United States Navy
Dynamic Reporting Tool
Overview

Dynamic Reporting Tool Overview

Version 2.5.3.3

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RECORD OF CHANGES

Change Number	Date of Change	Signature of Person Entering Change
1	2008.08.28	Original Issue
2	2010.03.01	
3	2010.12.15	Reviewed for PII

SECTION 1: General

1.1 NMCMPS RELATIONSHIPS

The Dynamic Reporting Tool (DRT) is fully integrated with the existing operational Navy-Marine Corps Mobilization Processing System (NMCMPS). As such, the DRT operates within BUPERS Online (BOL) and the Navy Marine-Corps Intranet (NMCI) as a web-based application. The DRT utilizes the existing user administration and BOL security integration currently implemented with the NMCMPS application.

1.2 DYNAMIC REPORTING TOOL OVERVIEW

The NMCMPS DRT enables users to design reports that query the NMCMPS database. Once a report is designed, users can select from a number of outputs, including user-friendly outputs (such as HTML, Excel, etc.) or raw data formats that can be used in other data analysis systems.

Advanced Users should access the DRT Report Manager through the NMCMPS Site Map. Depending on the advanced user's technical background, they can select to create reports from either one of the following Report Editors:

- **The Report Builder:** This nontechnical interface allows users to create and print custom reports that pertain to the information in the selected module.

- **The Report Designer**: This technical interface allows users to specify report properties, select data sets, modify the report layouts, chart or graph report information, review XML statements, and preview or print reports.

Standard Users can access the DRT Ad-Hoc through certain NMCMPS search pages. The DRT Ad-Hoc is a subset of the Report Builder. When opened, the Fields tab is automatically populated with the module specific Ad-Hoc table. In addition, the DRT Ad-Hoc will automatically create conditions used for filtering the data based on the criteria entered into the fields on the module Search pages.

Please refer to the *DRT Report Manager* section and the *DRT Ad-Hoc* section for more information.

1.3 REFERENCES

For further information, please refer to:

- *NMCMPS Overview and Common Features User Manual*
- Appendix A: .NET Formatting Standards
- Appendix B: Dynamic Reporting Tool Flow

SECTION 2: The DRT Report Manager

2.1 ACCESSING THE DRT REPORT MANAGER

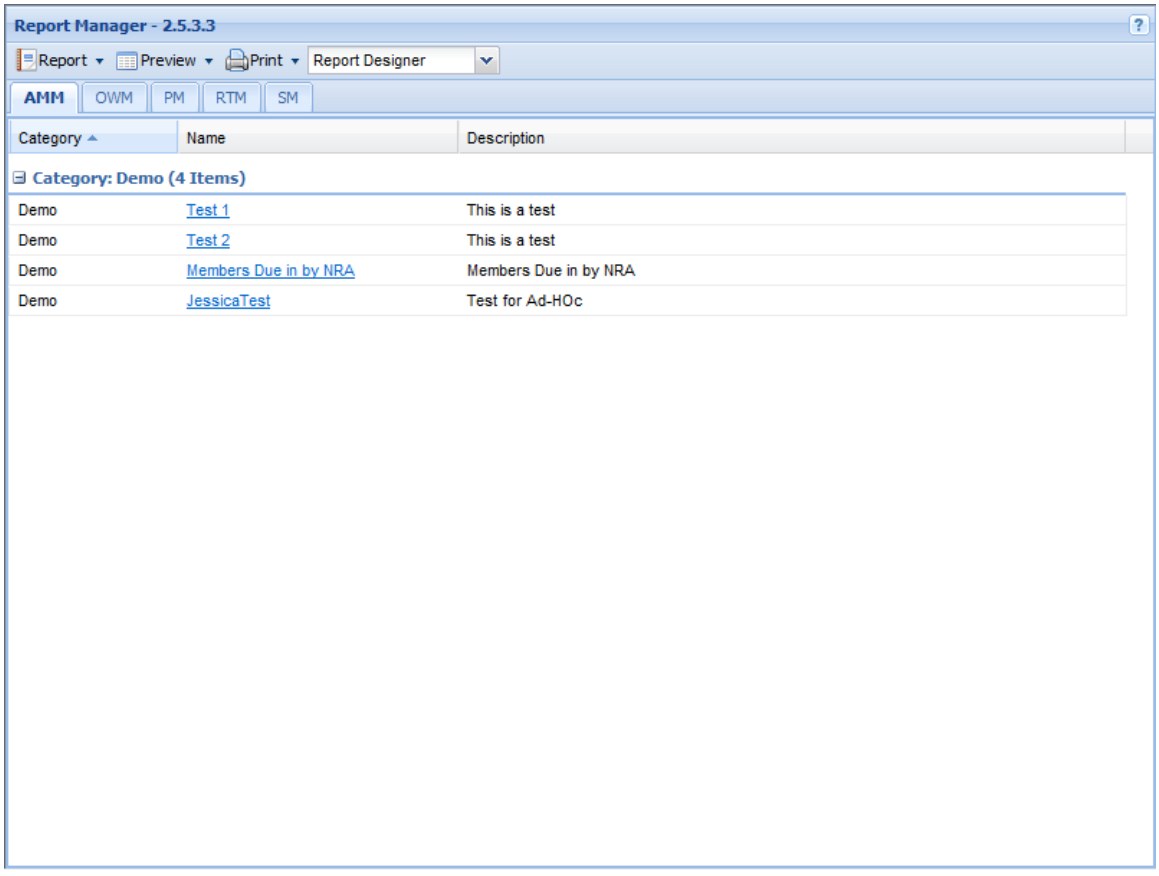
To access the Dynamic Reporting Tool Report Manager, navigate to BUPERS Online URL. After logging in, select **NMCMPS** from the BOL Application menu.

For information on accessing BOL, please refer to *Accessing NMCMPS* in the *NMCMPS Overview and Common Features*.

For information on the **NMCMPS Site Map and Navigational Map**, please refer to *NMCMPS Overview and Common Features*.

To enter the DRT, click on the Site Map and select **DRT** (Dynamic Reporting Tool). The DRT Report Manager page displays as shown in the following figure.

Figure 1: DRT Report Manager Page



Note:

To access Online Help, click the Help icon in the top right corner of the screens within the DRT.

2.2 THE DRT REPORT MANAGER FUNCTIONAL OVERVIEW

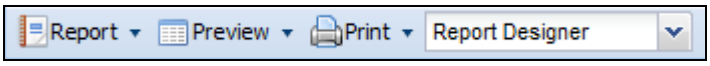
The DRT Report Manager page is the Home Page of the Dynamic Reporting Tool. From this page, you can enter into one of two editors: The Report Builder or The Report Designer.

Tabs across the DRT Report Manager Page represent the various NMCMPS modules. Module specific reports display in grids under each corresponding tab.

2.3 DRT REPORT MANAGER MENU OPTIONS

Once you have entered the DRT Report Manager, menu options are available from the tool bar at the top of the page.

Figure 2: DRT Report Manager Menu Options



The following table displays the options accessible from the Main Menu.

Table I: Main Menu Options

Hyperlink	Description
Report	Allows access to reporting options including creating a New report or Opening, Deleting, Previewing or Printing an existing report.
Preview	Provides a preview of the selected report in its default output format. Click the down arrow for a list of other available preview outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML)
Print	Prints the selected report in its default output format. Click the down arrow for a list of other available print outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML)
Drop-Down Field	Allows users to switch between the Report Designer and Report Builder editors.

2.4 OPENING REPORTS

The DRT Report Manager lists all reports that have been created and saved in the Report Designer, Report Builder and DRT Ad-Hoc.

To Open a Report:

a. Select the appropriate editor from the drop-down list. **Note:** Reports created in the Report Builder or DRT Ad-Hoc are available through both editors. However,

Reports created in the Report Designer are only available through the Report Designer page.

b. Select the appropriate module tab on the DRT Report Manager page.

c. Select the report from the displayed grid by double-clicking in the row that displays the report name.

OR

Select the report from the displayed grid by single-clicking the Report Name hyperlink.

OR

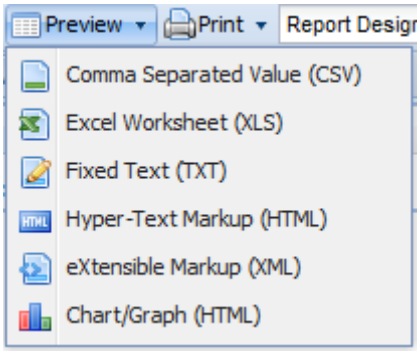
Select the report from the displayed grid by highlighting the row that displays the report name. From the menu bar, click the **Report** drop-down arrow and then select **Open**.

Note:
Saved reports are accessible via the DRT Report Manager, which is accessed via the DRT link on the NMCMPS Site Map. To access a saved report from either the Report Builder or Report Designer, navigate to the Report tab and select the **Report** from the drop-down list.

2.5 PREVIEWING REPORTS

When a report is previewed, only the first 500 lines of data in the report will be displayed. The report will be displayed in the default output selected in the Report Designer. Users can override the default output by clicking the down arrow next to the Preview button.

Figure 3: Preview Options Menu



To Preview a Report:

a. Select the appropriate module tab on the DRT Report Manager page.

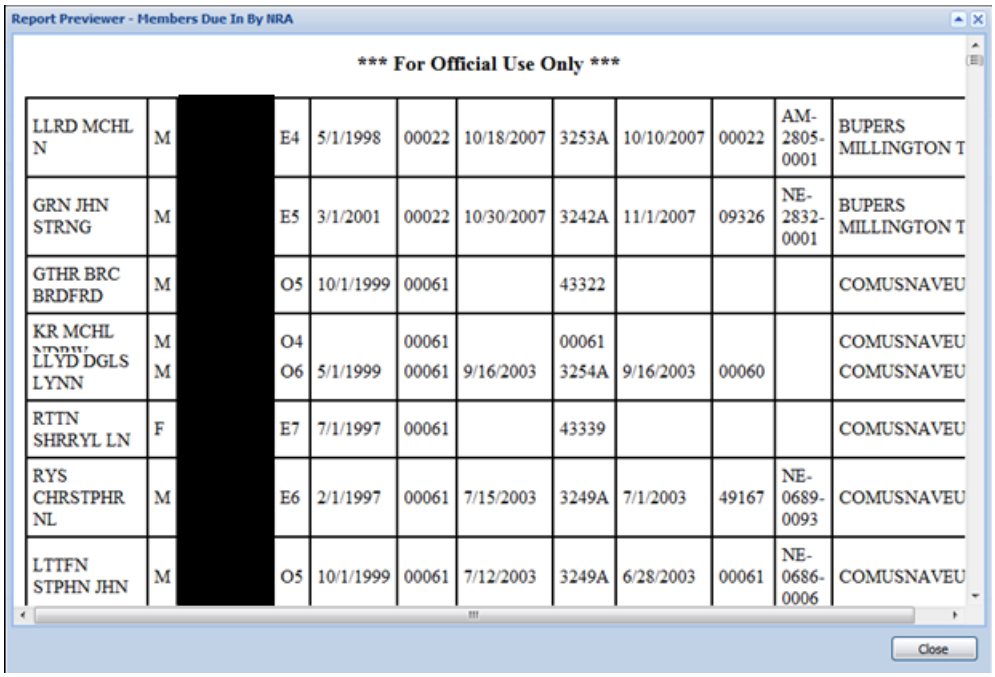
b. Select the report from the displayed grid by single-clicking in the row that displays the report name.

c. To preview the report in the default output, click the **Preview** button from within the main toolbar. The report will display on the Report Preview window.

OR

To customize the output, click the down arrow next to the **Preview** button in the toolbar. Select your output from the displayed list. The report will display in the selected output on the Report Preview window.

Figure 4: Report Preview Window

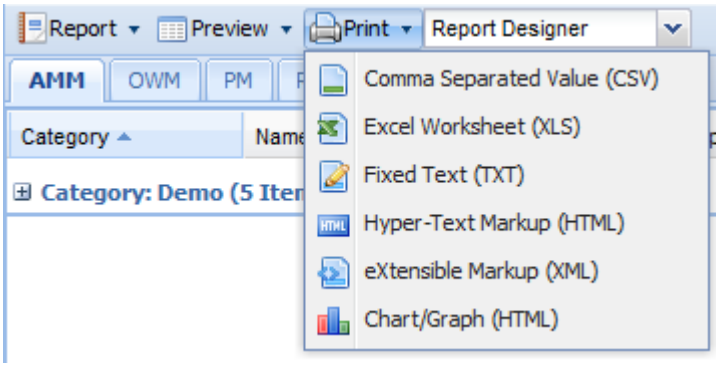


d. To close this window, click the **Close** button.

2.6 PRINTING (GENERATING) REPORTS

When a report is printed, the entire data set will be returned in the format selected in the Report Designer. Users can override the default output by clicking the down arrow next to the print button in the toolbar.

Figure 5: Print Options Menu



To Print (or Generate) a Report:

a. Select the appropriate module tab on the DRT Report Manager page.

b. Select the report from the displayed grid by clicking in the row that displays the report name.

c. To print the report in the default output, click the **Print** button from within the main toolbar. The **Report Previewer** window will open displaying the report in the default output.

   OR

   To customize the output, click the down arrow next to the **Print** button in the toolbar. Select your output from the displayed list. The **Report Previewer** window will open displaying the report in the selected output.

d. If you would like to print a paper copy of the report, right click the Report Previewer window and select the **Print** option.

Note:
The CSV output will need to be saved to your computer and will not appear in the **Report Previewer** window.

2.7 USING THE GRID

2.7.1 Grid Overview

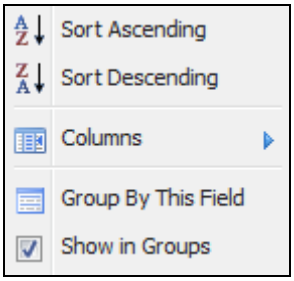
Each tab within the DRT Report Manager displays a grid of available reports. To display a record, click the available hyperlink in the row or double click on any part of the row. You can customize the look of the grid by rearranging the columns, grouping data, sorting by any column or selecting the columns you would like to see displayed.

2.7.2 Sorting the Grid

You can sort data from within the grid by any column heading in either ascending or descending order. Click the column heading once and a small blue up arrow appears to the right of the column heading. The grid is sorted in ascending or chronological order by that field. Click the column heading a second time and a small blue down arrow appears to the right of the column heading. The grid is sorted in descending or reverse chronological order by that field.

By placing your mouse over a column heading or by single clicking a column heading, a small black arrow becomes available. By selecting the black arrow, a secondary menu will become available, as shown in the following figure.

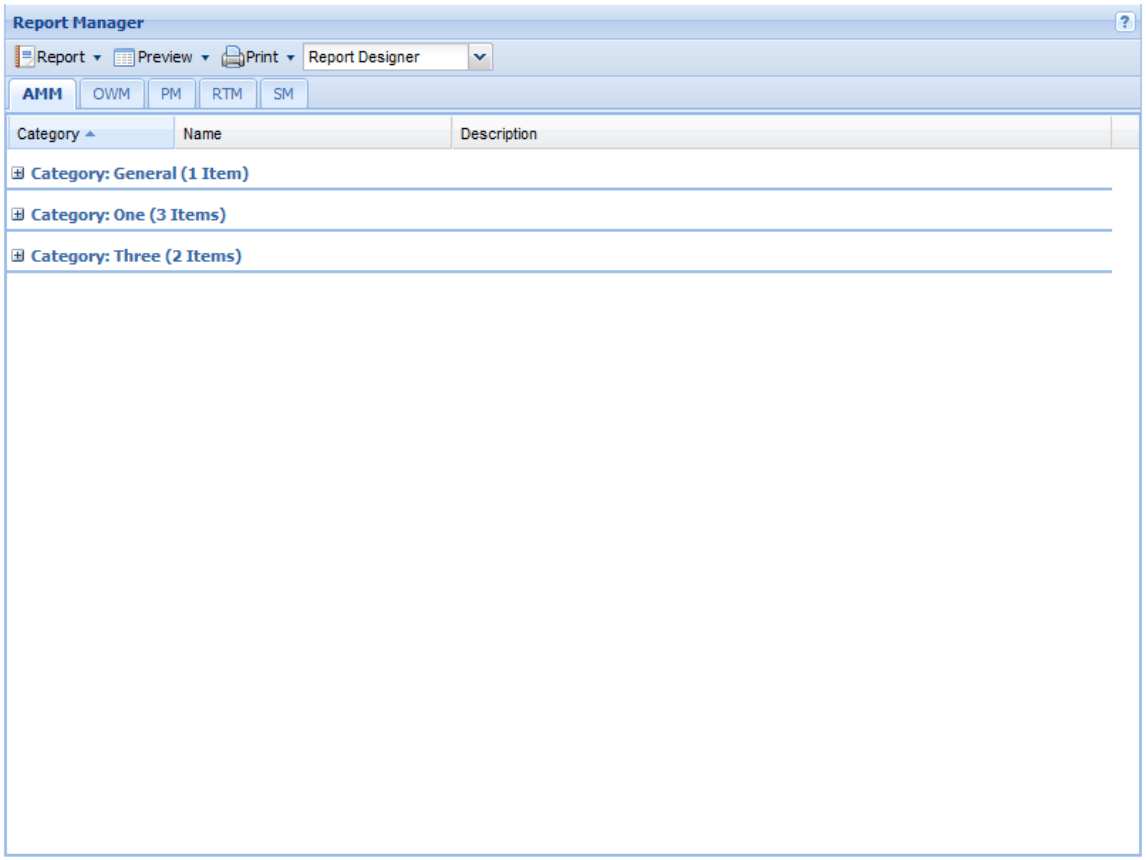
Figure 6: Column Secondary Menu



2.7.3 Grouping and Ungrouping Displayed Data

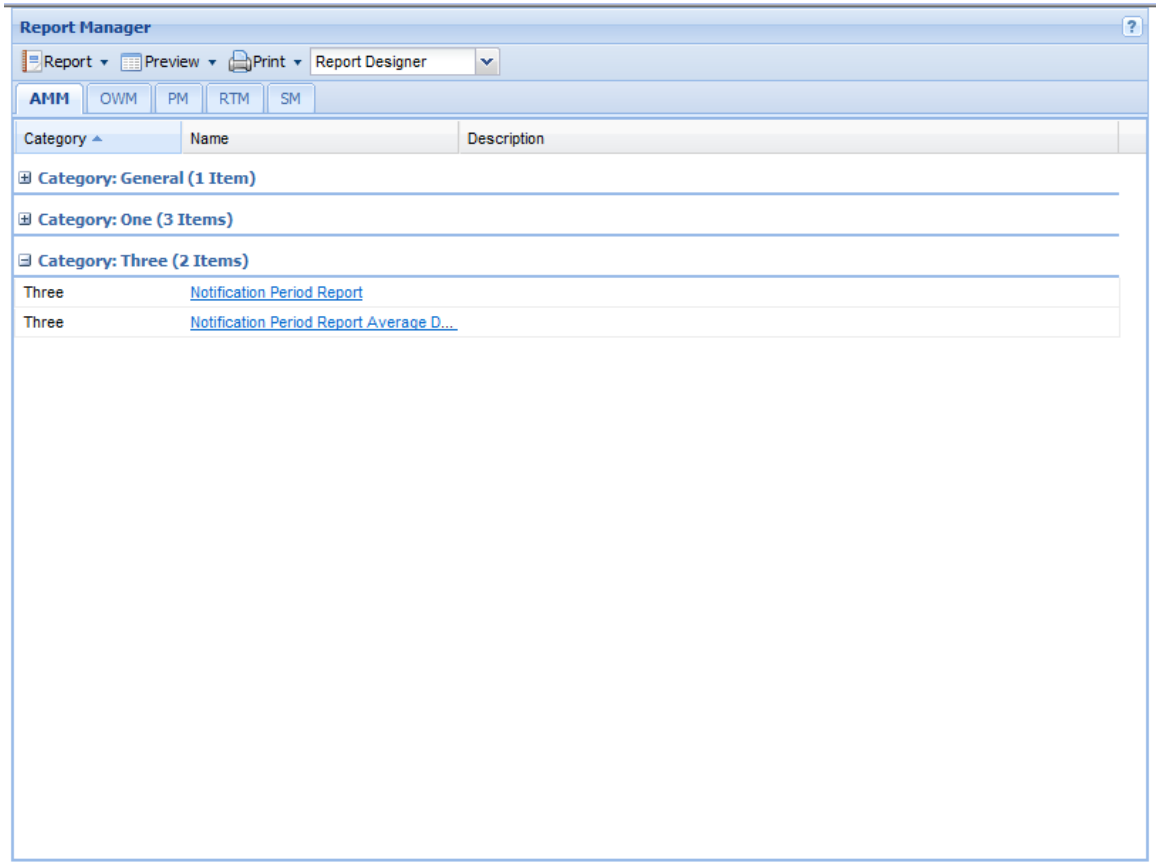
You can group data on the grid by one of the grid columns, enabling you to organize all requirements by a particular field. For example, in the DRT Report Manager, you can group information by the **Category** or **Name** of the report. The following figure shows reports grouped by **Category**.

