MX-ONE Traffic Manager 1.4 – Presentation Manager

USER GUIDE

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1 ABOUT PRESENTATION MANAGER

Presentation Manager (PM) enables you to retrieve and analyze, in graphical and tabular form, traffic data from any directly or remotely connected TM server. PM enables you to generate customized reports focusing on your specific system performance concerns. You can use Presentation Manager to display and analyze traffic activity on the following MX-ONE measurement objects.

- Operators
- Trunk Routes
- Voice Extensions(Here Analog and Digital only)
- MX-ONE Hunt Groups

Presentation Manager provides the following features and capabilities.

- .Provides access to traffic measurement data on any local (same LAN) or remote TM server.
- Provides the ability to display and analyze traffic measurement data in Chart, Data, and Summary views.
- Contains a comprehensive library of customizable pre-defined traffic measurement reports.
- You can define a schedule to generate automatic report printouts.
- Provides the ability to save custom report definitions for later selection and use.
- Allows scheduling for recurring traffic measurement report generation and printout or E-mail routing.
- You can view the charts and summary reports in different time intervals.
- Charts manipulation with field addition, deletion or alteration, or definition of new formulas for traffic management data from the same database table.
- You can view all or part of the traffic measurement data for measurement objects stored in the database table through Microsoft Query.

1.1 PRESENTATION MANAGER HELP

Help topics are displayed in a tri-pane Explorer View Help window where **Contents**, **Index**, and **Search** tabs appear to the left of the topic pane, and the selected topic appears on the right in the topic pane. The **Contents** tab is the default, and stays synchronized with the topic displayed in the topic pane. Click the **Index** tab to search for topics by using an index of Help subjects. Click the **Search** tab to use a full-text search for specific words or phrases.

Tips for using Help:

- When viewing Help, you can maximize the window or resize it if you want. Click **Help Topics** to show or hide the Navigation Pane. Click >> to go to the next topic in the browse sequence. Click << to go to the previous topic in the browse sequence. The **Options** menu provides additional display controls.
- Click the Print button to print the current topic. To print the entire help file you need to have Microsoft Word or Word Viewer installed on the PC. Word Viewer is a free download from Microsoft's web site.
- To print the entire help file

1. Right-click on the *PMHelp.doc* file in the PMG*HELP* directory under *MSP_S*.
2. Click **Print** on the pop-up menu.

- Click the **Help** buttons in dialog boxes to display information on the box's control elements.

2 GETTING STARTED

Presentation Manager enables you to retrieve Data Manager output from the TM server and generate customized reports based on your specific system performance concerns. It incorporates the following primary capabilities.

- It presents traffic measurement data in pre-defined chart and summary reports.
- It displays reports for selected measurement intervals.
- It provides three views: chart (graphical), data (spreadsheet), and summary (statistical).
- It allows modification of pre-defined reports by way of addition, deletion, or alteration of existing fields, or through definition of new formulas for traffic measurement data from the same database tables.
- It can save modified report templates for later retrieval and re-use.
- It performs scheduled report printouts or e-mail routing.
- You can display and analyze traffic measurement data in Chart, Data, and Summary views.

2.1 STARTING PRESENTATION MANAGER

To start PM from the Start menu:

1. Click **Start** on the Taskbar.
2. Select **Programs□TM Application Suite□Presentation Manager**.
3. When the Switch Nodes dialog box appears, select a server and a node to connect to.
4. Choose the database you want to use.
5. Click **OK**.
6. Microsoft Excel starts with the PM menu and toolbar.

To Start PM From Microsoft Excel:

7. Click **Start** on the Taskbar.
8. Select **Programs□Microsoft Excel**.
9. Select **Open** from the **File** menu.
10. In the Open dialog box, browse to *c:\msp_c\pmg\bin* (to run from client) or *c:\msp_s\pmg\bin* (to run from server), select the *PM.xla* file, and click **Open**.
11. Excel's toolbars are replaced with PM's toolbar and the PM menu is added to the menu bar.

2.2 QUITTING PRESENTATION MANAGER

Presentation Manager operates within Microsoft Excel. Although Excel's exit procedure closes Presentation Manager, you should always use PM's own exit procedure first:

1. Select **Exit...** from the **PM** menu.
2. Click **OK** to end your Presentation Manager session.

3. Quitting Presentation Manager procedure leaves Microsoft Excel open. To quit Excel, close any other spreadsheets and active Excel sub-applications and select **Exit** from the **File** menu.

2.3 NODE SELECTION

Presentation Manager allows you to access the network SQL database server of your choice. The following rules apply to default server/node selection settings during startup, interactive, and automated (scheduled) processing modes.

PROCESSING MODE	DEFAULT SERVER/NODE
First Icon Start	Local TM Server
Other Icon Starts	Previously Connected TM Server
Scheduled Report Start	Specified in Scheduled Report Parameters

When you select a measurement node, PM maintains your current Measurement Category and Available Reports selections.

To Select a Measurement Node:

1. Open the Switch Nodes dialog box by selecting **Switch Nodes** on the **PM** menu.
2. Use the **Available Servers** drop-down list to select the network server containing the SQL database you want to access.

Note! The first time you run PM after installation the default server is your local TM server. Subsequently, PM defaults to the previously logged server.

3. Select the MX-ONE measurements node you want to evaluate from the **Available Nodes** list.
4. Select the database you want to use (**Primary** or **Auxiliary**).

Note! The auxiliary database must have been successfully set up and initialized by DM prior to being selected.

5. Click **OK**. PM displays a message box indicating that switching nodes requires you to execute a new query and generate new reports.
6. Click **OK**. The Define Report dialog box is opened.

When you use the PM Switch Nodes selection, PM remembers your current report category and type settings. These selections remain in effect when the switch to the new node is executed.

2.4 SYSTEM TIME AND DATE SETTINGS

There are several circumstances in which time and date settings need to be adjusted.

2.4.1 FORWARD TIME ADJUSTMENT

When the MX-ONE system clock is set forward, as in the case of Daylight Savings Time (Spring), traffic measurements for the skipped hour are not saved to disk. Therefore, there will be a one-hour gap in the report.

