March 21

Technical Publications

User Manual

Zultys MXreport™ Version 4.2

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Description

This manual describes the configuration and operation for MXreport version 4.2.

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1 Contents

Revision History

Date/Revision	Comments
February 2021/Revision 1	Early Access version
March 2021/Revision 2	GA release – Updated CDR location fields.

2 Introduction

2.1 MXreport

MXreport is an advanced report writer software client running under Microsoft Windows. It gives a call center Supervisor, a Manager, or a System Administrator the ability to easily access the CDR database and extract, sort, calculate, and group meaningful data into customized management reports.

With MXreport, you can modify the appearance of an existing report or create new reports. Newly created reports can be saved as report templates for repeated use.

2.2 What's new in MXreport 4.2

- Web Chat statistics. Two new reports in the MXAdmin report area have been added to obtain statistics from the Webchat feature.
- Auto Attendant Action field now added to Clause editor.
- Caller and Recipient Location fields added to CDR reports.
- Trunk Usage reports added
- Capability to include/exclude spaces between call sessions for .csv output files.

2.3 Call Detail Records (CDR)

The Zultys MX Unified Communications Operating System manages your MX phone system. One of its functions is to maintain a database of call detail records (CDR) for all call sessions. Each CDR record contains **over 50 fields** of call data information. The data fields stored in the CDR database can be searched based on selection criteria, extracted, and formatted into meaningful enterprise-wide management control reports.

2.4 Call Center/Call Group Records

In addition to maintaining enterprise-wide call data, the Zultys MX Unified Communications Operating System is able to extract and report on call data by Operator Group, ACD Group, Hunt Group, and Call Center Group. This data can be used to provide meaningful group management reports.

2.5 MXAdmin Reports

In addition to CDR reports, the MX system comes with 43 comprehensive, preformatted CDR management reports (MXAdmin), which are accessible on demand from the MXreport interface. These reports are included in MXreport without the need for an MXreport license. See Appendix A for a listing of these reports.

3 MXreport Preparation

In order to run MXreport 4.0, you must meet the following requirements:

- The MX phone system is running MX software v.9.0.4 or higher.
- The appropriate MXreport system license(s) are installed on the MX phone system.
    - MXreport (CDR) – Provides access to CDR reports
    - MXreport (ICC) – Provides access to Call Center/Call Group reports
    - MXreport (MXAdmin) – Provides access to the pre-formatted reports. **No license is required.**
- The MXreport user is running either a 32-bit or 64-bit version of Microsoft Windows 7, Windows 8, Windows 10, Windows Vista, or Windows XP.
    - Microsoft .NET Framework 3.5 Service Pack 1 must be installed.
- The MXreport user has downloaded and installed a copy of the MXreport client software.

- If running MXreport on an MXnetwork, a separate MXreport license is necessary on each node.

  NOTE: When running MXreport for an MXnetwork node, you must log into the proper node to run the report. For example, if you plan to run a report on Node B, you must be logged into Node B.

4 Installing MXreport

To install MX report to your computer:

1. Download the MXreport software.

2. Run the MXreport *Setup* program to install the software on user's PC.

3. The MXreport set-up window opens.

4. Click **Next.**

5. Select the installation folder and click **Next.**

6. Click **Next** to confirm installation.

7. The MXreport client software is installed on the user's PC.

8. Click **Close** to complete.

NOTE: MXreport uses version 3.5 or higher of Microsoft .NET Framework, a component of the Microsoft Windows operating system. If a lower-level version is installed on user's PC, the MXreport installer will prompt user to run Windows Update.

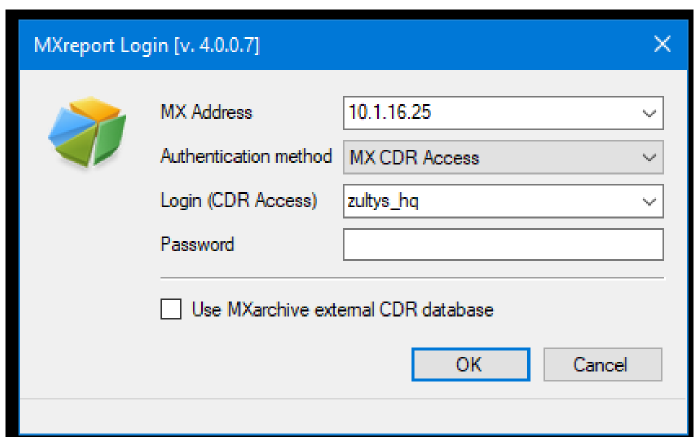
5 Starting MXreport

To access the program:

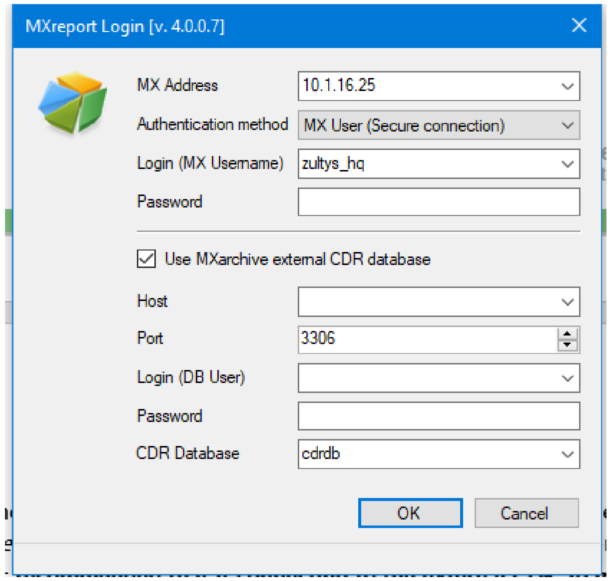
1. Click on the MXreport icon from the desktop or the Windows Start Menu to open the program.

2. In the **MXREPORT LOGIN** window, complete the field entries. If you are using the secured login connection, select “MX user – secure connection” in the Authentication method drop down. The user must enter their username and password to gain access.

This method requires the MX to be at aversion 15.0.2 (or greater).



3. If the CDR database being accessed is on an external server, select the *Use External CDR Archive* checkbox and complete the other field entries. ***It is recommended that if connecting to the external CDR archive that the user/password in the MX database should match the CDR archive database.***



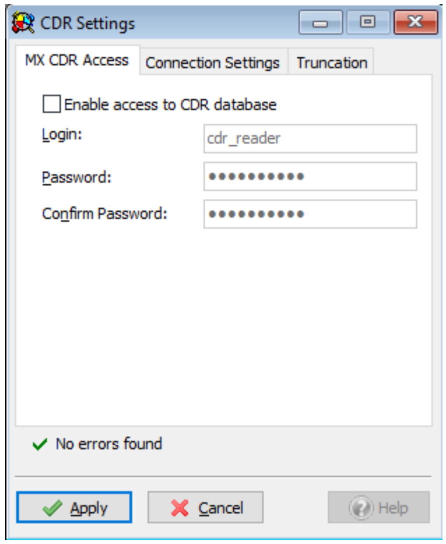
4. Click the OK button to access the program’s main window.

5.1 Secure Login Configuration

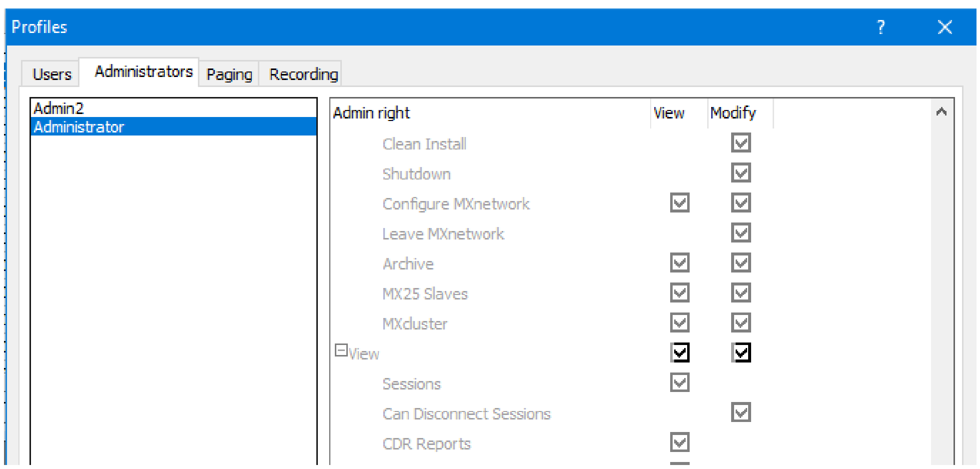
Secure login can be utilized to deny MXreport access to users who do not possess the proper authorization to access CDR records.

1) Disable CDR Access in MX Administrator\File\CDR Settings

Note: If you utilize MXarchive Server or other CDR connections you must leave this enabled. It is always recommend to change the password in these cases to prevent unauthorized users from logging into the program.



2) Assign CDR Access in MX Administrator\Users\Profiles\Administrators



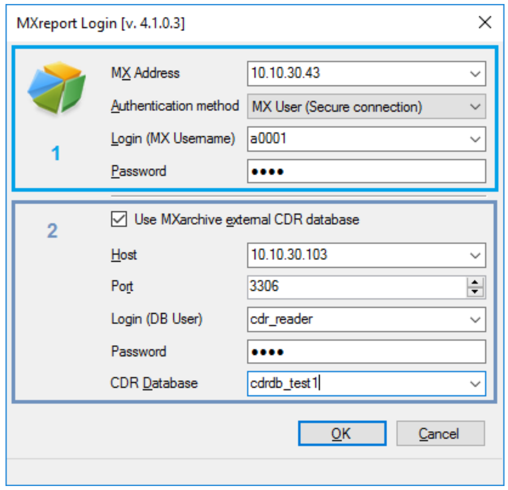
3) Assign the Administrator profile to users who require access to MXreport. Users who do not require access should not have any Administrator profiles assigned or if assigned, CDR Records should be disabled/unchecked.

4) The user accessing MXreport must use their username/password to login to MXreport.

5.2 Secure Login to External CDR database

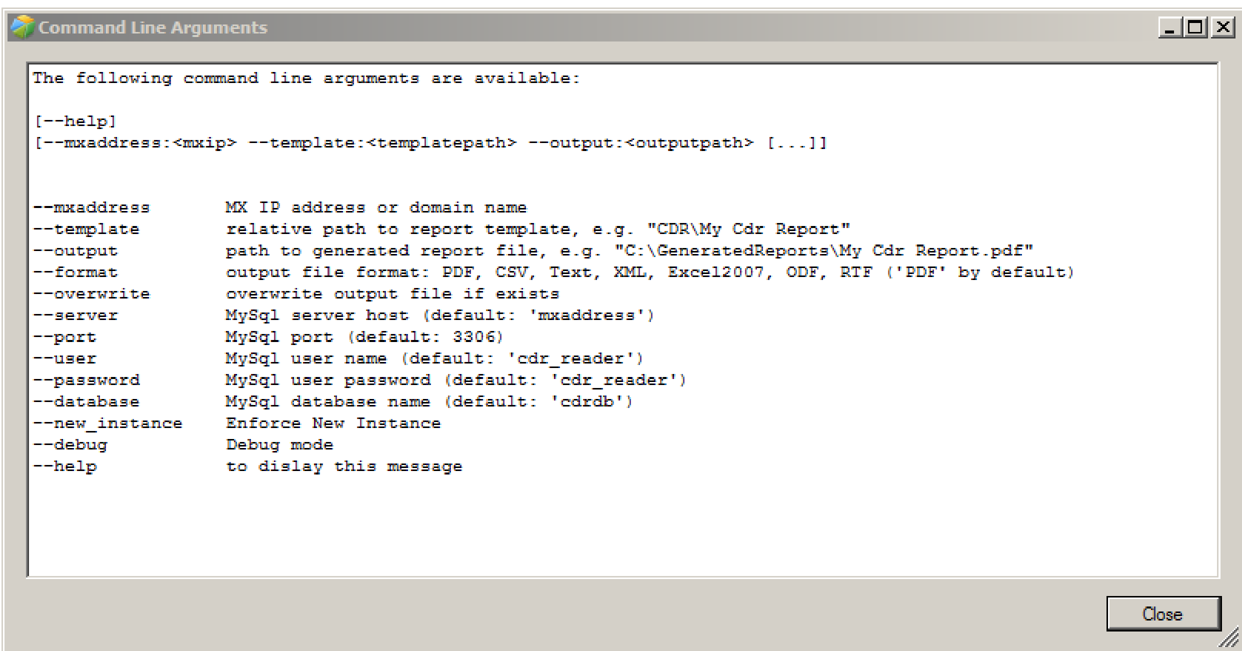
When utilizing secure login with an external CDR database, you enter both the user login information as well as the MXarchive external CDR login information.

The system will first process the user login followed by the external CDR database information.



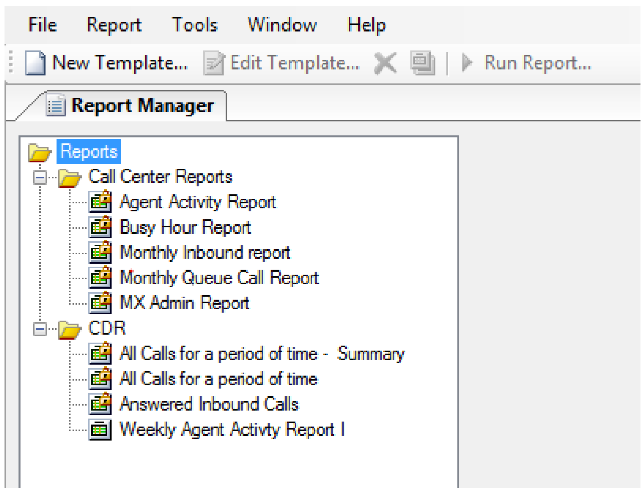
5.3 Command Line Arguments

MXreport supports command line arguments. A listing of the supported arguments that can be utilized is:

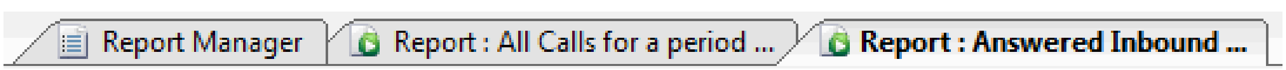


6 The MXreport Interface

After logging into MXreport, the main window of the program opens. It contains drop-down menus at the top, a toolbar beneath and **REPORT MANAGER** tab on the left. Within the **REPORT MANAGER** tab you can see a list of existing report templates that have been saved in folders. You can run these reports, clone them for creating new reports or else edit them if they have not been locked (See **Section 10: Editing/Cloning an Existing Report Template**).



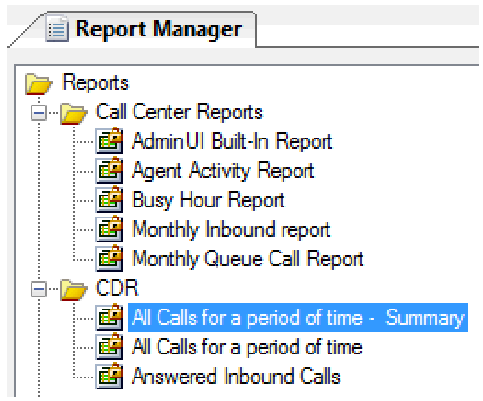
As you edit existing templates, create new report templates, or print reports, additional **Edit** and **Report** tabs open.



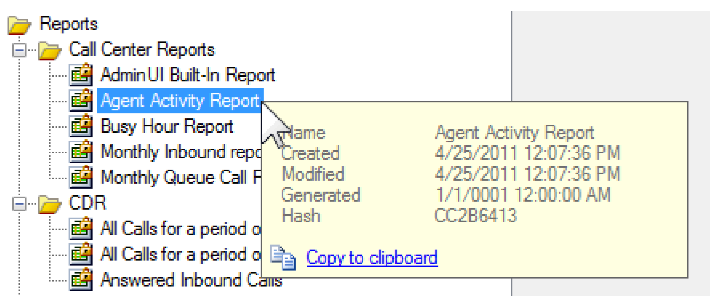
7 Running and Printing a Report

To run a report:

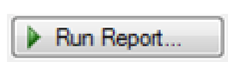
1. In the **REPORT MANAGER** tab, select a report by clicking on the report template's name.



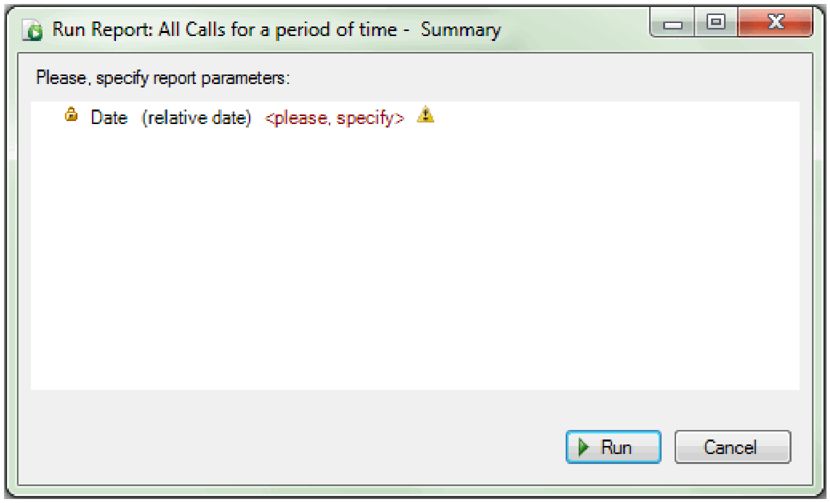
2. You can view date information about a template by positioning the cursor on its name and pausing.



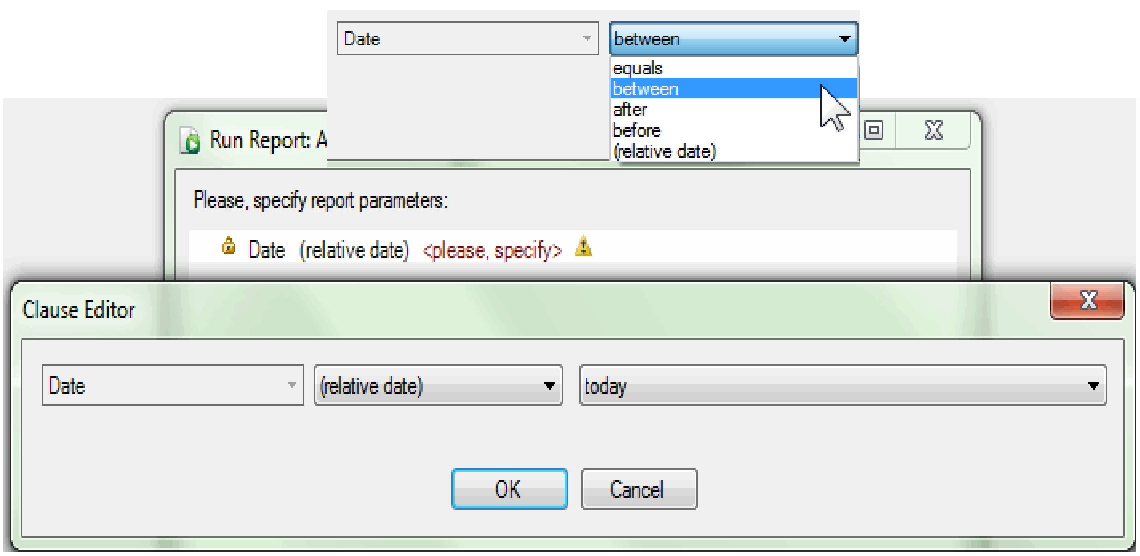
3. To run the report, click on the **RUN REPORT** button.



4. A **Run Report** window pops up indicating the report's parameters and the fields for entering variable data, such as, call dates.

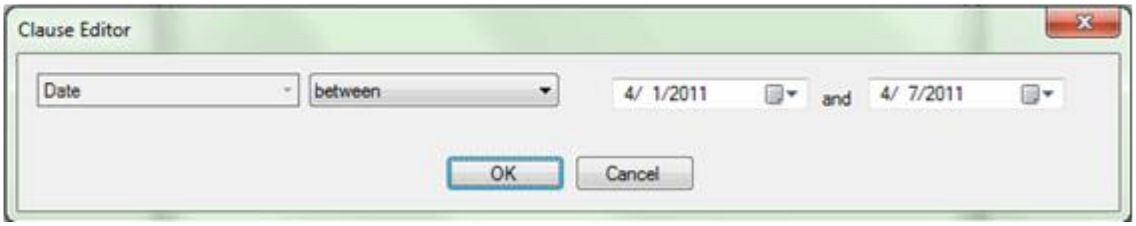


Click on the variable parameter *<please specify>*



5. A **Clause Editor** window opens.

6. Select a Call Date parameter from the Clause Editor drop-down menu and complete the data entry fields that appear.



7. Repeat for any other variable parameters.
8. When finished, click **OK** button.
9. Click the **RUN** button.

A **REPORT** tab opens displaying the report.

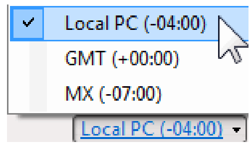
All Calls (between 4/1/2011 and 4/7/2011)

Time	Calling party #	Called #	Duration	ACD Name	Agent	Answered	Action	Global Call Id
Call Date : 4/1/2011								
8:16 AM	714	MX.Conference.21911099	02:11:34			Unanswered	End of Call	1107C-73-0015D-53F
8:18 AM	801	4342374300	00:01:07			Answered	End of Call	1107C-73-0015D-540
8:29 AM	4344551695	4083281553	01:58:10			Unanswered	End of Call	1107C-73-0015D-541
8:40 AM	8457425105	4083285433	00:00:27			Unanswered	Transfer	1107C-73-0015D-542
8:40 AM	8457425105	713	00:01:05		713 (Dennis Moran)	Answered	Transfer to VoiceMail	1107C-73-0015D-542
8:40 AM	8457425105	9637474	00:00:41		713 (Dennis Moran)	Answered	End of Call	1107C-73-0015D-543
8:40 AM	8457425105				713 (Dennis Moran)	Unanswered	End of Call	1107C-73-0015D-544
8:41 AM	8457425105	voicemail.713.0	00:01:25		713 (Dennis Moran)	Unanswered	End of Call	1107C-73-0015D-542
9:07 AM	255	713	00:01:07		713 (Dennis Moran)	Answered	Transfer to VoiceMail	1107C-73-0015D-545
9:07 AM	255	9637474	00:00:33		713 (Dennis Moran)	Answered	End of Call	1107C-73-0015D-546
9:07 AM	255				713 (Dennis Moran)	Unanswered	End of Call	1107C-73-0015D-547
9:08 AM	255	voicemail.713.0	00:00:00		713 (Dennis Moran)	Unanswered	End of Call	1107C-73-0015D-545
9:08 AM	255	717	00:02:48		717 (Chad Sanders)	Answered	End of Call	1107C-73-0015D-548
9:13 AM	4344551695	4083281551	00:00:00			Unanswered	Transfer	1107C-73-0015D-549
9:13 AM	4344551695	498	00:00:05			Unanswered	End of Call	1107C-73-0015D-549
9:14 AM	4344551695	4083281551	00:00:00			Unanswered	Transfer	1107C-73-0015D-54A
9:14 AM	4344551695	498	00:00:06			Unanswered	End of Call	1107C-73-0015D-54A
9:19 AM	5634454254	4083280450	00:00:00			Unanswered	Transfer	1107C-73-0015D-54B
9:19 AM	5634454254	498	00:00:06			Unanswered	Transfer	1107C-73-0015D-54B
9:20 AM	5634454254	950	00:00:18			Unanswered	Transfer	1107C-73-0015D-54B
9:20 AM	5634454254	777	00:00:03	TechSupportAdv		Unanswered	Merge	1107C-73-0015D-54B
9:20 AM	5634454254		00:01:55	TechSupportAdv	751 (Paul Chase)	Answered	End of Call	1107C-73-0015D-54F
9:20 AM	721	717	00:06:29		717 (Chad Sanders)	Answered	End of Call	1107C-73-0015D-54D
9:28 AM	4344551695	4083281551	00:00:00			Unanswered	Transfer	1107C-73-0015D-550
9:28 AM	4344551695	498	00:00:06			Unanswered	End of Call	1107C-73-0015D-550
9:33 AM	721	15084001470	00:00:40			Answered	End of Call	1107C-73-0015D-552
9:34 AM	721	4135859950	00:00:13			Answered	End of Call	1107C-73-0015D-554
9:35 AM	721	4137790079	00:05:57			Answered	End of Call	1107C-73-0015D-556

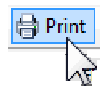
At the bottom right-hand corner of the report window there is a toolbar for viewing the report. The three icons let you display the report at screen width, full page, and 100%, respectively. The slider lets you view the report at other resolutions.

To print the report:

1. On the taskbar in the lower right-hand corner select the timestamp to use: Local, GMT or MX time.



2. Click on the toolbar icon **PRINT**.

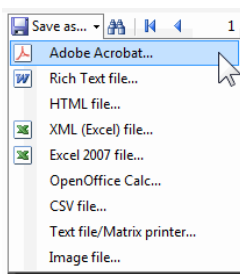


3. Enter your printer selection parameters and click on **PRINT** button.

8 Saving or Exporting a Report

You can save an opened report by following these steps:

1 Click on the toolbar icon **SAVE AS.**



2 A drop-down menu displays the available file formats.

ADOBE ACROBAT	Adobe .PDF file
RICH TEXT FILE	Microsoft Word .RTF file
HTML FILE	.HTML file

XML (EXCEL) FILE	Microsoft Excel .XML spreadsheet file
EXCEL 2007 FILE	Microsoft Excel .XLSX spreadsheet file
OPENOFFICE CALC	OpenOffice .ODS spreadsheet file
CSV	Comma separated values .CSV file
TEXT FILE/MATRIX PRINTER	.TXT file
IMAGE FILE	.BMP, .PNG, .JPG, .GIF, .TIF or .WMF

3 Make a selection and enter the parameters in the **EXPORT TO** pop-up window. The parameters will vary depending on which format is selected.

4 Click the **OK** button.

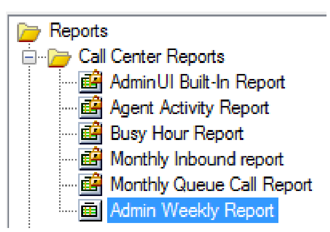
9 Exporting/Importing a Report Template

Templates can be shared with other MXreport users or they can be archived, by exporting and importing templates in MXreport.

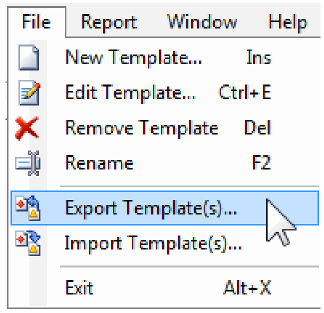
9.1 Exporting a Template

Follow these steps to save a template to export it to another user.