Figure 7: Grid Grouped by Category



In the above example, each different **Category** displays once on the list. The number in parentheses to the right of the **Category** name displays the number of items associated with each **Category**. You can view the reports associated with a particular row by clicking on the plus icon ⊞ to the left of the column. The following figure shows the grid grouped by **Category** with the report names under that group displayed.

Figure 8: Grid Listing Reports within a Category



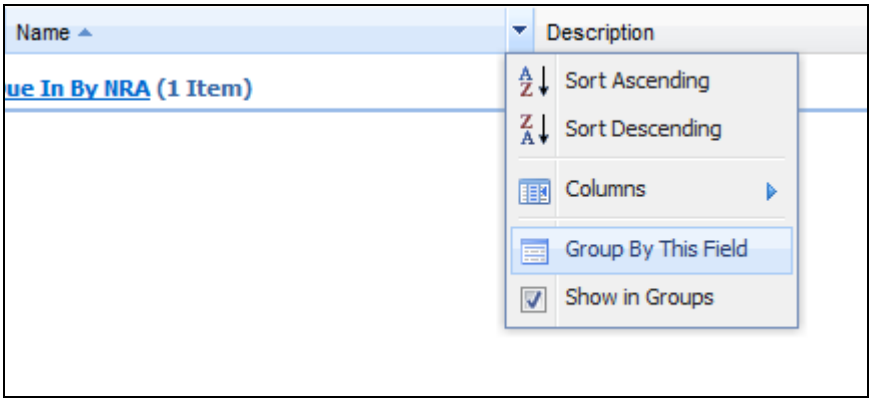
To Group Displayed Data:

a. Single click or place your mouse over the column header you want to use to group your search results.

b. Click on the black arrow to view the Column Secondary menu.

c. Select the **Group by this Field** option. The figure below shows how to execute this feature.

Figure 9: Grid with Column Secondary Menu Displayed



The data is then grouped by the selected column heading.

d. To display the contents of the group, click the plus icon.

To Ungroup Columns:

a. To show each record individually, single click or place your mouse over any column heading.

b. Click on the black arrow to view the Column Secondary menu.

c. Uncheck the "**Show in Groups**" option from the menu. The grid returns to list each record individually.

2.7.4 Adding and Removing Columns

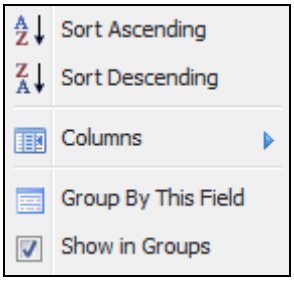
In order to customize the grid according to your preferences, you can add or remove columns.

To Add a Column:

a. Single click or place your mouse over any column heading.

b. Click on the black arrow to view the Column Secondary menu.

Figure 10: Column Secondary Menu



c. Click on the **Columns** menu option and a list of available columns displays. Each column currently appearing in your grid is marked with a check mark. Other available columns are listed without a check mark.

d. Click on an unchecked column name corresponding to a column you want to add to your grid so that a checkmark appears.

To Remove a Column:

a. Single click or place your mouse over any column heading.

b. Click on the black arrow to view the Column Secondary menu.

c. Click on the **Columns** menu option and a list of available columns displays. Each column currently appearing in your grid is marked with a check mark. Other available columns are listed without a check mark.

d. Click on the column name corresponding to a column you want to remove on your grid so that the column name is unchecked.

2.8 CREATING A NEW REPORT

To Create a Report:

a. On the DRT Report Manager page, select the tab corresponding to the module in which you would like to build your report.

b. Single click the **Report** button from within the main toolbar or click the **Report** drop-down arrow and then select **New**.

c. Depending on which Editor has been selected on the DRT Report Manager page, either the Report Builder or Report Designer window will appear.

d. Starting with the first displayed tab, fill out appropriate information on the tab. Working from left to right, repeat on each tab. (Refer to sections on The Report Builder and The Report Designer for more information on each tab.)

e. Click the **Save** button at the bottom of the screen.

2.9 EDITING OR MODIFYING A REPORT

To Edit or Modify a Report:

a. On the DRT Report Manager page, select the tab corresponding to the module that contains the report you would like to edit or modify.

b. Click on the report name hyperlink or double click on the row that contains the report information that you would like to edit or modify.

c. Depending on which Editor has been selected, the Report Builder or Report Designer window will appear.

d. Starting with the first displayed tab, edit the appropriate information in the tab. Working from left to right, repeat on each tab. (Refer to The Report Builder and The Report Designer sections for more information on each tab.)

e. Click the **Save** button at the bottom of the screen.

   OR

   To save the changes under a different name, click the **Save As** button at the bottom of the screen. **Note:** In order to use the **Save As** function, users must change both the Name and Caption fields on the Report Tab.

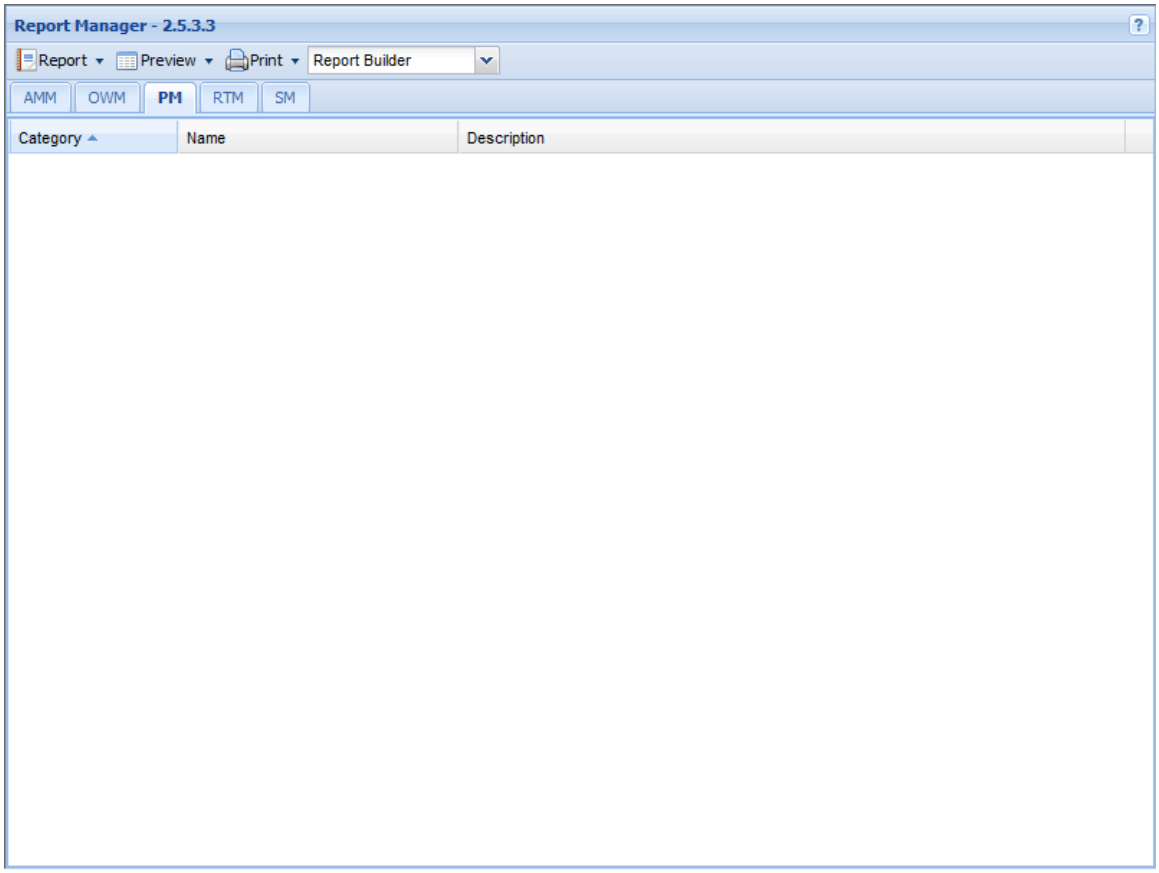
SECTION 3: The Report Builder

3.1 THE REPORT BUILDER FUNCTIONAL OVERVIEW

The Report Builder is available from within the DRT Report Manager and is the user interface for nontechnical users. This Editor allows users to create and print custom reports that pertain to the information in the selected module.

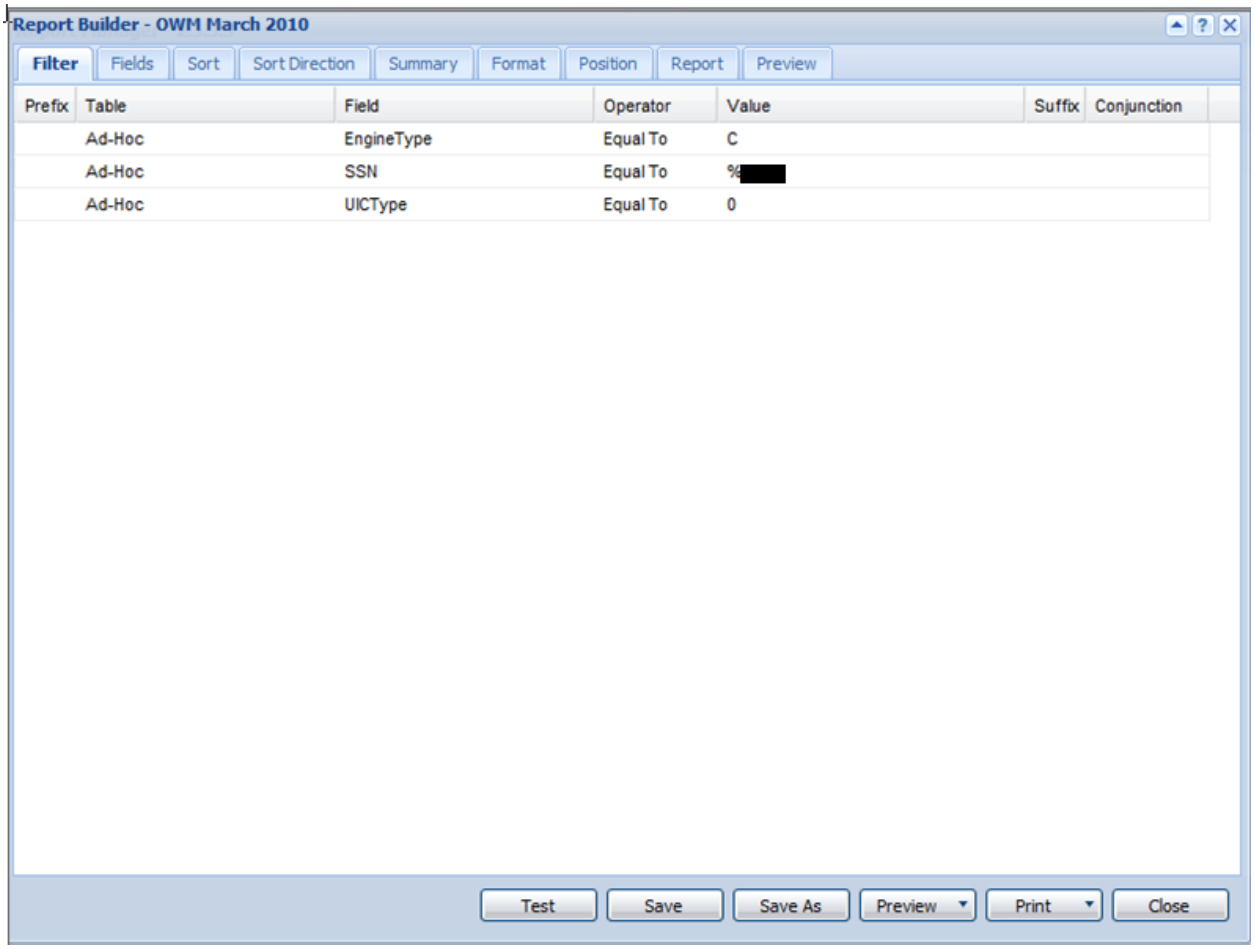
To access the report builder, make sure that **Report Builder** is selected on the DRT Report Manager Page as shown below.

Figure 11: DRT Report Manager Page with Report Builder Selected



Once the Report Builder is selected in the DRT Report Manager, opening an existing report or creating a new report will give you access to the Report Builder.

Figure 12: Report Builder Page



The Report Builder consists of nine tabs, which can be accessed in any order. However, when building a new report, start with the Filter tab (read-only) and work across the screen from left to right, ending with the Preview tab.

When you initially select a tab, you will see the tab contents in view mode. Once you make changes or edit information, you will need to Save the changes before closing out of the Report Builder.

3.2 REPORT BUILDER COMMAND BUTTONS

The Report Builder offers command buttons at the bottom of each page.

Figure 13: Report Builder Command Buttons

The following table displays the available buttons options.

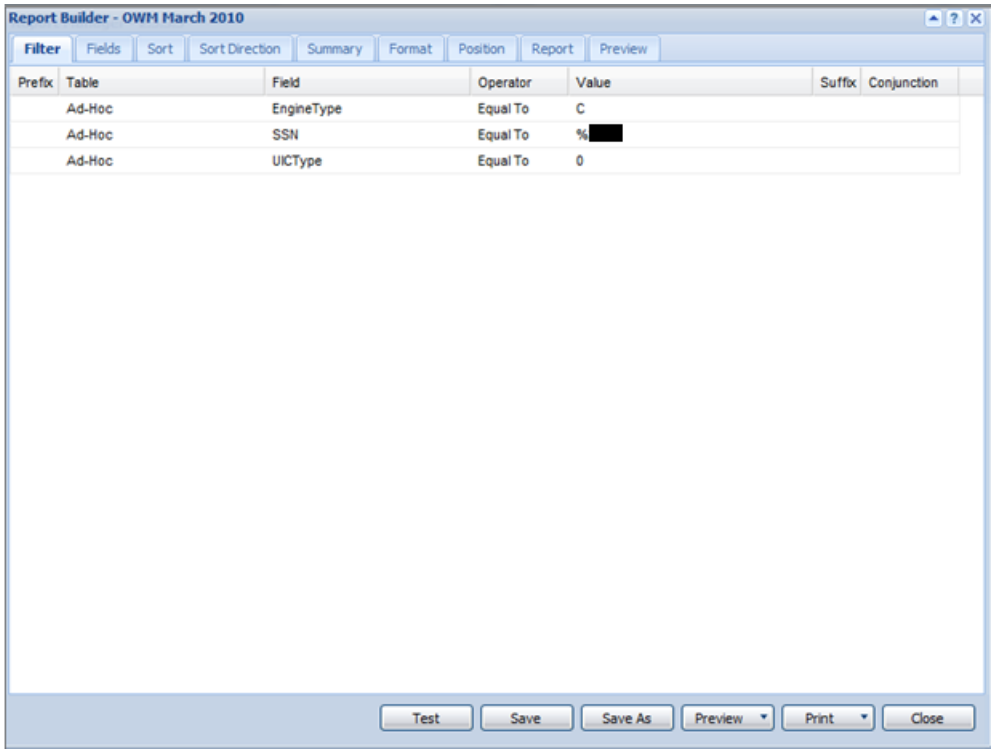
Table II: Report Builder Command Buttons

Hyperlink	Description
Test	Displays a message about the number of records in the data set and size of the opened report.
Save	Saves the report that has been built. **Note:** A report will not save unless all required information is entered into the Report tab.
Save As	Saves a copy of the selected report under a different name. **Note:** In order to use the Save As function, users must change both the **Name** and **Caption** fields on the Report Tab.
Preview	Provides a preview of the selected report. Click the down arrow for a list of available preview outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML) **Note:** CSV and XLS outputs will not be previewed on this screen and will require a file download.
Print	Prints the selected report. Click the down arrow for a list of available print outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML).
Close	Closes the Report Builder screen.

3.3 THE FILTER TAB (REPORT BUILDER)

The Filter Tab displays the conditions used to filter the data set used in the report. This tab displays read-only information based on information generated from the DRT Ad-Hoc.

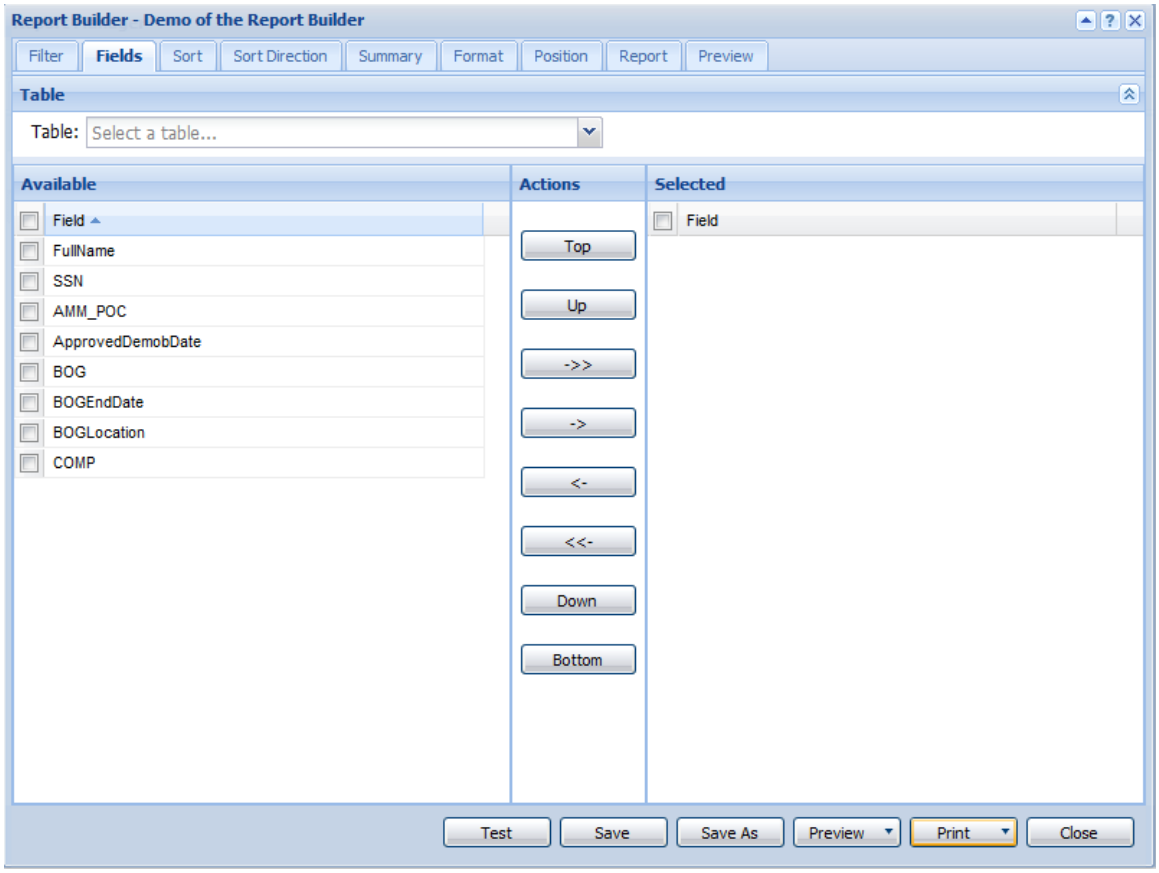
Figure 14: Report Builder - Filter Tab



3.4 THE FIELDS TAB (REPORT BUILDER)

The Fields Tab allows users to specify the fields that will be available for inclusion in the report output. To specify a set of fields for the report, the user must first select a table from the Table pick list. Available tables are populated based on the Ad-Hoc reporting specifications and module. The following image displays the Fields Tab.