2.4.2 BACKWARD TIME ADJUSTMENT

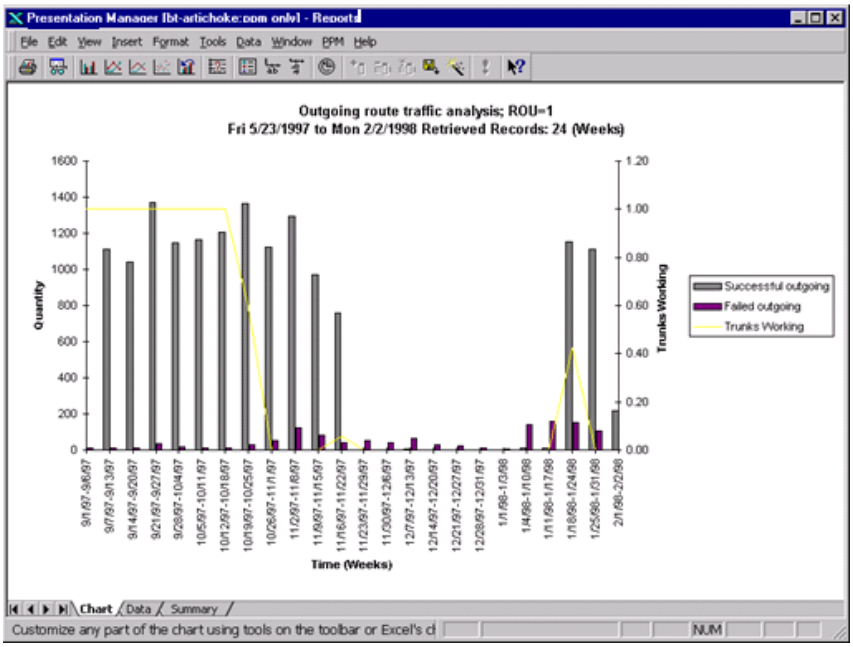
When the MX-ONE system clock is set backward, as in the case of Standard Time (Fall), traffic measurements for the repeated hour are duplicated on disk. Only the latest measurements for the repeated hour are in the report.

Caution! Do not change MX-ONE time-date settings while traffic recording is in progress. To do so can result in erroneous traffic measurement data readings by both DM and PM.

3 USER INTERFACE

3.1 CHART VIEW

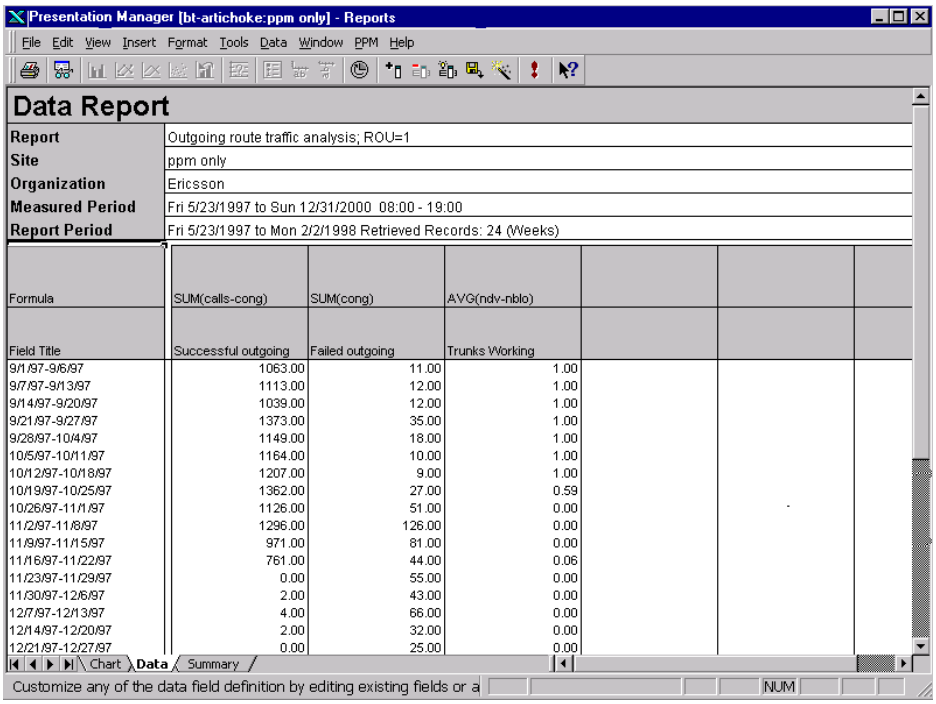
Chart View gives you a high-level visual perspective of traffic measurement results. You can compress and expand measurement intervals to narrow or broaden your focus on specific sets of data points. Depending on the kinds of measurements you are researching, you can select from a variety of chart types to enhance your evaluation of system performance.