1. In the **REPORT MANAGER** tab, select a repot template. You can select multiple report templates at the same time by clicking on the reports' names while holding down the *CTRL* key.



2. Click on **FILE** and select **EXPORT TEMPLATE(S)**. You may also right mouse click on the template.



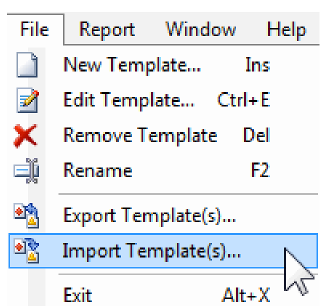
3. Choose the export directory and enter a file name.

4. MXreport saves the report templates in the .MXRP format.

9.2 Importing a Template

You can import a previously saved template from a file.

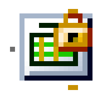
1. Click on **FILE** and select **IMPORT TEMPLATE(S)**. You may also right mouse click to bring up the option menu.



2. Select the .MXRP template(s) and click **Open**.

10 Editing/Cloning an Existing Locked Report Template

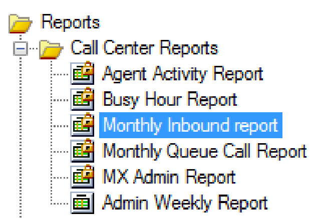
MXreport comes with ready-made CDR and Call Center/Call Group Report templates. These templates cannot be edited directly and are indicated by the lock icon next to their name:



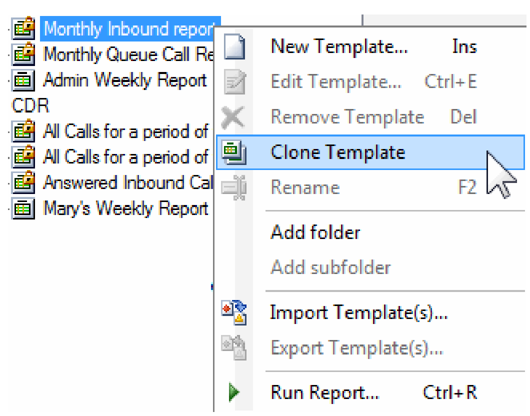
For locked templates, the *Edit Template* option is disabled and displays as gray in the toolbar.

An easy way to create a new report template from a locked report template is to clone the template and then edit the clone.

1. In the **REPORT MANAGER** tab, select the report template by clicking on the template's name.



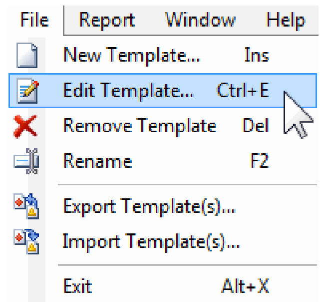
2. Right-click on the template's name and select **CLONE TEMPLATE**.



3. Enter the name of the new template and press ENTER.

4. In the REPORT MANAGER tab, select the cloned report template by clicking on the cloned template's name.

5. Click on FILE then select EDIT TEMPLATE.



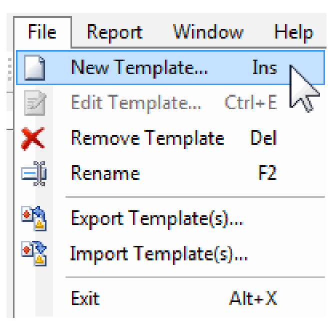
6. An EDIT tab opens.

7. You can edit your template from this tab. Go to **Section 14, Using MXreport's Advanced Editor** for more detailed information on how to use the MXreport template editing tools.

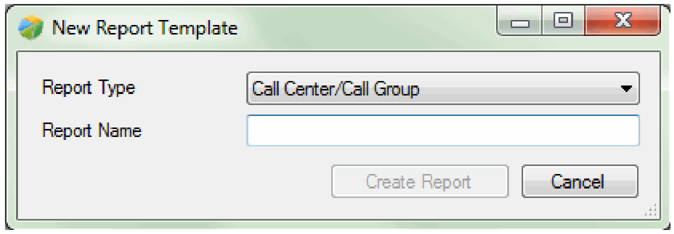
11 Creating a New Report Template

An easy way to create a new report template is to clone an existing template and edit the clone (See **Section 10, Editing an Existing Locked Report Template**). To create a completely new template:

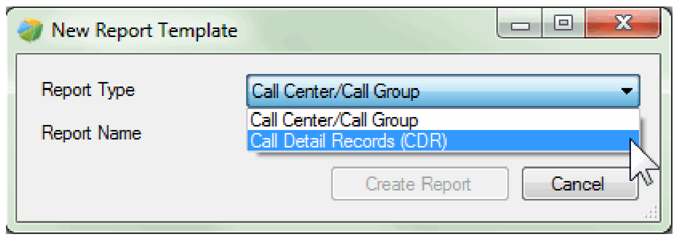
1. Click on FILE and select NEW TEMPLATE.



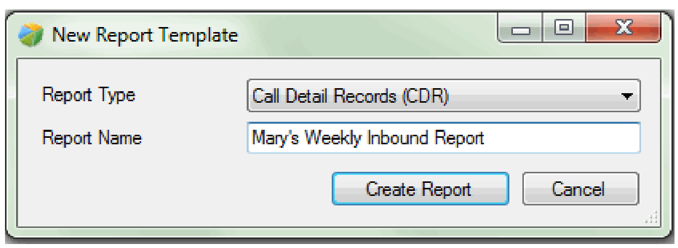
2. A **New Report Template** window opens.



3. Click on the drop-down icon and select the report type: CDR or Call Groups & Contact Center.



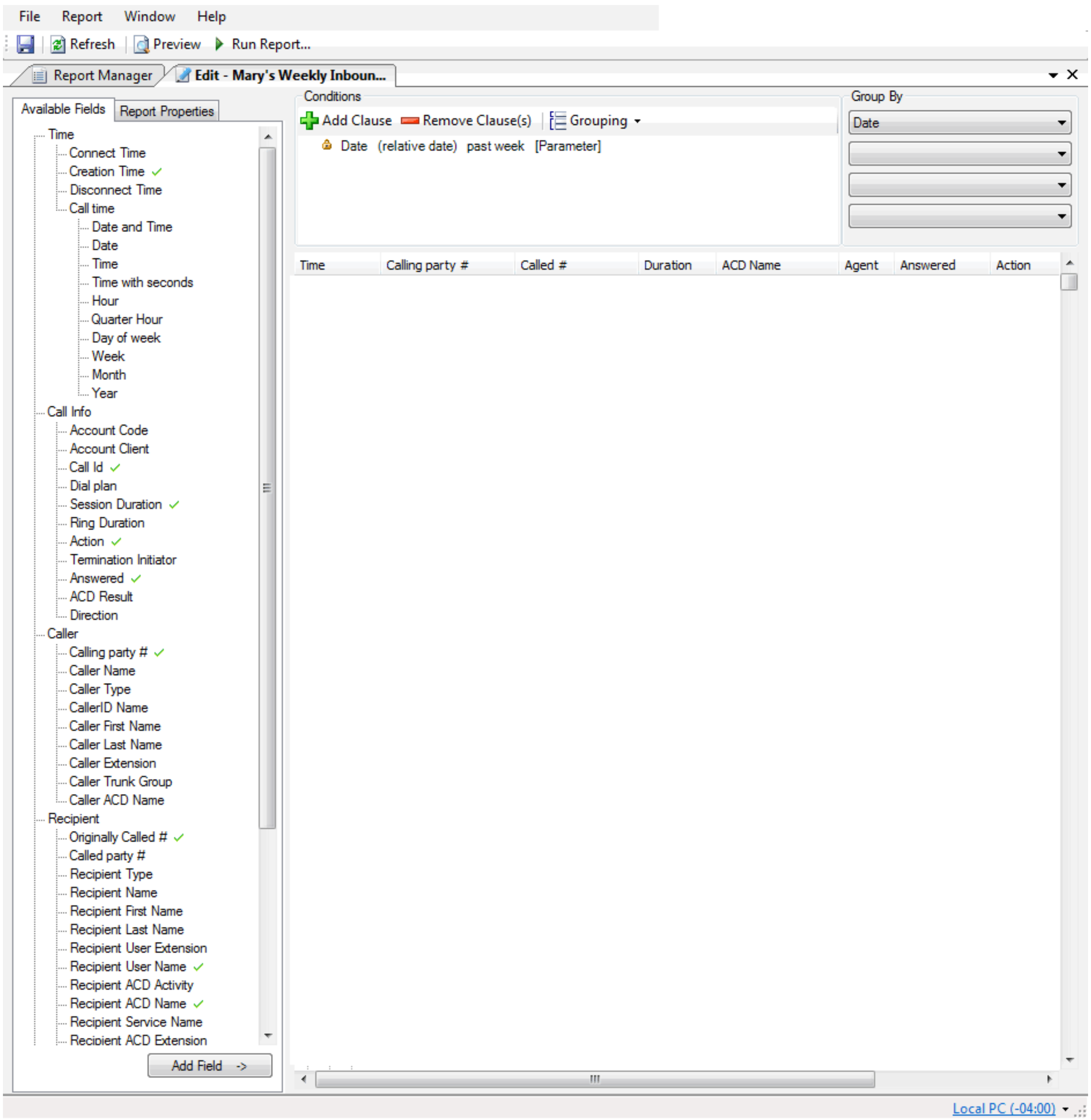
4. Type in the Report Name.



5. Click on **Create Report**.

6. An EDIT tab opens.

7. The new report template displays default column headings of MXreport.

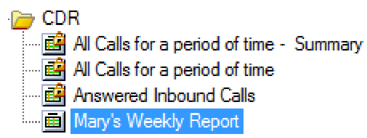


8. You can edit your template from this tab. Go to **Section 14, Using MXreport's Advanced Editor** for more detailed information on how to use the MXreport template editing tools.

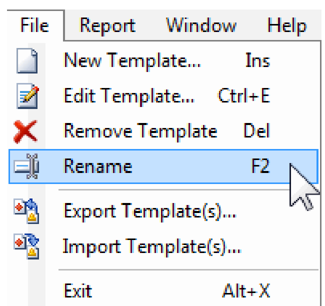
12 Renaming a Report Template

You can only rename templates that are not locked for editing. To rename a template, do the following:

1. In the **REPORT MANAGER** tab, select the report template by clicking on the template name.



2. Click on **FILE** and select **RENAME**.

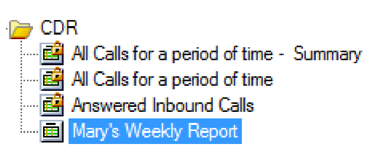


3. Enter the name of the new template and press ENTER.

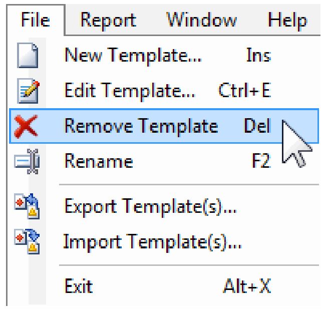
13 Deleting a Report Template

You can only delete templates that are not locked for editing. To delete a template, do the following:

1. In the **REPORT MANAGER** tab, select the report template by clicking on the template name.



2. Click on **FILE** and select **Remove Template**.



3. Confirm deletion.

14 Using MXreport's Advanced Editor

MXreport Advanced Editor provides you with tools to fully customize your report. You can choose from a variety of data fields to include in your report and align them in any order, as well as specify the data parameters displayed for each field. You can also edit the time frame of the report, printing options and much more.

14.1 MXreport's Editor Layout

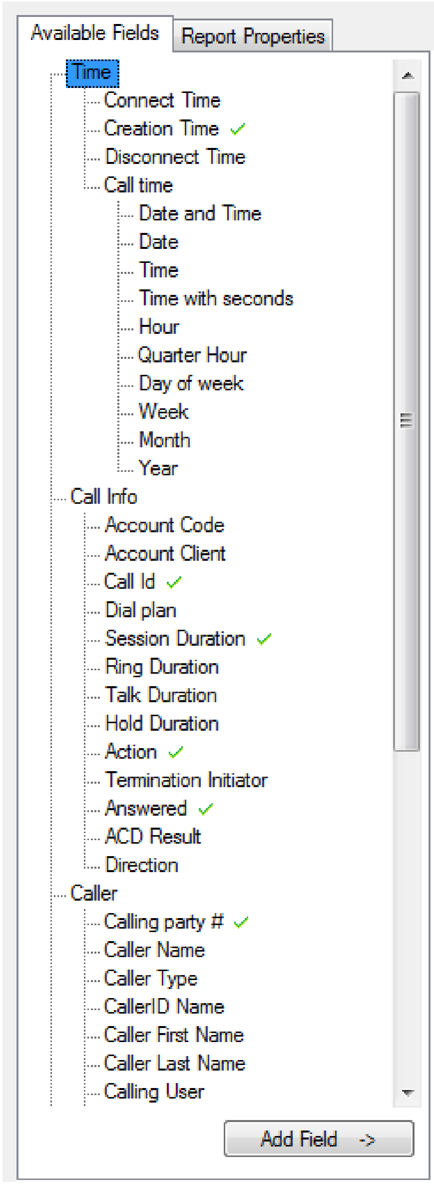
You can edit a template from the **EDIT** tab of MXreport. See section 10 or section 11 for how to access this tab.

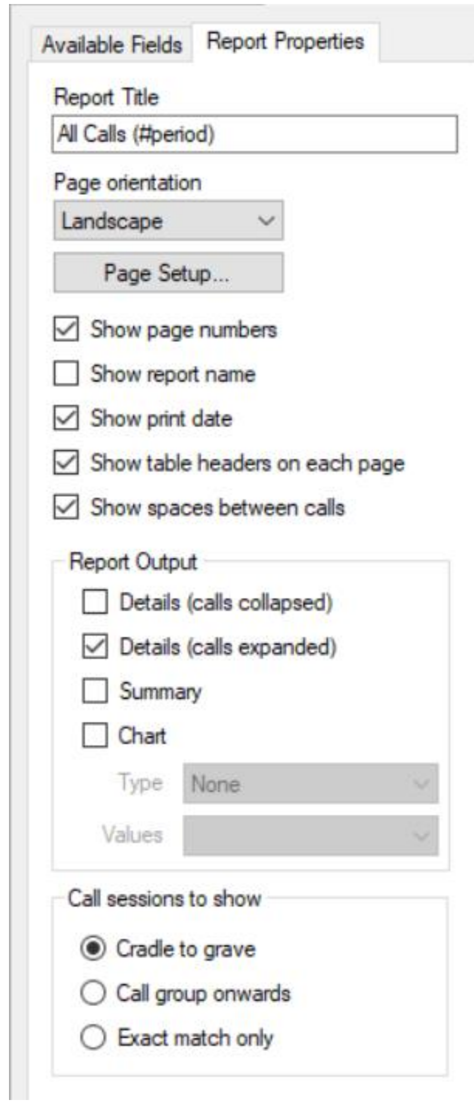
The **EDIT** tab contains four panes.

The left pane has two tabs: **AVAILABLE FIELDS** and **REPORT PROPERTIES.**

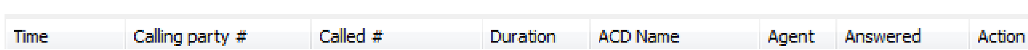
AVAILABLE FIELDS displays all the data fields that are available from the CDR database.

REPORT PROPERTIES displays the report's title and various report printing parameters.



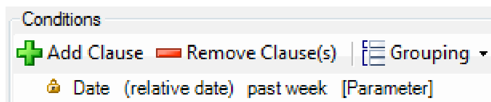


The bottom pane displays the report's current headings in a header bar and the order in which data will appear in this report. The height and width of this editing pane can be changed by dragging the borders.



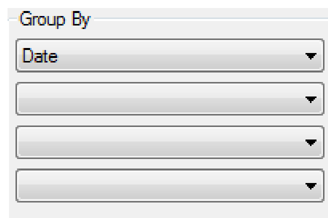
The top pane displays the CONDITIONS, or the selection criteria, used to filter the data. It has its own editing tool bar at the top of the pane (Add Clause, Remove Clause(s), etc.). The height and width of this editing pane can be changed by dragging the borders.

The right pane lets you choose up to four group breaks for printing the report.



14.2Data Available for the CDR and Call Center/Call Group Reports

Different data fields are available for the two types of reports, CDR reports and



Call Center/Call Group reports.

14.2.1 CDR Report Data Fields

Under the AVAILABLE FIELDS tab in the left panel, the list of available CDR data fields is divided into five logical groupings:

- Time
- Call Info
- Caller
- Recipient
- Call Attached Data

Whenever a field is selected, an information pop-up window displays at the bottom of the pane to provide information about that field. For more complete descriptions of the data stored in these groupings, see **Appendix B – CDR Report Fields**.

Fields that are *currently being used* in the report have a checkmark next to the field name.

Click on the **Run Report** button to see the report populated with actual data using the conditions specified.

14.2.2 Call Center/Call Group Report Fields

Under the **AVAILABLE FIELDS** tab in the left panel, the list of available Call Center/Call Group data fields is divided into two logical groupings:

- General
- Presence

Whenever a field is selected, an information pop-up window displays at the bottom of the pane to provide information about that field. For a more complete description of the data stored in these fields, see **APPENDIX** C – CALL CENTER/CALL GROUP REPORT FIELDS– **Call Center/Call Group Report Fields**.

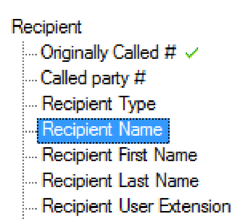
Fields that are *currently being used* in the report have a checkmark next to the field name. A field can have multiple checkmarks if it is used multiple times, for example, to report both a numerical value and a percentage value in the report.

Click on the **Run Report** button to see the report populated with actual data.

14.2.3 Adding a Data Column to a Report

You can customize your template by adding any of the available report fields or changing the order in which they appear.

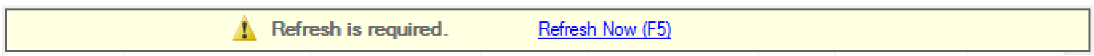
1. To add a data column to a report layout, double-click on the field's name under the **AVAILABLE FIELDS** tab.



2. Drag the field to a position in the report's header bar.

3. To reposition this added column or any other column drag its heading to a different position.

4. Whenever the format of the report is changed, a pop-up window prompts for a report refresh to regenerate the data.

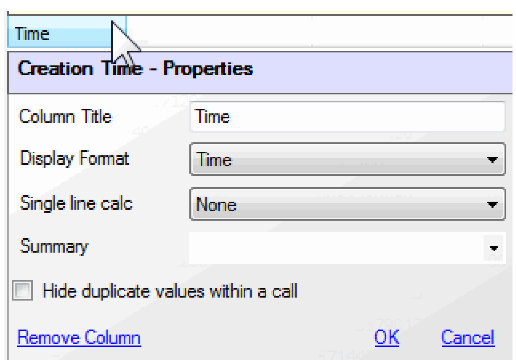


5. A new checkmark has been added next to the field name under the **AVAILABLE FIELDS** tab indicating that this field is being used in the report.

14.2.4 Modifying a Data Column's Parameters

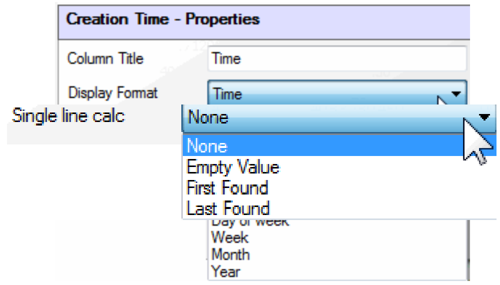
You can customize the data parameters shown in each column of your report as well as the column name. The available parameters vary with the field type.

1. Position the mouse cursor over a data column heading and pause, a drop-down menu appears.



2. To change the column title, enter the new title.

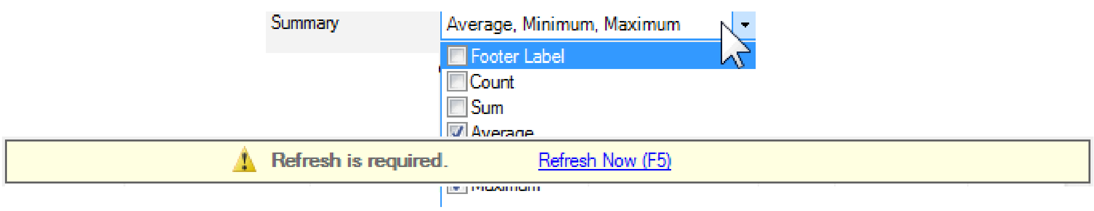
3. To change the display format, if that option is available, select from the drop-down menu of choices.



4. For a Single line calculation, select from the drop-down choices available.

5. To report summary values for the reporting period, click on the checkboxes next to the available choices.

6. To hide duplicate values in a call, select the checkbox.

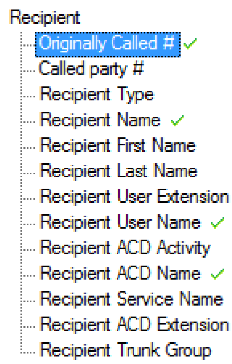


7. Click on the toolbar icon **Refresh** to update the report display with the changes.

14.2.5 Removing a Data Column from the Report

Follow these steps to remove a column from a report:

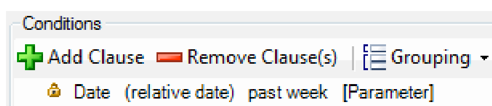
1. In the **Available Fields** pane, double-click on the name of the field being removed.



2. The checkbox next to that name disappears and that column is removed from the report.

14.3Conditions

The top pane indicates the **CONDITIONS,** or the selection criteria, that you wish to use to filter the data for the report. It has its own editing tool bar at the top of this pane (Add Clause, Remove Clause, etc.)

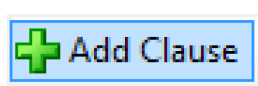


The selection criteria are built by adding conditional clauses while using the data fields under the **Available Fields** tab in the left panel.

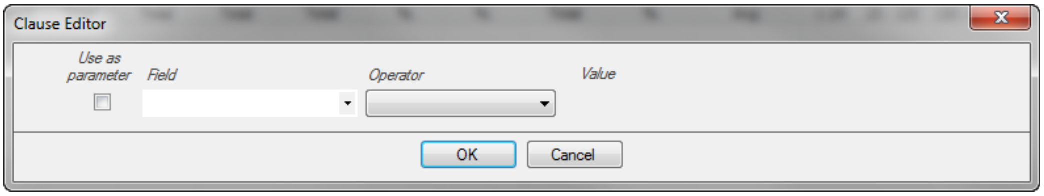
14.3.1 Adding a Conditions Clause

CALL DATE is a required clause and is displayed by default in the **CONDITIONS** pane. You can add more clause entries to a report.

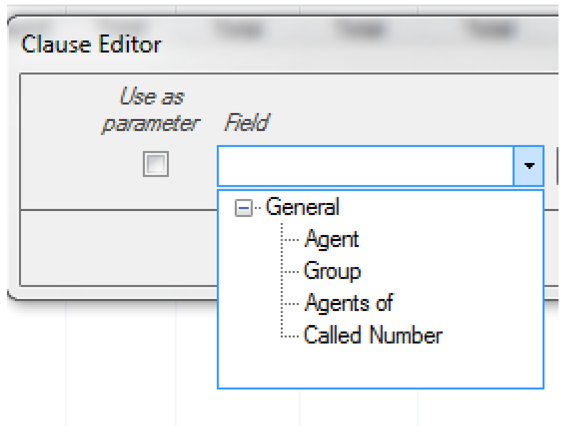
1. Click on **ADD CLAUSE** button in the **CONDITIONS** toolbar.



2. A pop-up **Clause Editor** window opens.

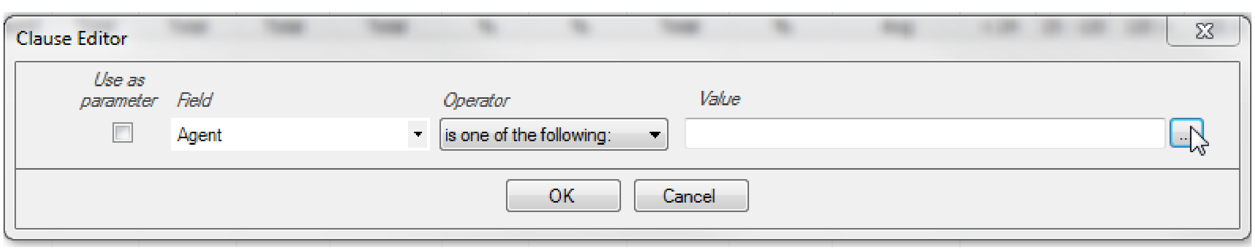


3. Click on the drop-down menu in the left entry field and select a data field.

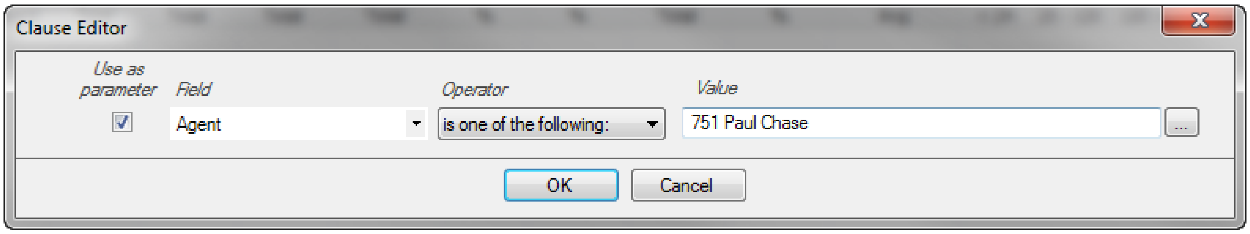


4. Click on the drop-down menu in the middle entry field and select a condition (some selections do not require this entry).

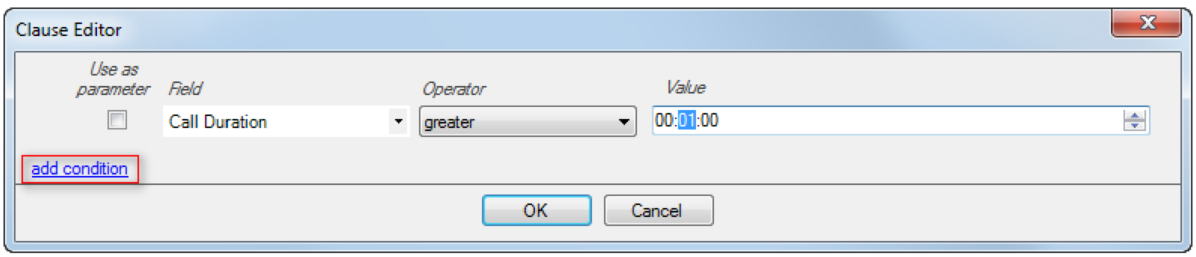
5. Click on "…" button next to the value field(s) and select condition parameter(s).