Figure 15: Report Builder - Fields Tab



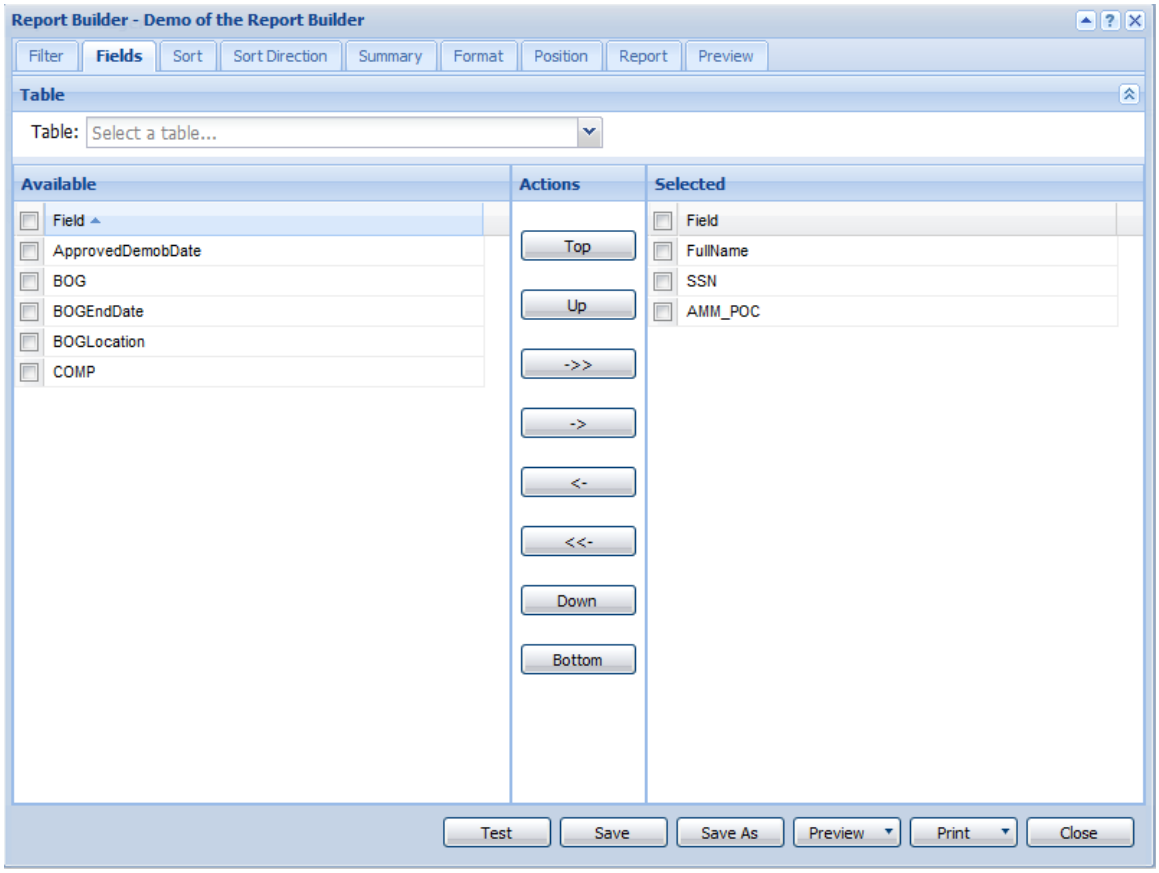
To Select Fields:

a. Select a **Table** from the drop-down list. Available fields for the selected table will appear.

b. From the **Available** list, select the fields(s) you want to include in your report by clicking on the checkbox next to the table name. Once selected, a checkmark will appear in the box.

c. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

Figure 16: Report Builder - Selected Fields



d. To add fields from a different table, change the selected **Table**. Repeat the last two steps until all desired fields appear in the **Selected** list.

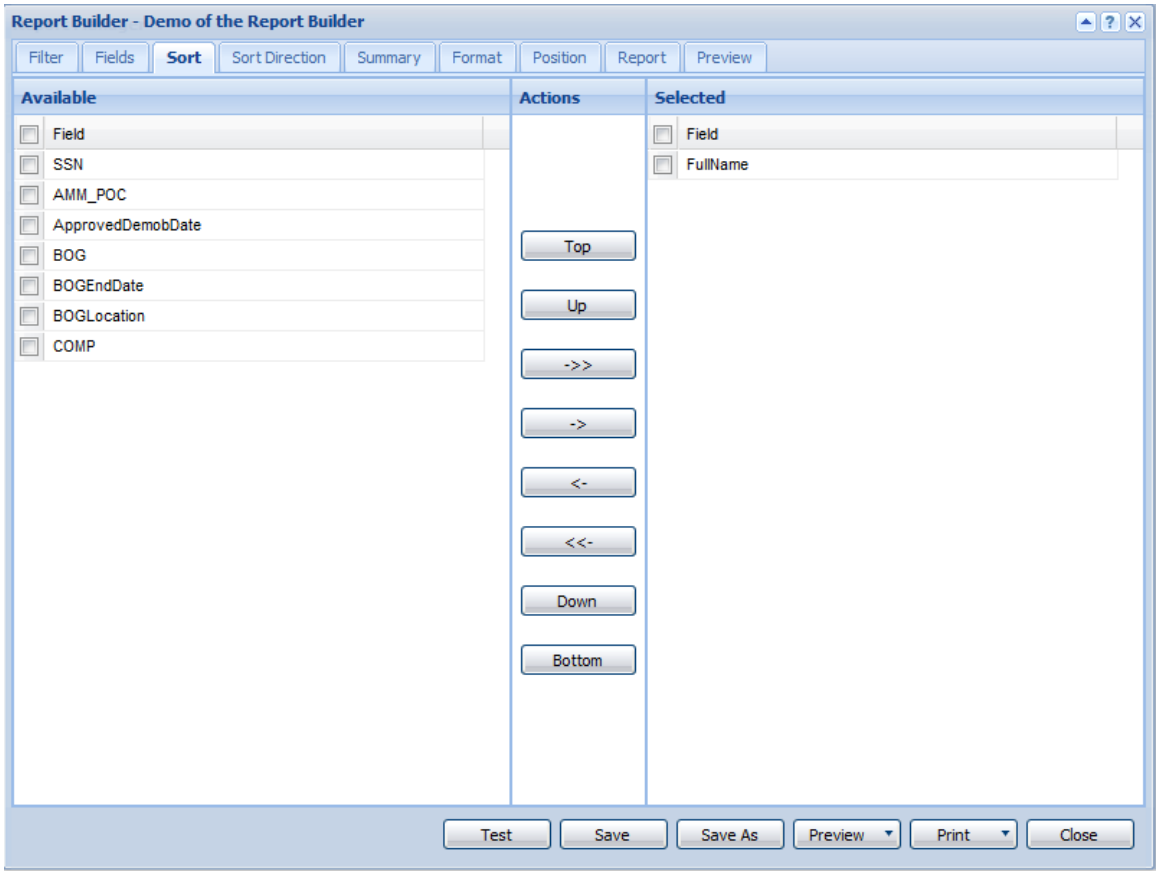
e. When you finish selecting the fields, you can change the order of the list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

f. (Optional) Click the **Save** button to save your work on the report.

3.5 THE SORT TAB (REPORT BUILDER)

The Sort Tab allows users to specify the fields that will be used to sort the data included in the report output. To specify a set of sorting fields for the report, the user will move the desired fields from the Available column to the Selected column. The resulting data for the report will be sorted using the fields in the order that they appear in the Selected Column.

Figure 17: Report Builder - Sort Tab



To Select the Sort Order of Fields:

a. Identify field(s) from the **Available** list that you would like the data sorted by on your report. Select the field(s) by clicking on the checkbox next to the field name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

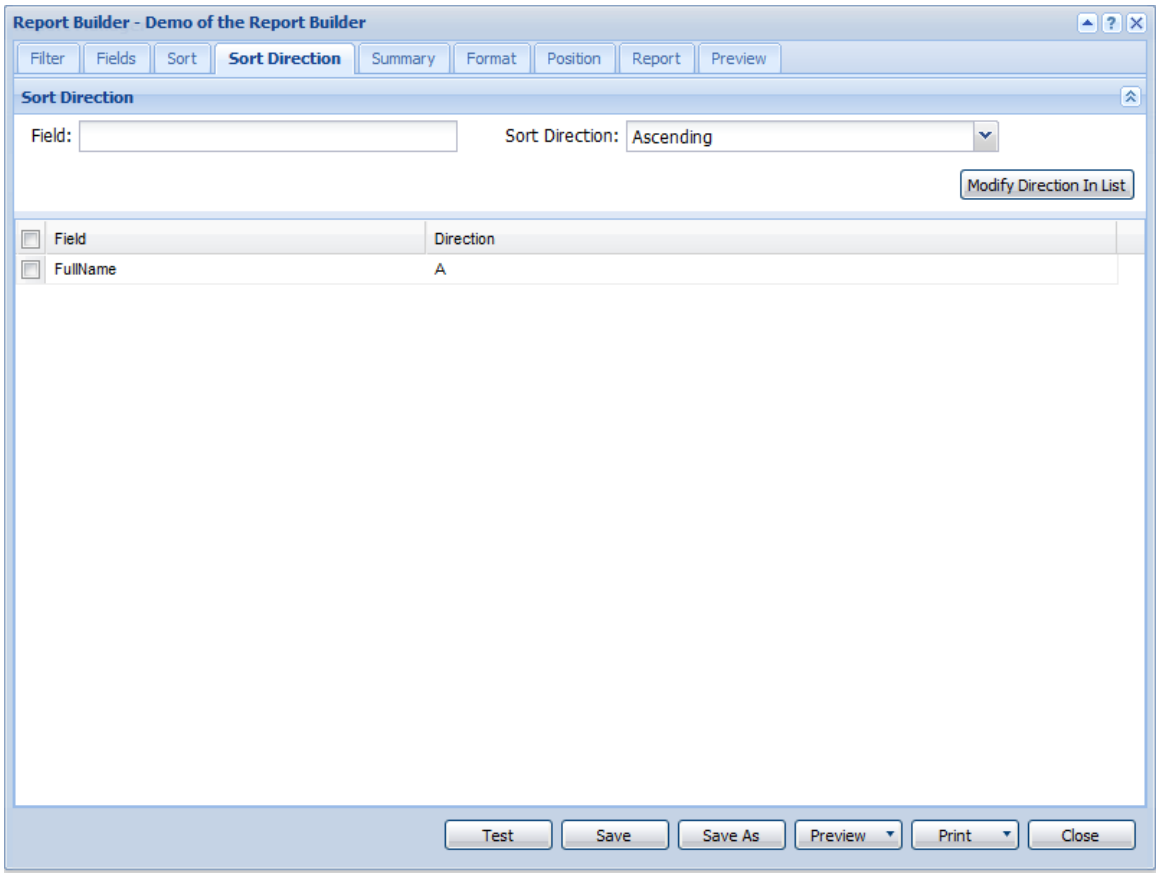
c. The report will be sorted using the fields in the order that they appear in the Selected list. Change the order of this list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. (Optional) Click the **Save** button to save your work on the report.

3.6 THE SORT DIRECTION TAB (REPORT BUILDER)

The Sort Direction Tab allows users to specify the direction (ascending or descending) that data will be displayed for specific fields in the report output. To specify a sort direction, the user will select the desired fields from the Fields list and then specify the direction of the sort.

Figure 18: Report Builder - Sort Tab



To Specify the Sort Direction of a Field:

a. Select a **Field** from the table by clicking the row within the table. Information on the selected field will display on the top portion of the screen.

b. Select a **Sort Direction** from the drop-down list.

c. Click the **Modify Direction in List** button. The table will reflect the updated information.

Note:
By selecting multiple rows, users can modify more than one field at a time. Only the first row selected will appear in the top portion of the screen. However, all selected rows will be modified in the table.

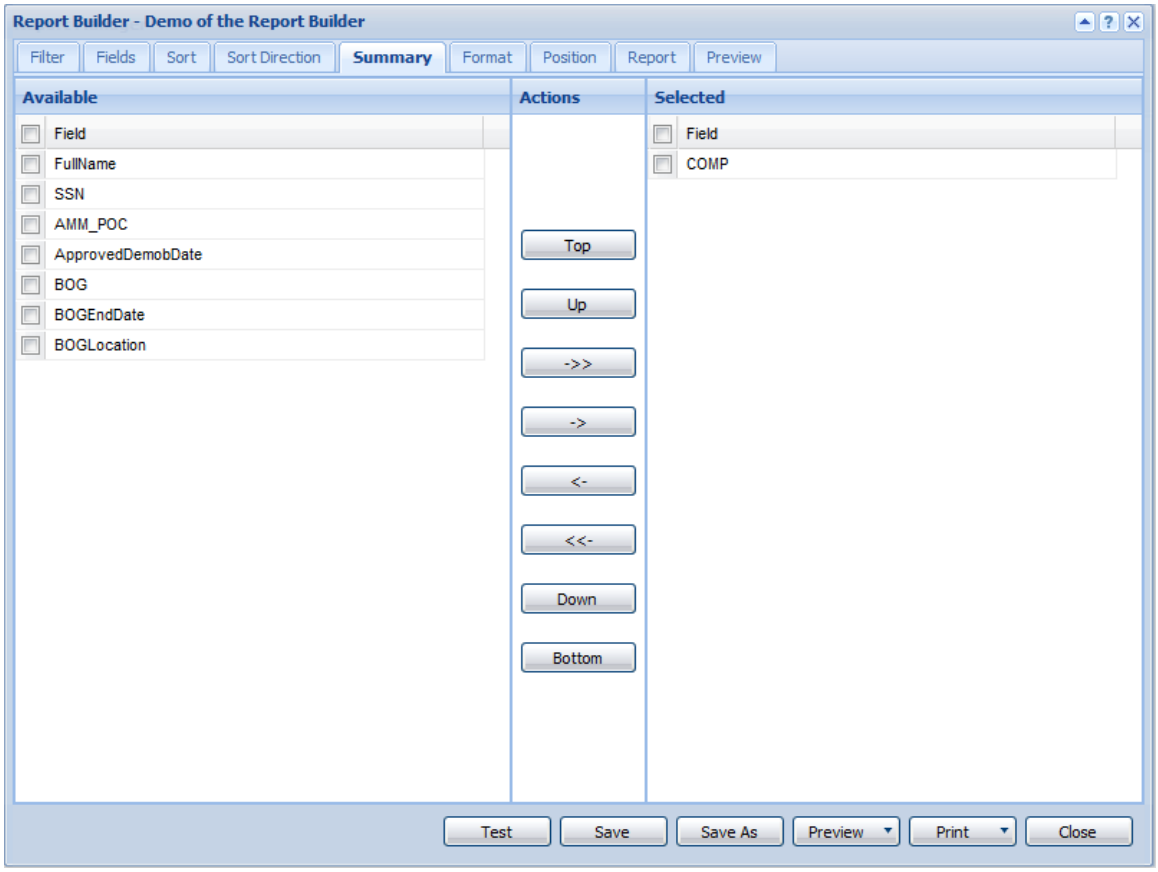
d. Repeat steps a-c as necessary.

e. (Optional) Click the **Save** button to save your work on the report.

3.7 THE SUMMARY TAB (REPORT BUILDER)

The Summary Tab allows users to specify the fields that will be used to summarize the data included in the report output. To specify a set of summary fields for the report, the user will move the desired fields from the Available Column to the Selected Column. The resulting data for the report will display the Sum of numeric fields and the Count of non-numeric fields in the order that the fields appear in the Selected Column.

Figure 19: Report Builder - Summary Tab



To Summarize Fields:

a. Identify field(s) from the **Available** list that you would like to use to summarize the data on your report. Select the field(s) by clicking on the checkbox next to the field name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

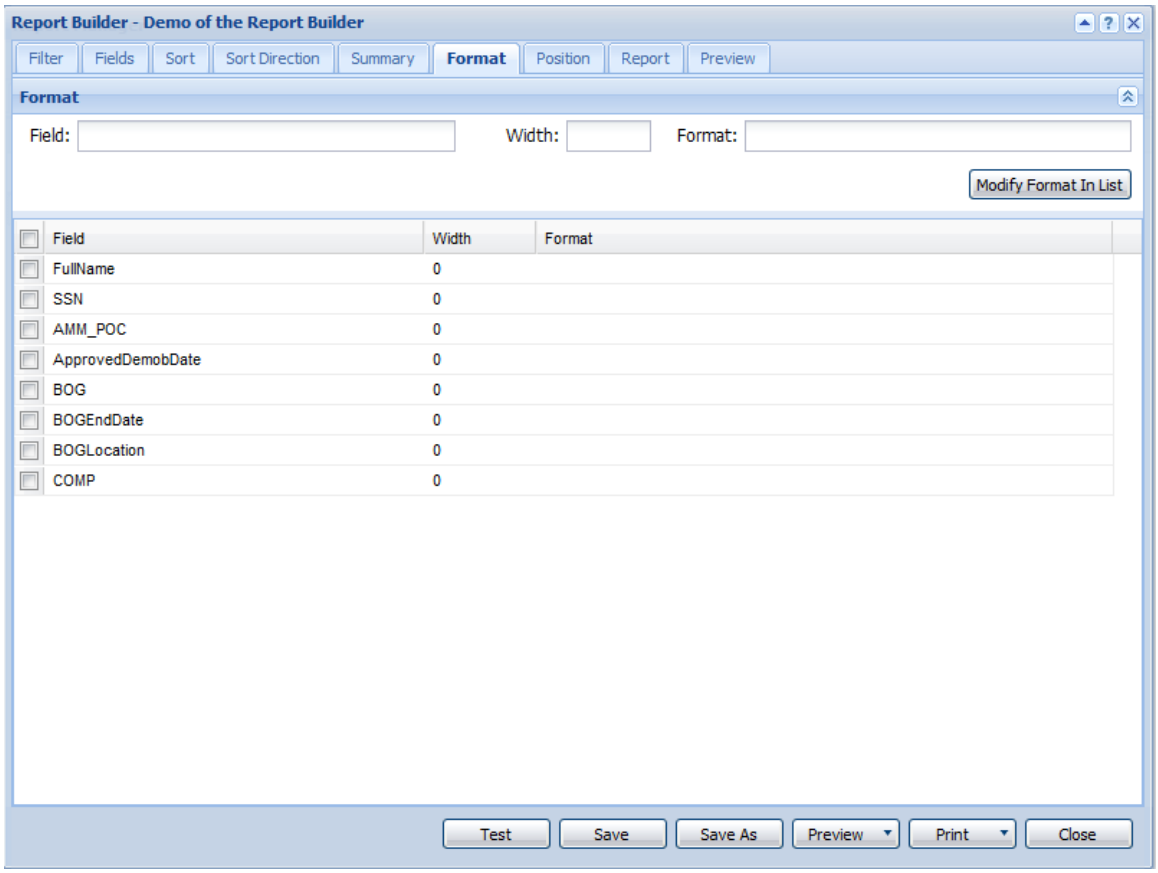
c. The report will be summarized using the fields in the order that they appear in the Selected list. Change the order of this list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. (Optional) Click the **Save** button to save your work on the report.

3.8 THE FORMAT TAB (REPORT BUILDER)

The Format Tab is an optional feature that allows users to specify the width and format of the fields or columns that will appear in the report. Users can choose to specify the width, the format or both the width and format of the columns.

Figure 20: Report Builder - Format Tab



To Modify a Field's Format:

a. Select a **Field** from the table by clicking the row within the table. Information on the selected field will display on the top portion of the screen.

b. Type in the desired column **Width** (in number of characters). **Note:** The entered value must be less than the default field width; entering a value greater than or equal to the default field width will not change your report.

a. Type the **Format** for the field. **Note:** This field must conform to what the String.Format() method expects in the .NET framework. Please refer to Appendix A.

c. Click the **Modify Format to List** button. The table will reflect the updated information.

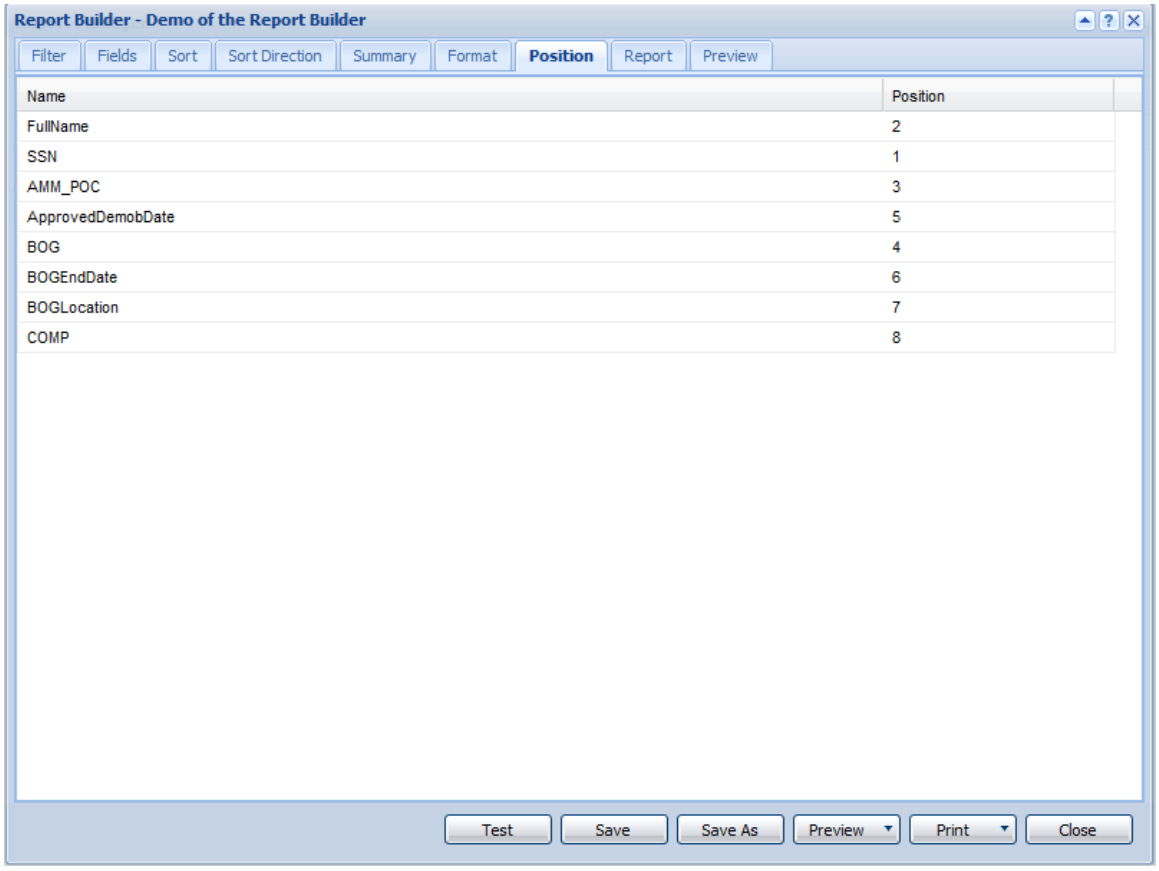
d. Repeat steps a-d as necessary. **Note:** If the Width value remains zero, the report will display all data for the specified field.

e. (Optional) Click the **Save** button to save your work on the report.