3.2 DATA VIEW

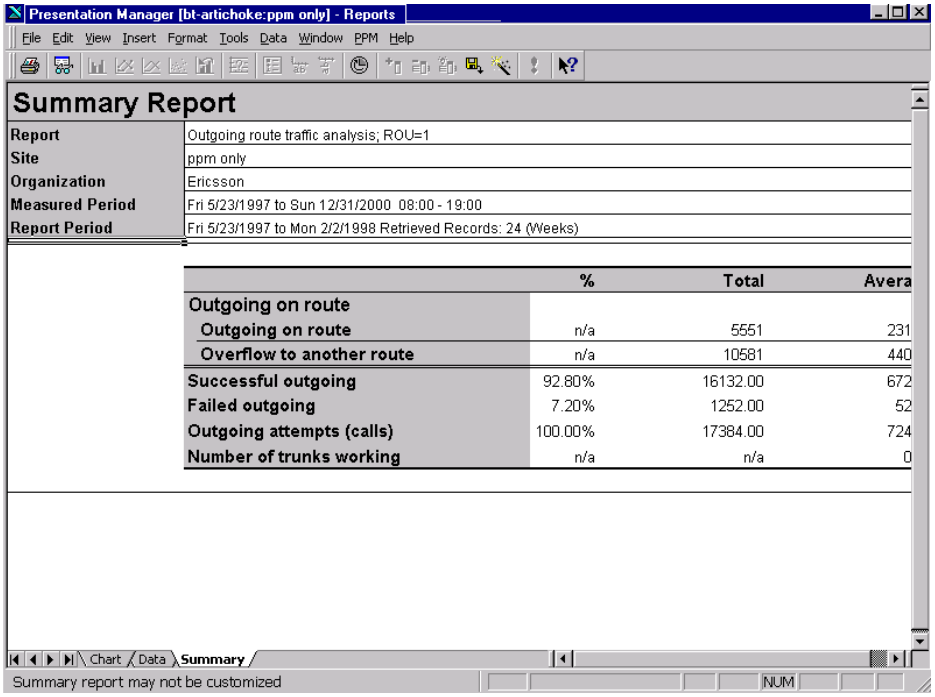
In Data View you are able to view the specific numerical values that produce your graphical Chart View presentations. Data View allows you to overlay and hide additional traffic data to better correlate cause and effect (resources versus performance, for example). In Data View you are also able to define custom reports based on PM's pre-defined reports, and save your custom report definitions for future use.

The data that makes up a chart, or data report, is contained in the datasheet in the form of a spreadsheet. However, busy hour information is not included in the datasheet. The chart in the same time interval views the data in the spreadsheet. Manipulating the data within the spreadsheet updates the chart accordingly, but summary reports remain unaffected. You can only manipulate applicable data existing in the database table from which the chart originated.



3.3 SUMMARY VIEW

Summary View aggregates measurements within a report in the form of percentages, averages, and totals. This view provides a comprehensive, quantitative summary of your report results.



3.4 PRESENTATION MANAGER MENU

The Presentation Manager (PM) Menu Bar includes standard MS Excel selections for displaying, editing, formatting, and otherwise processing measurement values. However, only the PM menu

belongs exclusively to Presentation Manager. This menu contains individual selections of feature controls and configuration options. The following table explains each menu selection.

TO	SELECT
Select a report category, retrieve all corresponding measurements, and generate reports.	**Define Report...**
Select available reports, specify reporting intervals, and direct output to a printer or an E-mail address.	**Scheduled Reports...**
Activate/deactivate the scheduler, set properties pertaining to your station regarding scheduled report print times, set your organization name, and schedule reports option,	**Profile Info...**
Select a server, node, and database.	**Switch Nodes...**
Exit PM.	**Exit...**
Get Presentation Manager Help Topics.	**Help Topics...**
View version or release level information for the Presentation Manager you are running.	**About...**

3.5 TOOLBAR

The toolbar provides mouse selection icons for major PM features and operations. You can display Windows Tooltips Help for each toolbar button by pointing with the mouse. These icons are grouped according to the following functions, but are individually activated or deactivated; depending on the kind of traffic measurement data report you are viewing.

3.5.1 REPORT PRINT ICON

ICON	DEFINITION
Print Reports	Formats and sends your reports to your selected print output device.

3.5.2 DEFINE REPORT ICON

ICON	DEFINITION
Define Report	Opens a dialog box where you can select the report category, name, grouping intervals, measurements, and date range.

3.5.3 REPORT FORMAT ICONS

Use these icons to modify the appearance and readability of your reports. Keep in mind that you can always use the Reset Chart Format button (see table below) to return to the original format.

ICON	DEFINITION
Column Chart View	Changes line and scatter charts to columnar format. Not accessible for distribution type reports.
Line Chart View (Show Markers)	Changes column or scatter charts to line chart view, with data point markers shown.
Line Chart View (Hide Markers)	Changes column or scatter charts to line chart view, with data point markers hidden.

ICON	DEFINITION
Scatter Chart View	Changes column or line charts to scatter chart view (line chart data points without the connecting lines).
Reset Chart Format	Restores default PM chart format.
Gridlines	Adds horizontal gridlines to column, line, and scatter charts.
Hide/Show Chart Legend	Hides or displays legend information for report Chart View. The Hide command provides maximum chart area viewing.
Automatic Labels	Have PM determine Chart View X-axis label orientation.
Vertical Labels	Forces PM to apply vertical (stacked-letter) orientation to Chart View X-axis labels.

Note! Certain Presentation Manager reports involve both the primary and secondary axes. The first four buttons (Column, Line, and Scatter View controls) apply only to the primary axis.

3.5.4 REPORT TIME INTERVAL ICON

PM report views support selectable query and display time intervals for most report types. This means that for a given span of report data, you can increase or decrease the density of information shown in Chart View, for example, by choosing smaller or larger report time intervals. All intervals are supported.

ICON	DEFINITION
Change Grouping Interval	Adjusts x-axis time division increments. Allows you to increase or decrease the density of information shown in Chart View and overlay the busy hour. Also affects how information is presented in Data and Summary Views.

3.5.5 REPORT TEMPLATE ICONS

These controls allow you to customize PM's basic report templates to ideally suit your requirements.

ICON	DEFINITION
Edit Fields	Opens a dialog box where you can select additional fields, and enter a field title and formula.
Hide Fields	Removes any rows or columns on traffic measurement charts. Restore hidden fields with the Unhide All Fields toolbar icon.
Unhide All Fields	Restores all fields hidden with the Hide Fields toolbar icon.
Save Custom Report Templates	Saves and deletes custom report templates.
Custom Report Wizard	Starts a Wizard that leads you through the steps of setting up a custom report.

3.5.6 DATABASE QUERY NOW ICON

When working in Data View, you can use report template controls to add, hide, and unhide data fields (measurement objects). The Query Now icon allows you to update your report accordingly as you make changes.

ICON	DEFINITION
Query Now	Updates your report with new SQL database information based on changes to data fields in the report template. Although you can only use this icon in Data View, query results are reflected in Chart View.

3.5.7 PM TOOLBAR HELP

This dedicated PM toolbar Help icon provides point-and-click information on PM.