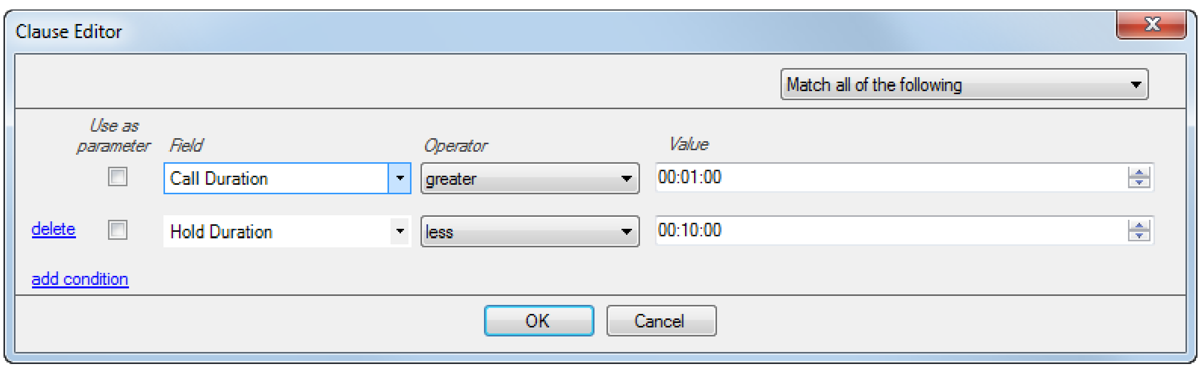


6. If you want to be able to enter a different value when the report is run, click on the checkbox next to **Use as parameter**.

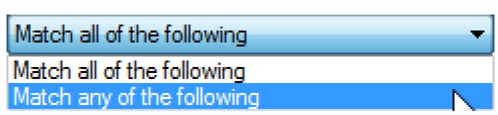


7. If you are working on a CDR report, you can include up to three conditions for a clause. Click the **add condition** button then define the new condition.



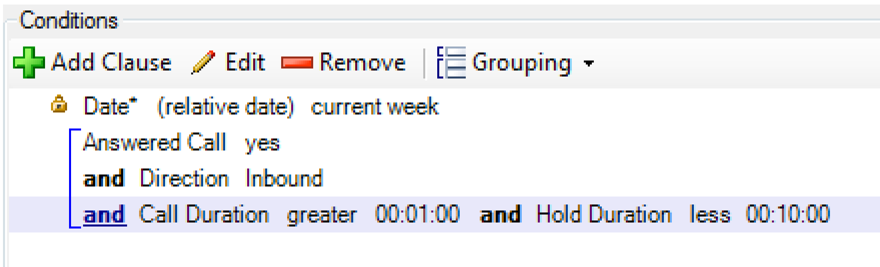


You can toggle the **Match all of the following** and **Match any of the following** options from the top right corner of the window.



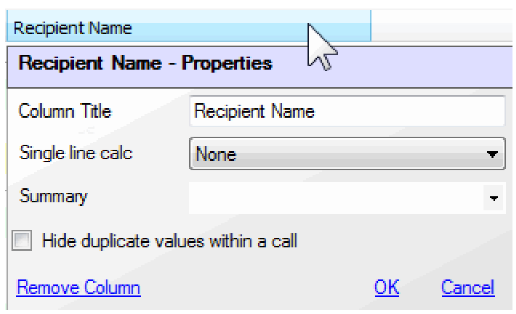
8. Press OK to accept.

9. The **CONDITIONS** pane now lists your entry and displays the data field, your logic statement and your parameter value.

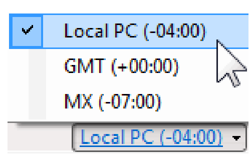


10. As other Conditions clauses are added, the logical AND operator is appended to each additional clause. If you wish to use an OR operator instead, click on the AND operator and it will toggle to an OR operator and vice versa.

11. Prior to running the report, you can modify the Data Column's parameters (See **Section 14.2.4 – Modifying a Data Column's Column**)



12. On the taskbar in the lower right-hand corner select the timestamp: local, GMT or MX time.



13. When you click **Run Report**, a pop-up Conditions window appears.

14. Enter your variable parameter values.

15. Click the **Run** button.

16. The report is generated in a new **Report** tab window and is populated with live data.

Ad Hoc Inquiry (equals 4/18/2011)

Time	Recipient Last Name	Calling party #	Called #	Duration	ACD Name	Answered	Action
Call Date : 4/18/2011							
10:30 AM	Bush	7345028342	4083285429	00:00:25		Answered	Transfer to VoiceMail
10:30 AM	Bush	7345028342				Unanswered	End of Call
10:30 AM	Bush	7345028342	7739070763			Unanswered	End of Call
10:30 AM	Bush	7345028342	7733830763			Unanswered	End of Call
10:31 AM	Bush	7345028342	voicemail.715.0	00:01:00		Unanswered	End of Call
10:39 AM	Bush	7345028342	4083285429	00:00:10		Answered	Merge
10:39 AM	Bush	7345028342		00:00:04		Answered	Merge
10:39 AM	Bush	7345028342	7739070763			Unanswered	End of Call
10:39 AM	Bush	7345028342	7733830763			Unanswered	End of Call
10:39 AM	Bush	7345028342		00:02:43		Answered	End of Call
11:11 AM	Bush	8322365308	4083285429	00:00:15		Answered	End of Call
11:11 AM	Bush	8322365308				Unanswered	End of Call
11:11 AM	Bush	8322365308	7739070763			Unanswered	End of Call
11:11 AM	Bush	8322365308	7733830763			Unanswered	End of Call

14.3.2 Modifying a Conditions Clause

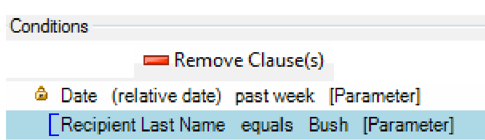
You can modify an existing condition clause, by following these steps:

1. In the **Conditions** pane, click on the condition or the parameter you are modifying.
2. The pop-up **CLAUSE EDITOR** window opens.
3. Make the change(s).
4. Click the **OK** button.

14.3.3 Removing a Conditions Clause

You can delete clause entries that do not have a lock icon next to them.

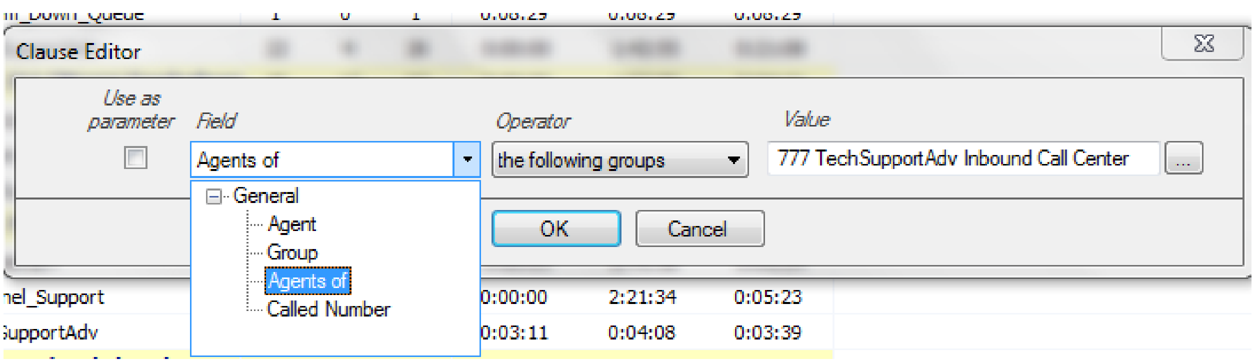
1. Click on the clause to highlight it.
2. Either click on **REMOVE CLAUSE** in the **CONDITIONS** toolbar



3. Confirm deletion.

14.3.4 Agents of the Following Group Clause in Call Center/Call Group Reports

If the **Agents of** clause is selected from the drop-down list, then the report creates a list of agents included in at least one of the specified groups, and then calculates and presents statistics for those agents.



If this clause is used by itself, all calls made by selected agents (in this group, in any other groups or personal) will be accounted.

This clause can be combined with a “Group” clause to filter calls in specific groups or/and personal calls. To provide access to personal calls statistics, the special group <Personal> is available in the group list.

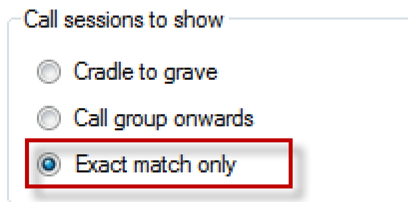
For example:

A supervisor for call groups A and B wants to see call statistics for their agents. Statistics should include calls made on behalf of Groups A and B, and personal calls, but should not include calls made on behalf of other groups.

Report template should have the clause [Agent of] [the following groups] with Group A and Group B selected, [and] clause [Group] [is one of the following] with Group A, Group B and <Personal> selected.

14.3.5 Filtering Out Unrelated Call Sessions in CDR Reports

For calls that have been transferred between users or other services, multiple call sessions will be shown in reports. To display only the call sessions which exactly match the conditions defined, an “Exact Match Only” option is available in the Report Properties tab of the template. If this option is selected, only the call sessions that match the exact conditions will be accounted for and displayed.

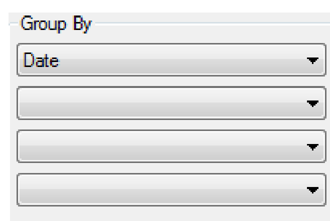


14.4 Grouping Data

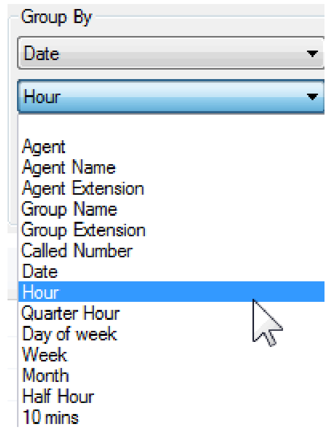
The right-hand **GROUP BY** pane lets you sort and display the report data in groups. This pane lets you choose up to four groupings for when your report is printed.

For example, if you are creating a weekly call count report and you want to display the data grouped first by date and within each date grouped by the hour.

1. In the **Group By** pane, use the drop-down field menus to make your selections.



2. Select **Date** for the first grouping and **Hour** for the second grouping.



3. When you click the **Run Report** button, the report will have the same grouping as the following image.

Mary's Weekly Call Count Report (4/17/2011 - 4/23/2011)

	Call Count		
	In	Out	Total
Grand Total	263	81	344
4/18/2011	63	21	84
9:00 AM - 10:00 AM	1	0	1
10:00 AM - 11:00 AM	4	0	4
11:00 AM - 12:00 PM	11	1	12
12:00 PM - 1:00 PM	10	1	11
1:00 PM - 2:00 PM	9	8	17
2:00 PM - 3:00 PM	6	1	7
3:00 PM - 4:00 PM	10	6	16
4:00 PM - 5:00 PM	5	0	5
5:00 PM - 6:00 PM	3	4	7
6:00 PM - 7:00 PM	4	0	4
4/19/2011	74	19	93
9:00 AM - 10:00 AM	5	0	5
10:00 AM - 11:00 AM	5	0	5
11:00 AM - 12:00 PM	4	1	5
12:00 PM - 1:00 PM	13	0	13
1:00 PM - 2:00 PM	15	3	18
2:00 PM - 3:00 PM	7	3	10
3:00 PM - 4:00 PM	9	3	12
4:00 PM - 5:00 PM	4	4	8
5:00 PM - 6:00 PM	7	1	8
6:00 PM - 7:00 PM	5	4	9
4/20/2011	53	12	65
9:00 AM - 10:00 AM	4	2	6
10:00 AM - 11:00 AM	4	0	4
11:00 AM - 12:00 PM	7	0	7
12:00 PM - 1:00 PM	8	2	10
1:00 PM - 2:00 PM	3	0	3
2:00 PM - 3:00 PM	5	1	6
3:00 PM - 4:00 PM	2	3	5
4:00 PM - 5:00 PM	6	4	10
5:00 PM - 6:00 PM	7	0	7
6:00 PM - 7:00 PM	7	0	7

14.4.1 Group By - Participants from Conditions Only

This grouping option forces the report output to only include users that explicitly match the participant Conditions defined in the report. This effectively excludes users from the report output that participated in a call but which were not explicitly defined in the Conditions.

For example:

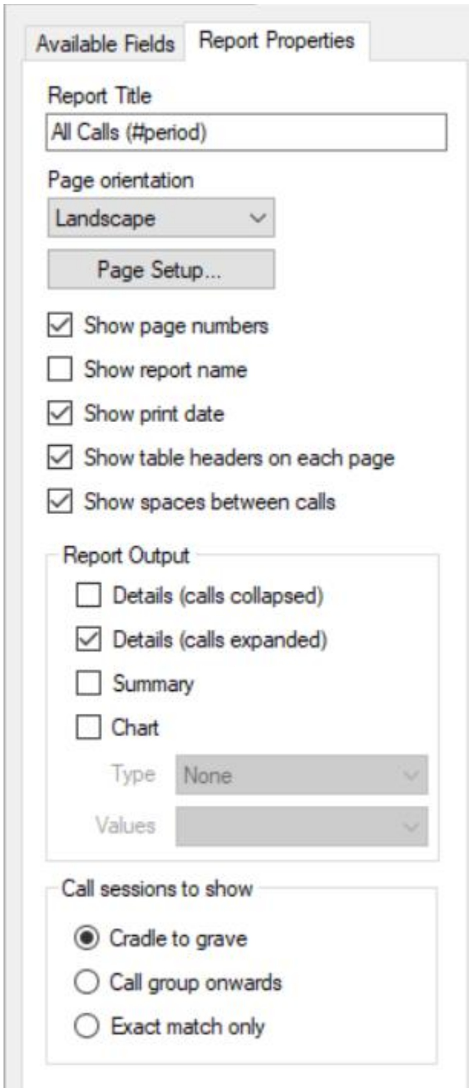
The Conditions of a report defines Alice and Bob as participant users, and Alice makes a call to Carol, both Alice and Carol are participants. Selecting Group By 'Participants from conditions only' would exclude Carol from the outputted report as she is not explicitly defined in the conditions. Selecting any of the other Group By 'Participant ...' options such as 'Participant User Name' will include Carol in the report output.

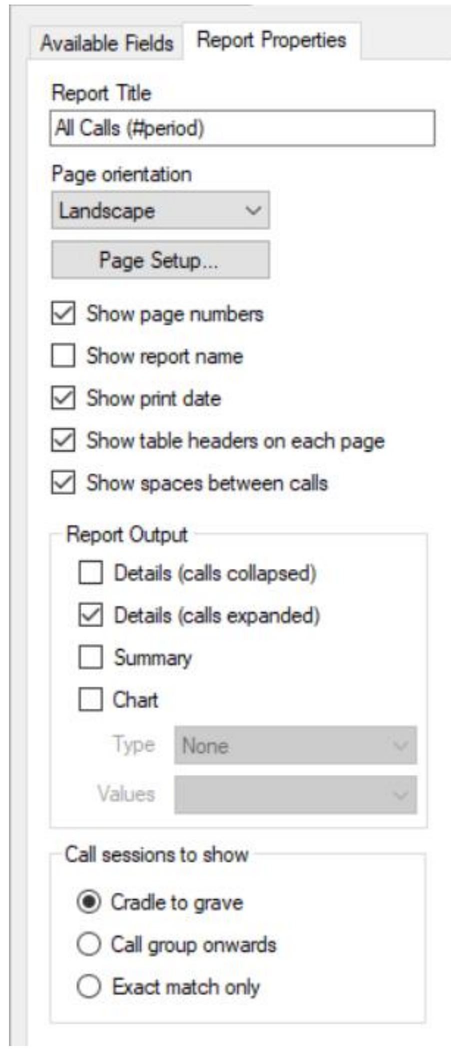
14.5Report Print Parameters

In the left pane, click on the **REPORT PROPERTIES** tab to view print parameters for your template.

This pane enables you to enter report properties like the report's title, page orientation, page numbering, detail reporting or summarization, charting etc.

The left image is the report properties panel shown for printing a CDR report. The Right image is the report properties panel shown for printing a CALL CENTER/CALL GROUP report.





In specifying the report title, you can use variable parameters enclosed in parentheses:

(#period)	Period that User Specifies in the Call Date Condition
(#name)	Name of the Report Template Being Used
(#user)	Name of the Person Running Report
(#time)	Date and Time Report Was Generated

Page Setup provided the specifications for paper size, source and margins.

If the *Call group onwards* box is checked, MXreport will only report those segments of a call that were connected to an ACD group. It will not, for example, report on a segment that is connected to an auto-attendant.

Version 4.0: A new option "Show table headers on each page" was added. This will enable/disable column headers on a .csv export file.

Version 4.2: A new option "Show spaces between calls" was added. This will include/exclude spaces in between call sessions.

14.6Charting

MXreport includes built-in charting capability that can be customized according to your needs.

14.6.1 MXreport's Charting Features

In the **Report Properties** tab, the report output also can be printed as a chart.

MXreport has eight built-in chart types available:

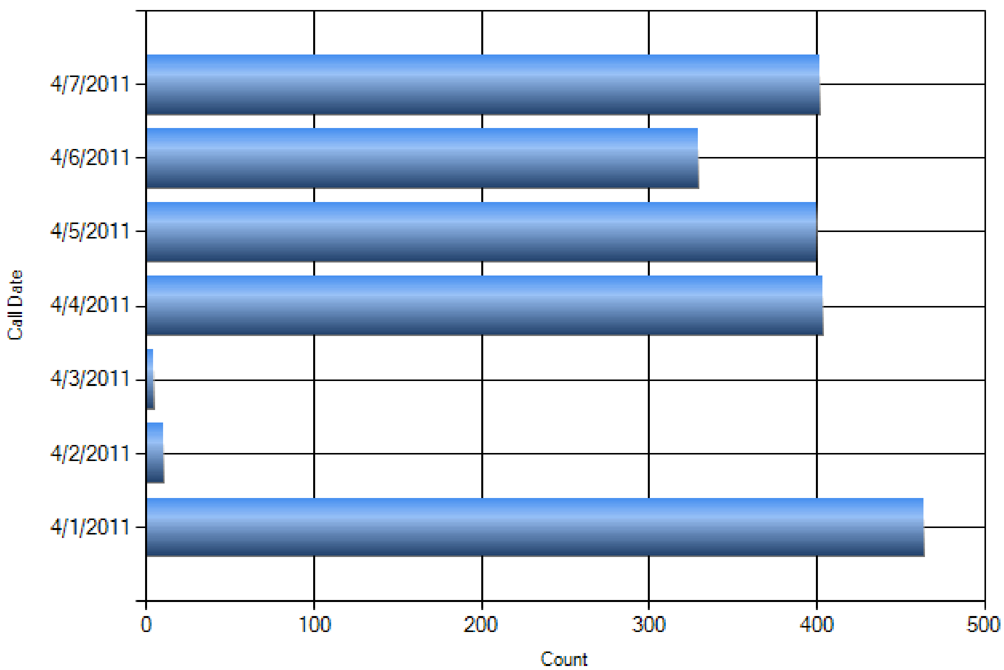
- Bar
- Stacked Bar
- 100% Stacked Bar
- Column
- Stacked Column
- 100% Stacked Column
- Line
- Pie

For a CDR report, the chart parameters are: ***Type*** and ***Values***.

Below are several examples of a weekly call count CDR report using various chart types.

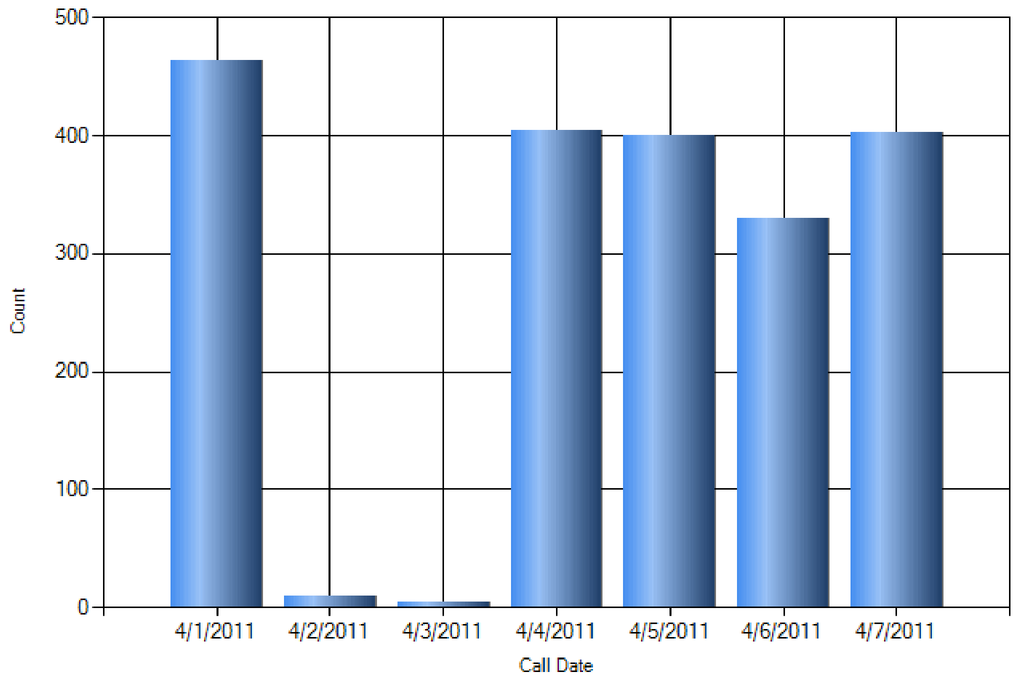
Mary's Weekly Inbound Report - Bar (between 4/1/2011 and 4/7/2011)

	Count
4/1/2011	464
4/2/2011	10
4/3/2011	4
4/4/2011	404
4/5/2011	400
4/6/2011	329
4/7/2011	402
	2013



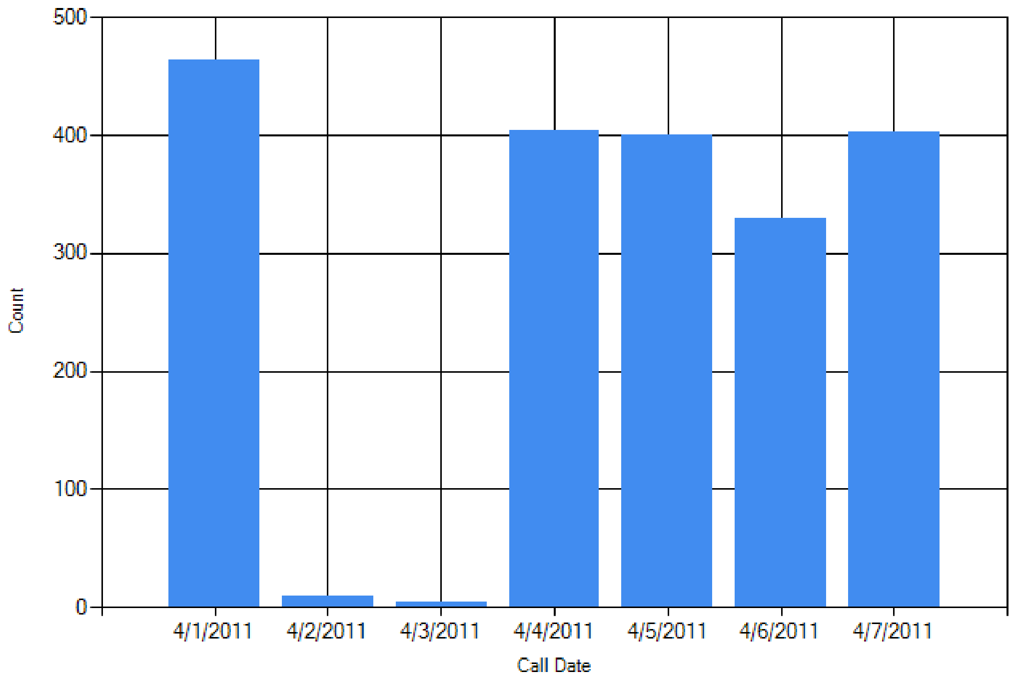
Mary's Weekly Inbound Report - Columns (between 4/1/2011 and 4/7/2011)

	Count
4/1/2011	464
4/2/2011	10
4/3/2011	4
4/4/2011	404
4/5/2011	400
4/6/2011	329
4/7/2011	402
	2013



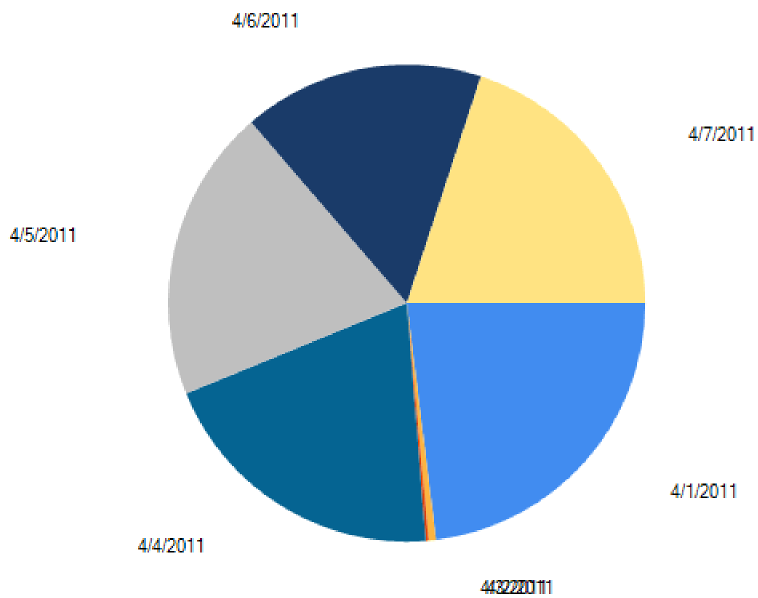
Mary's Weekly Inbound Report - Line (between 4/1/2011 and 4/7/2011)

	Count
4/1/2011	464
4/2/2011	10
4/3/2011	4
4/4/2011	404
4/5/2011	400
4/6/2011	329
4/7/2011	402
	2013



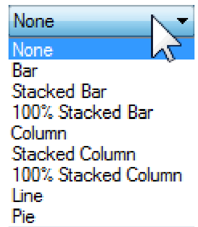
Mary's Weekly Inbound Report - Pie (between 4/1/2011 and 4/7/2011)

	Count
4/1/2011	464
4/2/2011	10
4/3/2011	4
4/4/2011	404
4/5/2011	400
4/6/2011	329
4/7/2011	402
	2013



For a Call Center/Call Group report, there are eight chart parameters. To include a chart in a Call Center/Call Group report:

- **Chart type:** Select the type of chart for this report.



- **Chart size**: Select the size of charts to be included in printed report: small, medium or large.