3.9 THE POSITION TAB (REPORT BUILDER)

The Position Tab is an optional feature that allows users to specify the order that fields will appear in the report. If nothing is specified on this tab, the fields in the report will appear in the same order as they originally appear in the list.

Figure 21: Report Builder - Position Tab



To Position Fields in a Report:

a. Click in the row of the first field that you would like to appear in your report. The Position value will change from "0" to "1", indicating that this field will appear first in your report.

b. Click the row of the second field that you would like to appear in your report. The Position value will change from "0" to "2".

c. Repeat as necessary or until all Position values are changed from "0". **Note:** If a Position value remains as "0", it will appear before all other values. If multiple Position values remain as "0", they will appear before all other values in the order they are listed in the table.

d. (Optional) Click the **Save** button to save your work on the report.

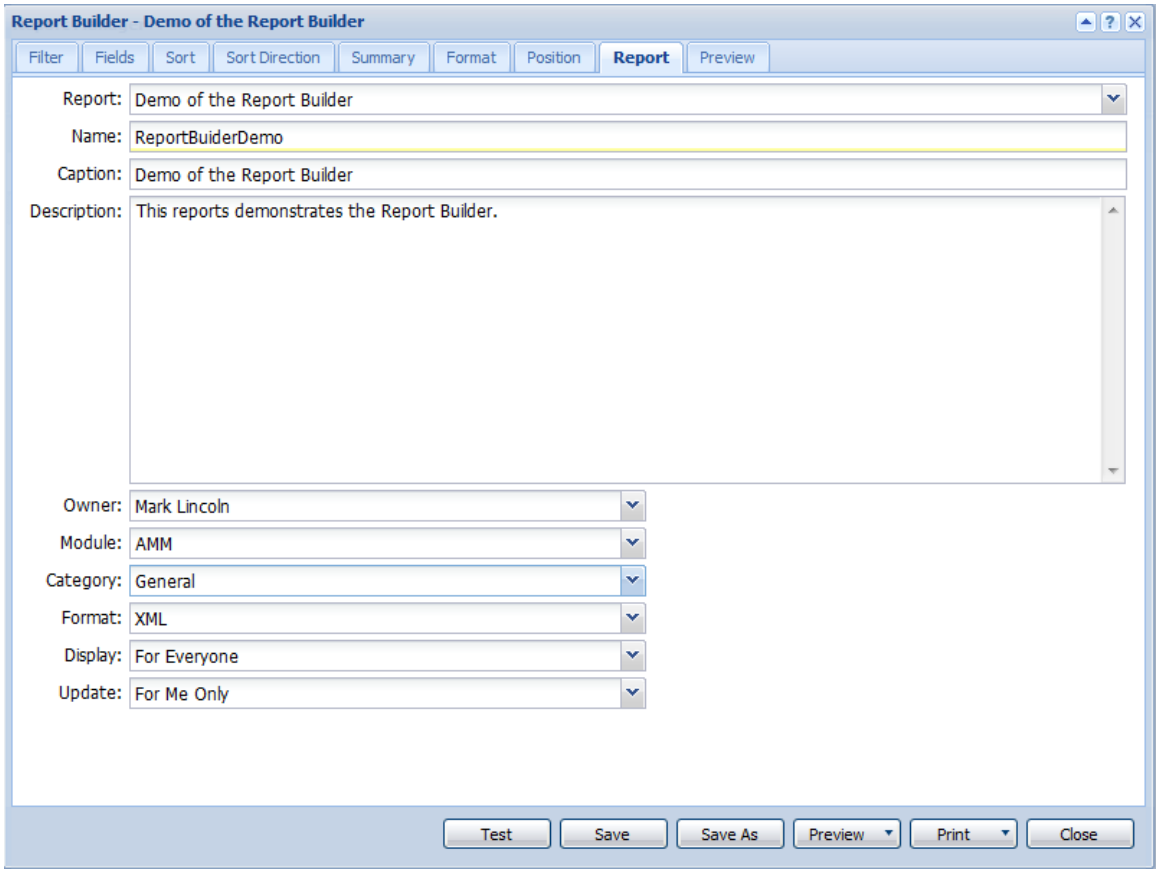
Note:
To remove a Position value from a row or to return the value to "0", click in the row for a second time.

For best results, Positions should be removed in reverse order. For example, if your list is numbered 1-10 and you need to renumber item number 6, start with changing the "10" value to "0" and proceed backwards until you reach item number "6".

3.10 THE REPORT TAB (REPORT BUILDER)

The Report tab contains general information about the report including the report Name, default output, owner, category, etc. With the exception of the Description field, all values on this tab are required. The following image displays the report tab for a new report.

Figure 22: Report Builder - Report Tab



To Complete the Report Tab:

a. If you would like to modify an existing report, select the report name from **Report** field. If you would like to create a brand new report, leave the **Report** field blank.

b. Type a **Name** for the report. This will be used to later identify the report in the system. **Note:** This field should not contain any spaces or special characters.

c. Type a **Caption** for the report. This will be displayed to the user in the available reports list.

d. If desired, fill in a **Description** of the report.

e. Select values for the **Owner** of the report. Typically, this will be the current user.

f. Select the **Module** in which you will be pulling your information. Note: After created, your report will show up under the Module tab you selected.

g. Select a **Category** for the report, which will be used to organize the report into logical groups.

h. Select the default **Format** for printing. Note: After created, you can always select to print in an alternate format.

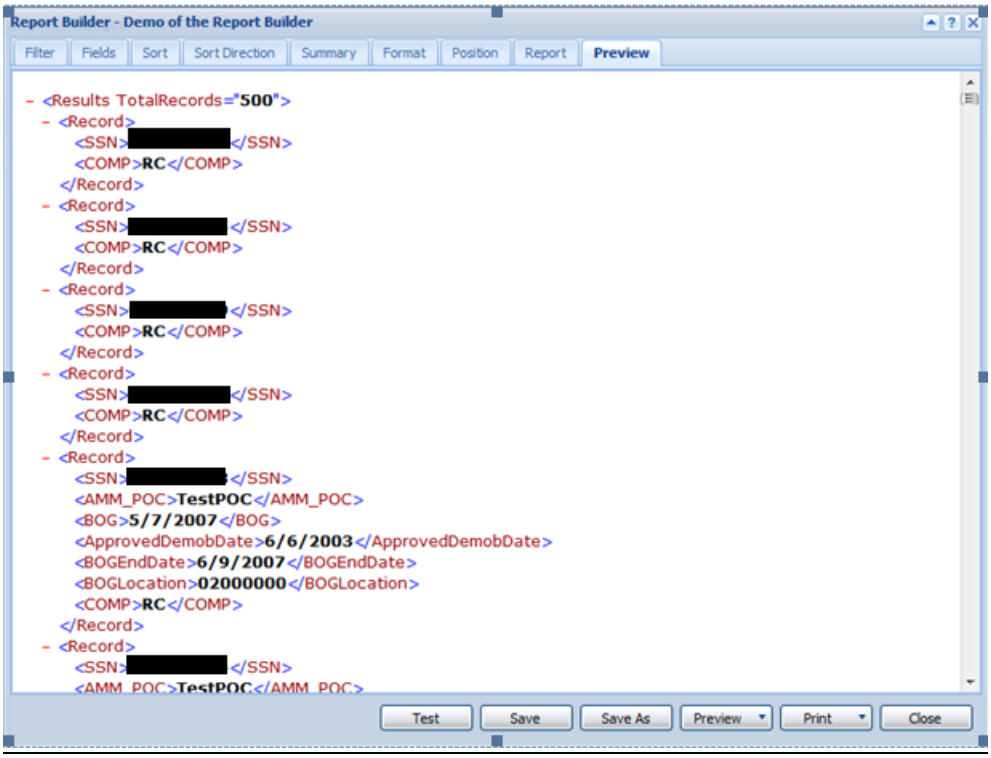
i. Select whether you would like this to be a public or private report upon initial **Display** and **Updates** thereafter.

j. (Optional) Click the **Save** button to save your work on the report.

3.11 THE PREVIEW TAB (REPORT BUILDER)

The Preview tab is used to preview the data and layout format of the designed report. When reports are previewed, only the first 500 records appear on the report. When selected, the Preview tab displays the report in the default output.

Figure 23: Report Builder - Preview Tab



When viewing reports through the Preview tab, clicking the **Close** button will close the Report Builder and will not save any changes.

Note:
To preview the report in a different output, click arrow next to the **Preview** button at the bottom of the window. Select the desired output from the displayed list. A secondary window will display a preview of the report. Click the **Close** button on the **Report Preview Window** to close the secondary screen and return to the Report Builder.

SECTION 4: The Report Designer

4.1 REPORT DESIGNER FUNCTIONAL OVERVIEW

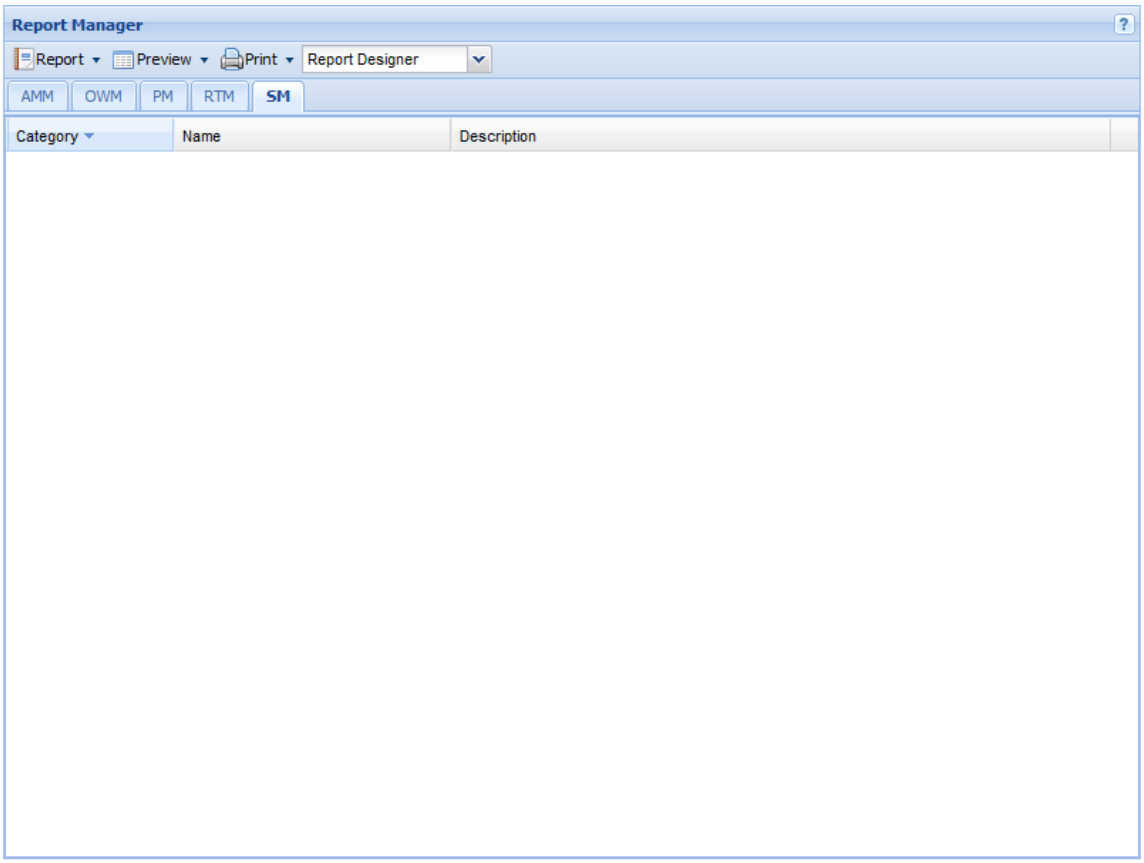
The Report Designer allows you to create a new report or modify an existing report. Accordingly, six tabs across the top of the screen allow the user to:

- edit the report properties
- edit the data sets for the report
- modify the layout for the rendering of the report to its output destination
- chart or graph the report information
- review the XML statement created by the Report Designer
- preview the report output

The Report Designer is the user interface for technical users. This Editor allows users to create and print custom reports that pertain to the information in that module.

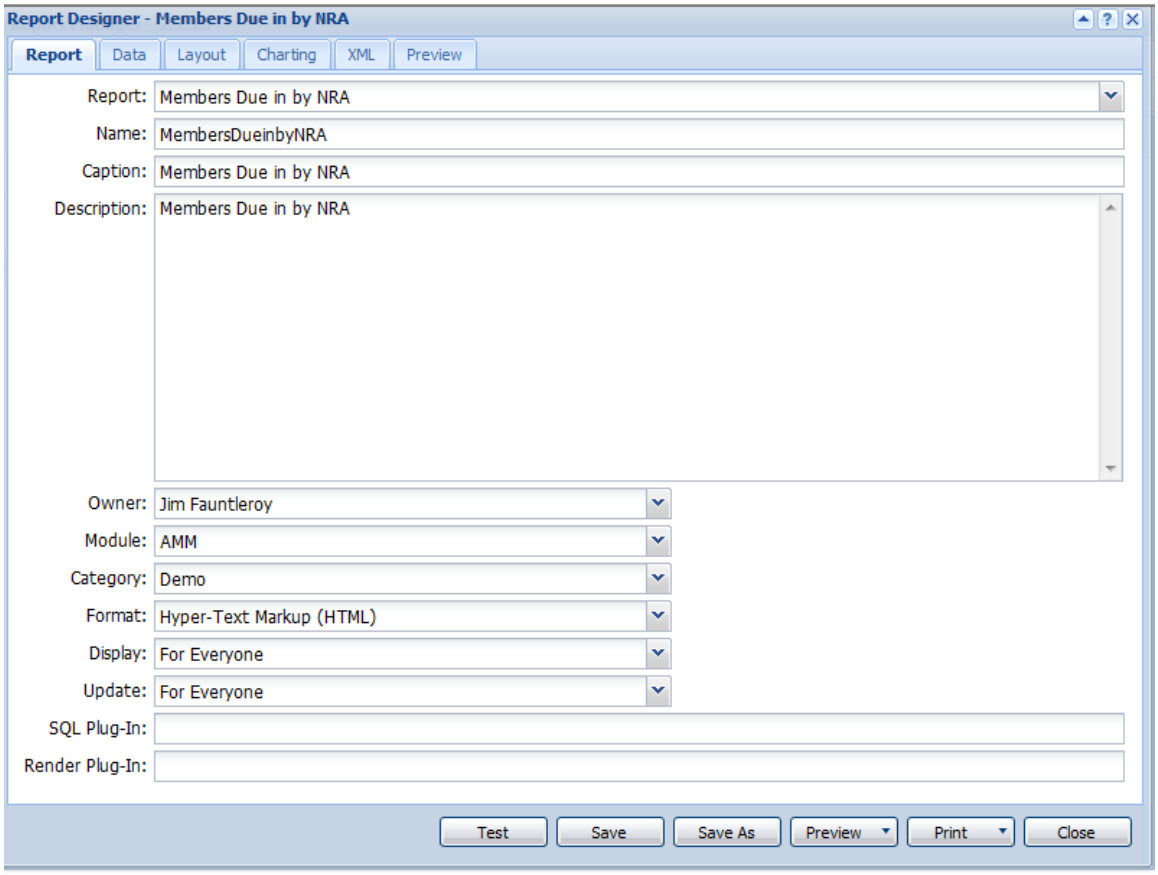
To access the Report Designer, make sure that **Report Designer** is selected on the DRT Report Manager Page as shown below.

Figure 24: DRT Report Manager Page with Report Designer Selected



Once the Report Designer is selected in the DRT Report Manager, opening an existing report or creating a new report will give you access to the Report Designer window.

Figure 25: Report Designer Page



The Report Designer screen consists of six main tabs, which can be accessed in any order. However, when building a new report, start with the Report tab and work across the screen from left to right, ending with the Preview tab.

When you initially select a tab, you will see the tab contents in view mode. Once you make changes or edit information, you will need to Save the changes before closing out of the Report Designer window.

4.2 REPORT DESIGNER COMMAND BUTTONS

The Report Designer offers command buttons at the bottom of each page.

Figure 26: Report Designer Command Buttons

The following table displays the available buttons options.

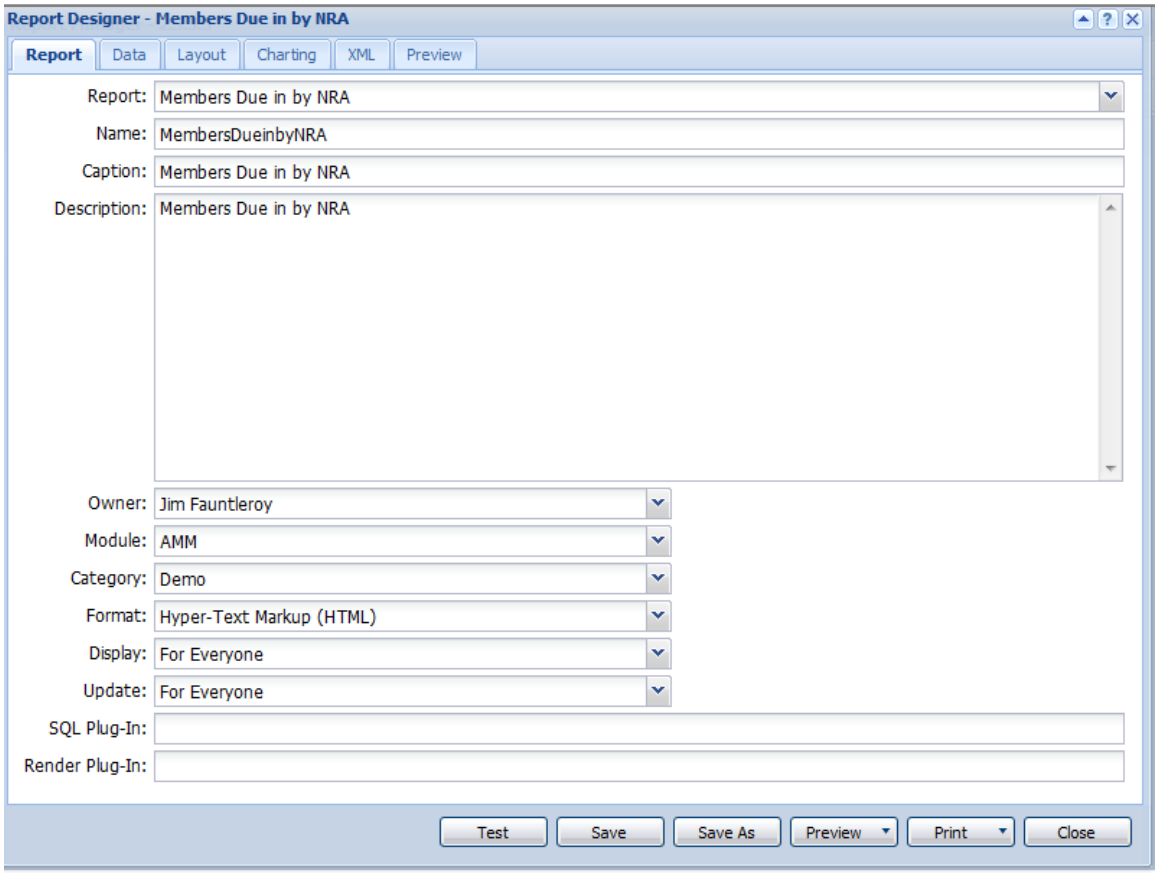
Table III: Report Designer Command Buttons

Hyperlink	Description
Test	Displays a message about the number of records in the data set and size of the opened report.
Save	Saves the report that has been built. **Note:** A report will not save unless all required information is entered into the Report tab.
Save As	Saves a copy of the selected report under a different name. **Note:** In order to use the Save As function, users must change both the Name and Caption fields on the Report Tab.
Preview	Provides a preview of the selected. Click the down arrow for a list of available preview outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML) **Note:** CSV and XLS outputs will not be previewed on this screen and will require a file download.
Print	Prints the selected report. Click the down arrow for a list of available print outputs. Options include: Comma Separated Value (CSV), Excel Worksheet (XLS), Fixed Text (TXT), Hyper-Text Markup (HTML), eXtensible Markup (XML), Chart/Graph (HTML)
Close	Closes the Report Designer screen.