ICON	DEFINITION
Help	Click, drag, and click to call up context-sensitive help for on PM screen objects and controls.

4 REPORTS

4.1 TRAFFIC MEASUREMENT REPORTS

You must open the Define Report dialog box as the first step in generating a traffic measurement report. Generating MX-ONE traffic measurement reports using PM involves the following operations.

- Selecting a Server/Node.
- Selecting a Report Type.
- Choosing a Measurement Category.
- Choosing an Available Report.
- Defining Query Criteria.
- Viewing Your Report.
- Scheduling Reporting Tasks.

It is important that you be aware of how PM handles reports that include zero-traffic intervals that can result from weekends, holidays, overnight, etc. When you define a report where the range includes one or more periods of zero traffic, such conditions can generate SQL server "divide-by-zero" error conditions.

PM report charts that include zero measurement intervals displays those intervals as blank spaces. PM detects and excludes these zero-traffic conditions and maintains the accuracy and usability of Data View calculations and Summary view statistics.

4.2 PRE-DEFINED REPORTS

Depending on the availability of measurement data for a given MX-ONE node, Presentation Manager provides up to twenty-seven pre-defined reports focusing on seven measurement categories.

- Individual Operators
- Operators in Call Origin Groups
- Trunk Routes
- Voice Extensions(here Analog and digital)
- Cordless Extension Traffic and Mobility
- IP Devices
- MX-ONE Hunt Groups

Each report consists of chart, data, and summary views. Data and summary view formats are the same for all reports. However, the chart type can vary from report to report.

Note! Although all traffic measurement data extracted from MX-ONE nodes is stored on TM SQL databases, only measurements relating to Operators, Trunk Routes, Voice Extensions, Cordless Extension Common Fixed Part, and MX-ONE Hunt Groups are available in pre-defined reports.

4.3 DEFINE REPORT

You can query active or archived measurement information for presentation purposes, select a traffic measurement report, and define the date range and time interval in which to view the report. You can use query results to extract proper traffic recording data to create pre-defined charts and summary reports.

The generated report date range can reflect the date range for valid data in the database per measurement selected (default) or a user-defined fixed date range. The fixed report date range is provided in case you want to generate all your reports in the same date interval.

After you've selected a measurement node, you must choose a measurement category and select from a list of available reports for that node. You can access the controls for generating a traffic measurement report from the Define Report dialog box.

4.3.1 TO DEFINE A REPORT

1. Open the Define Report dialog box by selecting **Define Report** on the **PM** menu, or clicking the **Define Report** icon on the toolbar.
2. Choose a report category from the **Category** drop-down list. Depending on the release, you can select from up to twenty-seven pre-defined reports focusing on eight categories.
   - Individual Operators
   - Operators in Call Origin Groups
   - Trunk Routes
   - Voice Extensions(Here Analog and digital)
   - MX-ONE Hunt Groups
   - IP Devices
   - Cordless Extensions
3. Choose one of the available reports from the **Name** drop-down list.
4. Select one of the following viewing intervals from the **Grouping Intervals** drop down list.
   - 15 Minutes
   - 30 Minutes
   - 1 Hour
   - Days
   - Weeks
   - Months

   If you select a report type other than one involving distribution measurements (i.e., Distribution of: attendance state, handling time, incoming calls), PM enables a Grouping Interval control. Use this drop-down list to adjust the time-axis (X-axis) intervals shown in Chart, Data, and Summary Views, depending on your analysis requirements.

   Selecting lower settings can result in crowded Chart View displays that you may find difficult (or impossible) to read. You will be able to re-adjust the display intervals later using the **Change Time Interval** toolbar icon (see Report Formats).

5. Click the **Active Measurements Only** option button to retrieve on-going measurements and exclude measurements that are no longer active, or click the **Measurements Starting From** option button to retrieve both active and inactive measurements recorded since the query start date you chose.

   You can generate a report based on the default date range. However, you may also choose to customize your report start and end dates with the **From** and **To** fields, respectively. The next steps (optional) in generating your report involves setting the initial date ranges and time intervals you want to view in your report. You use the **Date Range** fields for these settings.

   You can generate reports based on a sub-set of the time being measured. For example, if a measurement is running from 0:00 to 24:00, but you request a report for the business hours between 8:00 to 17:00, the summary will be based on the selected sub-set report range.

6. To set a query start date, select a date in the **From** drop-down list.

7. To set a query start time, select a time in the **From** spin-box.

8. To set a query end date, select a date in the **To** drop-down list.

9. To set a query end time, select a time in the **To** spin-box.

10. To select a fixed report range, click the **Fixed From and To Date and Time** checkbox to use the current selected report range with this and subsequent reports.

    When the **Fixed From and To Date and Time** checkbox is checked, Define Report does not automatically fill in the start and end dates, and your specified date range is preserved from one report to the next. PM issues a warning if you attempt to generate a report with a date range that is not within the valid default range.

11. With the viewing interval selected, click the **Generate Report** button to retrieve the measurement data you specified in your query criteria.

    Unless the database server responds immediately, you will see the "Accessing Database Server" message displayed while the query is in progress. When the database query is complete, PM switches to Chart View showing a graphical representation of the retrieved measurement data.

4.4 REPORT FORMATS

Presentation Manager displays reports in pre-defined formats. You can change the appearance and content of a report using toolbar icons and with on-screen controls in each report view.

4.4.1 TO CHANGE CHART TYPE

Use the following toolbar icons to change your chart type.

ICON	DEFINITION
Column Chart View	Changes line and scatter charts to columnar format. Not accessible for distribution type reports.
Line Chart View (Show Markers)	Changes column or scatter charts to line chart view, with data point markers shown.
Line Chart View (Hide Markers)	Changes column or scatter charts to line chart view, with data point markers hidden.
	Changes column or line charts to scatter chart view (line chart data points without the connecting lines).

Scatter Chart View	
Reset Chart Format	Restores default PM chart format.