- **Column data to chart**: Select one or more columns of data from the report to display on the chart(s).

- **Categorize by**: Select the category by which charted data will be grouped. Available options are determined by the *Group By* settings for the report.

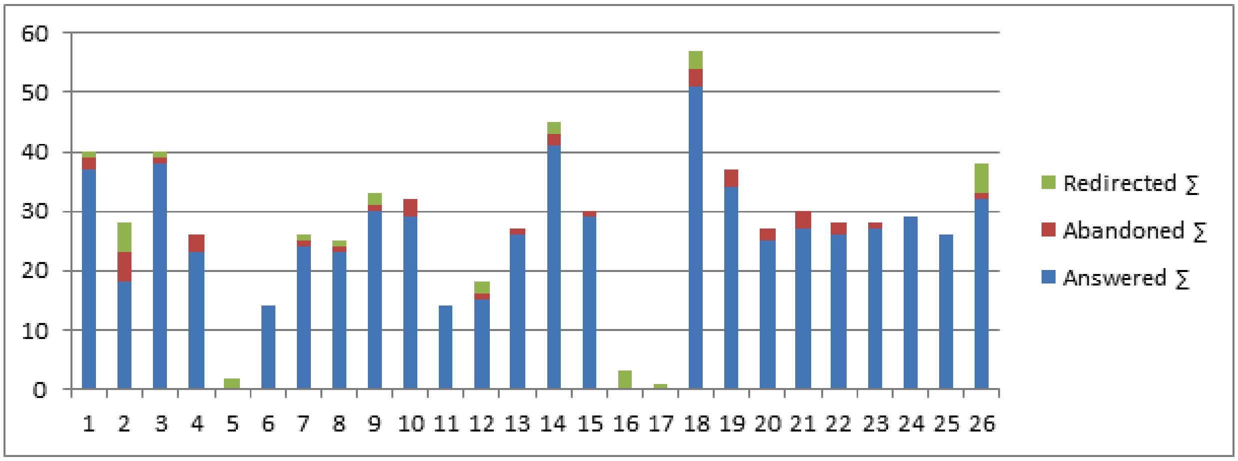
- **Main series**: Set the main series for chart as *Category* or *Column data*. *Category* plots data based on the parameter selected for *Categorize by* and is equivalent to the rows of the table data. *Column data* plots data based on the table columns. For Line Charts the Main Series is always *Category*.

- **Display data on a single chart**: Allows data of a similar structure to be plotted on a single chart. For example, the data columns for Calls in, Calls out and Calls total may be plotted on a single line, column or bar chart.

- **Do not display table**: Does not show table data on printed report.

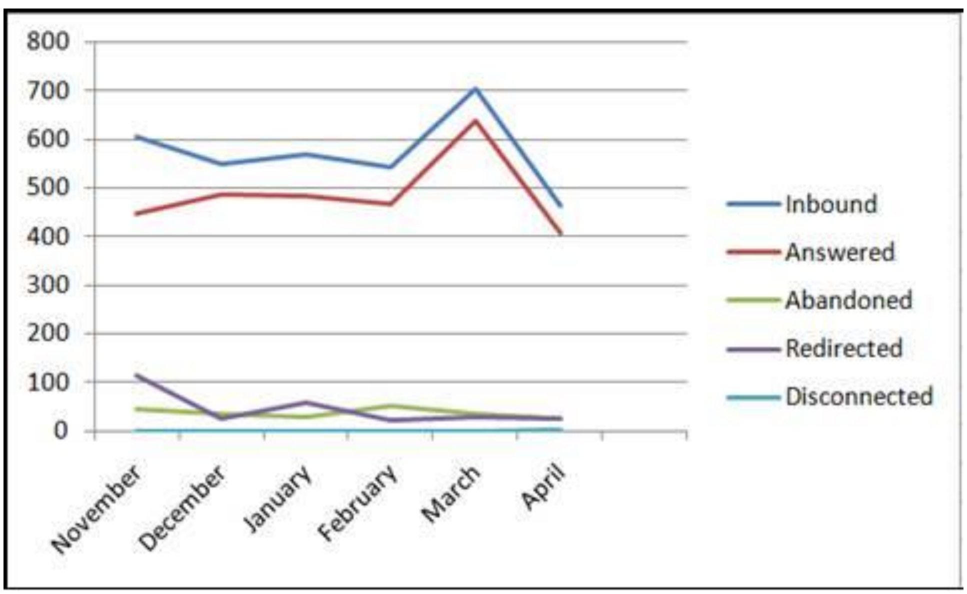
- **Start charts on a new page**: Inserts a page break between the table data and charts in printed report

The following screenshot is an example of a stacked bar chart used in a monthly inbound calls Call Center/Call Group report:



14.6.2 Charting Using Microsoft Excel

Additional data charts can be obtained by exporting the data to a file in the CSV format (See **Section 8 – Saving or Exporting a Report**) and then importing that file into Microsoft Excel. The following chart was obtained using Excel's built-in charting functions.



15 Example – Creating Call Center/Call Group Report for Call Groups

The process of creating a report, whether it is a Call Center/Call Group Report or a CDR report, is the same and is described in **Section 14 - Using MXreport's Advanced Editor**. Here is an example of the step-by-step process for creating the following new Call Center/Call Group Report for call groups.

NOTE: To perform this example, an MXreport (ICC) license must be installed on the MX phone system.

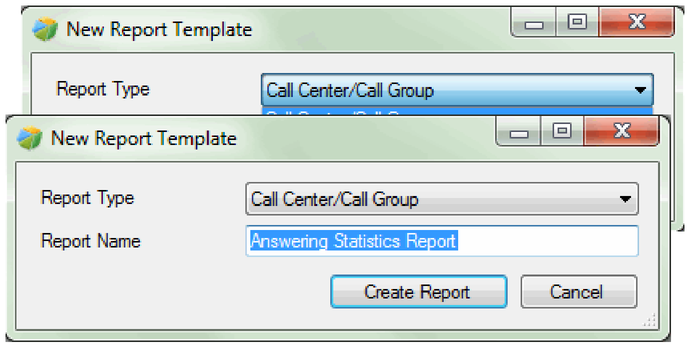
Requirements: Run an ***Answering Statistics Report*** for a specific call group that shows hourly data for a specific week. The report information shows:

1. Inbound call count (numerical)
2. Number of calls answered (numerical)
3. Number of calls abandoned (numerical)
4. Number of calls to voicemail
5. Inbound call count (percentage)
6. Number of calls answered (percentage)
7. Number of calls abandoned (percentage)
8. Automatic Callback Requests (received, handled, completed)
9. Number of calls to voicemail
10. Talk Time
11. Hold Time
12. Missed calls
13. Disconnected calls
14. Time to Answer (average)
15. The data is to be grouped by day of week and time of day
16. Include a Grand Total

15.1 Creating the Sample Report Template for a Call Group report

Follow these steps to create your template from the opening screen of MXreport:

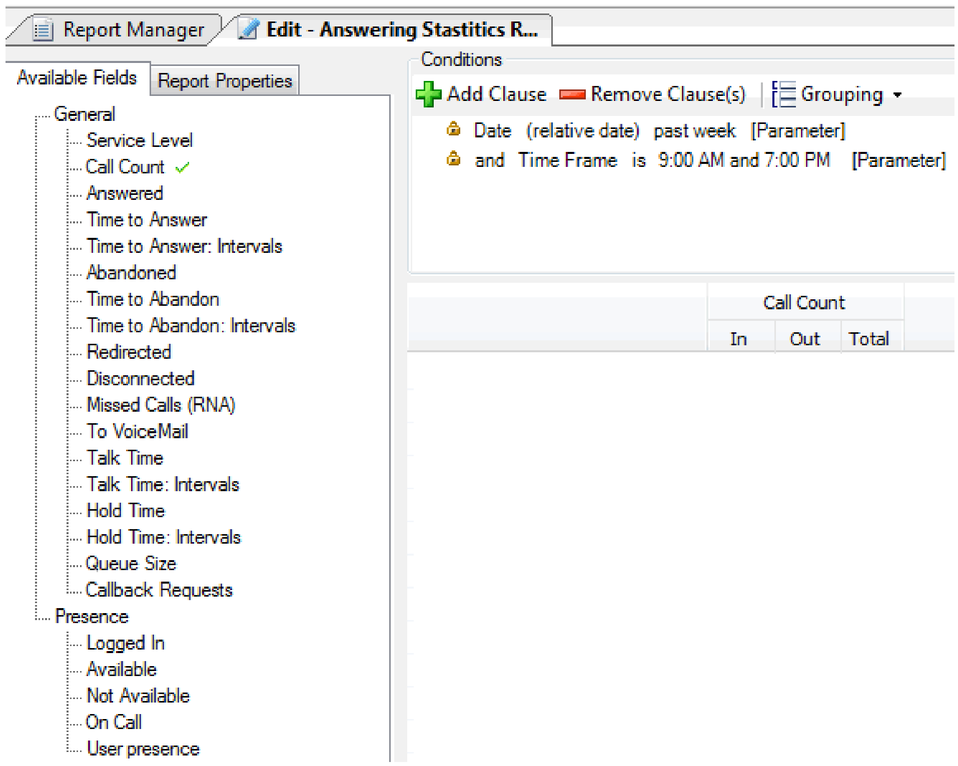
1. In the toolbar Click on **New Template.**
2. Select Report type Call Center/Call Group from drop-down menu.



3. Type in your report name. In this example we use *Answering Statistics Report*.

4. Click on **Create Report** button.

5. MXreport's Advanced Editor opens and loads data.

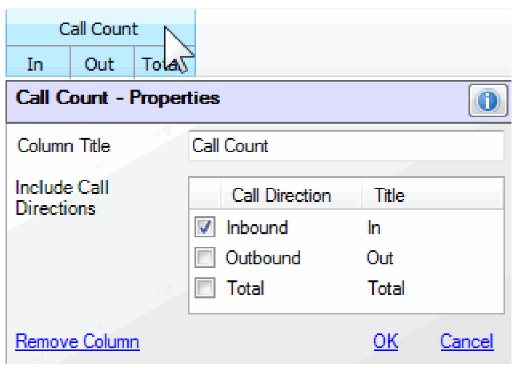


15.2 Editing the columns in a Sample Call Group Report Template

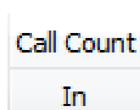
Follow these steps to edit the columns that appear in your template from the Edit tab of MXreport:

1. As changes are made to the report template, MXreport will prompt, *Refresh is required*, when changes are pending. To regenerate the report, click on **Refresh Now**.

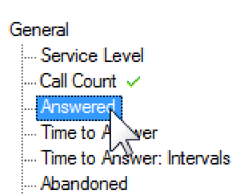
2. Position the mouse cursor on the Call Count column heading in the bottom pane and pause to display the drop-down menu. Select the *Inbound* checkbox as the call direction.



3. The heading changes as follows.



4. Select **Answered** in Available Fields. Drag the field to the headings bar in the bottom pane.



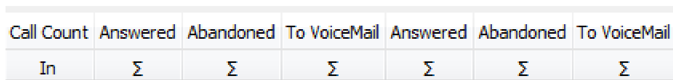
5. Select ***Abandoned*** in Available Fields and add this field to the report.

6. Select ***To VoiceMail*** in Available Fields and add this field to the report.

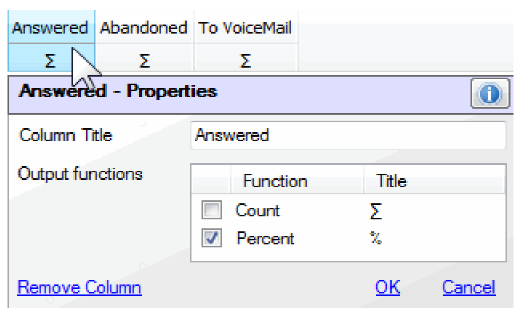
7. Again, select ***Answered*** in Available Fields and add this field to the report.

8. Select ***Abandoned*** in Available Fields and add this field to the report.

9. Select ***To Voice Mail*** in Available Fields and add this field to the report. The headings bar should appear as follows.

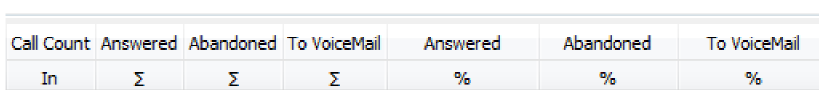


10. Position the mouse cursor on the second **Answered** column heading and pause. Unselect the C*ount* checkbox and select the *Percent* checkbox in the drop-down window.



11. Position the mouse cursor on the second **Abandoned** column heading and pause. Unselect the C*ount* checkbox and select the *Percent* checkbox in the drop-down window.

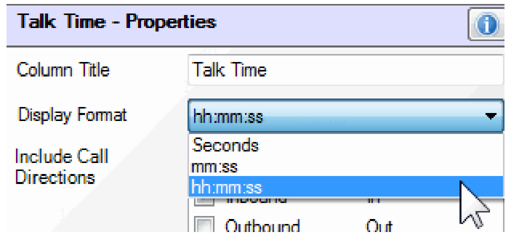
12. Position mouse on second ***To VoiceMail*** column heading and pause. Unselect the C*ount* checkbox and select the *Percent* checkbox in the drop-down window. The headings bar should appear as follows:



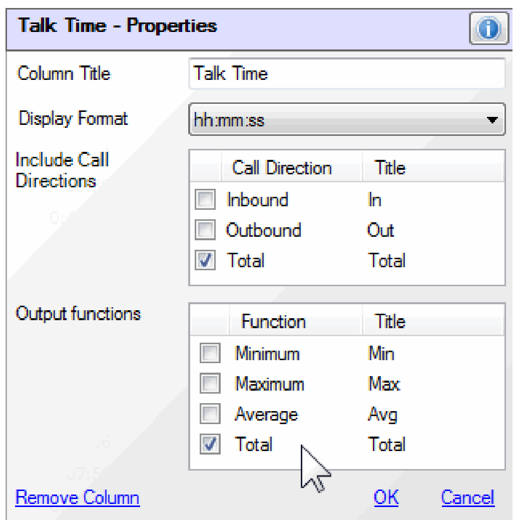
13. Select ***Talk Time*** in Available Fields and add this field to the report.

14. Position mouse on ***Talk Time*** column heading and pause for the drop-down menu.

15. In Display Format, ***select hh.mm.ss.***

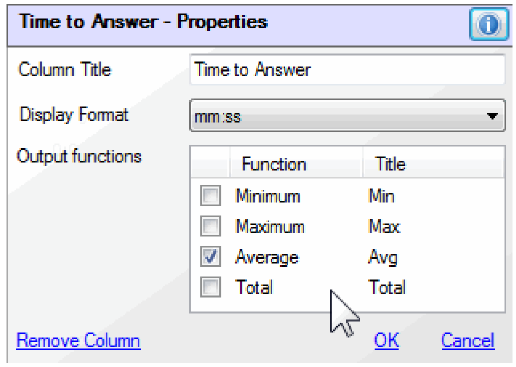


16. Select the *Total* checkbox for both **Include Call Directions** and **Output functions.**



17. Select ***Time to Answer*** in Available Fields and add this field to the report.

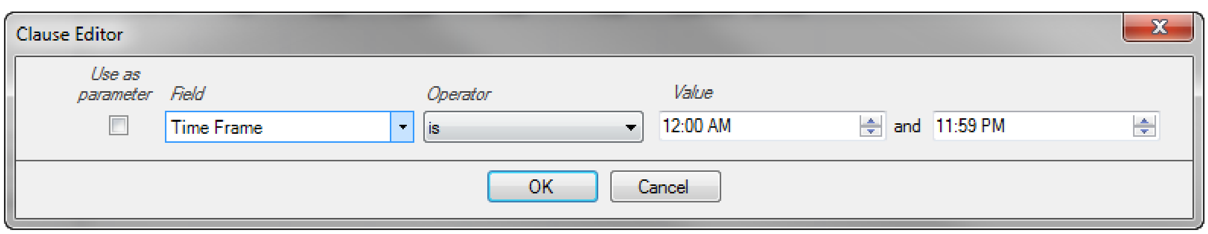
18. Position mouse on *Time to Answer* column heading and pause. Select the *Average* checkbox in the drop-down window.



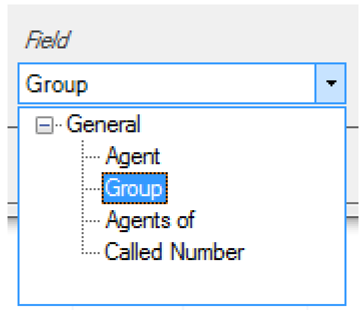
15.3 Editing the Condition Clauses in a Sample Call Group Report Template

Follow these steps to edit the Condition Clauses that appear in your template from the Edit tab of MXreport:

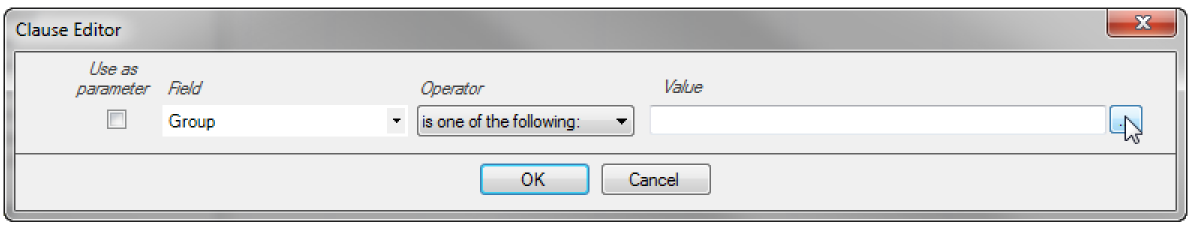
1. In the **Conditions** pane, change the Time Frame to *12:01 AM to 11:59 PM*.



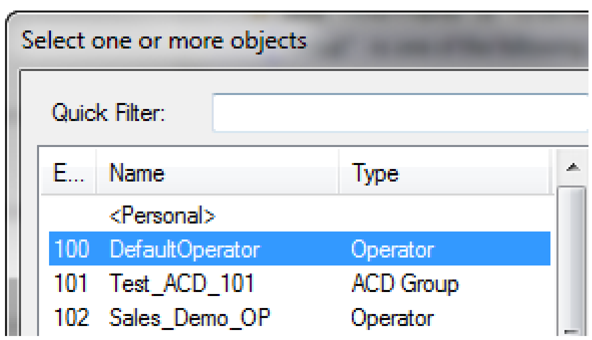
2. Click on the **Add Clause** icon in the **Conditions** toolbar.
3. In the pop-up **Clause Editor** window, select *Group*.



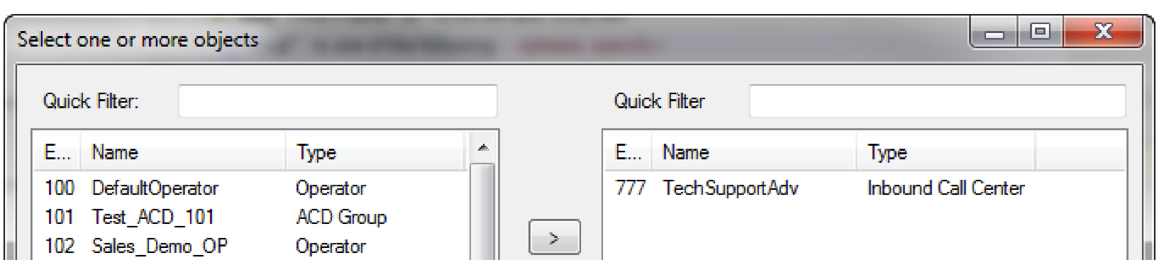
4. Click on the lookup icon button on the right.



5. A list of MX call groups appears. Select a call group.

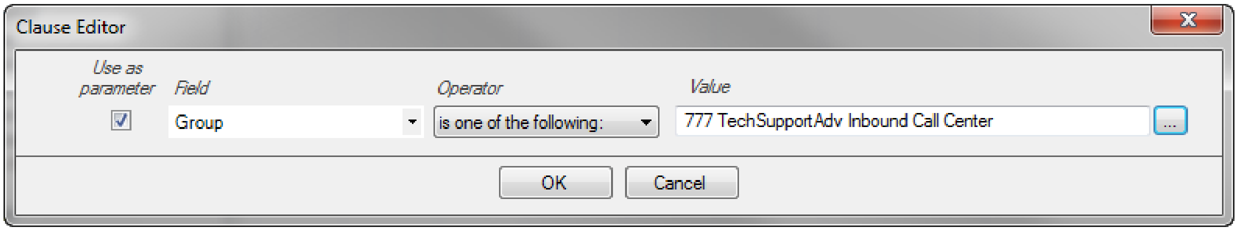


6. Double-click on the name to add it to the list.



7. Click **OK** to close window.

8. To make this a variable value each time the report is run, select the **Use as Parameter** checkbox in Clause Editor window.

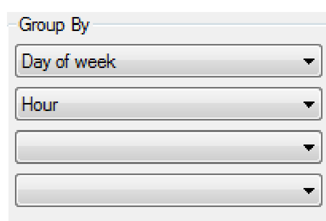


9. Click **OK** to close Clause Editor.

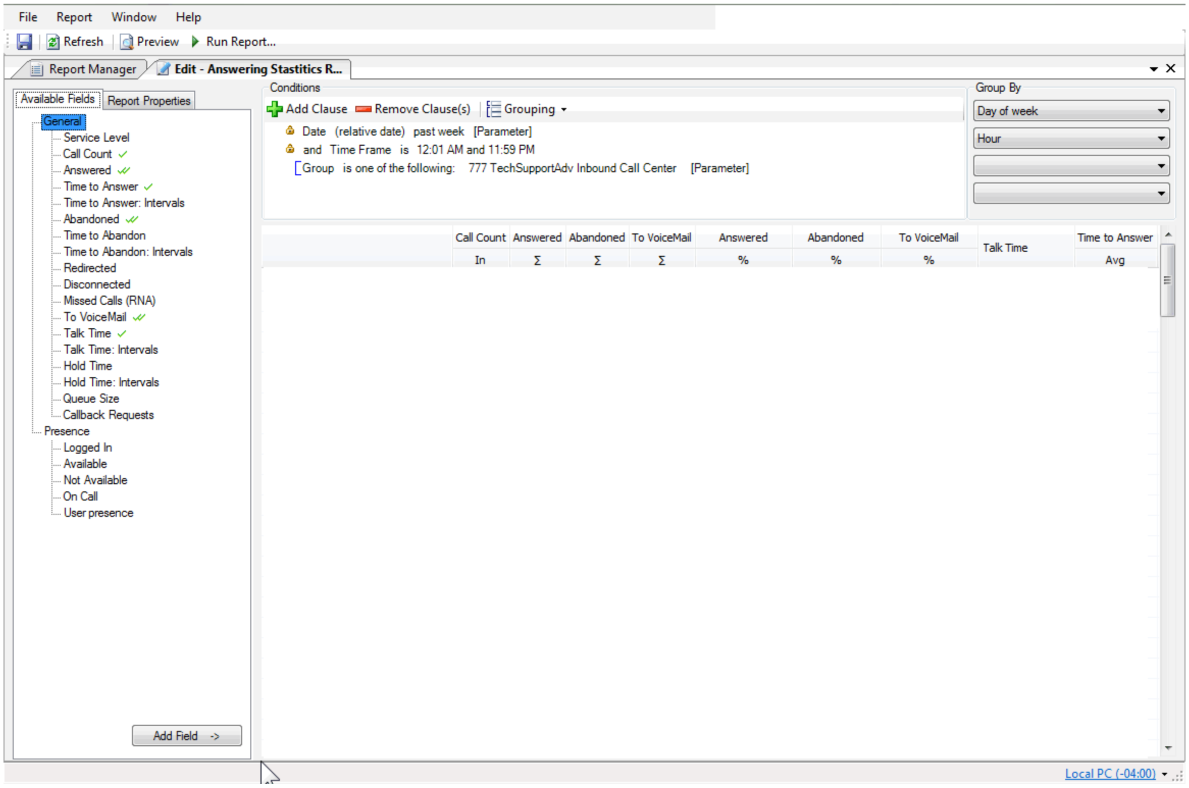
15.4 Editing the Group By Options in a Sample Call Group Report Template

Follow these steps to edit the Group By options that appear in your template from the Edit tab of MXreport:

1. In the Group By pane, select the following groupings in this exact order: *Day of week* then by *Hour*



2. Your Edit tab now should look like the following.



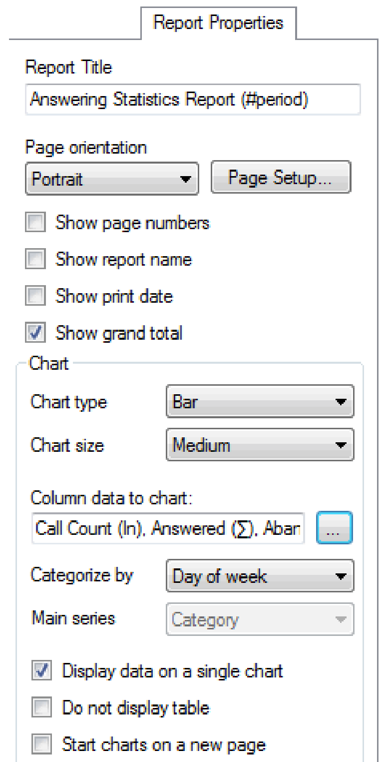
15.5Printing a Sample Call Group Report Template

14.5Printing a Sample Call Group Report Template

Follow these steps to edit the Printing options in your template from the Edit tab of MXreport:

1. Click on **Report Properties** tab in the **Report Manager** pane.

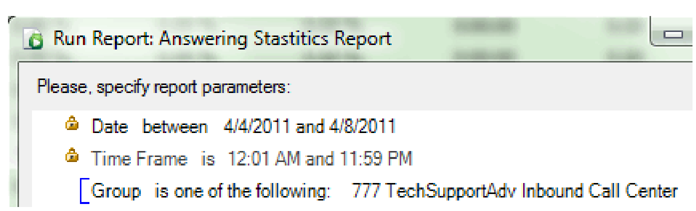
2. Enter the report title, here we used **Answering Statistics Report (#period)**, and select the *Show Grand Total* checkbox.