4.3 THE REPORT TAB (REPORT DESIGNER)

The Report tab contains general information about the report including the report Name, default output, owner, category, etc. All values on this tab, except for the Description, SQL Plug-In and Render Plug-In, are required. The following image displays the report tab for an existing report.

Figure 27: Report Designer - Report Tab



To Complete the Report Tab:

a. If you would like to modify an existing report, select the report name from the **Report** field. If you would like to create a brand new report, leave the **Report** field blank.

b. Type a **Name** for the report which will be used by the system to identify the report. **Note:** This field should not contain any spaces or special characters.

c. Type a **Caption** for the report. This will be displayed to the user in the available reports list and the DRT Report Manager.

d. If desired, fill in a **Description** of the report.

e. Select values for the **Owner** of the report. Typically, this will be the current user.

f. Select the **Module** in which you will be pulling your information. Note: After created, your report will show up under the Module tab you selected.

g. Select a **Category** for the report, which will be used to organize the report into logical groups.

h. Select the default **Format** for printing. Note: After created, you can always select to print in an alternate format.

i. Select whether you would like this to be a public or private report upon initial **Display** and **Updates** thereafter.

j. If additional processing to create SQL statement is required, type the name of a .NET plug-in assembly into the **SQL Plug-In** field.

k. If additional processing during the rendering or printing of the report is desired, type the name of a .NET plug-in assembly into the **Render Plug-In** field.

l. (Optional) Click the **Save** button to save your work on the report.

4.4 THE DATA TAB (REPORT DESIGNER)

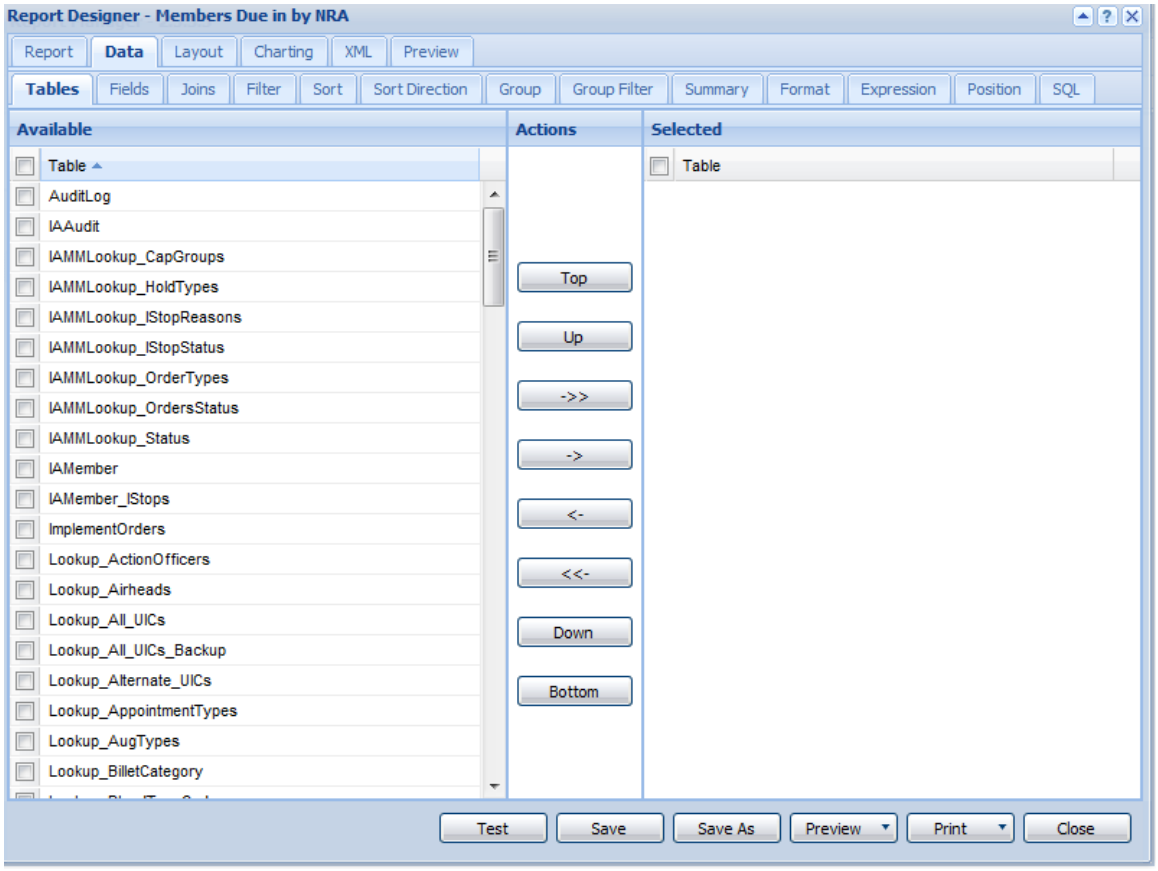
The Data tab allows users to handle complex reporting by selecting more than one data set from a pick list. The Data tab itself contains thirteen tabs for defining the data sets for the report. Users will first select the tables for the report. Next, they will select data fields, join tables, and create a data set filter condition. Finally, they will define groups, sort the data, choose which fields should contain sums of information and format the report.

The thirteen tabs within the Data Tab can be accessed in any order. However, when building a new report, start with the Tables tab and work across the screen from left to right, ending with the SQL tab

4.4.1 The Tables Tab (Report Designer)

The Tables Tab allows users to manage the data sets required for the report by selecting the tables from a pick list. The following image displays the Tables Tab.

Figure 28: Report Designer - Tables Tab

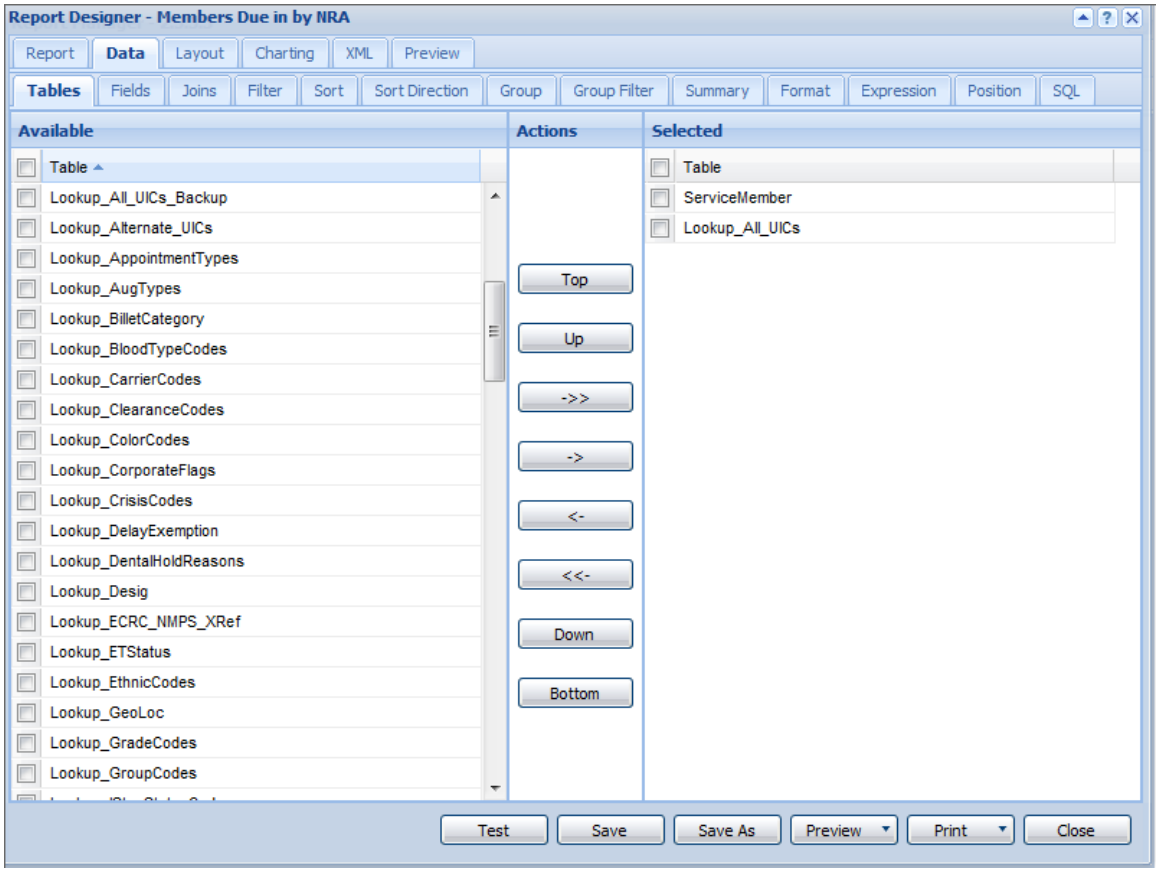


To Select Tables:

a. From the **Available** list, select the table(s) you want to include in your report by clicking on the checkbox next to the table name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list. To move all fields to the **Selected** list, click the double arrow (->>) button.

Figure 29: Report Designer - Selected Tables



c. When you finish selecting the tables, you can change the order of the list by clicking on a table name and clicking the **Up** or **Down** buttons. After selecting a table name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. To remove a field (or fields) from the **Selected** list, highlight the field(s) you'd like to move and click the left arrow (<-) button. To move all fields in the **Selected** list, click the double left arrow (<<-) button.

e. (Optional) Click the **Save** button to save your work on the report.

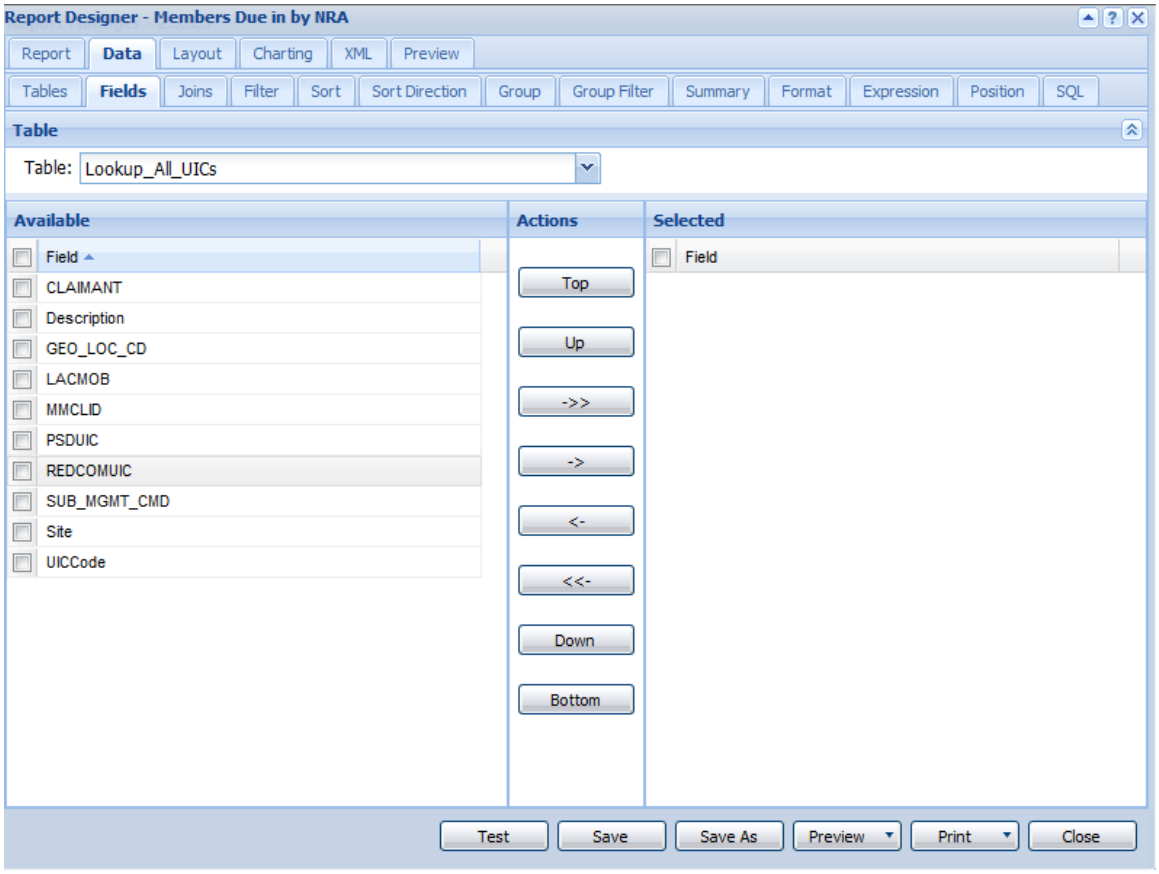
Note:

Tables cannot be removed from the Tables Tab unless all of their corresponding fields are also removed from the Fields Tab. If a Table is moved from the Selected list back to the Available list but its corresponding fields are still Selected on the Fields tab, the report will save as if the Table was still on the Available list.

4.4.2 The Fields Tab (Report Designer)

The Fields Tab allows users to specify the fields that will be available for inclusion in the report output. To specify a set of fields for the report, the user must first select a table from the Table pick list (Refer to The Table Tab section). If the user has specified only one table for the report in the Tables tab, that table will already be selected on the Fields tab. The following image displays the Fields Tab.

Figure 30: Report Designer - Fields Tab



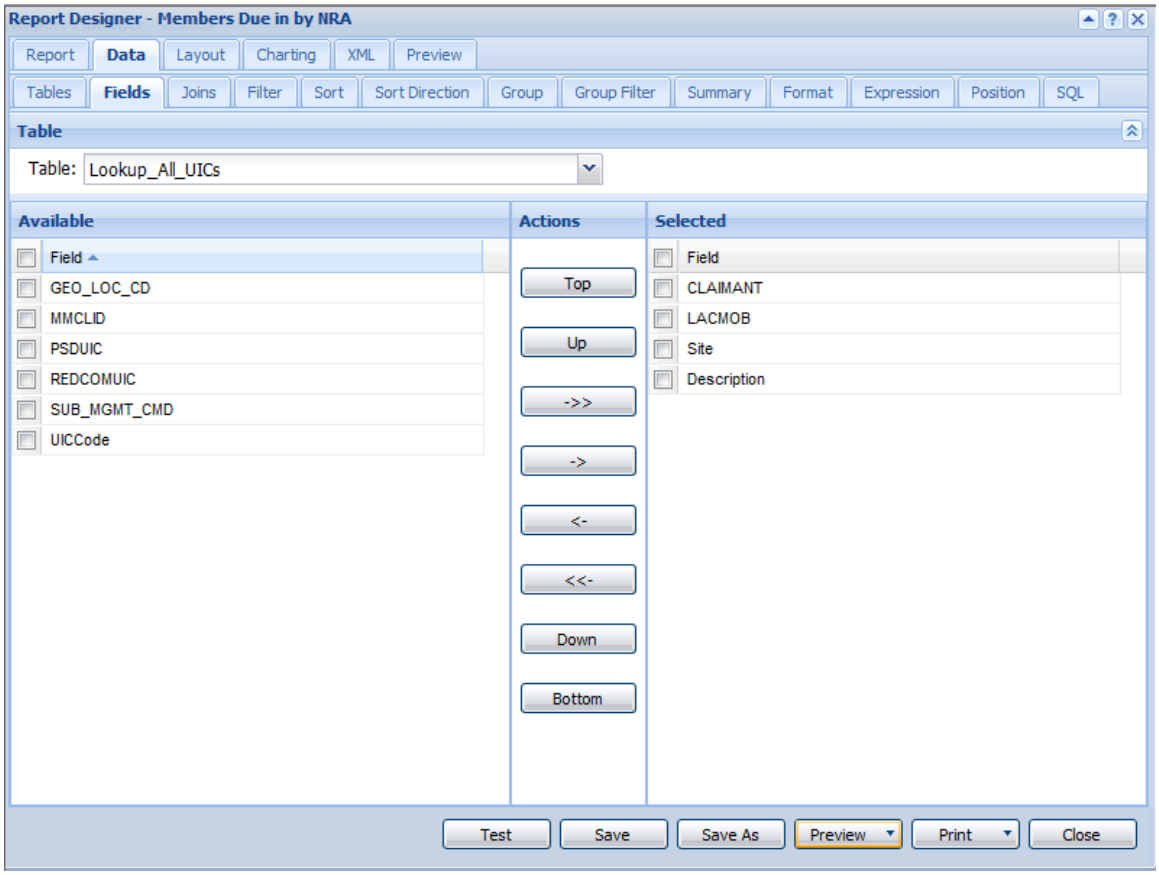
To Select Fields:

a. Select a **Table** from the drop-down list. Available fields for the selected table will appear.

b. From the **Available** list, select the fields(s) you want to include in your report by clicking on the checkbox next to the table name. Once selected, a checkmark will appear in the box.

c. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

Figure 31: Report Designer - Selected Fields



d. To add fields from a different table, change the selected **Table**. Repeat the last two steps until all desired fields appear in the **Selected** list.

e. When you finish selecting the fields, you can change the order of the list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

f. (Optional) Click the **Save** button to save your work on the report.

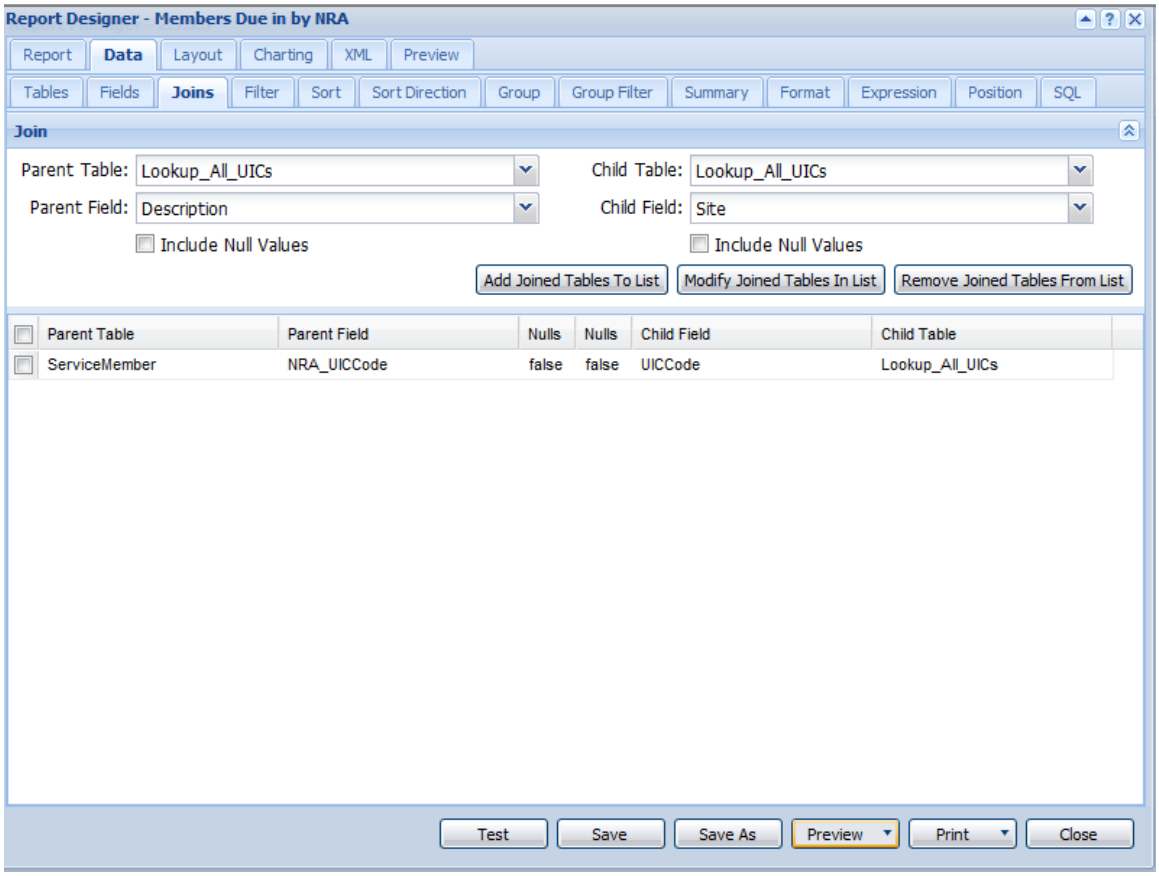
Note:

Tables cannot be removed from the Tables Tab unless all of their corresponding fields are also removed from the Fields Tab. If a Table is moved from the Selected list back to the Available list but its corresponding fields are still Selected on the Fields tab, the report will save as if the Table was still on the Available list.