4.5 BUSY-HOUR OVERLAYS

You have the option to add or delete the busy hour start time as an overlay on the existing chart. The busy hour overlay option is only applicable for charts viewed in day interval and to the following reports.

- Individual Operator Handling Time
- Individual Operator Overall Traffic
- Trunk Routes - all reports
- Voice Extension Overall Traffic(Analog and digital in this context)
- Operator Call Origin Group Handling Time
- Operator Call Origin Group Attendance State
- MX-ONE Hunt Groups Detailed Traffic by Percentage
- Cordless Extension Overall Traffic Analysis
- IP Devices Overall Traffic Analysis
- More than one busy hour per day might exist. In which case, you can specify a maximum of four "busiest" starting hours (hours with identical "traffic carried" value). Busy hour start time is only reflected in the "chart" sheet. Original charts with primary and secondary axes are redrawn with all previous data reflected on the primary axis and the busy hour overlay reflected on the secondary axis. Chart formatting options provided on the PM toolbar only affect data on the primary axis and does not affect the busy hour overlay. The original pre-defined traffic measurement reports do not contain busy hour overlay information; therefore the restore chart to original report option does not restore the busy hour overlay.

4.5.1 TO ADD BUSY-HOUR OVERLAYS

1. Open the Grouping Interval dialog box by clicking the **Change Grouping Interval** icon on the toolbar.
2. Use the **Group in Intervals of** drop-down list to set the interval to **Days**.
3. Check the **Overlay Busy Hour** checkbox.
4. Click **OK** to close the dialog box and save your settings.

Note! This feature is not available for all report types.

4.6 VIEWING INTERVALS

You have the option to view the charts in intervals of 15 minutes, 30 minutes, 1 hour, days, weeks and months. The charts are updated to reflect changes when you alternate between different viewing intervals. Viewing traffic measurement reports in different intervals does not apply to pie charts.

Different date ranges can be specified for viewing traffic measurement charts. However, they must be a subset of the measurement's date range. Traffic measurement reports are presented with the

measurement's time range in its entirety, it is not possible to view only a subset of the time range. Different date ranges and/or viewing times result in different data being computed for the summary reports.

When viewing data in other than 15 minutes intervals, traffic measurement charts are grouped as to reflect even time intervals. Incomplete starting and ending viewing intervals are possible since this is dependent on the measurement's starting and ending dates. All exceptional cases are clearly stated on the graph.

4.6.1 TO ADJUST DATA GROUPING INTERVALS

1. Open the Grouping Interval dialog box by clicking the **Change Grouping Interval** icon on the toolbar.
2. Use the **Group in Intervals of** the drop-down list to choose one of the following intervals.
   - 15 Minutes
   - 30 Minutes
   - 1 Hour
   - Days
   - Weeks
   - Months
3. Click **OK** to close the dialog box and save your choice.

4.7 CUSTOM REPORTS

Constructing custom reports involves modifying the field definitions of an existing report by adding new fields from the same table or changing the formulas for existing fields. You can customize the current selected report by clicking the **Edit Fields** icon, **Hide Fields** icon, or customize any pre-defined report by clicking the **Custom Report Wizard** icon.

4.7.1 TO CUSTOMIZE THE CURRENT SELECTED REPORT

1. Click the **Data** tab to display the Data Report.
2. Click anywhere in the column you want to modify.
3. To remove a column, click the **Hide Fields** icon on the toolbar. You can use the **Unhide All Fields** icon to restore all columns.
4. To add or modify a column, open the Edit Fields dialog box by clicking the **Edit Fields** icon on the toolbar.
5. Choose a field in the **Select Additional Fields** list. The fields listed are data fields in the SQL Server database.
6. Enter a new Field Title in the **Enter Field Title** edit box.
7. Choose a new Formula by clicking one of the **Grouping** option buttons.

8. Click **Insert into Formula** >> to place a new formula into the **Edit Field Formula** edit box. This button adds the new formula to any existing formula. When this is the case, you must delete the old formula or insert the proper operatives between formulas.
9. Click **OK**.
10. Respond **Yes** to the "Override Existing Field?" message if presented. You are prompted with this message when modifying existing column data.
11. Respond **Yes** to the "The report template changed. Do you want to refresh the report now?" message. Refreshing the report does not update data reflected in the summary reports.
12. If you want to save the report, open the Save Custom Report Template dialog box by clicking the **Save Custom Report Templates** icon on the toolbar.
13. Enter a name for your new custom report in the **Report Name** edit box.
14. Click **Close**.

When you build your own reports, you must rely on your own traffic measurement expertise to construct effective measurement formulas. Here are a few guidelines to help you get started:

- Become familiar with PM's capabilities and limitations.
- Gain experience with Microsoft Excel's capabilities and limitations.
- Base your initial designs on PM's pre-defined reports.
- Use the Traffic Measurement Objects Dictionary for reference.
- Refer to your "TM Technical Guide for SQL" traffic measurement data field definitions.
- Familiarity with pre-defined report formulas may prove helpful.

4.7.1.1 To Customize any Pre-defined Report

To customize any pre-defined report, click the **Custom Report Wizard** icon on the toolbar and follow the instructions presented by the wizard. It allows you to perform the following actions to the data report.

- Define a report category and type to base your Custom Report on.
- Construct your Custom Report by editing, deleting and inserting columns.
- Name and save your Custom Report.

4.8 SAVE CUSTOM REPORT TEMPLATE

After you create a custom report you can save that report's template (sum or average grouping, formulas, and field titles for future use (data is not included). These controls determine the contents of the chart and data sheets. The Save Report Template feature allows you to save an edited report template and assign a name of your choice.

4.8.1 TO SAVE YOUR CUSTOM REPORT DESIGNS FOR FUTURE USE

In Data View, open the Save Custom Report Template dialog box by clicking the **Save Custom Report Templates** icon on the toolbar. The following display and control options are available in the Save Custom Report Template dialog box.

Report Name Entry Box	Use this field to assign a name to your report template.