3. In the toolbar, click on the **Run Report** button.

4. The **Run Report** parameters window opens.

5. Enter this report's parameters.



6. Click on **Run** button.

7. An image of the report appears in a new tab of MXreport.

Answering Statistics Report (between 4/4/2011 and 4/8/2011)

	Call Count In	Answered Σ	Abandoned Σ	To VoiceMail Σ	Answered %	Abandoned %	To VoiceMail %	Talk Time	Time to Answer Avg
Grand Total	146	135	3	7	92.47 %	2.05 %	4.79 %	21:14:49	49.02
Monday	31	28	1	1	90.32 %	3.23 %	3.23 %	2:54:28	50.96
12:00 AM - 1:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
1:00 AM - 2:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
2:00 AM - 3:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
3:00 AM - 4:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
4:00 AM - 5:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
5:00 AM - 6:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
6:00 AM - 7:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
7:00 AM - 8:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
8:00 AM - 9:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
9:00 AM - 10:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
10:00 AM - 11:00 AM	1	1	0	0	100.00 %	0.00 %	0.00 %	0:03:02	6.00
11:00 AM - 12:00 PM	1	1	0	0	100.00 %	0.00 %	0.00 %	0:11:58	7.00
12:00 PM - 1:00 PM	7	6	0	1	85.71 %	0.00 %	14.29 %	0:48:13	8.50
1:00 PM - 2:00 PM	4	4	0	0	100.00 %	0.00 %	0.00 %	0:04:00	77.50
2:00 PM - 3:00 PM	6	6	0	0	100.00 %	0.00 %	0.00 %	0:41:05	67.67
3:00 PM - 4:00 PM	4	3	1	0	75.00 %	25.00 %	0.00 %	0:09:32	14.00
4:00 PM - 5:00 PM	2	1	0	0	50.00 %	0.00 %	0.00 %	0:03:06	7.00
5:00 PM - 6:00 PM	3	3	0	0	100.00 %	0.00 %	0.00 %	0:38:12	181.00
6:00 PM - 7:00 PM	2	2	0	0	100.00 %	0.00 %	0.00 %	0:06:33	24.00
7:00 PM - 8:00 PM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
8:00 PM - 9:00 PM	1	1	0	0	100.00 %	0.00 %	0.00 %	0:08:47	7.00
9:00 PM - 10:00 PM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
10:00 PM - 11:00 PM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
11:00 PM - 12:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
Tuesday	33	30	0	3	90.91 %	0.00 %	9.09 %	6:23:55	103.03
12:00 AM - 1:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
1:00 AM - 2:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
2:00 AM - 3:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
3:00 AM - 4:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
4:00 AM - 5:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
5:00 AM - 6:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00
6:00 AM - 7:00 AM	0	0	0	0	0.00 %	0.00 %	0.00 %	0:00:00	0.00

8. This *Answering Statistics* report template can be saved and rerun at any time. To save, click on **File** and select **Save**.

9. Click on the **Print** icon in the toolbar to print report.

16 Example – Creating a Call Center/Call Group Report for an Agent

NOTE: To perform this example, an MXreport (ICC) license must be installed on the MX phone system.

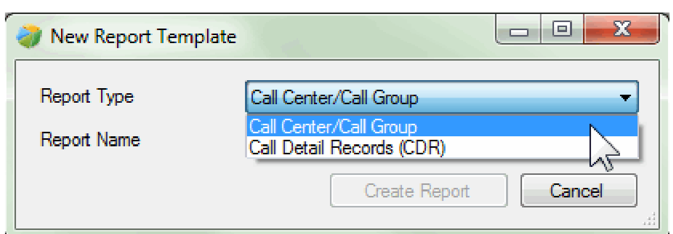
Requirements: Run an ***Agent Group Support Report*** that shows how agents who are assigned to multiple call groups have divided their activities during a specific time period. The report information is to be grouped by agent and is to show for each call group:

6. Call count (inbound, outbound, total)
7. Time logged In (numerical)
8. Time Available (percentage)
9. Time On Call (percentage)
10. Time Unavailable (percentage)
11. Talk time (minimum, maximum, average)

16.1 Creating a Sample Report Template for an Agent

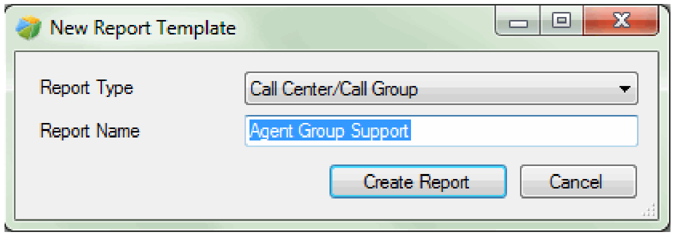
Follow these steps to create your template from the opening screen of MXreport:

12. In the toolbar Click on **New Template…**
13. Select Report type Call Center/Call Group from drop-down menu.

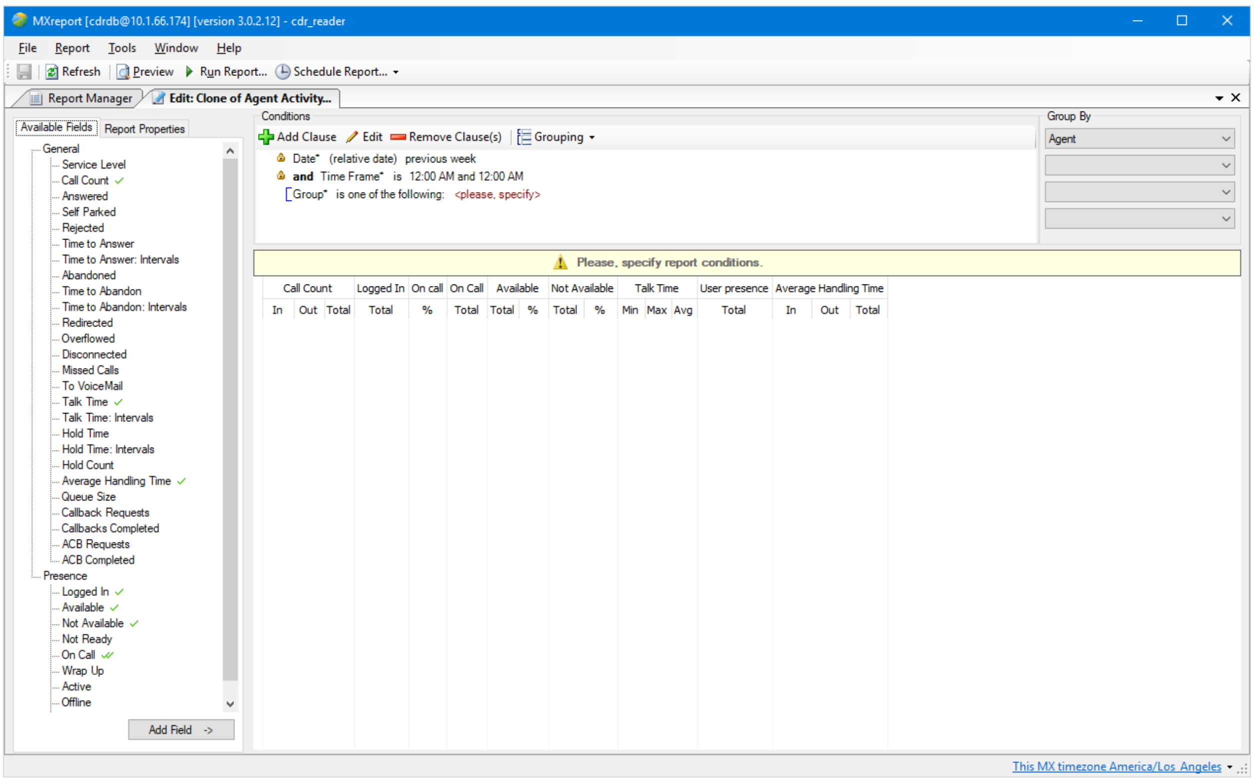


14. Type in your report name. In this example we use *Agent Group Support*.

15. Click on the **Create Report** button.



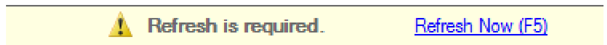
16. MXreport's Advanced Editor opens and displays default values.



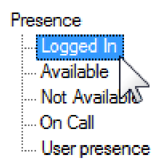
16.2Editing the columns in a Sample Agent Report Template

Follow these steps to edit the columns that appear in your template from the Edit tab of MXreport:

1. As changes are made to the report template, MXreport will prompt, *Refresh is required*, when changes are pending. To regenerate the report, click on **Refresh Now**.

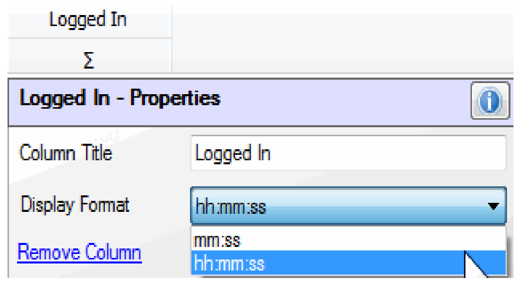


2. Select **Logged In** under the *Presence* grouping in Available Fields. Drag the field to the headings bar in the bottom pane.



3. Position mouse on **Logged In** column heading in the lower pane and pause for the drop-down menu.

4. In Display Format, ***select hh.mm.ss.***



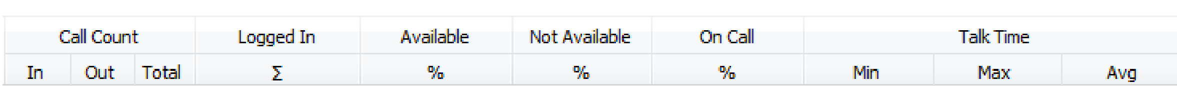
5. Select ***Available*** in Available Fields and add this field to the report.

6. Select ***Not Available*** in Available Fields and add this field to the report.

7. Select ***On Call*** in Available Fields and add this field to the report.

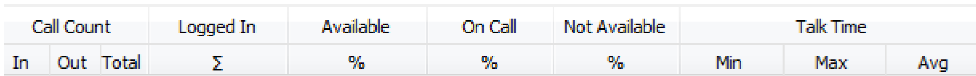
8. Select ***Talk Time*** in Available Fields and add this field to the report.

9. The column headings in the lower pane should appear as follows:



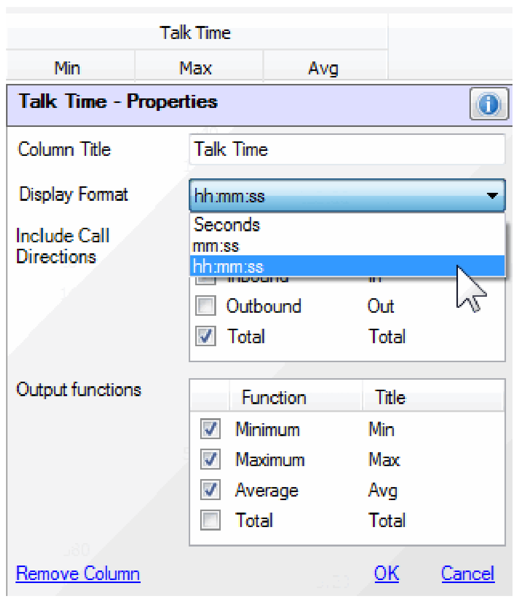
10. Position the mouse cursor on the *On Call* column heading and drag it to a position next to the *Idle* column heading.

11. The column headings in the lower pane should appear as follows.



12. Position the mouse cursor on *Talk Time* column heading and pause until the drop-down menu appears.

13. In Display Format, *select hh.mm.ss.*

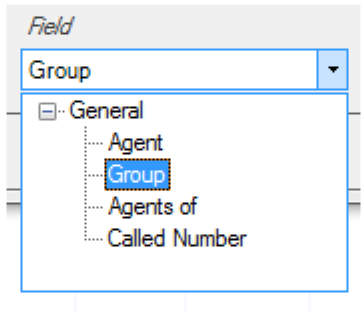


16.3Editing the Condition Clauses in a Sample Agent Report Template

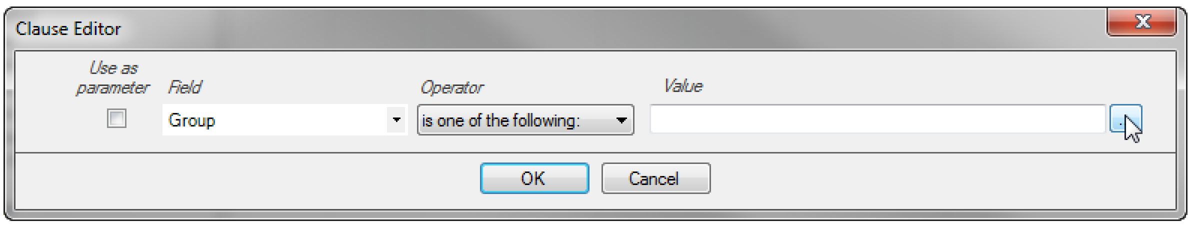
Follow these steps to edit the Condition Clauses that appear in your template from the Edit tab of MXreport:

1. In the **Conditions** pane, click on the **Add Clause** button.

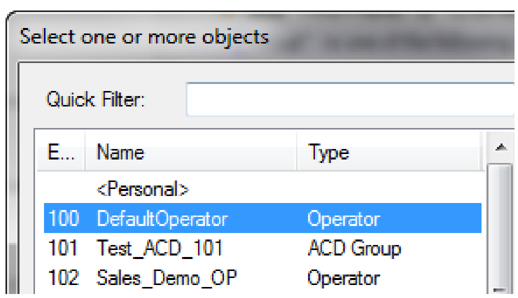
2. In the pop-up **Clause Editor** window, select *Group*.



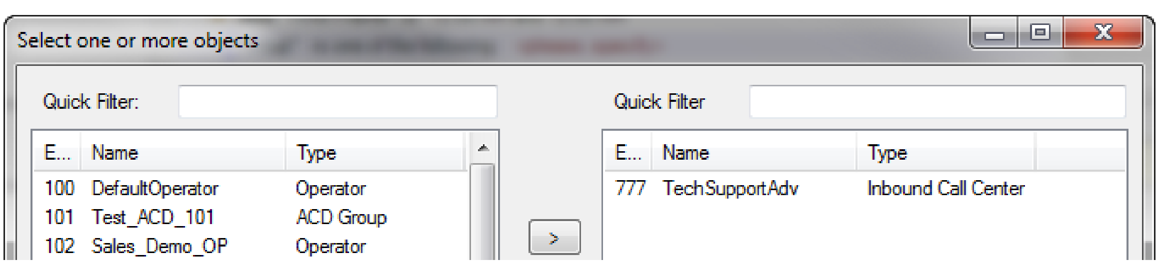
3. Click on the lookup icon button on the right.



4. A list of MX call groups appears. Select a call group.

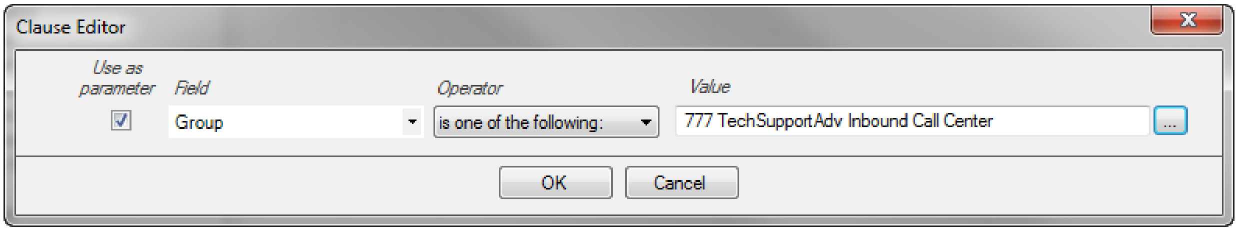


5. Double-click on the name, to add it to add it to the list.

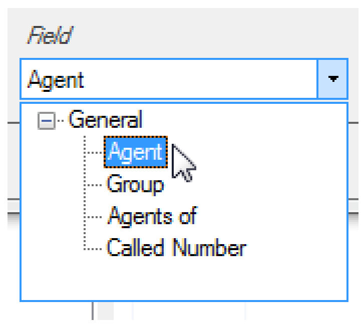


6. Click **OK** to close window.

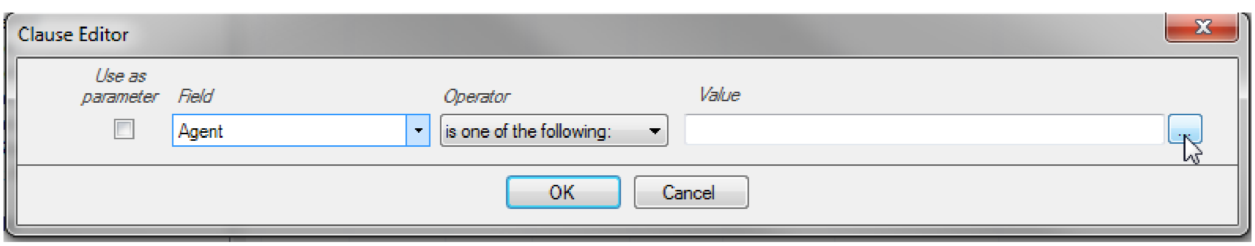
7. Select the **Use as Parameter** checkbox in the Clause Editor window to make this a variable value each time the report is run.



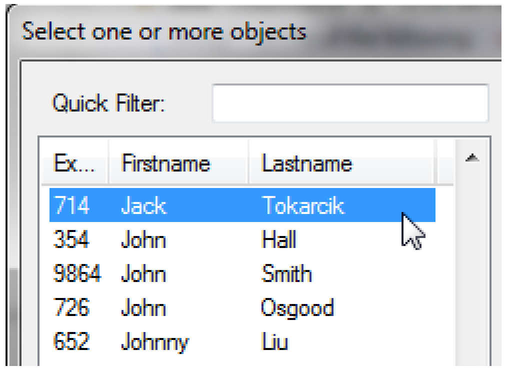
8. Click **OK** to close Clause Editor.
9. In the **Conditions** pane, click on the **Add Clause** icon again.
10. In the pop-up **Clause Editor** window, select *Agent*.



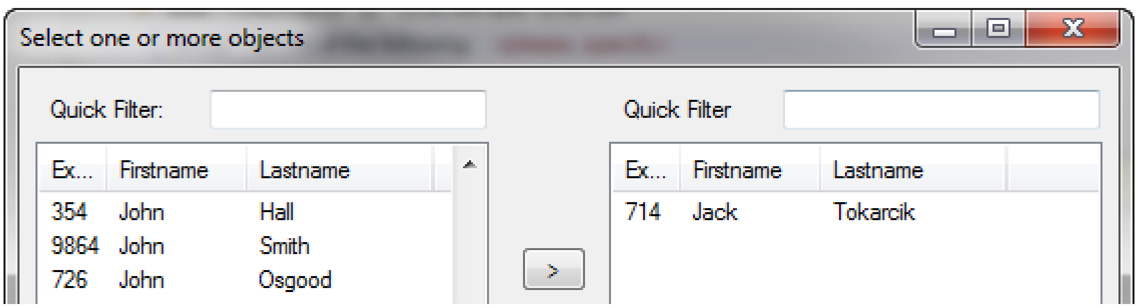
11. Click on the lookup icon button on the right.



12. A list of agents appears. Select an agent.

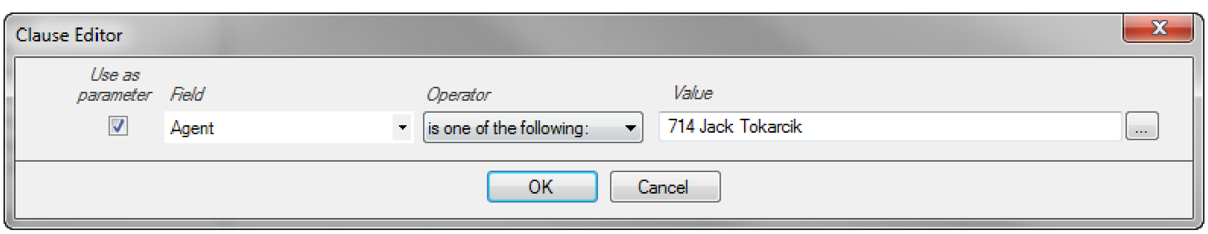


13. Double-click on the agent's name to add them to the list.

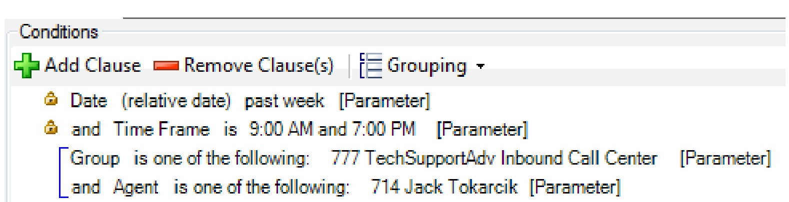


14. Click **OK** to close window.

15. Select the *Use as parameter* checkbox in the **Clause Editor** window to make this a variable value each time the report is run.



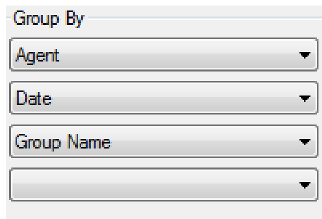
16. Click **OK** to close the Clause Editor.



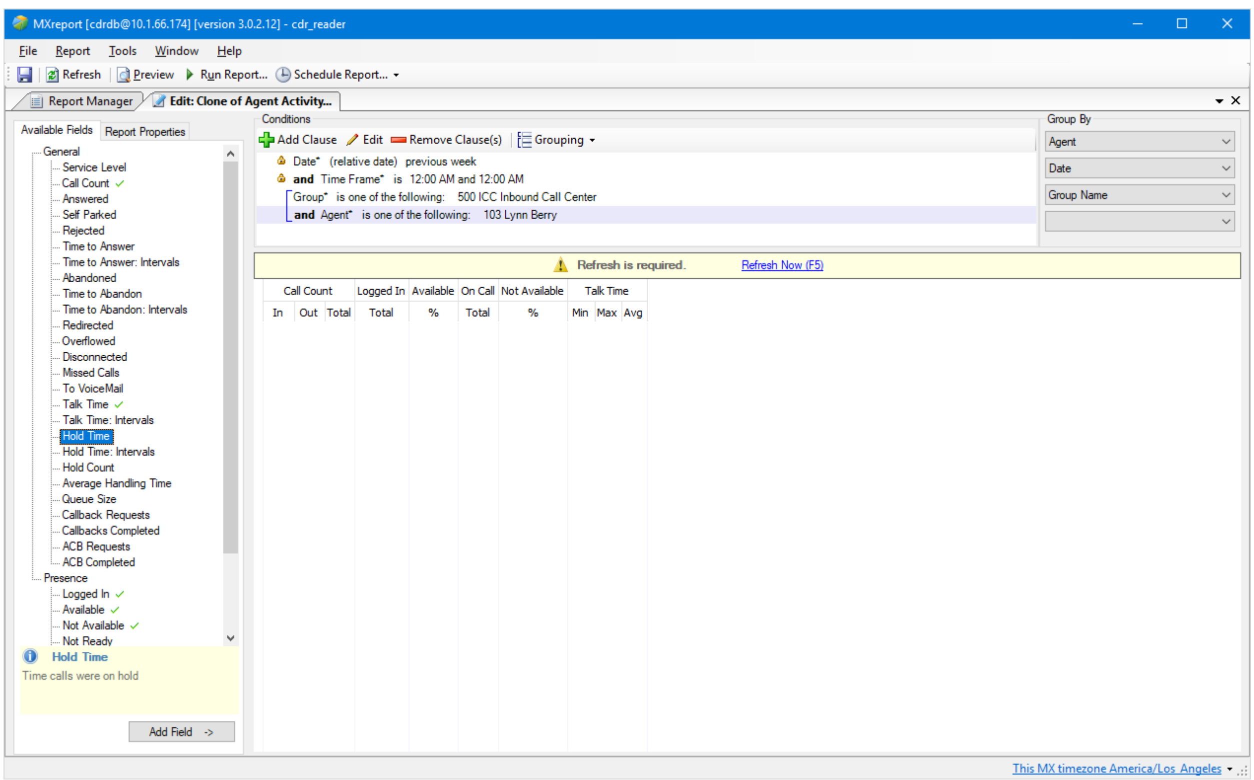
16.4 Editing the Group By Options in a Sample Report Template

Follow these steps to edit the Group By options that appear in your template from the Edit tab of MXreport:

1. In the Group By pane, select the following groupings in this exact order: Agent, Date and Group Name.



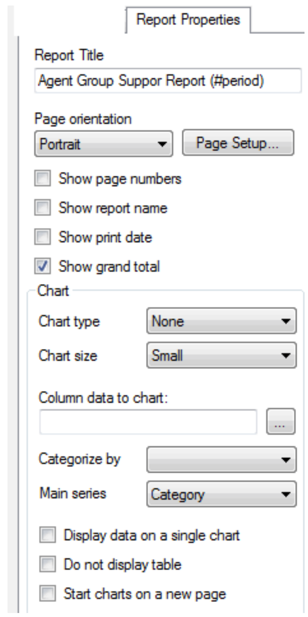
2. Your Edit tab now should look like the following.



16.5Printing the Sample Report

Follow these steps to edit the Printing options in your template from the Edit tab of MXreport:

1. Click on **Report Properties** tab in the **Report Manager** pane.

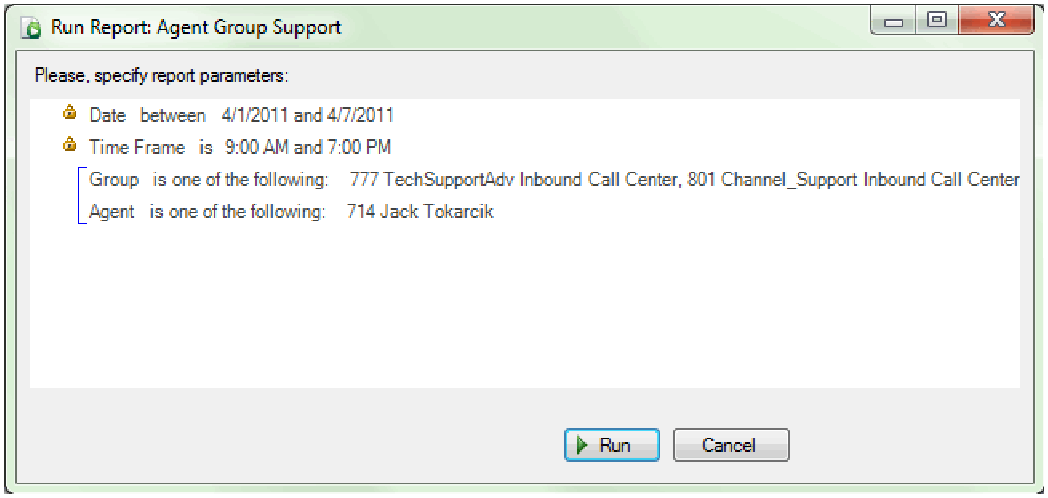


2. Enter the report title, here we used **Agent Group Support Report (#period)**, and check the *Show Grand Total* option.