4.4.3 The Joins Tab (Report Designer)

The Joins Tab allows users to specify the condition to join two or more tables in the data set for use in the report. To create a joining condition, select a parent table, a child table, and the fields that will link them together. Users can also specify whether null values from the parent or child table should be included in the report data set.

Figure 32: Report Designer - Joins Tab



To Join Tables:

a. Select a **Parent Table** and corresponding **Parent Field** from the drop-down lists. Click in the checkbox to **Include Null Values** for this selection.

b. Select a **Child Table** and corresponding **Child Field** from the drop-down lists. Click in the checkbox to **Include Null Values** for this selection.

c. Click the Add Joined Tables to List button.

To Modify Joined Tables:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Joined Tables in List** button. Your changes will be reflected in the grid.

To Remove Joined Tables:

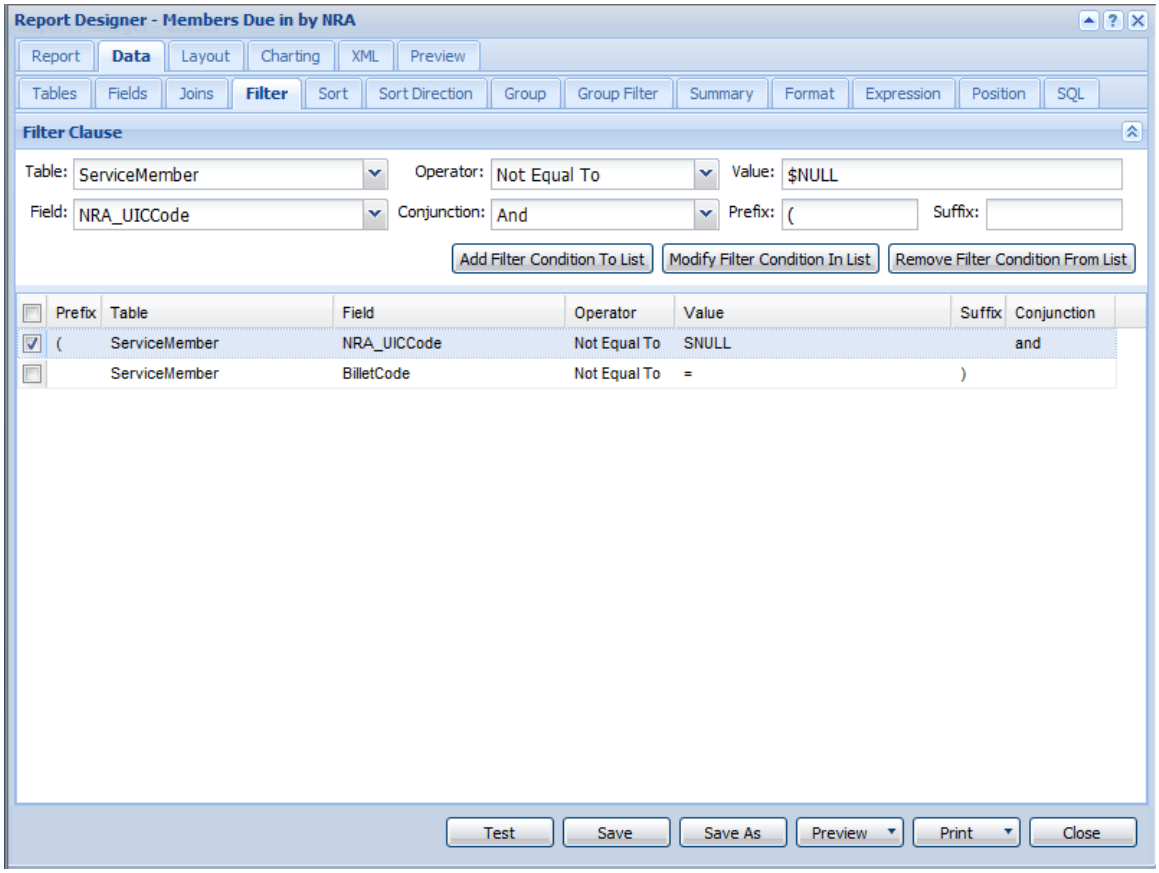
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Joined Tables from List** button. The selected tables will be removed from the grid.

4.4.4 The Filter Tab (Report Designer)

The Filter Tab allows users to specify the condition to filter the data set for use in the report. The filter condition created is a Boolean expression used to limit that data available in the data set for the report. In order to create the filter condition, the user must assemble filter clauses that are in the form of Field Operator Value (i.e. Field = 100). Multiple filter clauses can be assembled to create a complex filter condition using logical conjunctions (i.e. And and Or) and parenthesis for grouping the clauses into valid Boolean expressions. To create a clause for the filter condition, the user will select a Field, an Operator, and specify a Value. The Value for the clause can be a scalar value specified by the user or a value selected from existing values for the field in the database.

Figure 33: Report Designer - Filter Tab



To Add a Filter Condition:

a. Select a **Table** and **Operator** from the drop-down lists.

b. Type in the **Value** for the condition.

c. Select the appropriate **Field** for the condition.

d. If this condition will be associated with another, select a **Conjunction** from the drop-down list.

e. To group conditions, use the **Prefix** and **Suffix** fields as necessary.

f. Click the **Add Filter Condition to List** button.

Note:
To test for a value being null, use the "**Equal To**" operator and **$NULL** as the field value. The Report server will resolve this expression into a valid "is null" condition.

To test for not null, use the "**Not Equal To**" operator and **$NULL** as the field value. The Report server will resolve this expression into a valid "is not null" condition.

To test for null strings, use either "**Equal To**" or "**Not Equal To**" as the operator and the **$NULLSTRING** or **''** as the field value.

To Modify a Filter Condition:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Filter Condition in List** button. Your changes will be reflected in the grid.

To Remove a Filter Condition:

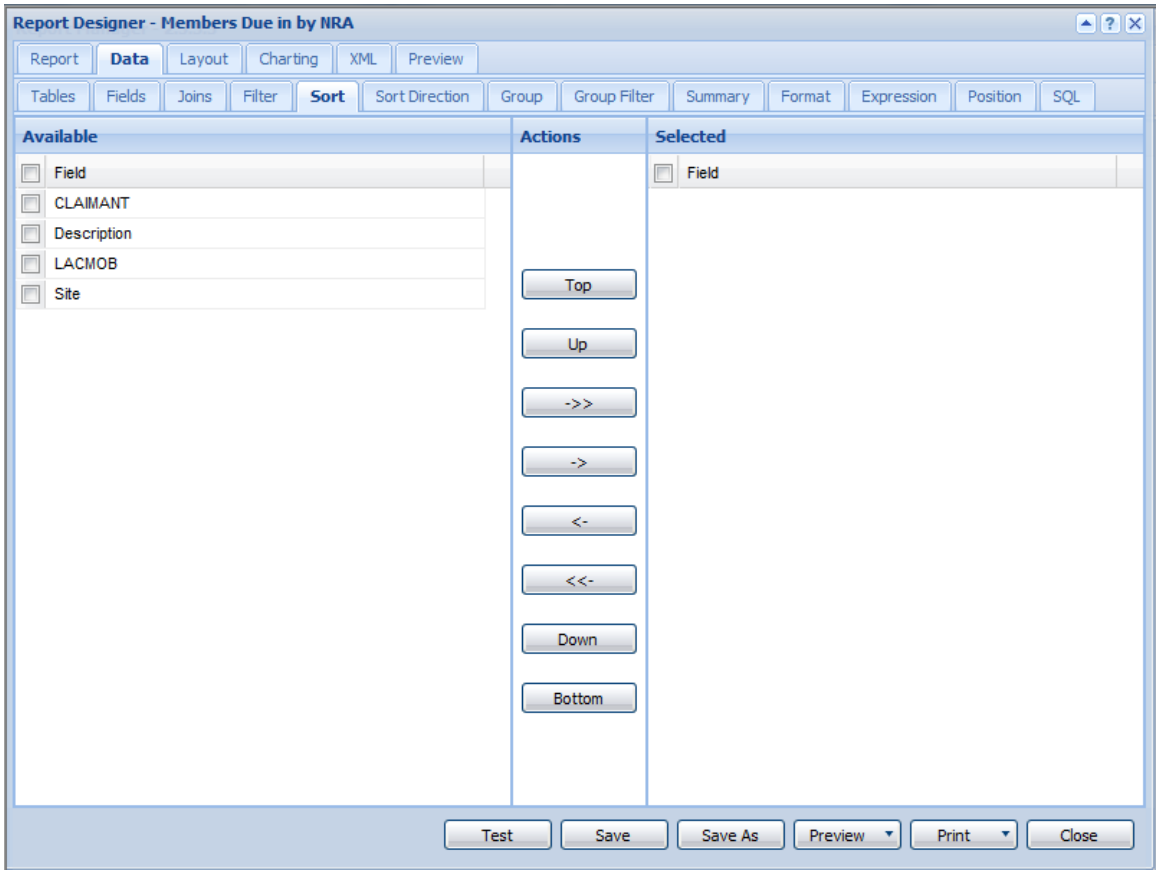
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Filter Condition from List** button. The selected tables will be removed from the grid.

4.4.5 The Sort Tab (Report Designer)

The Sort Tab allows users to specify the fields that will be used to sort the data included in the report output. To specify a set of sorting fields for the report, the user will move the desired fields from the Available Column to the Selected Column. The resulting data for the report will be sorted using the fields in the order that they appear in the Selected Column.

Figure 34: Report Designer - Sort Tab



To Select the Sort Order of Fields:

a. Identify field(s) from the **Available** list that you would like the data sorted by on your report. Select the field(s) by clicking on the checkbox next to the field name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

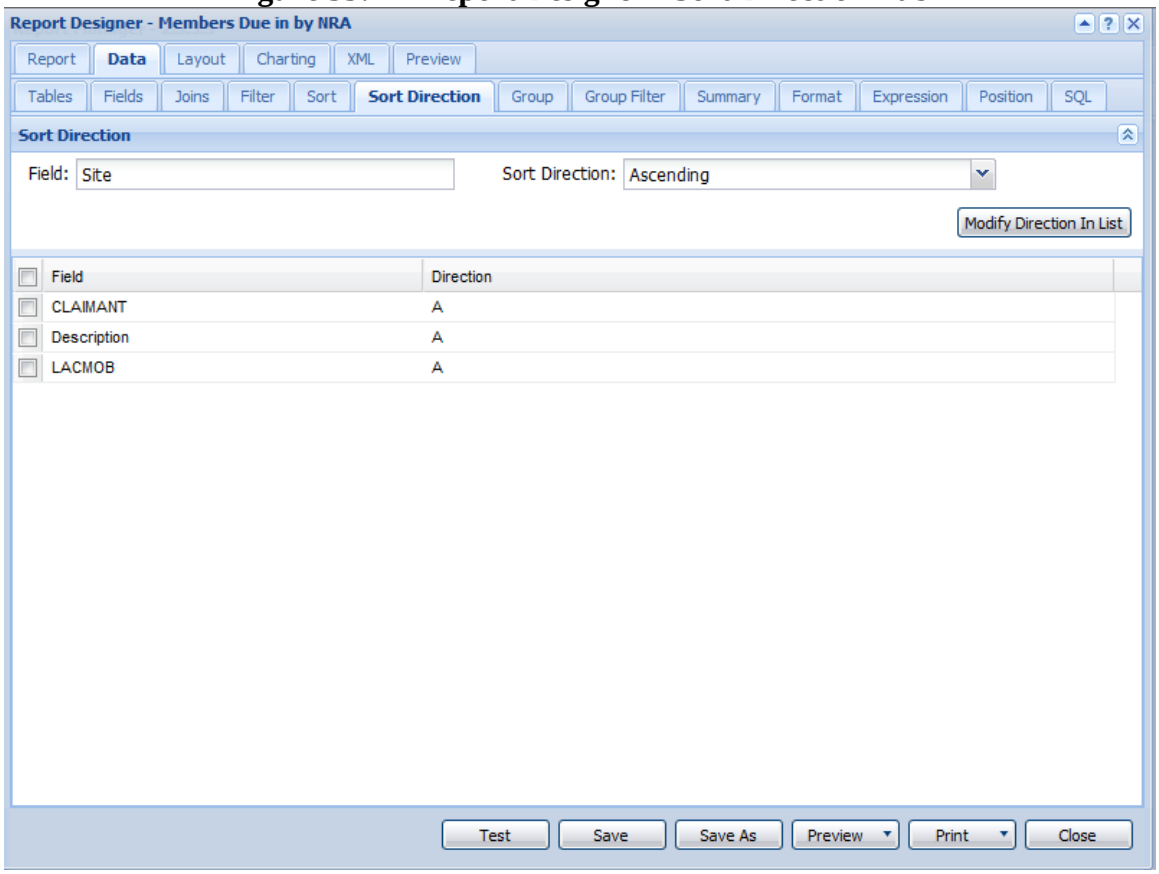
c. The report will be sorted using the fields in the order that they appear in the Selected list. Change the order of this list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. (Optional) Click the **Save** button to save your work on the report.

4.4.6 The Sort Direction Tab (Report Designer)

The Sort Direction Tab allows users to specify the direction (ascending or descending) that data will be displayed for specific fields in the report output. To specify a sort direction, the user will select the desired fields from the Fields list and then specify the direction of the sort. Fields displayed here reflect the fields selected on the Sort tab.

Figure 35: Report Designer - Sort Direction Tab



To Specify the Sort Direction of a Field:

a. Select a **Field** from the table by clicking the row within the table. Information on the selected field will display on the top portion of the screen.

b. Select a **Sort Direction** from the drop-down list.

c. Click the **Modify Direction in List** button. The table will reflect the updated information.

Note:
By selecting multiple rows, users can modify more than one field at a time. Only the first row selected will appear in the top portion of the screen. However, all selected rows will be modified in the table.

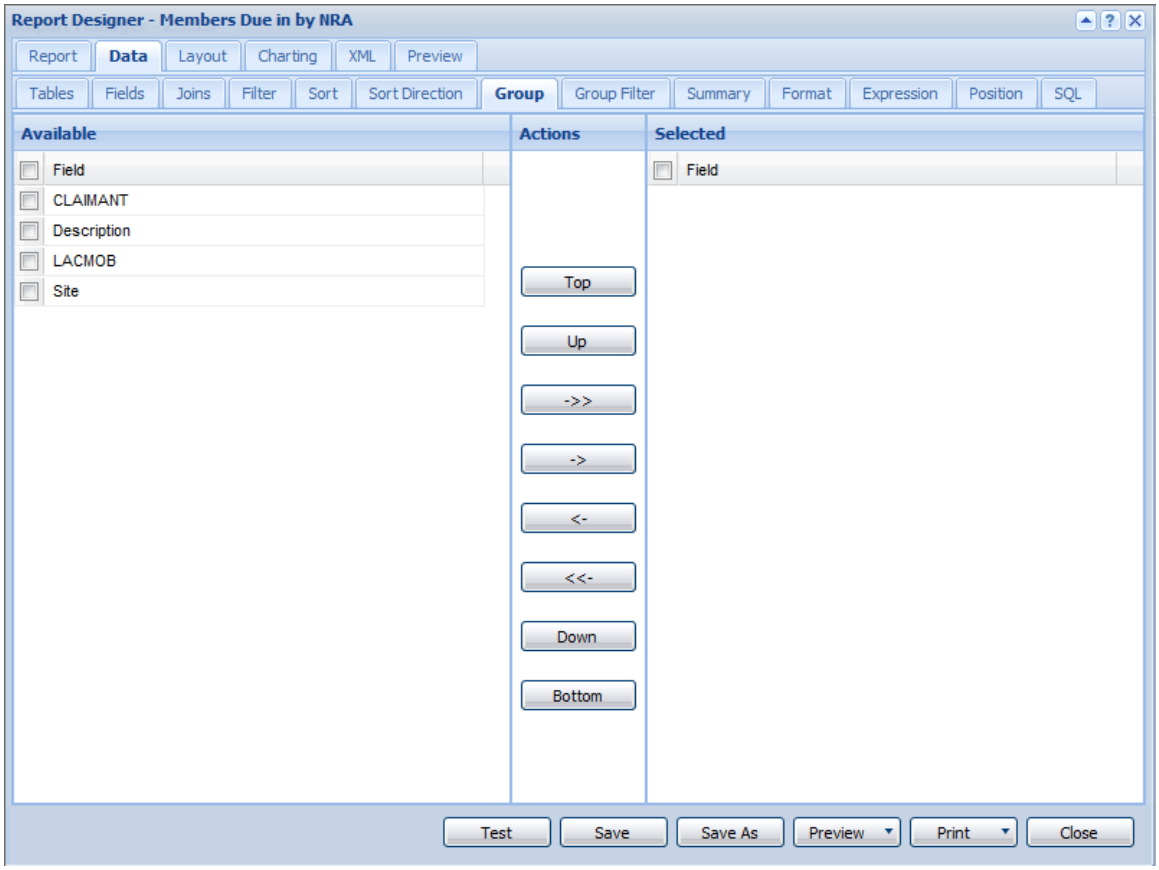
f. Repeat steps a-c as necessary.

g. (Optional) Click the **Save** button to save your work on the report.

4.4.7 The Group Tab (Report Designer)

The Group Tab allows users to specify the fields that will be used to group the data included in the report output. To specify a set of grouping fields for the report, the user will move the desired fields from the Available Column to the Selected Column. The resulting data for the report will be grouped using the fields in the order that they appear in the Selected Column.

Figure 36: Report Designer - Group Tab



To Group Fields:

a. Identify field(s) from the **Available** list that you would like the data grouped by on your report. Select the field(s) by clicking on the checkbox next to the field name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

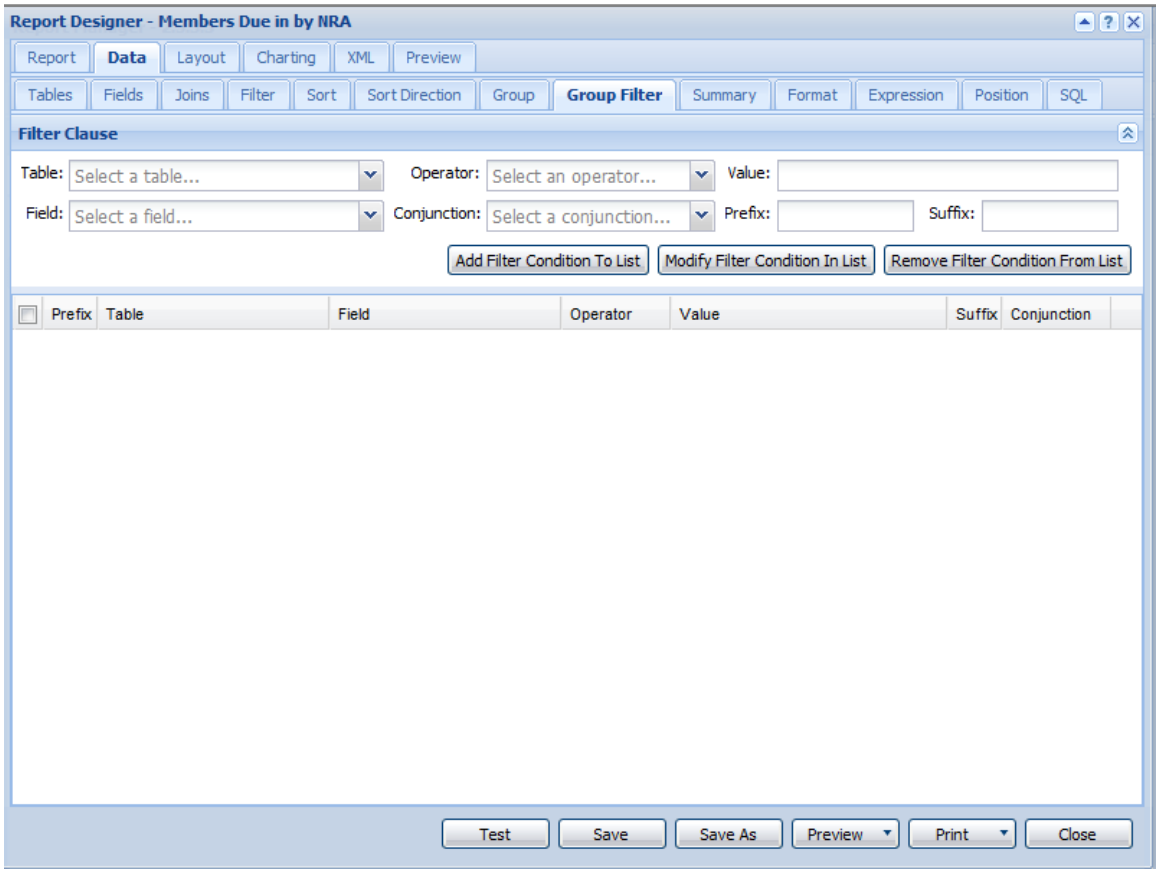
c. The report will be grouped using the fields in the order that they appear in the Selected list. Change the order of this list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. (Optional) Click the **Save** button to save your work on the report.