Available Custom Reports List box	Lists the names of saved reports. Reports appearing in this list also appear in the Available Measurements list box in the Define Report dialog box. You may use the Add or Delete buttons to control the contents of this list.
Close Button	Closes the Save Custom Reports Template dialog box.
Help Button	Displays online help on the topic of saving custom report templates.
Add Button	Adds the current report, in the Report Name entry box, to the Available Custom Reports list.
Delete Button	Deletes the highlighted report in the Available Custom Reports list.

15. Click the **Add** button to add the new report name to the list displayed in the **Available Custom Reports** list.

16. Select **Close** to return to close the dialog box.

Note! When you click the **Save Custom Report Templates** icon , PM clears all data from the Data worksheet. You must then use the **Query Now** toolbar icon to retrieve data according to the report template fields.

Both saved custom reports and predefined reports can be access by "Define Reports" and " Schedule Reports". As well, you can schedule these custom report templates for automated printout or E-mail routing using the **Schedule Reports...** command on the **PM** menu.

4.9 SAVING AND PRINTING REPORTS

It is very important that you not use Microsoft Excel's **File Save** command on the **File** menu to save traffic measurement reports. In fact, if you attempt to do so, PM intervenes and forces you to use the **Save As** option to save under another name. This action prevents corruption of PM files.

To Print the current report

1. Open the Print Current Report dialog box by clicking the **Print Reports** toolbar icon.
2. Check the desired Print What (**Chart**, **Data**, **Summary**) checkboxes.
3. If you have a color printer, check the **Use Color/Gray Scales** checkbox to print in color. This checkbox has no effect on black and white printers.
4. Check the **Print Preview** checkbox if you want to view a page layout preview of the report.
5. Click **OK** to send the report to the printer.

4.10 SETTING PROFILE INFORMATION

When you first install Performance Manager, or when you need to change your installation's general setup, use the Profile Information dialog box to:

- Control Your Report Scheduling Feature.
- Set Report Formatting Parameters.
- Change the Organization Name for Report Labeling.
- Set Up a Default E-mail Address for Scheduled Report Routing.

To Change Your Report Profile

1. Open the Profile Information dialog box by selecting **Profile Info...** on the **PM** menu.

2. Select **On** or **Off** with the **Scheduler is** option buttons (defaults to Off on installation). The On/Off scheduler option is provided so you can temporarily halt your automatic report generation for recurring printouts.

3. Be sure to set a time with the **Print Reports at** drop-down list if you are setting Scheduler to **On**. The default time is 0:00 (midnight). This setting determines the time-of-day, each day, your scheduled measurements reports will print.

4. Check the desired **Print What** (**Chart, Data, Summary**) checkboxes.

5. Select the orientation priority you prefer for the **X-Axis Labels** on your Chart printouts. Select **Automatic** to let PM determine label orientation. Select **Vertical** to insure longer labels always take up the least amount of space to avoid crowding and overlap. This selection also enables you to associate time and data points more accurately.

6. If you have a color printer, check the **Use Color/Gray Scales** checkbox to print in color. This checkbox has no effect on black and white printers.

7. Click **More** >> to display the Company Information and Default E-mail Address fields.

8. Enter the company name or organization you want to appear on your reports in the **Organization Name** edit box. The business name is reflected as part of the report description title.

9. For automated routing of scheduled reports, enter an E-mail Recipient's Address or click the **Address...** button to select an address from the network's post office directory listing. You should use the Address dialog box to select an address from the post office directory listing. If no Address Book appears, see your System Administrator.

Note! PM does not validate the Recipient's Address (for E-mail) before, during, or after the scheduling or dissemination process. Use the Address dialog box to select the addresses, or take other steps to make sure the destination address is accurate.

10. To save your changes and close the dialog box, click **OK**, otherwise click **Cancel**.

If you are viewing a report you want to schedule for automatic/recurring generation and printing (or e-mail routing), proceed to Schedule Reports. Otherwise, you must select a network server, measurement node, report type and category, and measurement object before scheduling automatic print or e-mail routing. Make sure these settings are coordinated with those of the Schedule Reports dialog box.

4.11 SCHEDULING REPORT TASKS

You can program Presentation Manager to automatically generate and print pre-defined and custom-defined traffic measurement reports. Alternatively, you may choose to route your scheduled reports directly to one or more personal electronic mailboxes (including your own) using the Schedule Reports dialog box E-mail option.

Since PM's scheduler execution time is based on local time settings, the scheduler does not support different time zones when generating reports for remote TM database servers. You can control both the general content and timing of automatic printouts. You may schedule your reports to print, and/or be routed via E-mail:

- To a specific printer and/or e-mail address.
- At a specific time-of-day (hour).
- On a specific date.
- On a specific day of the week.
- On a recurring basis.

PM's E-mail report scheduling capability applies only to Microsoft Mail operating on Windows networks. Make sure your Microsoft Mail Registry keys are properly configured. For Microsoft Exchange, you must define a default profile. The following procedures will help you set up and schedule automatic report printouts.

Use the Scheduled Reports dialog box to add, edit, and delete scheduled reports. You can specify or select a unique destination printer and/or e-mail address for each individual report. If you do not specify a destination printer and/or e-mail recipient, PM routes printouts to Windows Print Manager's default printer and to the E-mail address specified in your PM Profile Information dialog box.

Note! You can use PM's task scheduling feature with both pre-defined and user-defined reports.

4.11.1 TO ADD A SCHEDULED REPORT

1. Open the Scheduled Reports dialog box by selecting **Scheduled Reports...** on the **PM** menu.
2. Open the Add Scheduled Report dialog box by clicking the **Add...** button.
3. Use the drop-down lists (**Category**, **Name**, **Grouping Intervals**) in the **Report** fields area to choose a report category, type, and interval.
4. Check **Overlay Busy Hour** to add busy hour overlays if desired. The **Overlay Busy Hour** checkbox is only available when the grouping interval is days.
5. Click the **Active Measurements Only** option button to retrieve on-going measurements and exclude measurements that are no longer active, or click the **Measurements Starting From:** option button to retrieve both active and inactive measurements recorded since the query start date you chose.
6. Click the **Specific Day** option button to select a reporting interval for a single specific date, or click the **Recurring Every** option button to select a reporting interval for a weekly report for a specific day of the week.
7. Enter the desired historical depth of your report, in days, in the **For the Past** field. The default is 60 days.
8. Change the desired report time.
9. Choose your output destination by checking the **Printer** and/or **E-Mail** checkboxes. You should use the Address dialog box to select an address from the post office directory listing.