3. In the toolbar, click on the **Run Report** button.

4. The **Run Report** parameters window opens.

5. Enter this report's parameters.



6. Click on the Run button.

7. An image of the report appears in a new tab of MXreport.

Agent Group Support Report (between 4/1/2011 and 4/7/2011)

	Call Count			Logged In	Available	On Call	Not Available	Talk Time		
	In	Out	Total	Σ	%	%	%	Min	Max	Avg
Grand Total	8	27	35	41:20:37	91.58 %	5.90 %	2.52 %	2	3 252	256.34
714 (Jack Tokarcik)	8	27	35	41:20:37	91.58 %	5.90 %	2.52 %	2	3 252	256.34
4/1/2011	2	3	5	0:00:00	0.00 %	0.00 %	0.00 %	37	3 252	860.00
Channel_Support	1	3	4	0:00:00	0.00 %	0.00 %	0.00 %	37	3 252	889.00
TechSupportAdv	1	0	1	0:00:00	0.00 %	0.00 %	0.00 %	744	744	744.00
4/2/2011	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
Channel_Support	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
TechSupportAdv	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
4/3/2011	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
Channel_Support	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
TechSupportAdv	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
4/4/2011	4	10	14	0:00:00	0.00 %	0.00 %	0.00 %	3	603	117.43
Channel_Support	4	10	14	0:00:00	0.00 %	0.00 %	0.00 %	3	603	117.43
TechSupportAdv	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
4/5/2011	2	10	12	0:00:00	0.00 %	0.00 %	0.00 %	2	1 189	215.17
Channel_Support	2	10	12	0:00:00	0.00 %	0.00 %	0.00 %	2	1 189	215.17
TechSupportAdv	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
4/6/2011	0	2	2	0:00:00	0.00 %	0.00 %	0.00 %	39	91	65.00
Channel_Support	0	2	2	0:00:00	0.00 %	0.00 %	0.00 %	39	91	65.00
TechSupportAdv	0	0	0	0:00:00	0.00 %	0.00 %	0.00 %	0	0	0.00
4/7/2011	0	2	2	41:20:37	91.58 %	5.90 %	2.52 %	55	261	158.00
Channel_Support	0	2	2	41:20:37	91.59 %	5.40 %	3.01 %	55	261	158.00
TechSupportAdv	0	0	0	10:07:37	88.14 %	2.04 %	9.81 %	0	0	0.00

8. This Agent Group Support report template can be saved and rerun at any time. To save it, click on **File** and select **Save**.

9. Click on the **Print** icon in toolbar to print report.

17 Managing Folders and Template Files

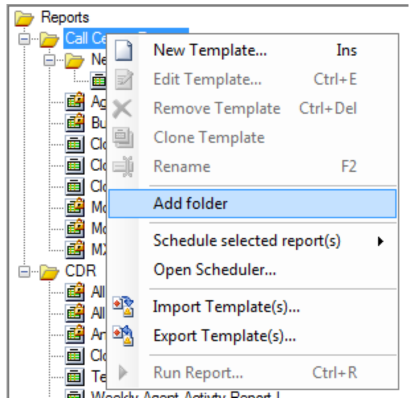
To better organize the available templates, you can create and manage folders in the Report Manager tab.

17.1 Creating a New Templates Folder

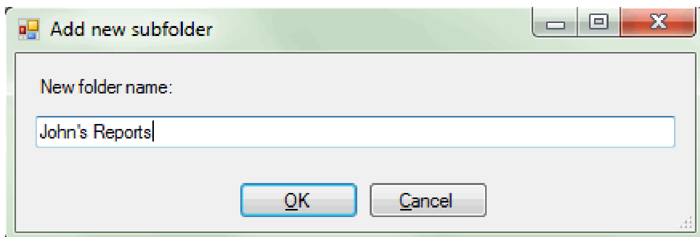
Follow these steps to create a new template folder in the Report Manager tab.

1. Right-click on folder named **REPORTS** in the **REPORT MANAGER** tab.

2. From the contextual menu click ADD FOLDER.



3. Enter the name of folder in the ADD NEW FOLDER pop-up window.



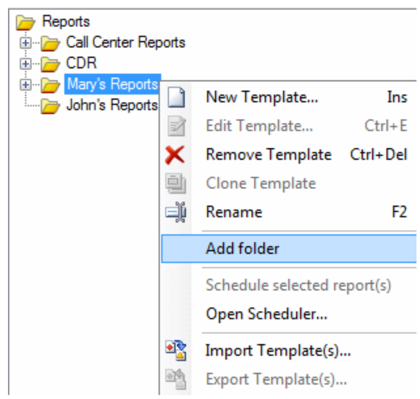
4. A new report templates folder is created.

17.2 Creating a New Nested Template Folder

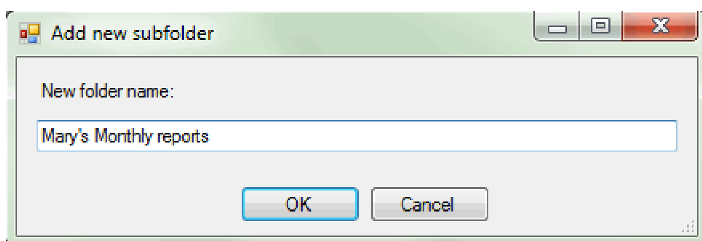
Follow these steps to create a nested folder in the Report Manage tab:

1. Right-click on the master folder in which you are creating the sub-folder.

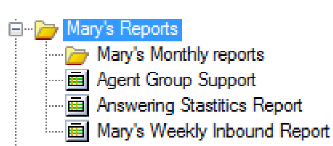
2. From the contextual menu click on **ADD FOLDER**.



3. Enter the name of folder in the **ADD NEW FOLDER** pop-up window.



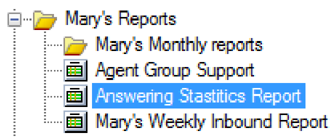
4. A new nested templates folder is created.



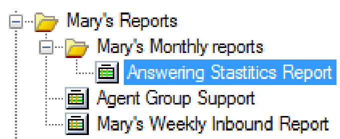
17.3 Moving a Report Template

Once you have multiple folders, follow these steps to move a template to the new location in the **REPORT MANAGER** tab.

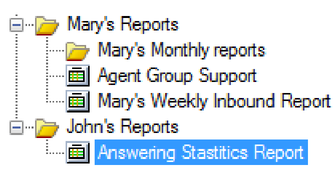
1. Select the report template by clicking on the folder's name to highlight it.



2. To move a template within the same folder, drag the template to the new location.



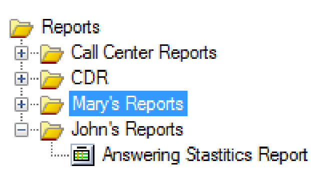
3. To move a template to a different folder, drag the template to a new location in that folder.



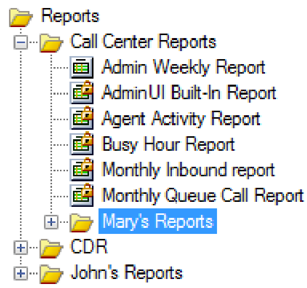
17.4 Moving a Template Folder

You can also move an entire folder of templates to a new location in the **REPORT MANAGER** tab.

1. Select the report folder by clicking on the folder's name to highlight it.



2. Drag the folder to the new location in the folder tree.

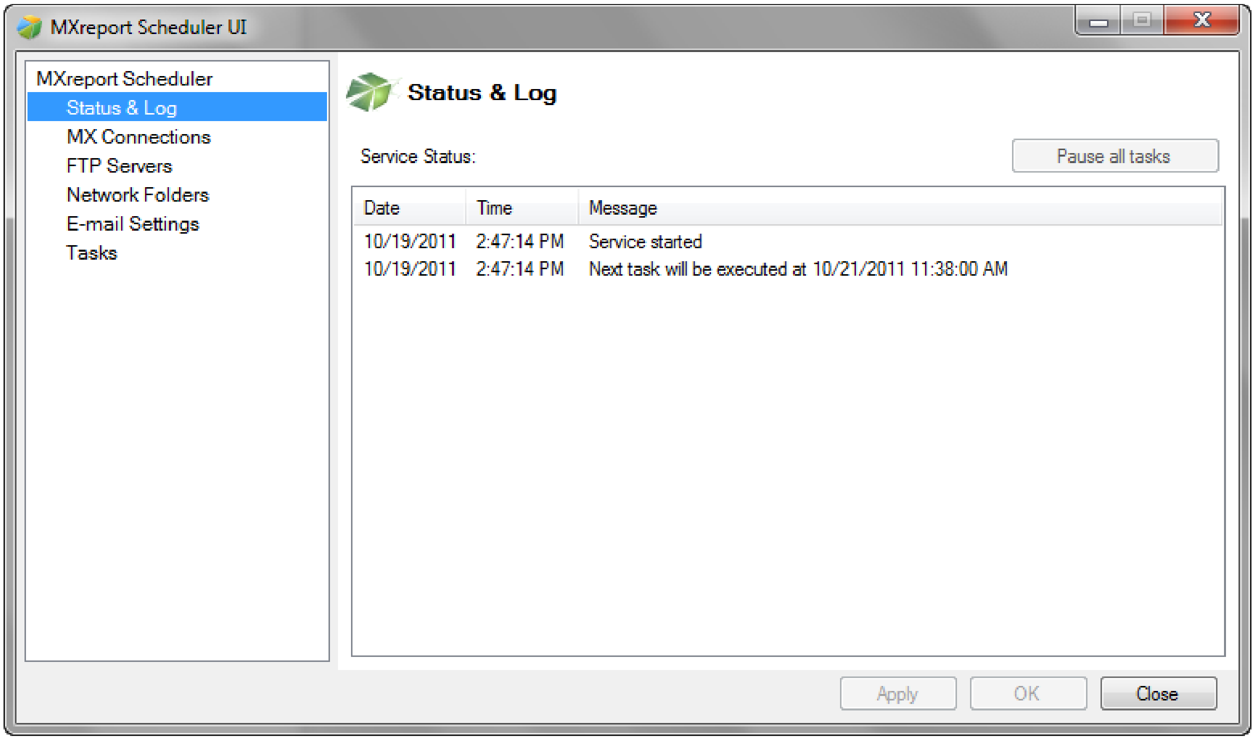


18 Report Scheduler

MXreport allows users to schedule reports to run at any set time period and have the results be either automatically uploaded to an FTP server, local or network folder, or receive the report as an email attachment. The Report Scheduler feature operates as a Windows Service, which means that scheduler will still be running if MXreport application is closed. This feature is available starting with version 2.2 of MXreport.

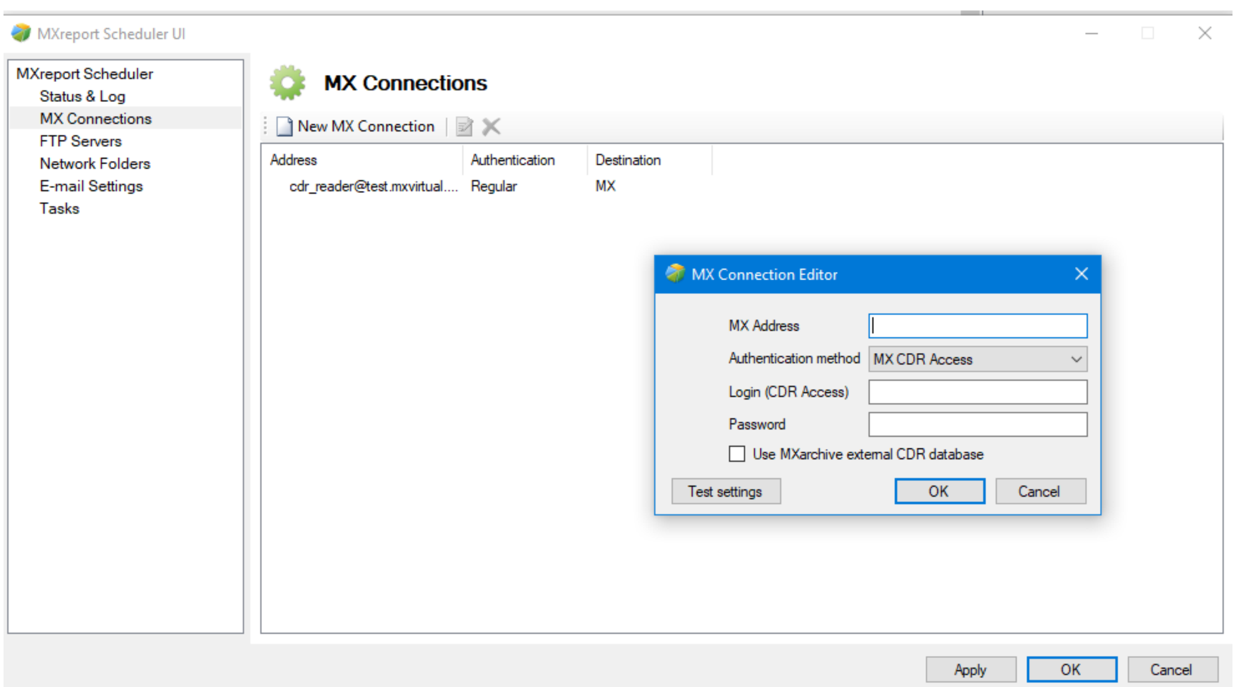
18.1 Configuration

To access the **MXreport Scheduler UI** window, click on **Tools,** then **Open Scheduler**. Click on the entries on the right side, to view or configure Scheduler settings. After editing any of the fields in this window, you must either click **Apply** or exit the window by clicking the **OK** button, for the changes to take effect.



Status & Log – This section displays all recent scheduler activity.

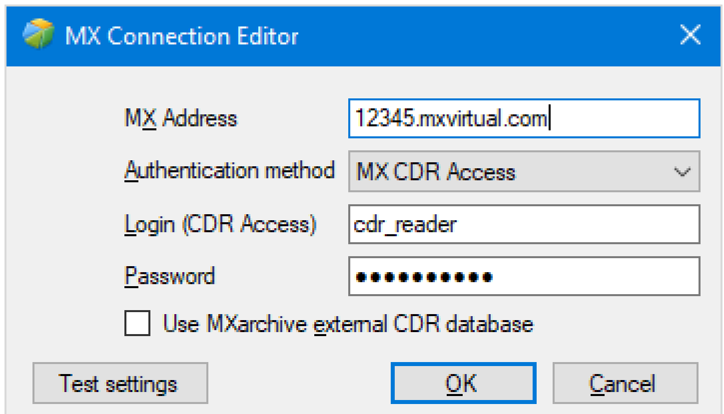
To temporarily stop all scheduler activity, click the **Pause All Tasks** button.

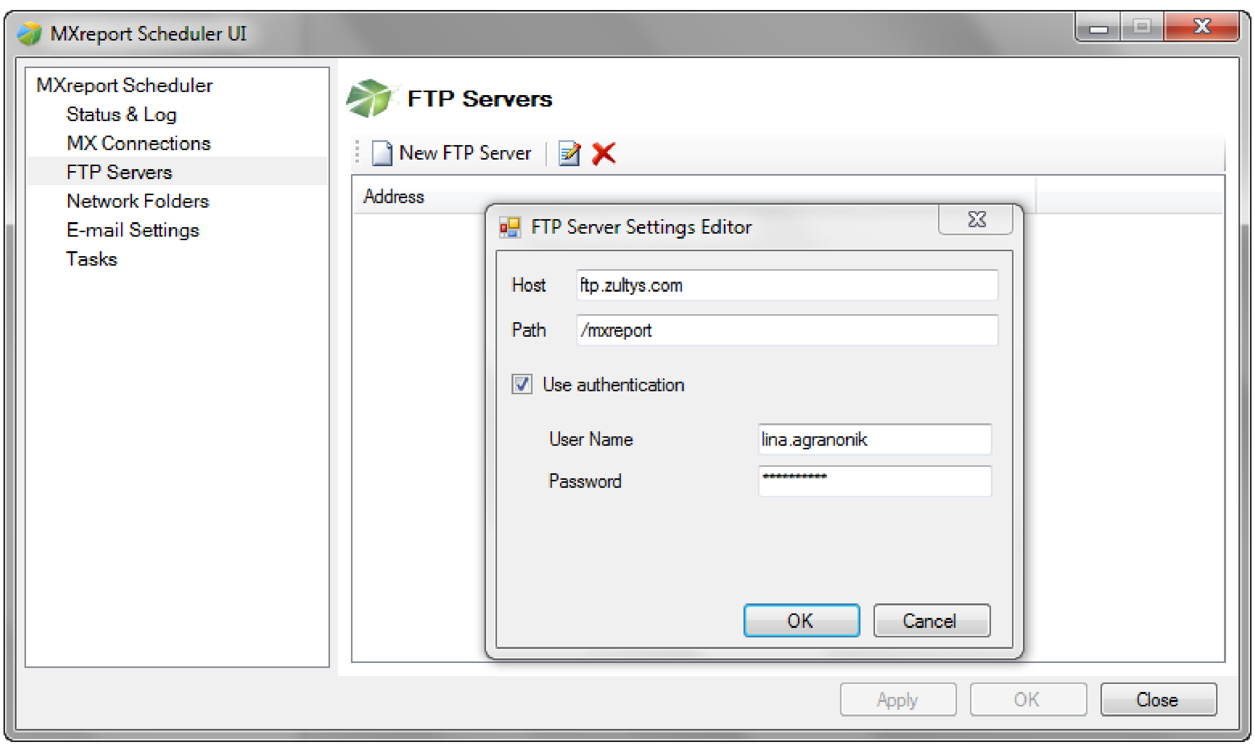


MX Connections – This section lists all the current MX connections.

Click New MX Connection to add a new connection, or click the Edit Connection Properties icon next to it to edit an existing connection. Click the red X to remove a connection.

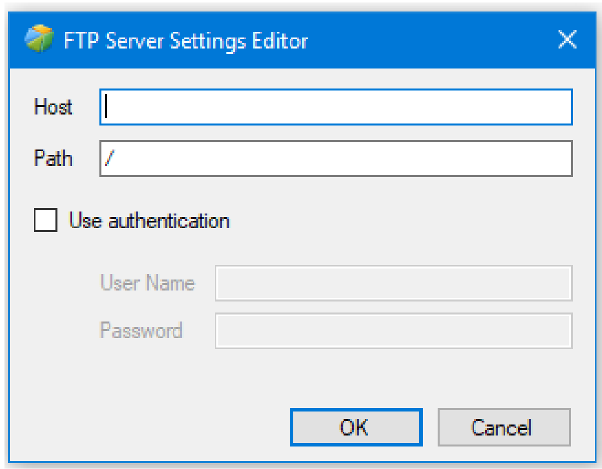
Adding or editing an MX connection will open the **MX Connection Editor** popup window. Complete the necessary field entries and click **OK**.
You may test the connection by utilizing the Test settings button.

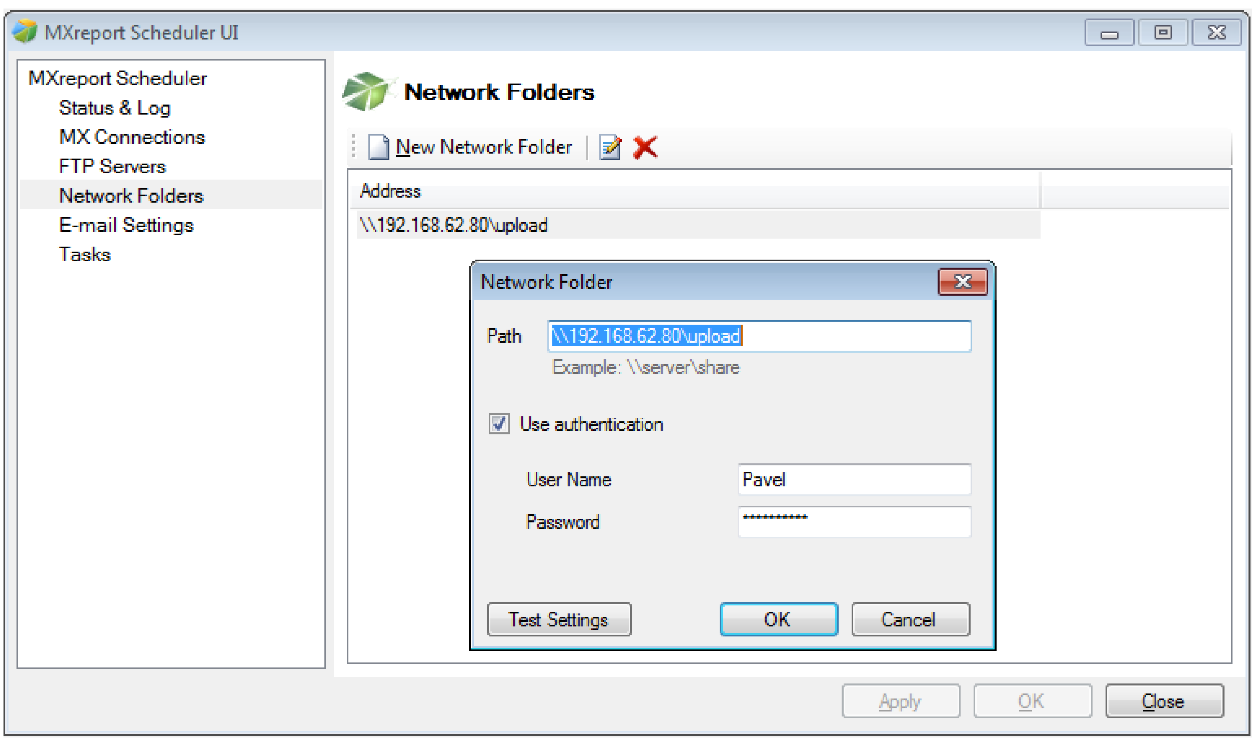




FTP Servers – This section lists all the FTP Servers to which MX reports could be uploaded. Click New FTP Server to add a new server, or click the Edit icon next to it to edit an existing Server's Setting. Click the red X to remove a Server.

Adding or editing an FTP Server will open the **FTP Server Settings Editor** popup window. Complete the necessary field entries and click **OK**.

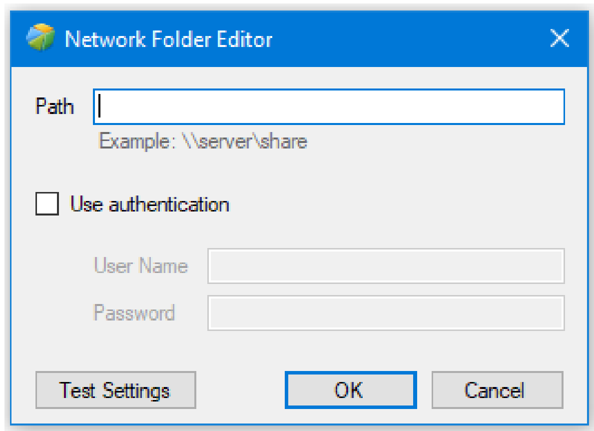


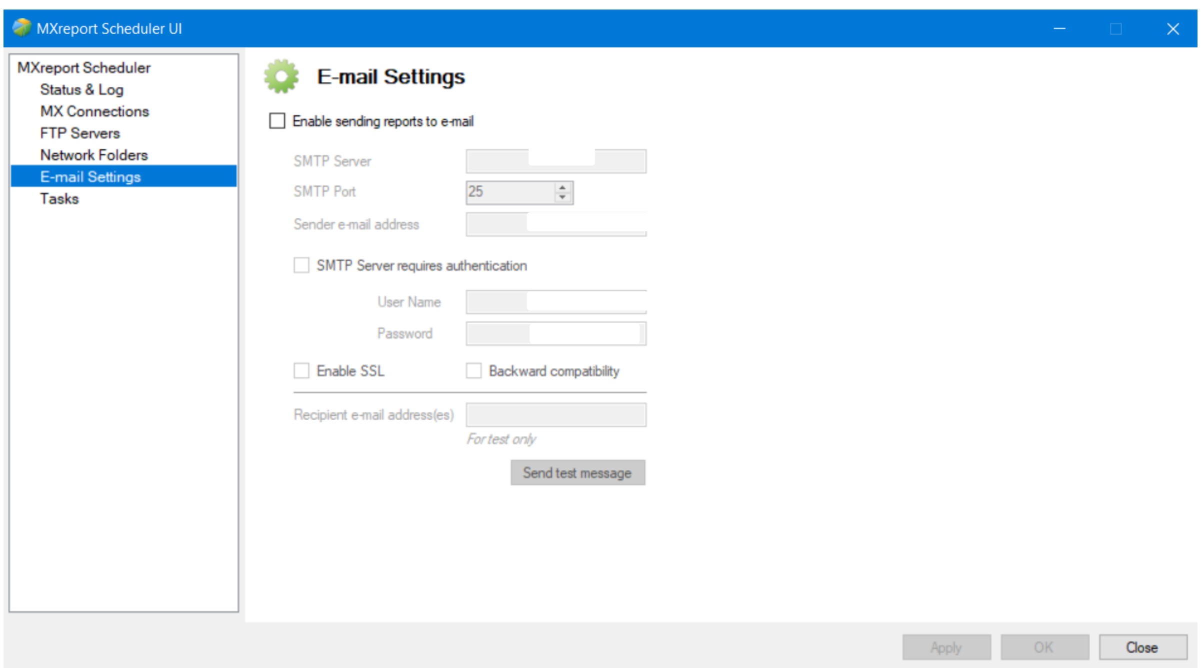


Network Folders – This section lists all the network folders to which MX reports could be uploaded. Click New Network Folder to add a new folder, or click the

Edit icon next to it to edit an existing folder's Setting. Click the red X to remove a folder.

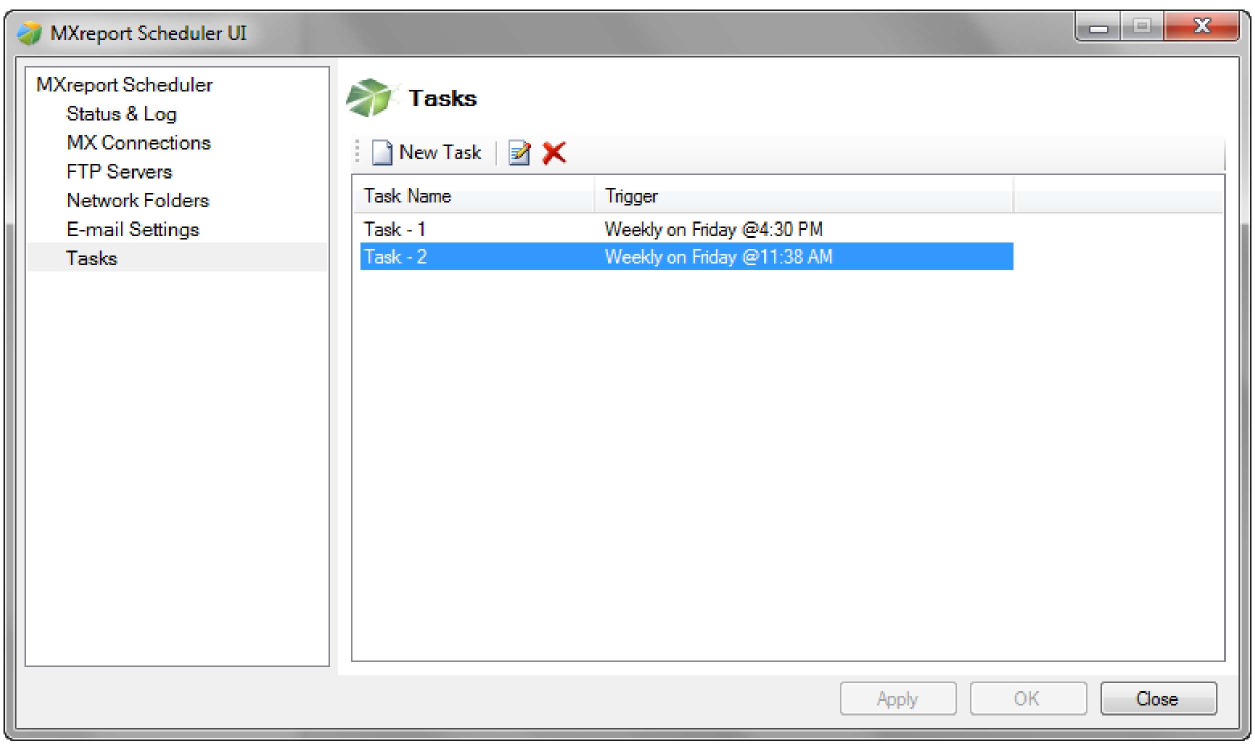
Adding or editing a Network Folder will open the **Network Folder Editor** popup window. Complete the necessary field entries and click **OK**.