4.4.8 The Group Filter Tab (Report Designer)

The Group Filter Tab allows users to specify the condition to filter the data set groups when grouping the data for use in the report. This tab functions similarly to the Filter tab; however, the fields available for the group filter must appear in the Selected Fields list on the Group tab. The group filter condition created is a Boolean expression used to limit that data available in the data set for the report. To create the group filter condition, the user must assemble filter clauses that are in the form of Field Operator Value (i.e. Field = 100). Multiple group filter clauses can be assembled to create a complex group filter condition using logical conjunctions (i.e. And and Or) and parenthesis for grouping the clauses into valid Boolean expressions.

Figure 37: Report Designer - Group Filter Tab



To Add a Group Filter Condition:

a. Select a **Table** and **Operator** from the drop-down lists.

b. Type in the **Value** for the condition.

c. Select the appropriate **Field** for the condition.

d. If this condition will be associated with another, select a **Conjunction** from the drop-down list.

e. To create complex conditions, use the **Prefix** and **Suffix** fields as necessary.

f. Click the **Add Filter Condition to List** button.

g. (Optional) Click the **Save** button to save your work on the report.

To Modify a Filter Condition:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Filter Condition in List** button. Your changes will be reflected in the grid.

To Remove a Filter Condition:

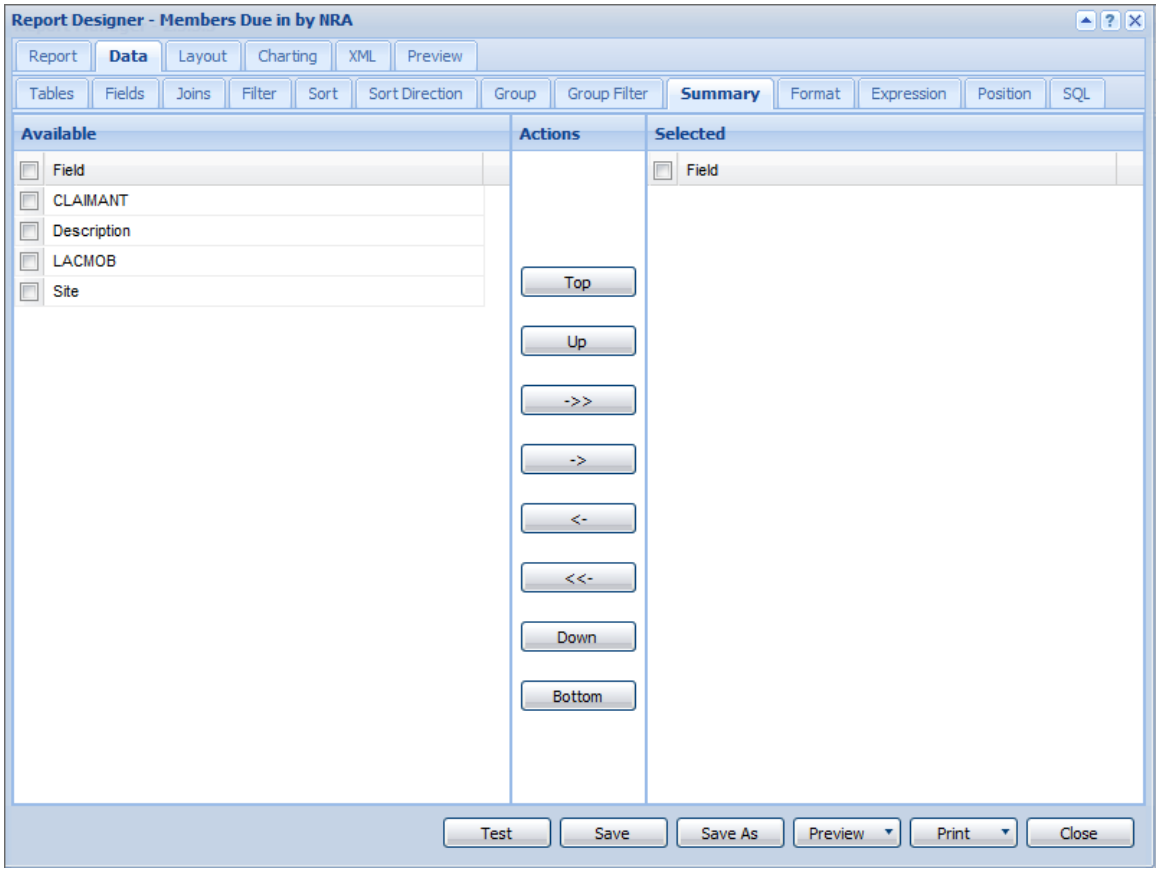
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Filter Condition from List** button. The selected tables will be removed from the grid.

4.4.9 The Summary Tab (Report Designer)

The Summary Tab allows users to specify the fields that will be used to summarize the data included in the report output. To specify a set of summary fields for the report, the user will move the desired fields from the Available Column to the Selected Column. The resulting data for the report will display the Sum of numeric fields and the Count of non-numeric fields in the order that the fields appear in the Selected Column.

Figure 38: Report Designer - Summary Tab



To Summarize Fields:

a. Identify field(s) from the **Available** list that you would like to use to summarize the data on your report. Select the field(s) by clicking on the checkbox next to the field name. Once selected, a checkmark will appear in the box.

b. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

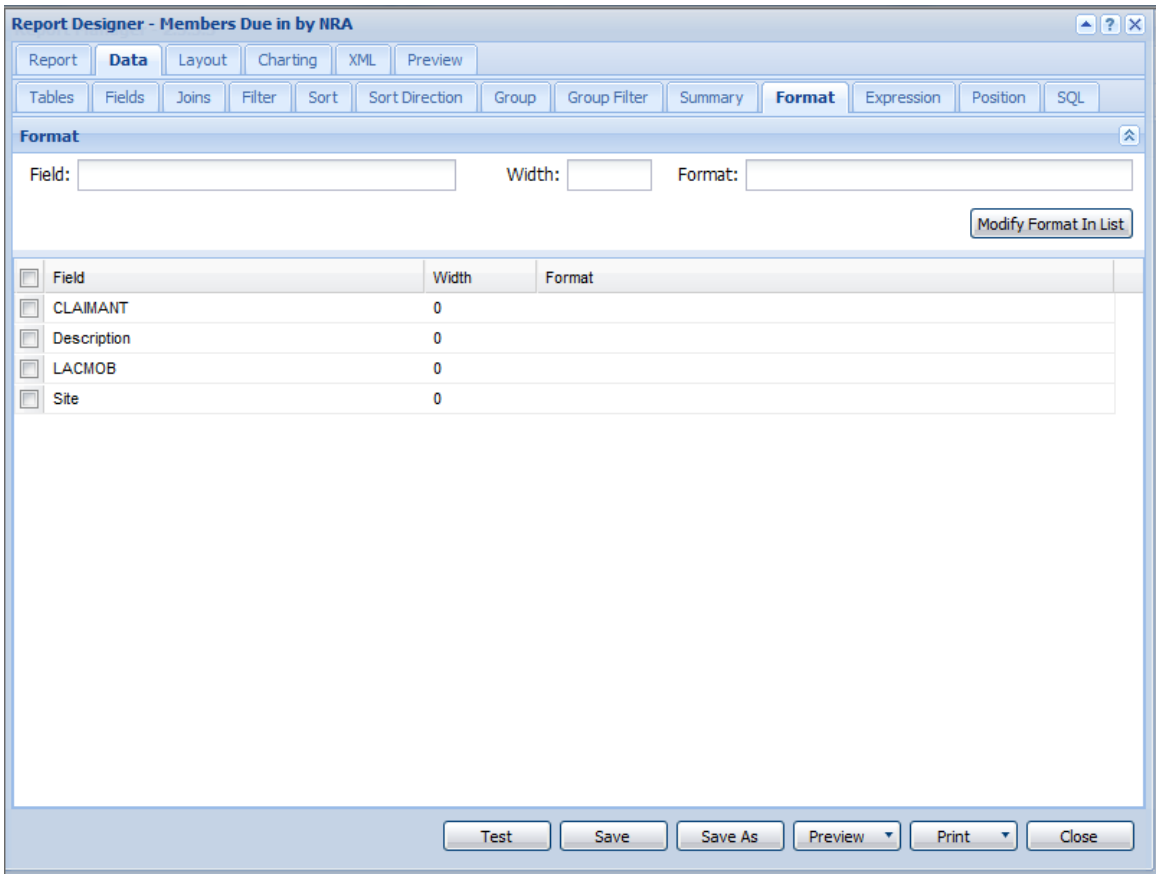
c. The report will be summarized using the fields in the order that they appear in the Selected list. Change the order of this list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

d. (Optional) Click the **Save** button to save your work on the report.

4.4.10 The Format Tab (Report Designer)

The Format Tab is an optional feature that allows users to specify the width and format of the fields or columns that will appear in the report. Users can choose to specify the width, the format or both the width and format of the columns.

Figure 39: Report Designer - Format Tab



To Modify a Field's Format:

a. Select a **Field** from the table by clicking the row within the table. Information on the selected field will display on the top portion of the screen.

b. Type in the desired column **Width** (in number of characters). **Note:** The entered value must be less than the default field width; entering a value greater than or equal to the default field width will not change your report.

c. Type the **Format** for the field. **Note:** This field must conform to what the String.Format() method expects in the .NET framework. Please refer to Appendix A.

d. Click the **Modify Format to List** button. The table will reflect the updated information.

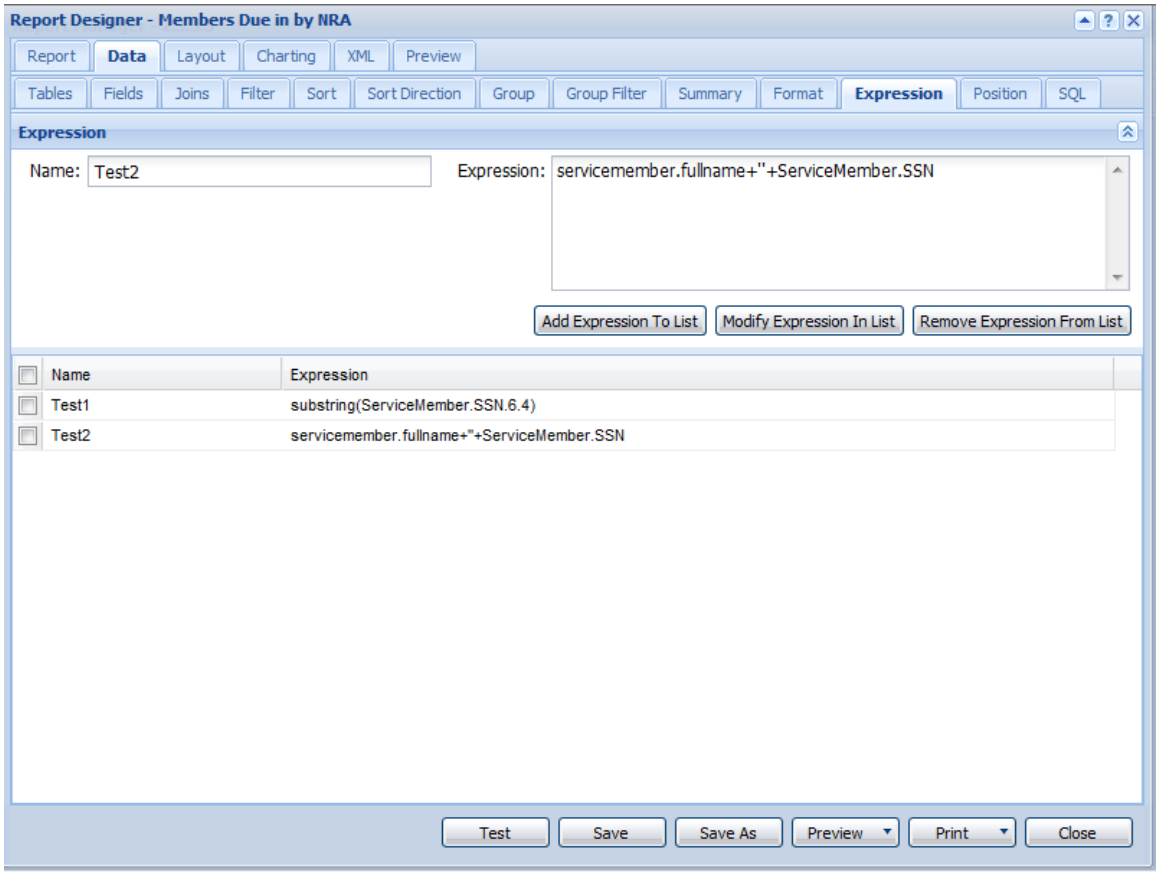
e. Repeat steps a-d as necessary. **Note:** If the Width value remains zero, the report will display all data for the specified field.

f. (Optional) Click the **Save** button to save your work on the report.

4.4.11 The Expression Tab (Report Designer)

The Expression Tab allows users to create an expression that will be available in the report data set as a calculated field. The expression must be a valid SQL expression to appear in the report data set.

Figure 40: Report Designer - Expression Tab



To Add an Expression:

a. Type in a **Name** for the expression. **Note:** Spaces and special characters should not be used in this field.

b. Type in the desired **Expression**.

c. Click the **Add Expression to List** button.

d. (Optional) Click the **Save** button to save your work on the report.

To Modify an Expression:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Expression in List** button. Your changes will be reflected in the grid.

To Remove an Expression:

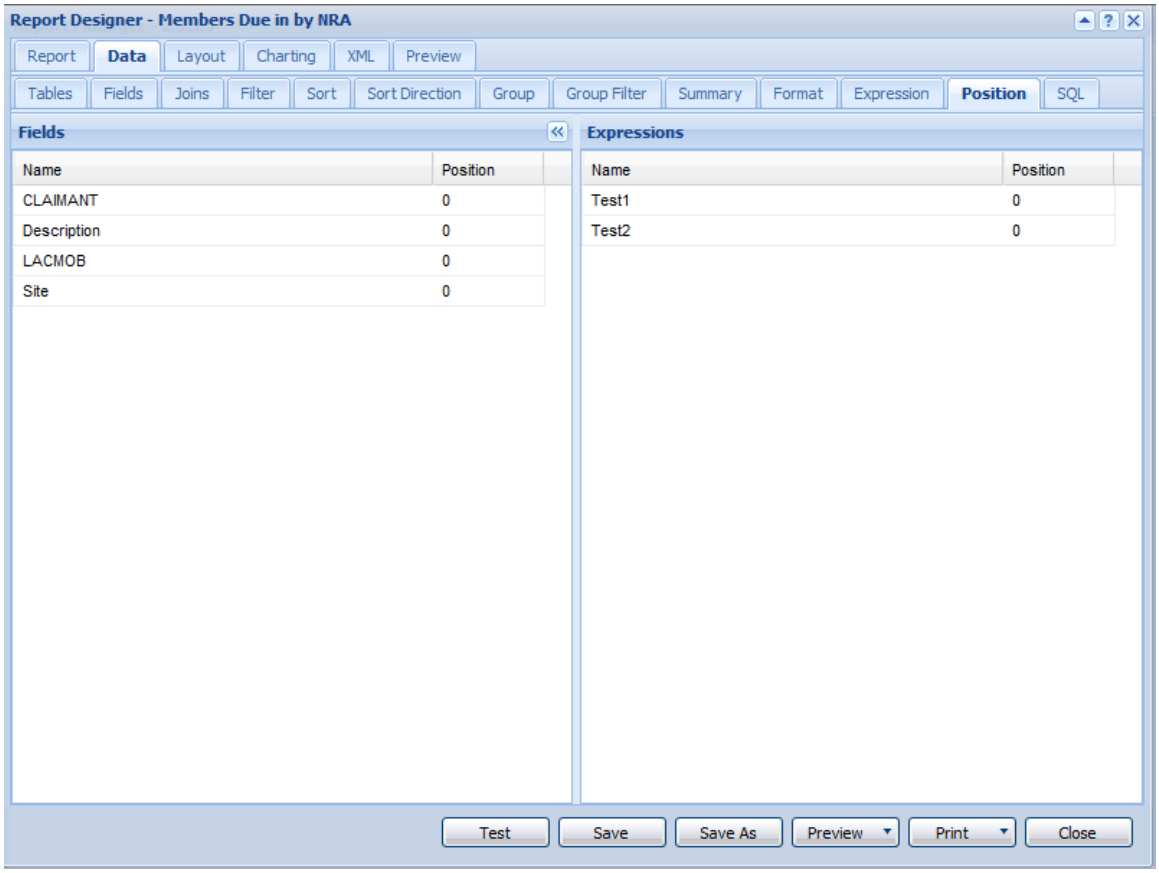
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Expression from List** button. The selected expression will be removed from the grid.

4.4.12 The Position Tab (Report Designer)

The Position Tab allows users to specify the order that the fields and/or expressions will appear in the report.

Figure 41: Report Designer - Position Tab



To Position Fields and/or Expressions in a Report:

a. Click in the row of the first field or expression that you would like to appear in your report. The Position value will change from "0" to "1", indicating that this field will appear first in your report.

b. Click the row of the second field or expression that you would like to appear in your report. The Position value will change from "0" to "2".

c. Repeat as necessary or until all Position values are changed from "0". **Note:** If a Position value remains as "0", it will appear before all other values. If multiple Position values remain as "0", they will appear before all other values in the order they are listed in the table(s).

d. (Optional) Click the **Save** button to save your work on the report.

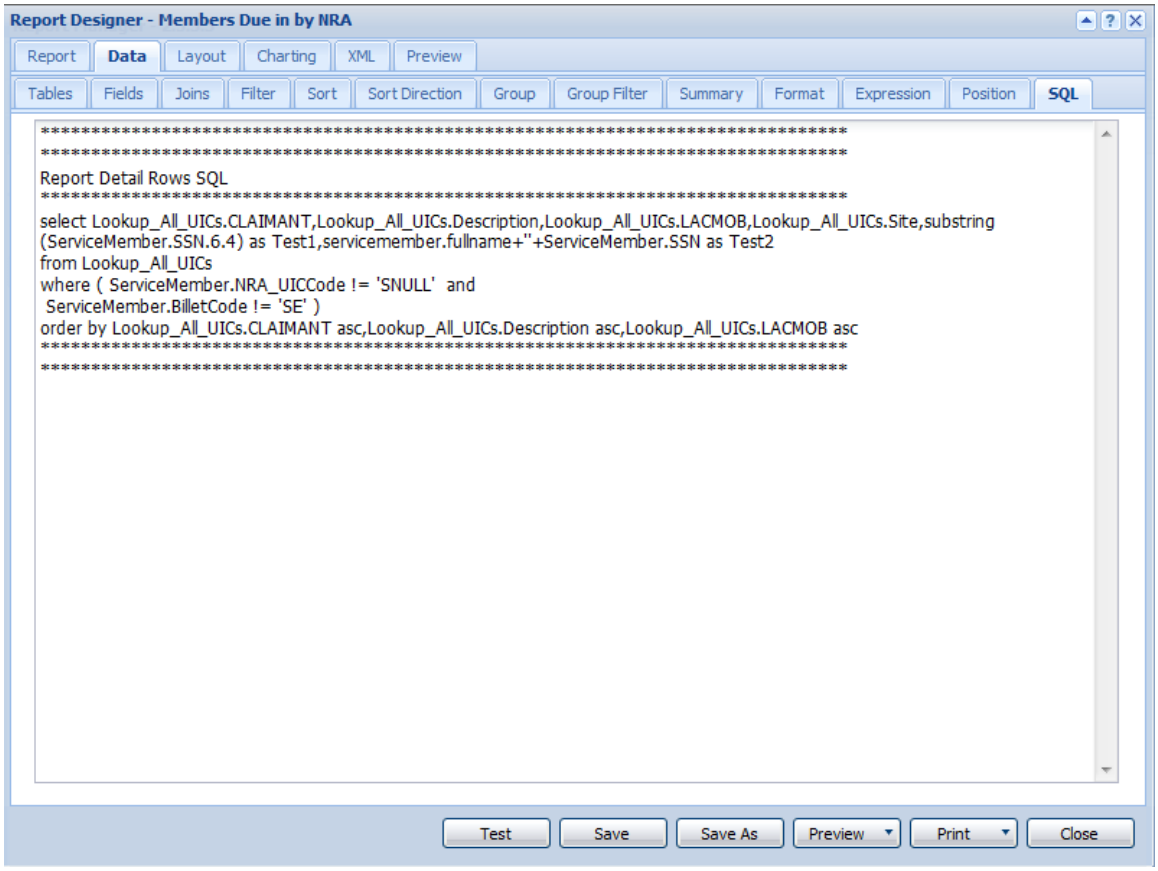
Note:
To remove a Position value from a row or to return the value to "0", click in the row for a second time.