Note! If the Address dialog box does not appear, your electronic mail (e-mail) application is not appropriately configured. Request assistance from your system administrator. PM does not validate the recipient's Address (for e-mail) before, during, or after the scheduling or dissemination processes.

4.11.2 TO EDIT A SCHEDULED REPORT

1. Open the Scheduled Reports dialog box by selecting **Scheduled Reports...** on the **PM** menu.
2. Select the report you want to edit. If the report you selected is scheduled for another node, the **Edit** button is disabled. You can only edit reports on the current node.
3. Open the Edit Scheduled Report dialog box by clicking the **Edit...** button.
4. Use the drop-down lists (**Category**, **Name**, **Grouping Intervals**) in the **Report** fields area to change the report category, type, and interval.

5. Check **Overlay Busy Hour** to add busy hour overlays if desired. The **Overlay Busy Hour** checkbox is only available when the grouping interval is days.
6. Click the **Active Measurements Only** option button to retrieve on-going measurements and exclude measurements that are no longer active, or click the **Measurements Starting From** option button to retrieve both active and inactive measurements recorded since the query start date you chose.
7. Click the **Specific Day** option button to change the reporting interval for a single specific date, or click the **Recurring Every** option button to change the reporting interval for a weekly report for a specific day of the week.
8. Change the desired historical depth of your report, in days, in the **For the Past** field. The default is 60 days.
9. Change the desired report time.
10. Change your output destination by checking the **Printer** and/or **E-Mail** checkboxes. You should use the Address dialog box to select an address from the post office directory listing.

Note! PM does not validate the recipient's Address (for e-mail) before, during, or after the scheduling or dissemination process. Use the Address dialog box to select the addresses, or take other steps to make sure the destination address is accurate.

4.11.3 TO DELETE SCHEDULED REPORTS

1. Open the Scheduled Reports dialog box by selecting **Scheduled Reports...** on the **PM** menu.
2. Highlight the scheduled report you want to delete. If the report you selected is scheduled for another node, the **Delete** button is disabled. You can only delete reports on the current node.
3. Click the **Delete** button.
4. Click **Yes** in response to the verification message.

5 TRAFFIC MEASUREMENT

5.1 TRAFFIC MEASUREMENT OBJECTS DICTIONARY

The MX-ONE supports simultaneous active measurements. The following table describes each of the available objects and lists.

OBJECT	EXPLANATION	DM COMMANDS
OPINDI	PBX Operator Individual	TROPI:DIR=ind, all
OPCORG	PBX Operator CORG	TROPI:CORG=ind, all
OPMANN	PBX Operator Manned time	TROMI:DIR=ind, all CORG=ind
ROUDDI	Direct Indialling Route	TRROI:ROU=ind
ROUINC	Incoming Route	TRROI:ROU=ind
ROUOUT	Outgoing Route	TRROI:ROU=ind
ROUBWY	Bothway Route	TRROI:ROU=ind
ROUDIO	Direct Indialling Outgoing Route	TRROI:ROU=ind
CONFER	Conference Units	TRCOI:none TRCOI:LIM=ind, &, &&
EXTENS	Extensions	TREXl:none TREXI:LIM=ind, &, && TREXI:DIR=ind, &, &&
PBXGRP	Internal Group Hunting (PBX) Group Number	TRPBI:GRP=ind
KEYC_S	Key Code Senders	TRKSI:none TRKSI:LIM=ind, &, &&
KEYC_R	Key Code Receivers	TRKRI:none TRKRI:LIM=ind, &, &&
CODE_S	MFC Code Senders	TRCSI:none
CODE_R	MFC Code Receivers	TRCRI:none
TONE_R	Tone Receivers	TRTRI:none TRTRI:LIM=ind, &, &&
TRUNKS	Trunks	TRTLI:none TRTLI:LIM=ind, &, && TRTLI:ROU=ind TRTLI:TRU=ind, &
CXNTRF	Cordless Extension Traffic	TRCFI:none TRCFI:BPOS=ind, & RPN=ind,& TRCFI:LIM=ind, &, &&
CXNMOB	Cordless Extension Mobility	TRMBI=none TRMBI:BPOS=ind, & RPN=ind,& TRMBI:LIM=ind, &, &&
IPXDEV	IP Device	TRIPI:none TRIPI:BPOS=ind, & TRIPI:LIM=ind, &, &&

5.2 OPERATOR MEASUREMENTS

The reports explained in the following table enable you to observe individual operator performance as measured against ongoing traffic demands.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Distribution of Attendance State	Pie	Breakdown of operator availability and level of activity when present.
Distribution of Handling Time	Pie	Breakdown of handling times for various call types, including operator-initiated calls.
Distribution of Incoming Calls	Pie	Shows total number of calls answered by operator versus the number abandoned.
Handling Time	Column/Line(BH)*	Charts average call handling time, average queue wait time versus the number of abandoned calls. Use these measurements to evaluate the effect on the number of abandoned calls when operator handling time and queue wait times fluctuate.
Operator overall traffic	Line(BH)*	Shows the number of calls answered, initiated, and abandoned by the selected operator. Operator Initiated Calls include operator transfers and operator originated calls.
Attendance State (traffic optional)	Column	The mandatory measurement (Attendance State) and optional measurement (operator traffic information) must be on the same Date and Time range in order to join them for report presentation. When there is no traffic information available, operator attendance is charted in terms of Operator Workstation present-marked versus absent-marked status.
	Column/Line Overlay	When traffic information is available, values for calls answered and calls abandoned are also included. Use these measurements to evaluate operating scheduling based on predicted traffic volume patterns.