E-mail Settings – Check the Enable Sending Reports to e-mail box and enter the required information, to allow Scheduled reports to be sent to your email address.

- SMTP Server: This field specifies the address (FQDN or IP address) of the SMTP server that will deliver the notification messages.
- SMTP Port: This field specifies the port number of the SMTP server that will deliver the notification messages. SMTP servers typically use port 25.
- Sender e-Mail address: This field specifies the e-mail address of the entity that sends the notification messages.
- SMTP Server Requires Authentication: Select this option if the SMTP server requires authentication, then enter the User Name and Password for the account through which the notification messages will be sent.
- Enable SSL: This allows e-mail services like Gmail to be utilized.
- Recipient e-mail address: Enter the SSL enabled e-mail recipient to receive the report and click “Send test message” to check the settings.



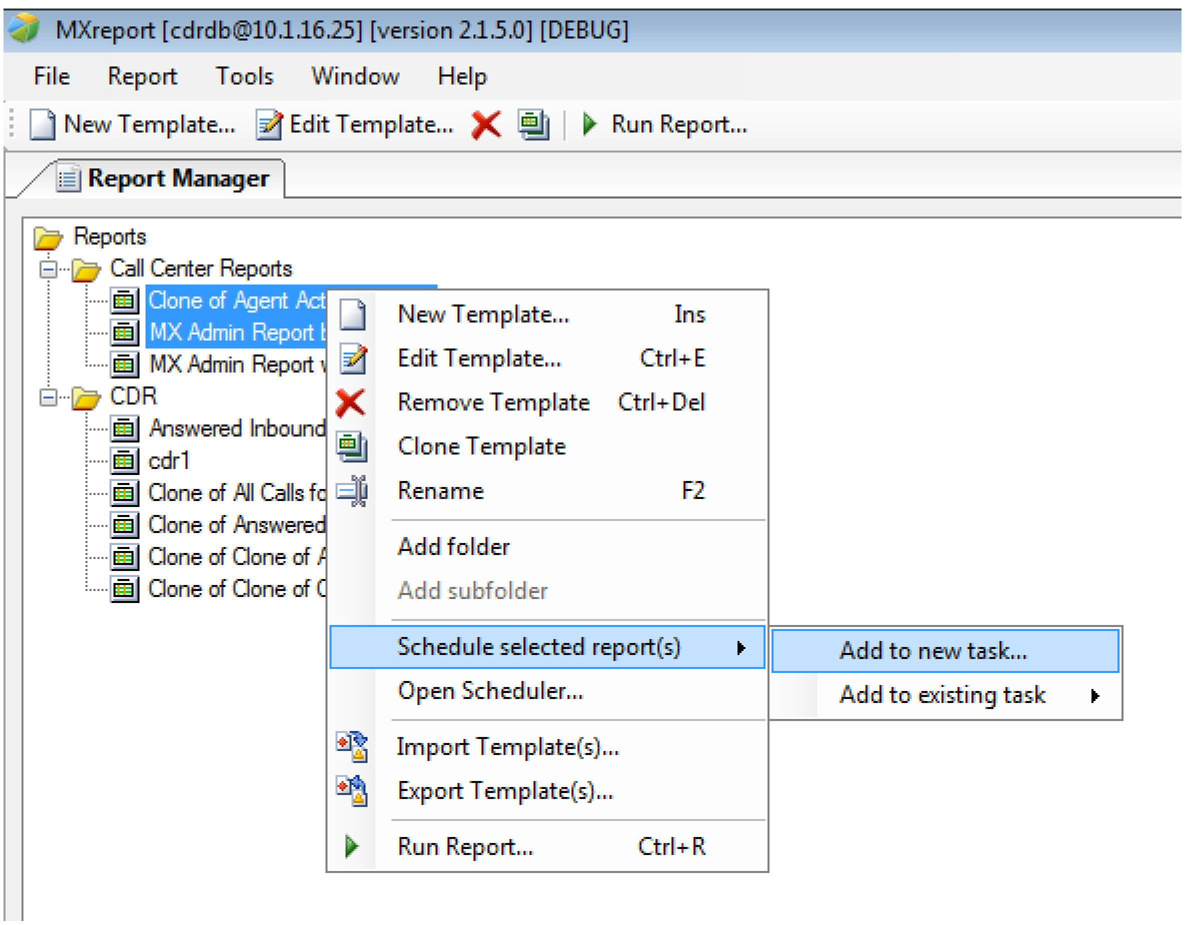
Task – This section displays all Tasks. Click New Task to add a new task, or click the Edit icon next to it to edit an existing connection. You can also edit a task by double-clicking on it the list. Click the red X to remove a task.

18.2Task Editor

To create a new Task, click on New Task in the Task tab of the Report Scheduler UI.

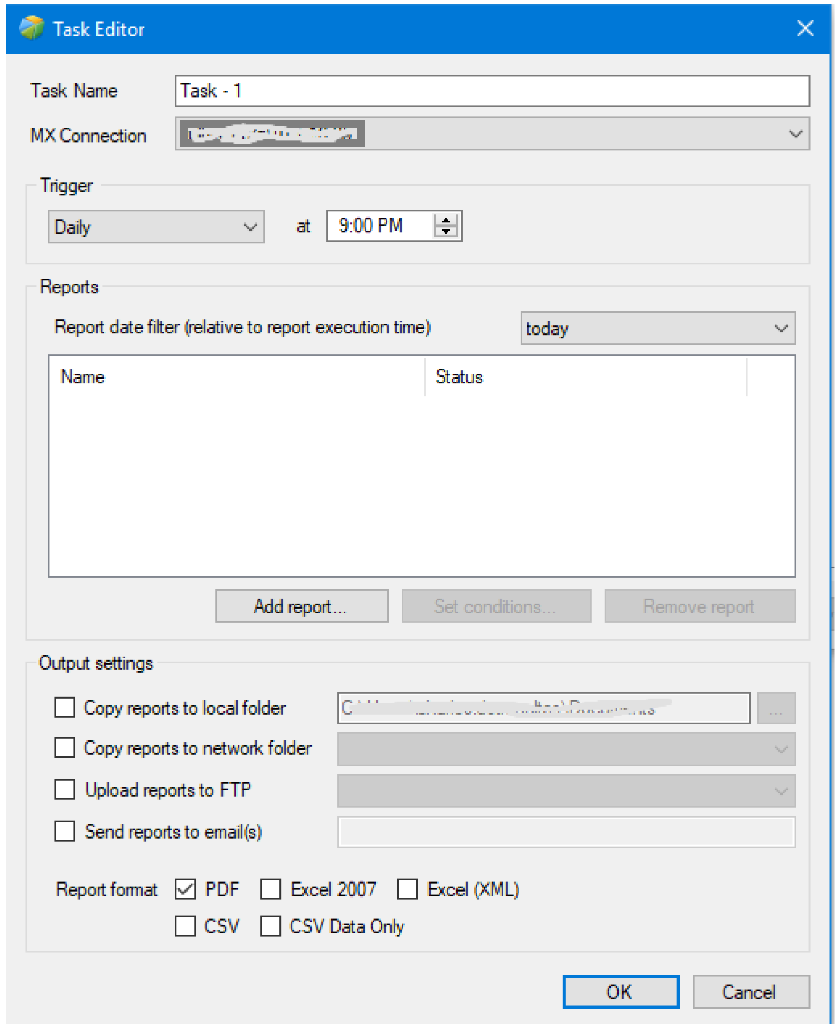
Or you can enter task manager by right-clicking on a template in the Report Manager tab. Click Schedule Selected Report(s) and select either Add to New Task or Add to Existing Task.

Note that Add to existing task will only appear if there is already an existing task created.



18.2.1 Creating a task

In the Task Editor window, follow these steps to create a scheduler task.



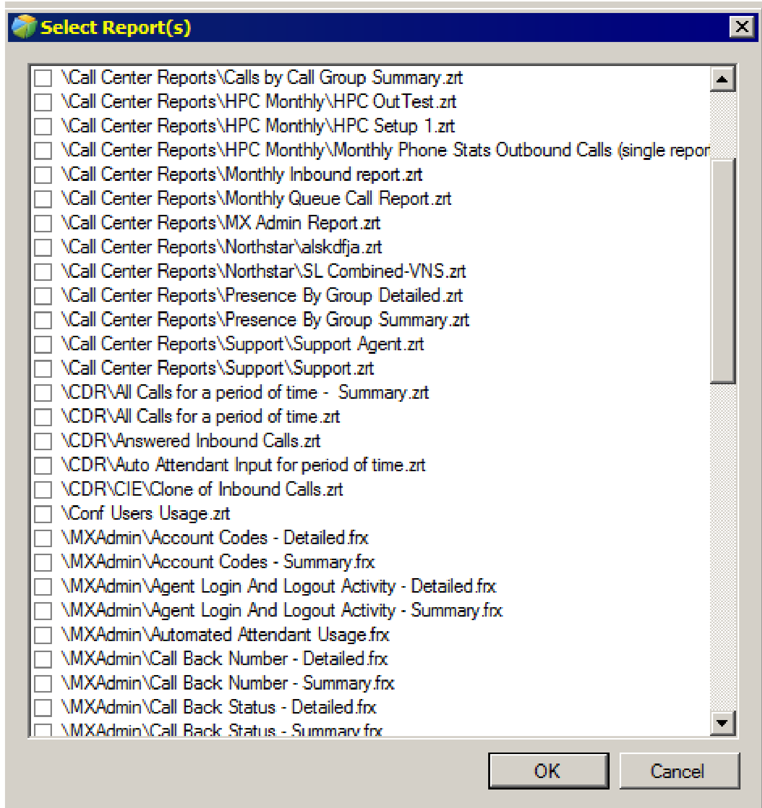
1. Enter a name for your task
2. Select an MX Connection from the list.
3. In the Trigger Section, chose the frequency of the report
    - **Daily** – A report will be sent out every day at a specified time.
    - **Weekly** – A report will be sent out on a specified day of the week at a specified time
    - **Monthly** – A report will be sent out on a specified day of the month at a specified time.

4. Chose a value from the drop-down menu for Report Data Filter (relative to report execution time).

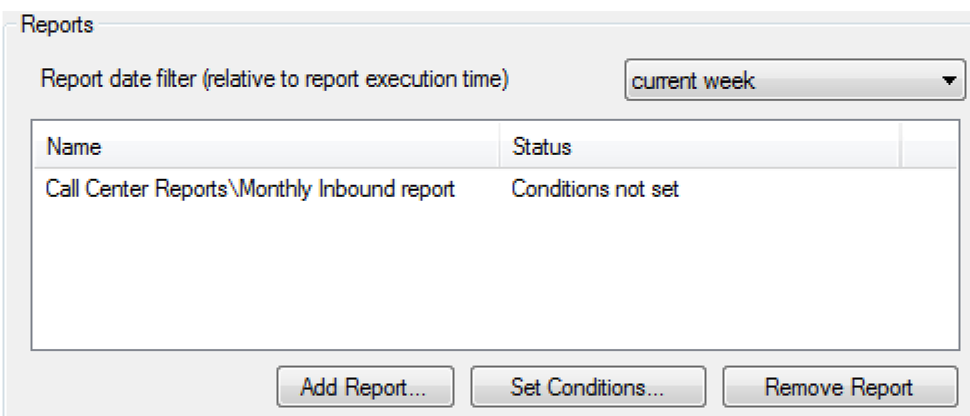
Possible values include:

- Today
- Yesterday
- Previous 2 days
- Previous 3 days
- Current week – all data from Sunday to present for the current week regardless of current date.
- Previous week – all data from Sunday to Saturday for the previous week regardless of current date.
- Previous 7 days
- Current month – all data for the current month starting from the 1st of the month regardless of current date.
- Previous month
- Current year
- Previous year

5. Click on **Add Report**.



6. Select Report(s) popup window will appear. Check the box next to a report to include it in this task and click **OK**.



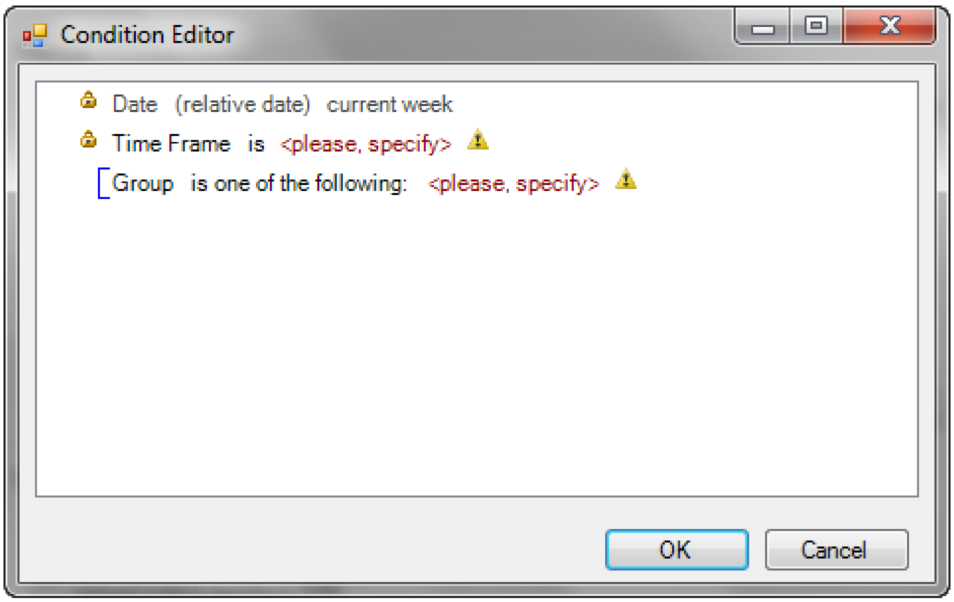
7. The added reports will appear in the box.

If the new report has the status of Condition Not Set, you will need to specify conditions for it. You will not be able to run the task until conditions for all the reports are set. If you do not need to set conditions for your reports, continue to section 18.2.3

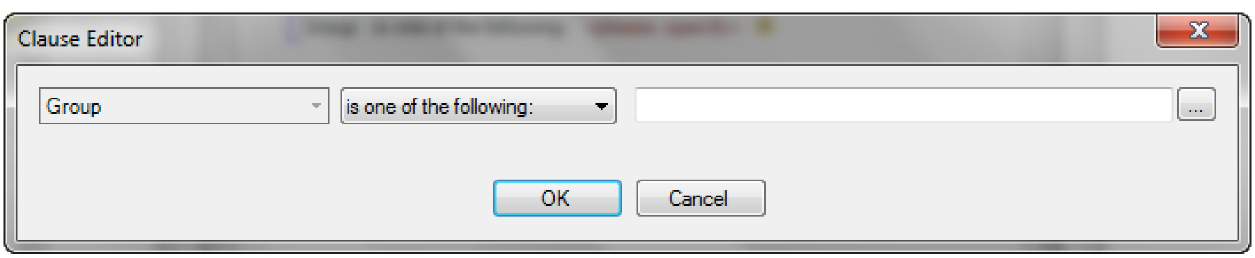
18.2.2 Setting Conditions for a Report

To set conditions for a report:

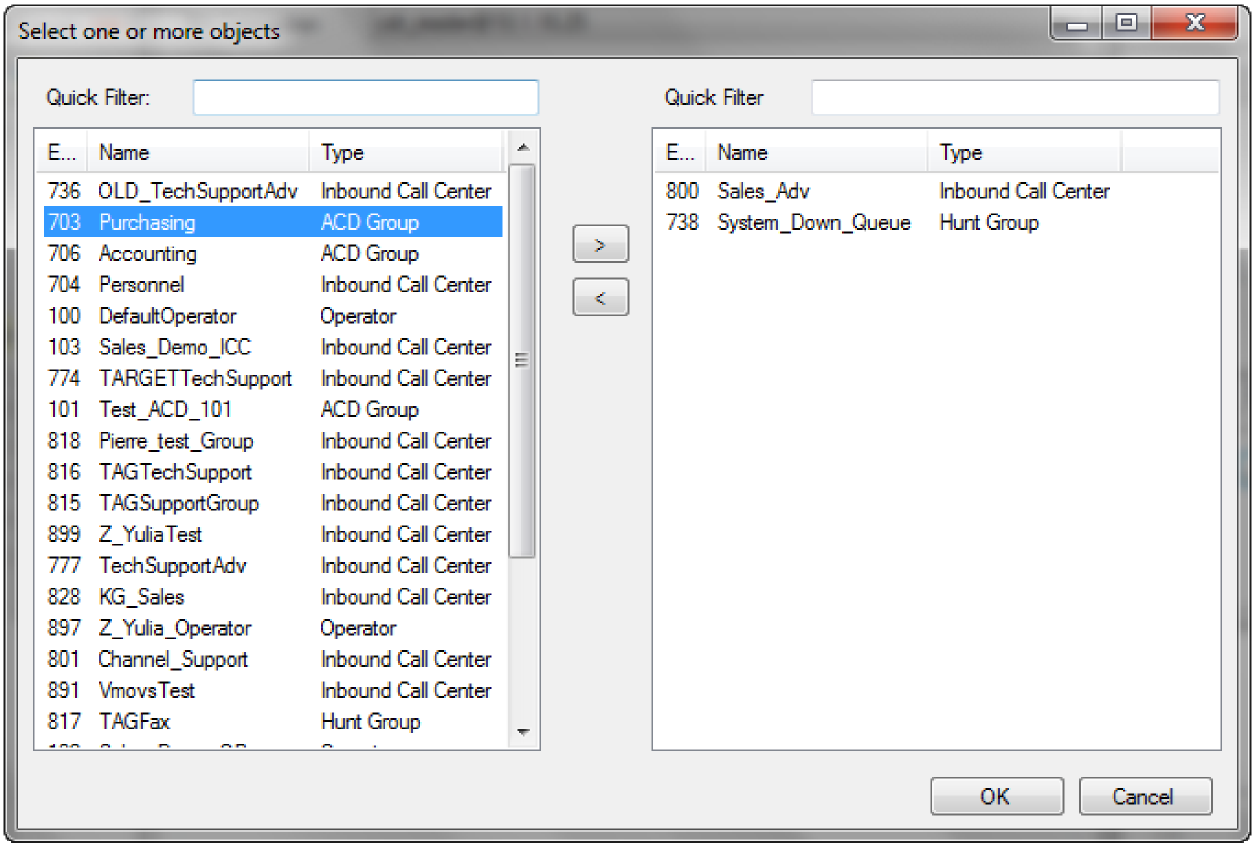
1. Click on **Set Conditions** or double-click on a report.



2. **Condition Editor** popup window will appear. Double-click on **Please Specify** to complete the “Group is one of the following” clause.

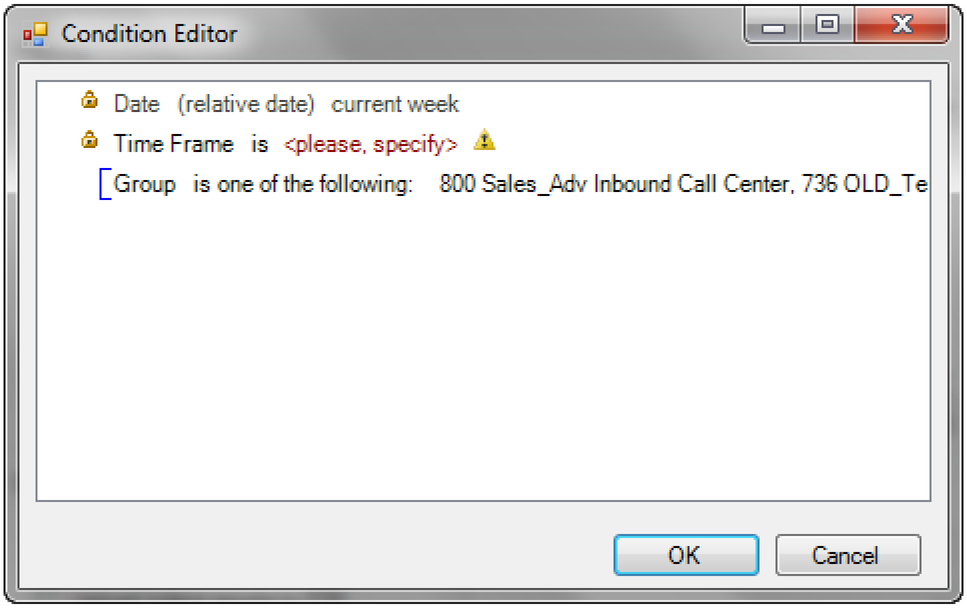


3. In the **Clause Editor** window, click on the lookup icon button on the far right side of the window.

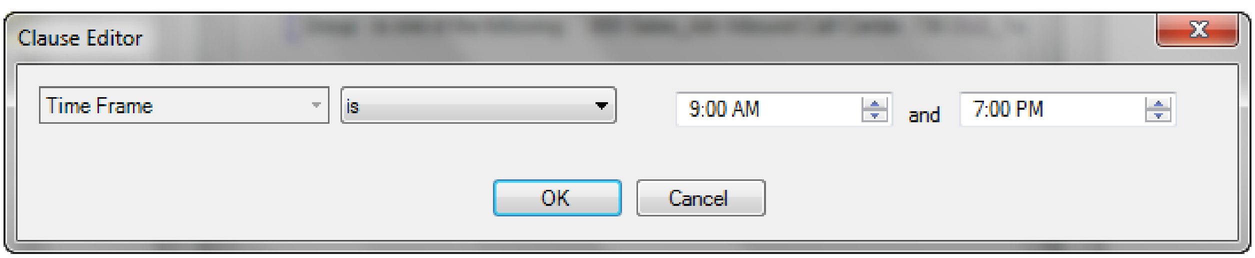


4. A list of MX call groups appears. Select a call group.
5. Double-click on the name to add the group to the list on the right.

6. Click **OK** to close window.



7. After completing the Group clause, double click **Please Specify** next to the Time Frame clause. Depending on the type of report, this clause may already be automatically filled in by the system.
8. In the **Clause Editor** for the Time Frame, you can either select “All Day Long” from the list, or select “Is” and choose a time frame.
9. Click **OK** in the Clause Editor.

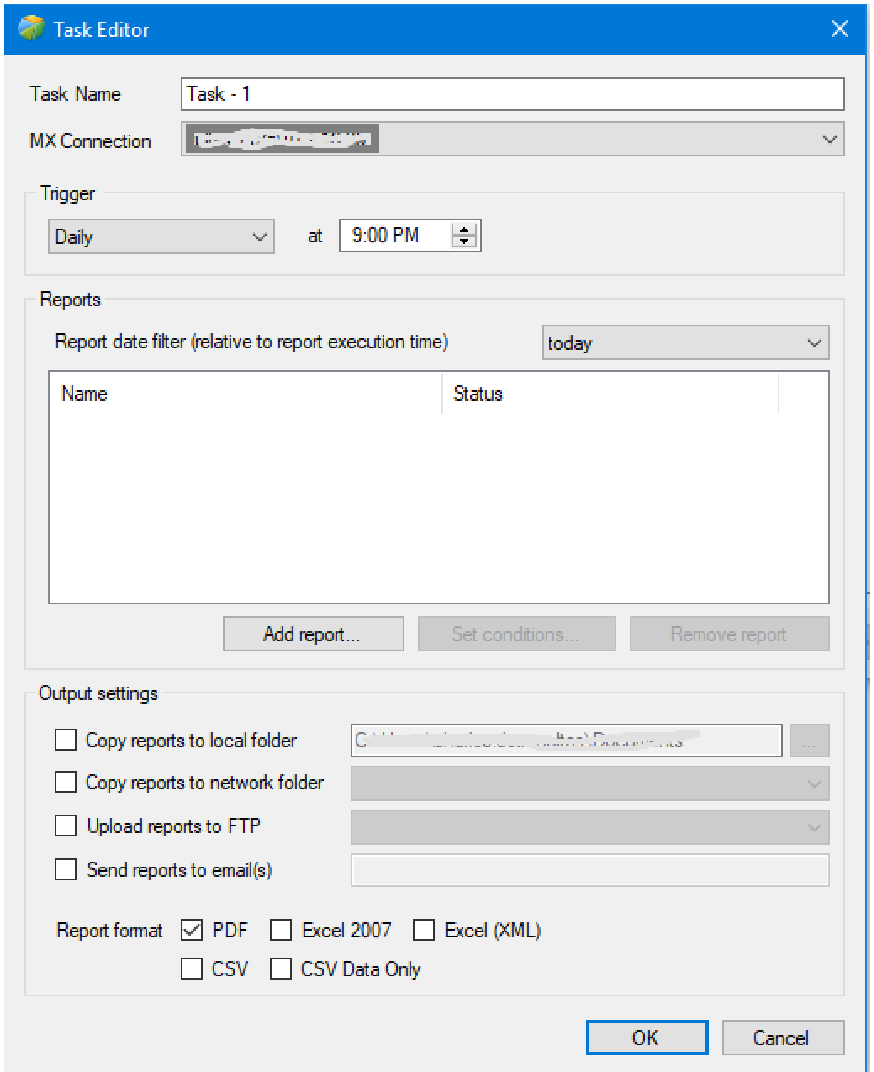


10. Click **OK** to exit the Condition Editor Window.

In the Task Editor Window the report status will change to **OK**.

18.2.3 Choosing Report Delivery Format

Before completing the task, you need to choose the format in which the report will be delivered.



1. In the Output settings sections, you can choose the method by which the report will be delivered:
   - **Copy Output Reports to Local Folder** – You will need to specify a folder on your computer.
   - **Copy Report to Network Folder** – You can select a folder from the list, if a Network Folder was specified in the Report Scheduler UI.
   - **Upload Output Reports to FTP** – You can select a server from the list, if an FTP server was specified in the Report Scheduler UI.
   - **Send Output Reports to email(s)** –you can enter an email address to send the reports to, if Enable Sending Reports to email box was

checked and all necessary information was entered in Report Scheduler UI.

