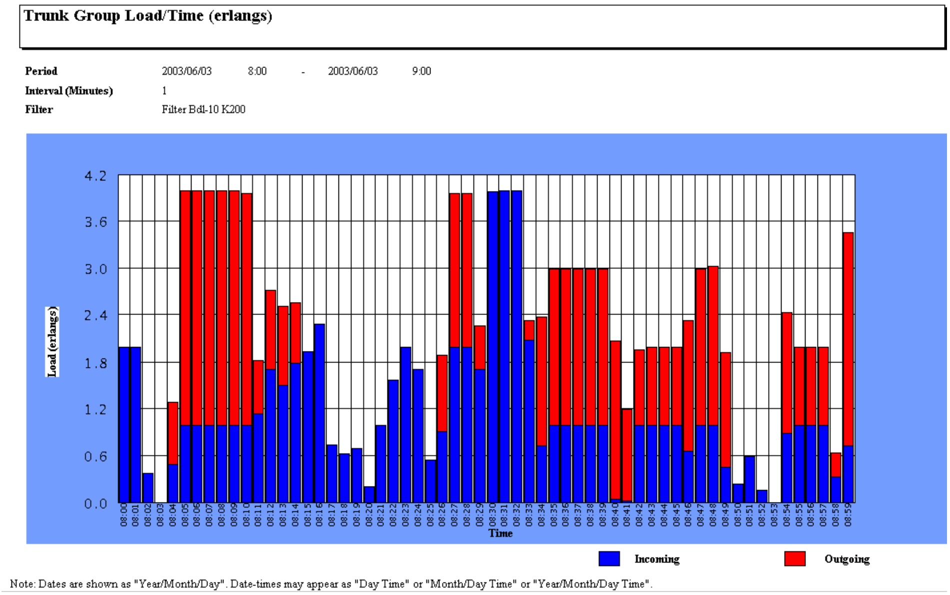


Figure 306: TrunK Group Load/Time (erlangs) Report with Finer Scale Interval

In this more accurate diagram, it is evident that the theoretical maximum value of 4 erlangs (4 physical lines in the trunk group) was achieved repeatedly (the first time being from 8:05 to 8:10). The trunk group is working to capacity, and any further attempted calls are rejected because the line is busy.

10.3 Evaluation at Attendant Consoles

Task: Check the utilization ratio of the attendant console is to be checked.

Condition: Attendant Console 7199 is configured on node 101 and is physically existent.

Remark: Any of the evaluations described can also be performed for attendant consoles.

10.3.1 Defining Filters

1) Click **Filter** in the tree structure

2) Click **New**.
3) Type **Attendant_7199** as the filter name.
4) Specify the filter as follows:

   a) Select a switch: **K101** for this example.

   Define telephony items: from switch K101, select the attendant console (7199).

   Select call types: in our example, check all call types for evaluation.

   The filter summary shows the choices made.

10.3.2 Defining, Running and Interpreting Reports

1) Click **Report** in the tree structure.
2) Click **New**.
3) Type **Report_Attendant_7199** as the report name.
4) Select General Statistics template in the table format for this example.
5) Leave the scale interval at 15 minutes. If you want to run the report immediately, press **Run**.

   Alternatively, you can start running the report by selecting **Run Report** in the tree structure.

6) Specify the start and end time. The period specified in our example is from 8:00 on June 2, 2003 to 9:00 on June 3, 2003 (25 hours).

The results are displayed immediately. The icons enable the report to be saved and printed.

General Statistics

Period 2003/06/02 8:00 - 2003/06/03 9:00
Filter Vermittlung_7199

		Exchange Line	Attendant Line	Personal Line	Outgoing Line	Incoming Lines	All Lines
Number of Calls							
Calls per Line		49	46	19	6	114	120
Calls Answered		31	23	10	7	64	71
Calls Not Answered	Total	18	23	9	-1	50	49
	Signalled in call queue only	0	0			0	0
	Signalled at AC	18	23	9	1	50	51
First Calls		42	43			85	
Recalls		7	3			10	
Times (average - seconds)							
Waiting Time (call queue)	Total	0	0			0	0
	Calls Answered	0	0			0	0
	Calls Not Answered	0	0			0	0
Ringing Time	Total	3	2	2	18	2	3
	Calls Answered	4	2	1	15	3	4
	Calls Not Answered	2	1	3	38	2	2
Sum of Waiting and Ringing	Total	3	2	2	18	2	3
	Calls Answered	4	2	1	15	3	4
	Calls Not Answered	2	1	3	0	2	2
Placing Time (Conversation+Hold)		33	19			26	28
Conversation Time		19	19	19	52	19	22
Hold Time		18				18	18
Total of Call Time (Wait+Ring+Conversation+Hold)		24	11			17	20

Figure 307: General Statistics Report

The period shown in the report is from 8:00 to 9:00.

The Exchange Line column lists the trunk or tie trunk calls to the central switching exchange.

The Attendant Line column lists the internal calls via the answer code.

The Personal Line column lists the calls made directly to extension 7199.

The calls conducted are further differentiated in the Outgoing Line and Incoming Lines columns and summed up in the All Lines column.

Evaluation of calls at the Attendant Console can also be displayed as a diagram. In this report definition (filter as above), the number of answered calls per line type were selected.

7) Start the evaluation by pressing **Run** and entering 13:30 to 14:30 as the times, and produces the following report:

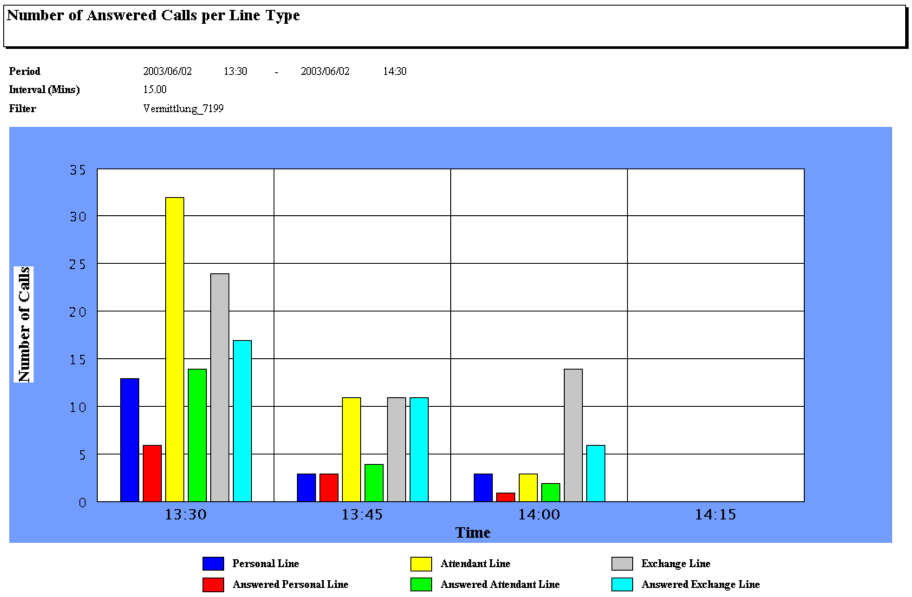


Figure 308: Number of Answered Calls per Line Type Report

The report shows the incoming connections from 13:30 to 14:30 in fifteen-minute intervals.

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