*(BH) = The Busy Hour Overlay option is only available when the grouping interval is set to **Days**.

5.3 OPERATOR CALL ORIGIN GROUP MEASUREMENTS

MX-ONE software allows you to assign calls of different origins (i.e., internal, Direct Inward Dialing, Emergency, etc.) to be handled by specific groups of operators. The series of reports in the following table enable you to evaluate the overall effectiveness of current Operators in Call Origin Group (CORG) arrangements.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Distribution of Incoming Calls	Pie	Compares distribution of incoming

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
		calls between those answered by primary and secondary operator stations, and those abandoned.
Handling Time	Column/Line Overlay (BH)*	Charts overall handling time versus queue wait time. Line graph overlays abandoned call counts.
Attendance State (traffic optional)	3-axis Column	The mandatory measurement (Attendance State) and optional measurement (operator traffic information) must be on the same Date and Time range in order to join them for report presentation. When no traffic information is available, displays primary and secondary present-/absent-marked ratios on a 3-axis graph.
	Column/Line Overlay	When traffic information is available, displays both primary and secondary present-/absent-marked ratios and calls answered versus calls abandoned. Helps evaluate operator resources based on measured traffic.
Attendance State	3-axis Column	Shows activity level for present-marked primary and secondary CORG operator stations.

*(BH) = The Busy Hour Overlay option is only available when grouping interval is set to **Days**.

5.4 TRUNK ROUTE MEASUREMENTS

The reports explained in the following table allow you to examine trunk route resources and traffic demands to project future requirements and to detect emerging trends.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Incoming Route Resource Analysis	Line(BH)*	Plots the average number of available and blocked incoming trunks.
Incoming Route Traffic Analysis	Line(BH)*	Charts incoming attempts against the number of working trunks. Helps evaluate working trunk resources based on measured traffic levels.
Outgoing Route Resource Analysis	Line(BH)*	Displays the average number of available and blocked outgoing trunks.
Outgoing Route Traffic Analysis	Line(BH)*	Shows outgoing attempts versus the number of working trunks. Helps evaluate working trunk resources based on measured traffic levels.
Two-way Route Resource Analysis	Line(BH)*	Plots the average working versus blocked trunk route count, over time.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Two-way Route Traffic Analysis	Column/Line Overlay(BH)*	Examines trunk route serviceability in terms of successful/failed outgoing attempts and total incoming attempts. Line overlay plots total count of working trunks. Helps evaluate working trunk resources based on measured traffic levels.

*(BH) = Busy Hour Overlay option is only available when grouping interval is set to **Days**.

5.5 VOICE EXTENSION MEASUREMENTS

The Voice Extension (In this context *Analog and digital* only) report allows you to examine the traffic on your voice extensions.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Extension Overall Traffic	Column/Line Overlay(BH)*	Shows the average number of working extensions plotted (as a line) against the number of incoming and outgoing attempts, and the average talk times for new calls. All measurements are plotted over a selected time interval. Talk time durations typically fall outside the scale of the other measurements in this report. To view talk times, hide all other columns.

*(BH) = Busy Hour Overlay option is only available when grouping interval is set to **Days**.

5.6 MX-ONE SERVICE NODE HUNT GROUP MEASUREMENTS

Use the reports in the following table to look at PBX Hunt Group performance with respect to distribution of incoming calls, overall call traffic, and detailed traffic components by percentages.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Distribution of Incoming Calls	Pie	Shows percentages of calls answered immediately, calls leaving queues, and lost attempts (calls abandoned before entering queues.).
Overall Traffic by Calls	Line	Displays separate total counts for calls answered immediately, calls leaving queues, lost (abandoned) attempts, and the number of present hunt group members.
Detailed Traffic by Percentages	Column/Line Overlay(BH)*	Charts the total present and absent hunt group members count (line graph) against calls answered immediately, calls leaving queues, calls abandoned while queued, and total lost attempts (all column graphs). Use these measurements to evaluate PBX hunt group resources based on measured traffic.

*(BH) = Busy Hour Overlay option is only available when grouping interval is set to **Days**.

5.7 CORDLESS EXTENSION MEASUREMENTS

The Cordless Extension Overall Traffic Report allows you to examine the performance of all measured cordless extensions and common fixed parts.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Cordless Extension Overall Traffic	Column/Line Overlay(BH)*	Plots the total number of working cordless extensions (line graph) against incoming/outgoing attempts, failed attempts, and average holding time (all column graphs), over a selected measurement interval. Use these measurements to evaluate working time slots against average usage.
Registration Location Traffic Analysis	Column	Examines the process initiated or terminated by cordless extension in terms of successful/unsuccessful location registration requests and successful/unsuccessful detach requests. Use these measurements to evaluate phone turn on, in operation, turn off, and unauthorized users.
Handover Traffic Analysis	Column	Examines the call switching between base stations connected to the same or different boards in terms of successful/unsuccessful connection handover requests and successful/unsuccessful external handover requests. Use these measurements to evaluate whether more base stations or ELU-31 boards are needed based on the call dropped, call congestions on the base station, and attempts to do handover where other base stations could not handle the load.
Fallback Traffic Analysis	Column	Examines the terminated call switching from one channel to another in terms of successful/unsuccessful fallback requests. Use these measurements to evaluate whether the call stays with the original base station or the connection is lost when handover has failed.

*(BH) = Busy Hour Overlay option is only available when grouping interval is set to **Days**.

5.8 IP DEVICE

The IP Devices Interface is supported by MX-ONE.

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS

AVAILABLE REPORTS	DEFAULT CHART TYPE	MX-ONE PERFORMANCE FOCUS
Overall Traffic Analysis	Column/Line	Examines the usage of IP network interfaces and the quality of the IP traffic in terms of successful/failed incoming and outgoing call attempts. Line overlay plots total counts of working device boards.
Packets Data Analysis	Column/Line	Examines the quality and performance of IP devices and the IP network (the LAN) in terms of Jitter, send packets, receive packets, dropped packets, and lost packets. Line overlay plots total count of working device boards.