Multiple e-mail addresses(5 total) can be entered using a comma to separate each address.

2. Check the box(es) for the format the report will be delivered in.

Formats include:

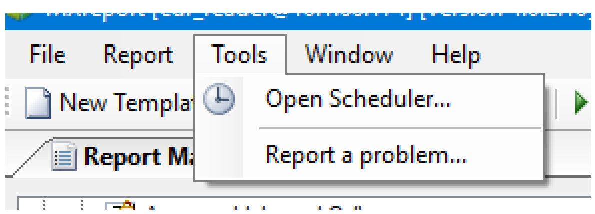
- PDF
- Excel 2007
- Excel (XML)
- CSV
- CSV Data Only

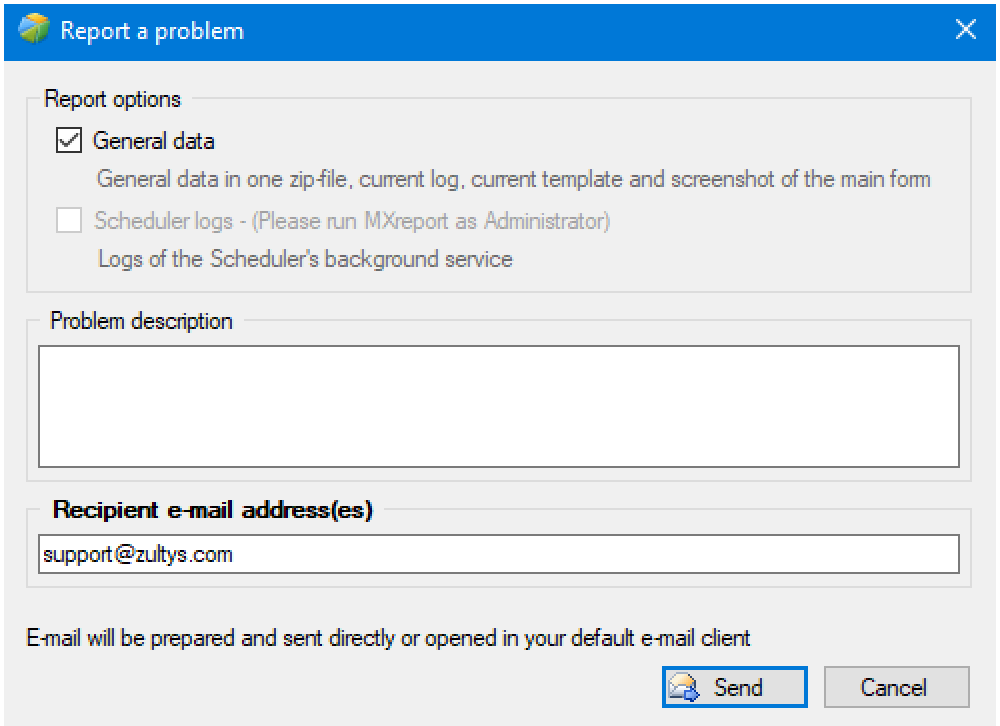
3. Press **OK** to exit the Task Editor Window and save all the settings.

18.3Sending error messages

MXreport includes the ability to send e-mail messages regarding error conditions. These messages can be sent directly to Zultys support.

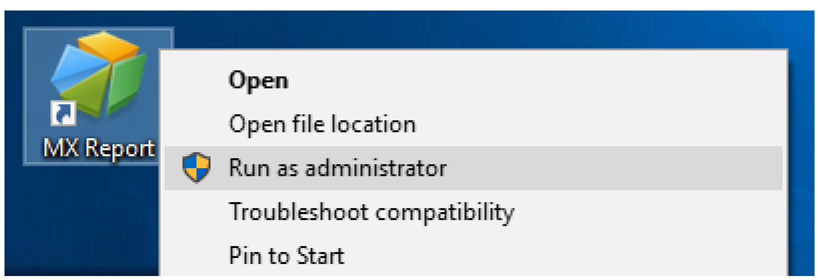
MXreport>Tools>Report a problem





Check General data and you may include Scheduler logs as well.

Note: To send Scheduler logs you must run MXreport as an Adminsitrator:



Enter a description of the issue

Enter the desired recipient(s) to send to. Separate multiple entries wit a comma.

Click Send

19Troubleshooting

User is unable to install MXreport software.

Installer must have Microsoft Administrator privileges.

MXreport Log-In failed.

Check that your MXreport log-in information is correct.

Some data fields are grayed out and not useable.

Access to data fields is call group dependent – Operator, ACD Group, Hunt Group, or ICC group. Some fields are not applicable and will not be available depending on the group.

I do not have the capability for creating Call Center/Call Group reports.

MXreport (ICC) is a separate MXreport license that is needed to create Call Center/Call Group reports.

Appendix A – List of Existing Preformatted Reports

The MX system automatically comes with 44 comprehensive, preformatted management reports that are accessible on-demand from the MXreport interface. Prior to MXreport 3.0, these reports were accessed via the MX Administrator program. In MXreport 3.0+, they are grouped in their own section titled MXAdmin as shown below:

NOTE: These reports have a fixed design and cannot be altered. Typical options for these reports include the ability to select dates/times and in some cases users/extensions.
The pre-formatted reports do not have new template, edit template, clone template, remove, or import/export template functionality.

These reports can be setup on a schedule to run at specified time periods. Please see the Report Scheduler *section.*

Account Codes – Detailed or Summary

Displays the individual calls or total number of calls that were charged to each account code.

Call Group Call Service – Detailed or Summary

Displays daily call waiting statistics for ACD groups. This report provides information on the amount of time callers waited in queues before speaking to an ACD agent.

Call Group Detailed Report

Displays the complete call sequence for ACD calls that are routed to other ACD groups or users.

Call Group Performance - Detailed or Summary

Displays common performance indicators for agents in each ACD group.

Agent Login and Logout Activity - Detailed or Summary

Displays the initial login, final logoff, and total logged on time for all agents in each ACD group during a specified period.

Automated Attendant Usage

Displays the input activity for each Auto Attendant input option. This report displays the input option selected, date, time, action, and calling party number.

Automatic Call Back Number - History

Displays the history associated with each Automatic Call back. This includes request time, call time, call back number, agent, duration, and result.

Automatic Call Back Number - Detailed

Displays the details associated with each Automatic Call back on a group basis. This includes date, time, call back number, agent, duration, and result.

Automatic Call Back Number - Summary

Displays a summary associated with each Automatic Call back on a group basis. This includes date, total calls, total Automatic Call Back requests, and a percentage of total calls that were Automatic Call Back requests.

Automatic Call Back Status – Detailed

Displays the detail associated with each Automatic Call back status on a group basis. This includes Agent, date, requests, total calls, Automatic Call Back results, and a success percentage rate.

Automatic Call Back Status – Summary

Displays the summary associated with each Automatic Call back status on a group basis. This includes Agent, date, total time, average time, requests, total calls, Automatic Call Back results, and a success percentage rate.

Call Back Status – Detailed or Summary

Displays the call-back status for each agent in ACD groups.
Note this is not the Automatic Callback from Queue status.

Call Queue – Summary

Displays daily call queue information about the disposition of calls that entered ACD Groups.

Calls by Call Group – Detailed or Summary

Displays the calls made and received by each agent in each ACD group.

Calls by Extension – Detailed or Summary

Displays the daily volume and duration of calls to the specified extensions. Calls are categorized as Internal, Outbound, and Inbound.

Calls by Operator Group – Detailed or Summary

Displays the total number of calls made and received by each Operator Group.

Calls Handled by Automated Attendant – Detailed or Summary

Displays the time, date, duration, direction, transfer information, and number for each call handled by the Automated Attendant.

Dial Plan Activity – Detailed or Summary

Displays the calls made for each dialing rule in the system's dial plan.

Emergency Calls

Displays calls made to emergency numbers as specified in the dial plan. Information provided for each call includes date, time, user, number dialed, route, and duration.

Longest Calls

Displays the 20 longest calls during the specified interval.

Most Active Extensions

Displays the 20 most active extensions, measured by the number of voice calls for each extension.

Most Frequently Called Numbers

Displays calling statistics for the 20 most active extensions during the specified interval.

Presence by Group - Detailed or Summary

Displays the average total time spent by each ACD group within each Presence state.

Presence by User - Detailed or Summary

Displays the percentage of time each user spends at each Presence state. Records are grouped by user profile, user, and date.

Trunk Group Activity - Complete

Displays the call count and duration of two systems that utilize a SIP server to pass calls.

Trunk Group Activity – Detailed or Summary

Displays the number of calls made using each trunk group.

User Profile – Detailed or Summary

Displays the statistics associated with each User Profile.

Trunk Usage – Detailed (grouped)

Displays call time, call direction, number and duration on a per trunk group basis.

Trunk Usage - Detailed

Displays call time, call direction, number and duration on a per trunk group basis.

Trunk usage – (Summary by date)

Displays the total amount of inbound, outbound, total calls and duration for on a daily basis for the date range specified.

Trunk usage – (Summary extended)

Displays the total amount of inbound, outbound, total calls and duration for each trunk group on a daily basis for the date range specified.

Trunk usage – (Summary)

Displays call time, call direction, number and duration on a per trunk group basis for the date range specified.

Appendix B – CDR Report Fields

The following is a list of the 59 data fields available within a CDR report. They are grouped by function. In the left column is MXreport's identifier name. In the right column is an explanation of the data contained within that field.

Time

Connect Time	Time the Call Was Connected and a Voice Session Was Initiated.
Creation Time	Time the Call Was Created (Dialed from or Reached the MX IP phone system).
Disconnect Time	Time the Call Was Terminated.
Call Time:	
Date and Time	Date and Time When Call Began.
Date	Date When Call Began.
Time	Time When the Call Began.
Time with Seconds	Time When the Call Began to the second.
Hour	Hour When the Call Began.
Quarter Hour	Quarter-Hour When the Call Began.
Day of Week	Day of Week When the Call Began.
Week	Week When Call Began.
Month	Month When Call Began.
Year	Year When Call Began.

Call Info

Account Code	Account Code.
Account Client	Account Client.
Call ID	A unique MX-Generated ID of a specific Call Segment to Track the Life of a Call.
Dial Plan	The MX Dial Plan Used.
Session Duration	Length between Connect and Disconnect.

Ring Duration	Length between Creation and Connect.
Talk Duration	Total time the call session was in talk state
Hold Duration	Total time the call session was in hold state
Call Answered Count	Provides a count if the call was answered. (0=no, 1=yes)
Action	What Action Terminated a Call Segment (End of Call, Transfer to Another Number, etc.). Also includes Automatic Call Back from queue.
Termination Initiator	Who Terminated the Call? (Party 1, Party 2, 3=MX system)
Answered	Was the Call Answered?
Auto Attendant Action	Displays the action the caller took on an auto attendant script.
ACD Result	Status of ACD Call (Abandoned, Delivered, Transferred to VM, etc). Also includes Automatic Call Back from queue
Direction	Was the Call Incoming, Outbound, or Internal

Caller (Person Calling)

Calling Party #	An External or Internal Phone Number (Extension) of the Calling Party.
Caller Name	The Name of the Caller (User's Name, ACD Group and Agent Name, etc.).
Caller Type	User, External, Agent.
Caller ID Name	Caller ID shown.
Caller First Name	Caller's First Name.
Caller Last Name	Caller's Last Name.
Calling User	If the call was an internal call, displays the calling users' extension/name.
Calling Group Extension	Caller's Extension Number.
Calling Group Name	ACD Group Name for Agents
Calling Trunk Group	Trunk Group of Caller.

Caller Location	MX location of the caller (if applicable)
Recipient – (Person Called)	
Original Called #	Phone Number Being Called.
Called Party #	Phone Number Answering the Call.
Recipient Type	User, External, Agent, group, auto attendant, voicemail, hunt group, operator group.
Recipient Name	The Name of the Caller (User's Name, ACD Group + Agent Name, etc.).
Recipient First Name	Recipient's First Name.
Recipient Last Name	Recipient's Last Name.
Recipient User Extension	Recipient's Extension Number.
Recipient User	Recipient's First and Last Name.
Recipient Call Group Name	Group Name the call was directed to.
Recipient Call Group Extension	Extension of the call group the call was directed to.
Recipient Service Name	Recipient’s Service Name. (Auto Attendant, Group name),
Recipient Trunk Group	Trunk Group of Agent
Recipient location	MX location of the recipient (if applicable)

Call Attached Data (Custom Fields – See Zultys' *Call Attached Data Manual*)

Call attached data allows your users to attach information associated with a call. The information is customizable and you may report on CAD data.

Appendix C – Call Center/Call Group Report Fields

The following is a list of the 32 data fields available within a Call Center/Call Group Report. They are grouped by function.

General

Data Field	Applicable To:		Short Description	Full Description
	Call Group	Agent		
Service Level	Yes	No	Percentage of inbound calls answered within a given time frame.	Calculated as a percentage of inbound calls answered within a given time frame. Parameters: time to answer, inbound call type (answered, abandoned, redirected, disconnected).
Call Count	Yes	Yes	Number of inbound calls and/or number of outbound calls.	For queue – calls delivered to queue(IN), or made on behalf of queue(OUT). For agent – calls delivered to agent(IN) or made by agent(OUT).
Answered	Yes	Yes	Number or Percentage of calls answered.	Only calls answered in a particular group are counted. If a call is transferred outside the group, it is not included even if it was answered later.

Self Parked	Yes	Yes	Number or Percentage of calls that were parked and picked up from park by the SAME agent. This applies to inbound or outbound group calls.	Agents that park/retrieve inbound/outbound group calls are counted in this field. These are not counted as answered calls.
Rejected	Yes	No	Number or Percentage of calls rejected due to no sessions available to handle incoming calls.	This is a blockage statistic to determine how many calls were rejected due to not enough sessions available to handle the call volume.
Time to Answer	Yes	Yes	Time in queue prior to being answered (min, max, average).	Time from when an inbound call reaches a queue, to the time it is answered.
Time to Answer: Intervals	Yes	Yes	Number or Percentage of calls answered within a user defined interval.	Time from when an inbound call reaches a queue, to the time when it is answered.
Abandoned	Yes	No	Number or Percentage of time caller abandoned the call between entering queue and hanging up.	Calls disconnected by caller while in queue. Total number or percentage of incoming calls.
Time to abandon	Yes	No	Time in queue prior to abandonment (min, max, average).	Time in queue prior to abandonment (min, max, average).

Time to abandon: Intervals	Yes	No	Number or percentage of calls abandoned in a user defined interval.	Time in queue prior to when call was abandoned.
Redirected	Yes	No	Calls transferred out of queue by caller request or by call handling rules as well as calls to group VM. (min, max, average).	Call could not be accepted in queue (e.g. no agent was logged in), or was transferred out of queue by an overflow rule or else by a caller request (pressed # or 0). **Calls to the Call Group voice mail are included in this count.**
Overflowed	Yes	No	Calls transferred out of queue by caller request or by call handling rules. (min, max, average).	Call could not be accepted in queue (e.g. no agent was logged in), or was transferred out of queue by an overflow rule or else by a caller request (pressed # or 0). **Calls to the Call Group voice mail are NOT included in this count.**
Disconnected	Yes	No	Number or percentage of calls disconnected by call handling rules while in queue.	A call rule terminates call (e.g. call is too long in queue).
Missed Calls **Ring No answer (RNA)**	Yes	Yes	Number of unanswered calls presented to logged-in agent.	A call is directed to an agent that is logged in and who has Available presence, but the call is not answered by the Agent. After a timeout the call is retuned to queue or the

				call is processed by RNA rules.
To VoiceMail	Yes	No	Number or percentage of calls directed to group's voicemail.	Call has been redirected to voicemail by an overflow rule or by caller's request. Also included as a subset of Redirected call counts.
Talk Time	Yes	Yes	Time agent is connected to caller.	Time agent is on the phone with an inbound calls or outbound call or total. Can be calculated for multiple or all agents in one group, or one agent in multiple groups.
Talk Time: Intervals	Yes	Yes	Number or percentage of calls connected and active within a user defined interval.	Time agent is on the phone for inbound calls, outbound calls or total. Can be calculated for multiple or all agents in one group, or one agent in multiple groups.
Hold Time	Yes	Yes	Time agent has put calls on hold.	Time agent has put active call on hold. This value can be calculated for multiple or all agents in one group, or for one agent in multiple groups.
Hold Time: Intervals	Yes	Yes	Number or percentage of time calls have been put on hold within a user defined time interval.	Time agent has put active call on hold. This value can be calculated for multiple or all agents in one group, or one agent in multiple groups.

Hold Count	Yes	Yes	Total number of calls that have been placed on hold.	Total count of all calls placed on hold in the group or by an agent.
Average Handling Time	No	Yes	Average call handling time for Agents.	Average handle time for a per Agent pre group basis. Can be calculated for inbound/outbound/total. The formula used to calculate the time is: (total talk time + total hold time + total wrap up time) / total number of calls handled
Queue Size	Yes	No	Number of calls simultaneously in queue (min, max, average).	Number of calls simultaneously in queue (min, max, average).
Callback requests	Yes	No	Number of callback requests.	Number of callback requests.
Automatic Callback requests	Yes	Yes	Total number of automatic callback requests received.	Total number of automatic callback requests received.
Automatic Callback completed	Yes	Yes	Number of automatic callback requests that were completed.	Total number of automatic callback requests that were completed.

Presence

Data Field	Applicable To:		Short Description	Full Description
	Call Group	Agent		
Logged In	Yes	Yes	Total agent log-in time.	Total logged in time. For multiple groups it is calculated as total time when agent was logged in to at least one group.
Available	Yes	Yes	Amount or percentage of time agent is logged in and is available but is not active on a call.	Total time agent was available within all call groups. Absolute amount, or percentage of total log-in time in groups.
Not Available	Yes	Yes	Amount or percentage of time agent is logged in but is unavailable.	Total time agent was unavailable but logged in within all call groups. Absolute amount or percentage of total unavailable time in groups.
Not Ready	Yes	Yes	Amount or percentage of time an agent is not available, at lunch, busy, be right back, in a meeting, or appear offline.	Amount or percentage of time an agent is not available, at lunch, busy, be right back, in a meeting, or appear offline.
On call	Yes	Yes	Amount or percentage of time of total logged in time active on call. On call is same as talk time).	Total time agents spent on inbound and outbound calls on behalf of groups. Calculated as an absolute value or a percentage of login time.

Wrap up	Yes	Yes	Amount or percentage of time an agent spent in wrap up mode.	Total amount/percentage of time agents spent in wrap up mode. Calculated as an absolute value or a percentage of login time.
Active	Yes	Yes	Amount or percentage of time an Agent is active on a group call.	Amount or percentage of time an Agent is active on a group call.
Offline	Yes	Yes	Amount of time the Agent is not logged into a group.	Amount of time the Agent is not logged into a group.
User presence	Yes	Yes	Any user presence combinations (logged in, available, not available, on call).	Time accounted if requested presence was set when agent was logged in to any of requested groups; Calculated as absolute time or percentage of logged In time

Note: N/A or No Recipient in a call center report indicates that the call went unanswered. The unanswered call can be classified as abandoned, disconnected, overflowed, redirected, or redirected to voice mail.

Appendix D – Miscellaneous

This section provides information that may be useful in understanding the MXreport program. The following tips and rules may be of assistance when creating or analyzing reports.

- Inbound call count for Call Center reports is calculated as:

  Answered + Abandoned + Redirected + Disconnected

- The overflow call count does not include calls that were directed to a group voicemail. These calls are captured in the Re-directed and To voicemail fields.

- It is best to utilize Call Center reports for group reporting. Although CDR can be used, CDR contains information about all call legs for a group call. This requires analysis and filtering to obtain the data that is already presented in the Call Center report.

- If a call is answered by an Agent in Group 1 and then transferred to another group, Inbound counts/Agent counts/Service Level statistics are generated for both groups.

- Template Rules between MXreport versions:

  MXreport 2.4 template can be exported and used in MXreport 3.0 = Y

  MXreport 3.0 template can be exported and used in MXreport 2.4 = Y*

  *some 3.0 fields will not populate when utilizing a MXreport 3.0 template on MXreport 2.4.x versions. It is recommended to disable the self-park and rejected fields on the 3.0 template PRIOR to exporting for use in MXreport 2.4.x versions.

- N/A in the Agent Name filed or No Recipient in the Agent field in Call Center reports:

N/A or No Recipient in a call center report indicates that the call went unanswered. The unanswered call can be classified as abandoned, disconnected, overflowed, redirected, or redirected to voice mail.

- Missed call counts may exceed the Inbound call count.

  It is possible for the Missed call count to exceed the inbound count. A missed(unanswered call) can occur if the call is transferred to an Agent and the agent does not answer. The miss call count will increment but the in count will not. If the call is routed to another agent that does not answer, another missed call is incremented.

- Missed call percentage calculation:

  [missed calls]/([answered calls]+[missed calls])*100

- Average Handling Time formulas:

  AHT IN = inbound talk time + inbound hold time + inbound wrap up time/inbound calls.

  AHT OUT = outbound talk time + outbound hold time + outbound wrap up time/outbound calls.

  AHT TOTAL = total talk time + total hold time + total wrap up time/total calls.

- Wrap up time formulas:

  INBOUND WRAP = total wrap up time * (inbound calls/total number of calls)

  OUTBOUND WRAP = total wrap up time * (outbound calls/total number of calls)

Appendix E – Automatic Callback from Queue

This section provides information on the reporting options now available for the Automatic Callback from Queue feature.

Note: The Zultys MX system must be running at firmware version 14.0.3(or greater) in order to obtain Automatic Callback from Queue statistics.

The following statistics can be viewed with MXreport 3.2:

- Total number of Automatic Callback requests
- Total number of Automatic Callback requests handled by an agent
- Total number of Automatic Callback requests handled by an agent but far end did not answer
- Total number of unhandled Automatic Callback requests
- Total number of completed Automatic Callback requests

Automatic Callback from Queue in CDR reporting:

Time	CallId	Caller Type	Caller Name	Called #	Recipient Type	Recipient Service Name	Agent	Date and Time	Duration	Answered	Action	ACD Result
1:55	113730	User	a0002 a0002	5101	Advanced ACD	icc_qcb		07.03.2018 1:55	0:00:11	Unanswered	Transfer	Transferred
1:55	113730	User	a0002 a0002	5101	Advanced ACD	icc_qcb		07.03.2018 1:55	0:00:05	Unanswered	Transfer	Transferred
1:55	113730	User	a0002 a0002	5101	Auto Attendant	AA-default		07.03.2018 1:55	0:00:06	Unanswered	Transfer	
1:55	113730	User	a0002 a0002	5101	Advanced ACD	icc_qcb		07.03.2018 1:55	0:00:00	Unanswered	ACB request	ACB requested

Action: ACB request – ACD result: ACB requested

ACB attempt:

Time	CallId	Caller Type	Caller Name	Called #	Recipient Type	Recipient Name	Agent	Date and Time	Duration	Answered	Action	ACD Result
Date : 03.03.2018												
1:46	88272	Advanced ACD	N/A	0001	Advanced ACD	icc_qcb/a0001 a0001	0001 (a0001 a0001)	03.03.2018 1:46	0:00:13	Answered	ACB handled	ACB completed
1:46	88272	Advanced ACD	N/A	0001	Advanced ACD	icc_qcb/a0001 a0001	0001 (a0001 a0001)	03.03.2018 1:46	0:00:03	Answered	ACB handled	
1:46	88272	Advanced ACD	icc_qcb / a0001 a0001	0001	User	a0002 a0002	0002 (a0002 a0002)	03.03.2018 1:46	0:00:10	Answered	ACB success	ACB completed

Action: ACB handled, ACB success ACD result: ACB completed

In addition, ACB callback could look like this:

Time	CallId	Caller Type	Caller Name	Called #	Recipient Type	Recipient Name	Agent	Date and Time	Duration	Answered	Action	ACD Result
Date : 06.03.2018												
5:47	88344	User	a0002 a0002	5101	Advanced ACD	N/A	0001 (a0001 a0001)	06.03.2018 5:47	0:00:28	Answered	Transfer	Transferred
5:47	88344	User	a0002 a0002	5101	Advanced ACD	N/A		06.03.2018 5:47	0:00:02	Unanswered	Transfer	Transferred
5:47	88344	Advanced ACD	N/A	5101	Advanced ACD	icc_qcb/a0001 a0001	0001 (a0001 a0001)	06.03.2018 5:47	0:00:02	Unanswered	End of Call	
5:47	88344	User	a0002 a0002	5101	Auto Attendant	AA-default		06.03.2018 5:47	0:00:06	Unanswered	Transfer	
5:47	88344	User	a0002 a0002	5101	Advanced ACD	N/A		06.03.2018 5:47	0:00:00	Unanswered	ACB request	ACB requested
5:47	88344	Advanced ACD	N/A	5101	Advanced ACD	icc_qcb/a0001 a0001	0001 (a0001 a0001)	06.03.2018 5:47	0:00:07	Answered	ACB handled	
5:48	88344	Advanced ACD	icc_qcb / a0001 a0001	5101	User	a0002 a0002	0002 (a0002 a0002)	06.03.2018 5:47	0:00:13	Answered	ACB success	ACB completed

Automatic Callback from Queue in ICC report

	Service Level	Call Count			Answered	Abandoned	Overflowed	To VoiceMail	Disconnected	Callback Requests		Callback Completed	ACB Requests		ACB Completed
		In	Out	Total	Σ	Σ	Σ	Σ	Σ	Σ	%		Σ	%	
Grand Total	0,01%	11,185	2	11,187	1	1	3	11,180	0	2	0,02%	1	3	0,03%	1
Date : 06.03.2018	0,01%	11,185	2	11,187	1	1	3	11,180	0	2	0,02%	1	3	0,03%	1
Group Name : icc_callbacks	0,00%	6	1	7	0	1	0	5	0	2	33,33%	1	0	0,00%	0
0001 (a0001 a0001)	0,00%	0	1	1	0							1			0
No Recipient	0,00%	6	0	6	0							0			0
Group Name : icc_qcb	0,00%	3	1	4	0	0	3	0	0	0	0,00%	0	3	100,00%	1
0001 (a0001 a0001)	0,00%	0	1	1	0							0			1
No Recipient	0,00%	3	0	3	0							0			0

ICC report contains new fields: "ACB requests" (group level), "ACB completed" (agent level).

A successful completion of an ACB callback would result in the following counts:

Inbound – 1

Outbound – 1

Total – 2

Answered – 0

Overflowed – 0

ACB request – 1

ACB complete – 1

19.1.1 Conditions

- An Automatic Callback request does not count as an incoming call in group statistics and does not impact the Service Level statistic of a group. Automatic Callback requests statistics are identified in the columns "ACB Requests" and "ACB Completed" in MXreport.