For best results, Positions should be removed in reverse order. For example, if your list is numbered 1-10 and you need to renumber item number 6, start with changing the "10" value to "0" and proceed backwards until you reach item number "6".

4.4.13 The SQL Tab (Report Designer)

The SQL Tab allows users to review the SQL statement created by the Report Designer. This tab displays read-only information. Users can copy and paste the SQL statements out of the Report Designer.

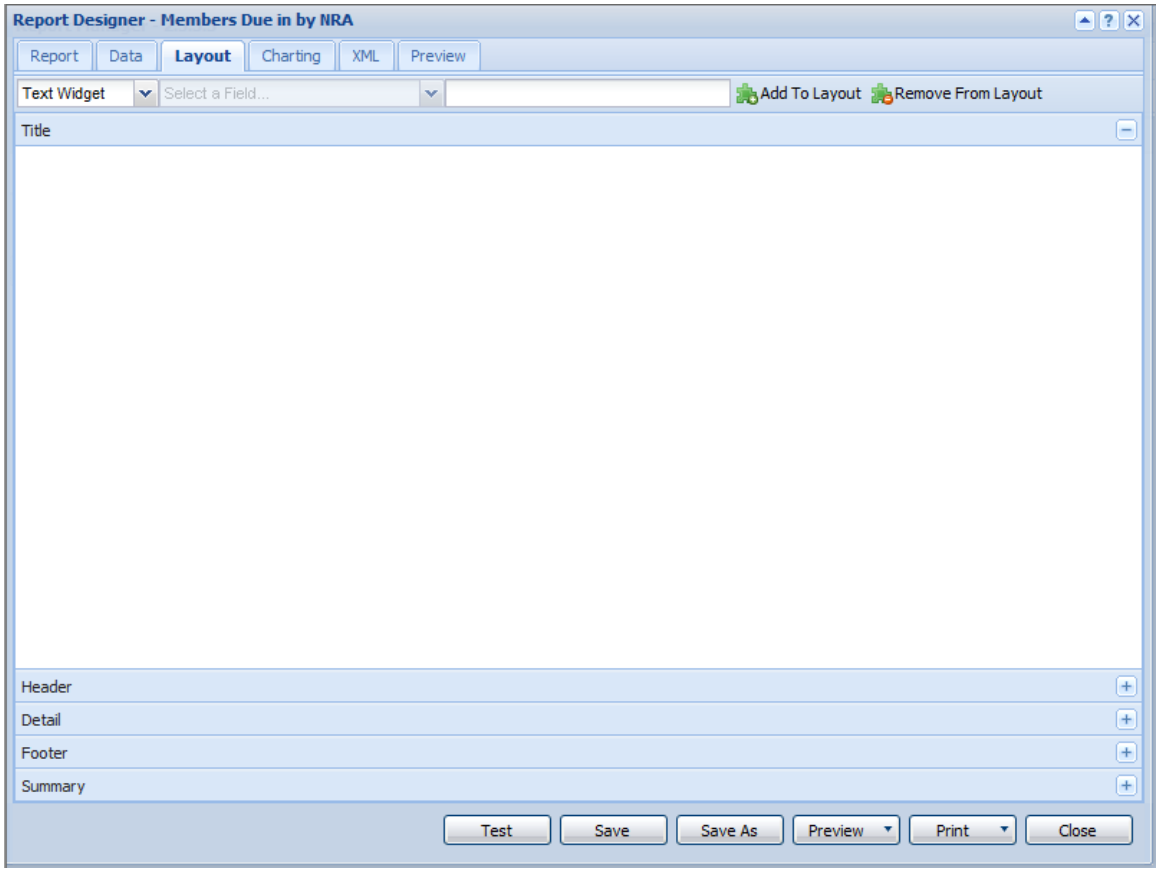
Figure 42: Report Designer - SQL Tab



4.5 THE LAYOUT TAB (REPORT DESIGNER)

The Layout tab is used to design the layout or output format of the report. By arranging fields and/or adding text, users can change the title, header, detail, footer, and summary of the report. This tab is optional; if the user does not specify a report layout, the report data will be output in a standard list format.

Figure 43: Report Designer - Layout Tab



To Modify the Layout of a Report:

a. Select the section that you would like to modify by clicking the associated icon until the band expands and the associated icon changes to a .

b. To add text to the selected section, select the **Text Widget**. The field picklist will become disabled and the edit control will become available. Type the text into the edit control field that becomes available. Click the **Add to Layout** button. The text will become available on the canvas section of the selected band.

c. To add a field value to the selected section, select the **Field Widget**. Select the desired field from the available drop-down list. Click the **Add to Layout** button. The field will become available on the canvas section of the selected band.

Note:

The **Field Widget** is not available on the **Title** band.
The **Detail** ban will only display fields previously selected on the **Fields** tab.
The **Summary** band will only display fields previously selected on the **Summary** tab.

The **Header** and **Footer** band will only display fields previously selected on the **Group** tab.

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d. To resize or rearrange the text or fields displayed on the canvas, use your mouse to drag and drop the text into a new location or resize the text.

e. To remove text or fields displayed on the canvas, double click on the text so that it changes color. Once highlighted, click the **Remove From Layout** button.

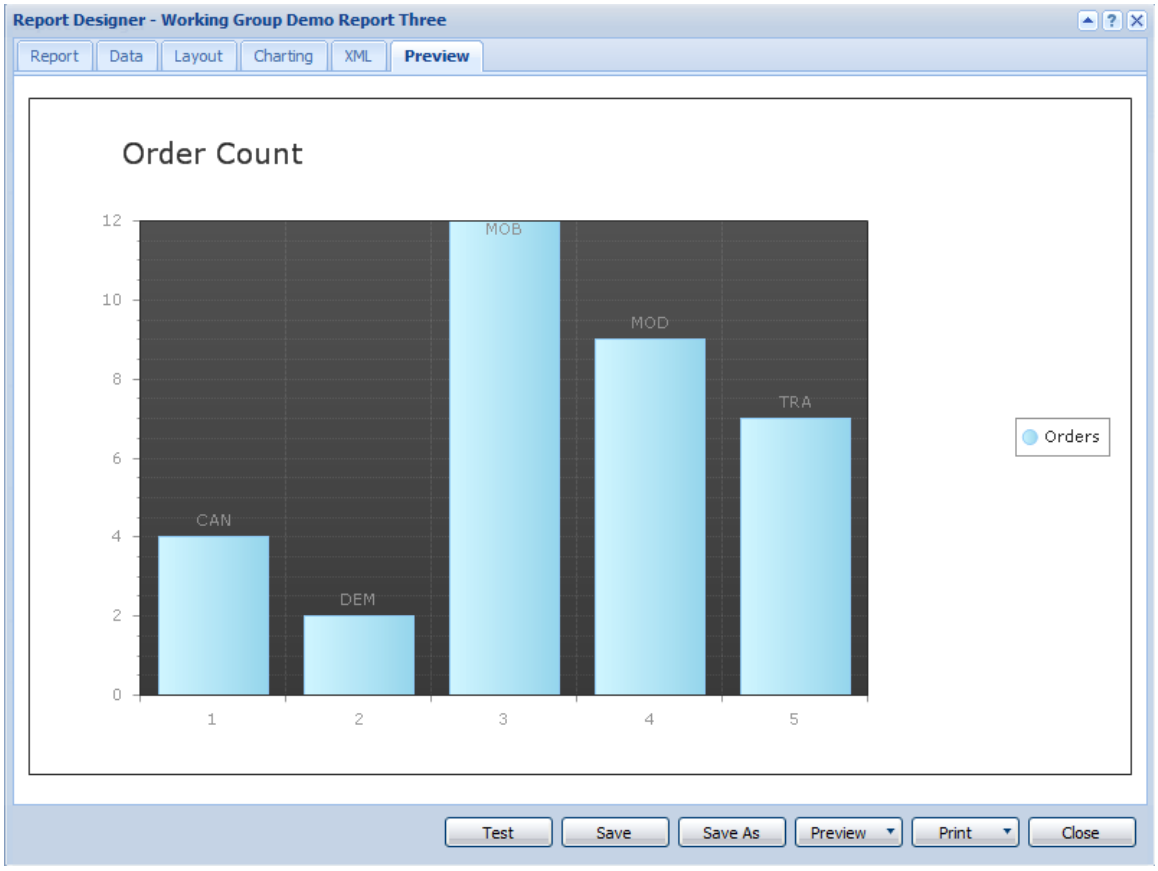
f. (Optional) Click the **Save** button to save your work on the report.

4.6 THE CHARTING TAB (REPORT DESIGNER)

The Charting tab allows users to chart or graph the data from their report. The Charting tab itself contains two tabs for defining the chart style, data series, fields and labels used in the charts.

Users will first use the **Charts** tab to name their charts and decide on a style. Next, they will use the **Chart Series** tab to select the fields, field labels and series labels for the charts. If "Chart/Graph (HTML)" was selected as the default output on the Reports tab, users can preview their charts using the **Preview** tab. Otherwise, to view their charts, users can select "Chart/Graph (HTML)" from either the **Preview** button or **Print** buttons.

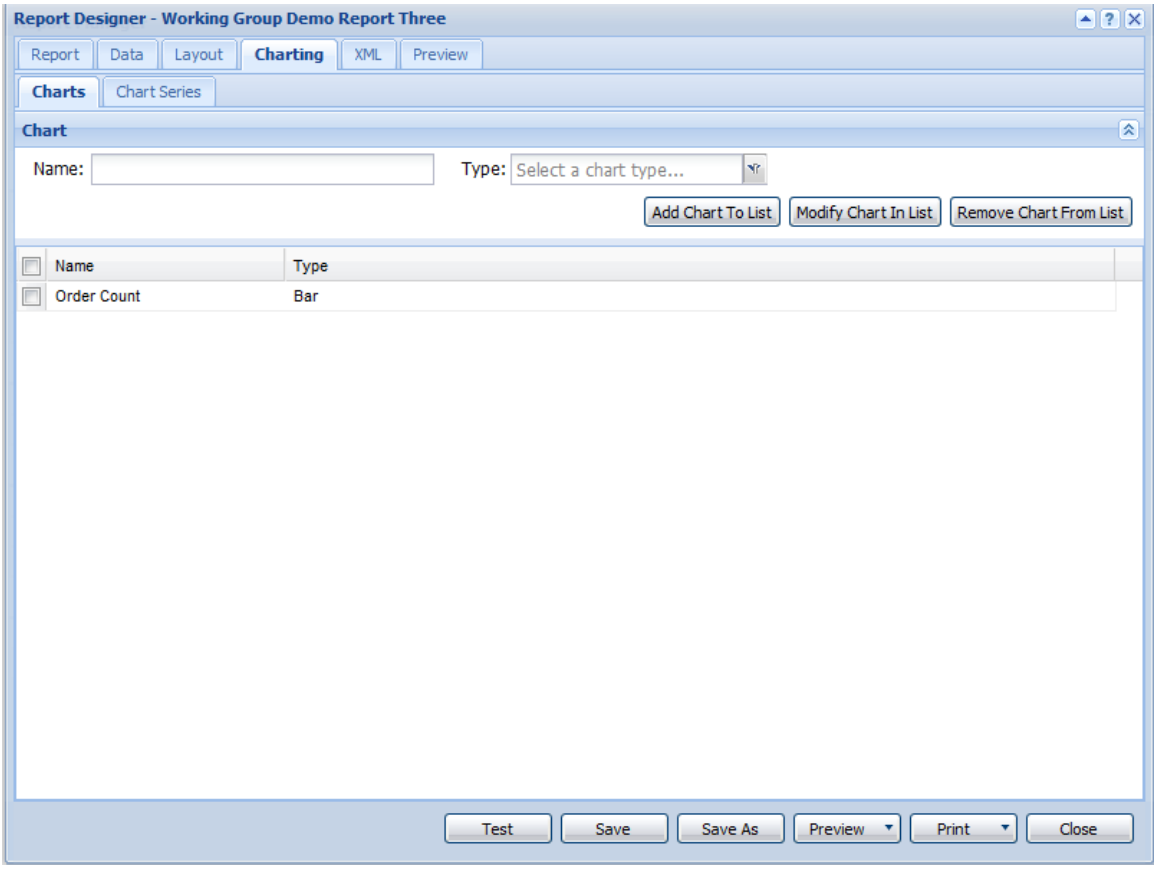
Figure 44: Report Designer with Chart Displayed



4.6.1 The Charts Tab (Report Designer)

The Charts Tab allows users to provide a Name for the charts they would like to select. and select the chart style. The following image displays the Charts Tab.

Figure 45: Report Designer - Charts Tab



To Add a Chart:

a. Type in a **Name** for the Chart.

b. Select the desired chart **Type** from the drop-down.

c. Click the **Add Chart To List** button.

d. (Optional) Click the **Save** button to save your work on the report.

To Modify a Chart:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Chart In List** button. Your changes will be reflected in the grid.

To Remove a Chart:

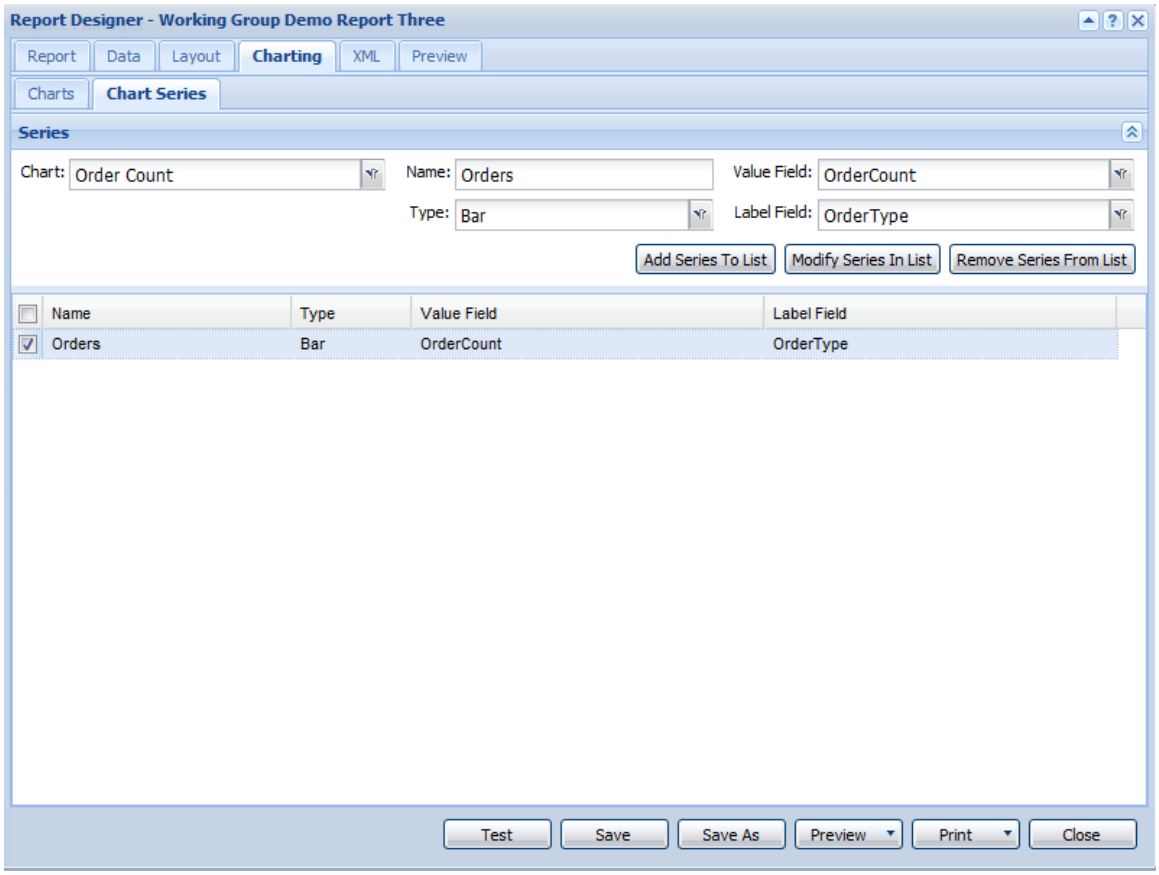
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Chart From List** button. The selected chart will be removed from the grid.

4.6.2 The Chart Series Tab (Report Designer)

The Chart Series Tab allows users to create a Series Name for the charts and select a value field and a label field. The following image displays the Chart Series Tab.

Figure 46: Report Designer – Chart Series Tab



To Add a Series:

a. Select the Chart you would like to modify from the drop-down.

b. Type in a data series **Name** for the chart. **Note:** This name will display in the legend to identify the charted data.

c. Select the type of information you would like to graph by selecting a **Value Field** from the drop-down.

d. (Optional) To label the graph, select a **Label Field** from the drop-down.

e. If necessary, modify the chart **Type**.

f. Click the **Add Series To List** button.

g. (Optional) Click the **Save** button to save your work on the report.

To Modify a Series:

a. Select the row in the grid that you would like to modify by either single clicking in that row or placing a check in the checkbox for the corresponding row.

b. The data for the selected row will appear in the fields above the grid. Make necessary changes to fields.

c. Click the **Modify Series In List** button. Your changes will be reflected in the grid.

To Remove an Expression:

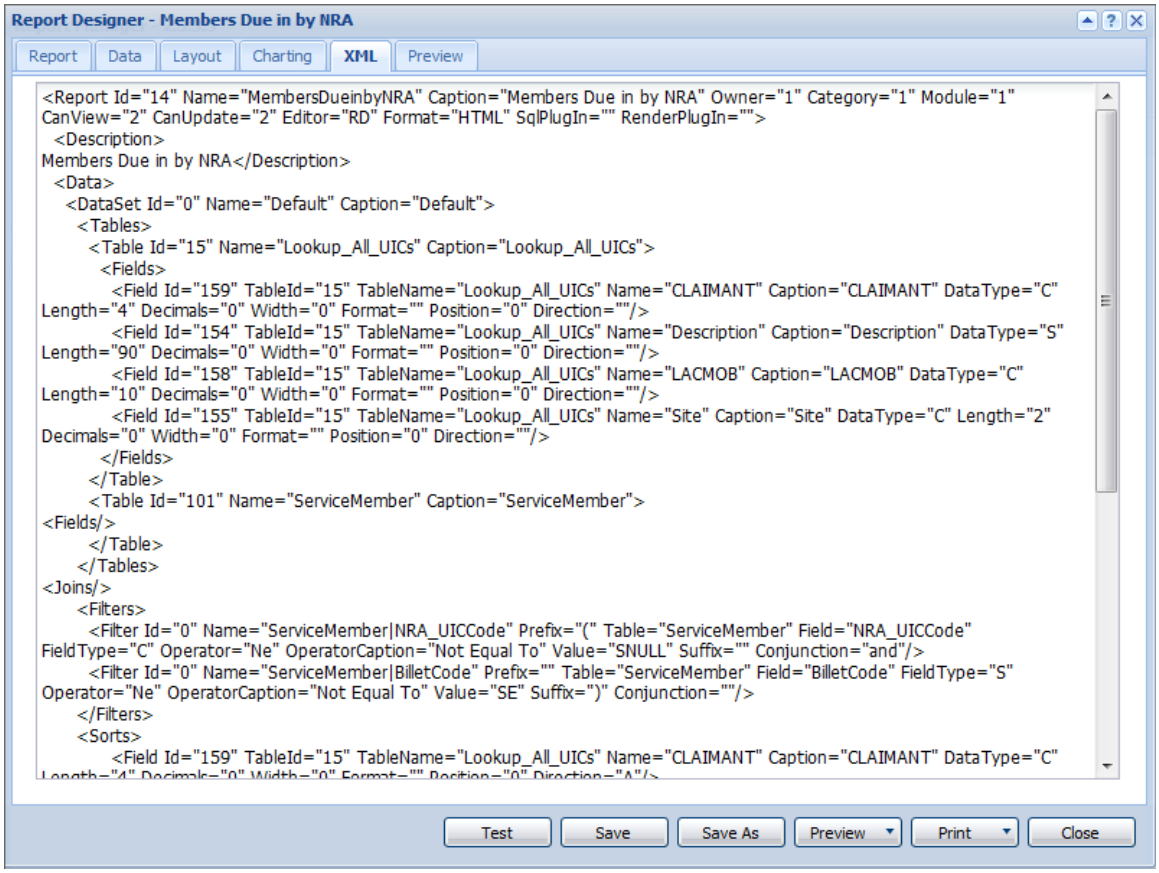
a. Select the row(s) in the grid that you would like to remove by either single clicking in that row or placing a check in the checkbox(s) for the corresponding row(s).

b. Click the **Remove Series From List** button. The selected series will be removed from the grid.

4.7 THE XML TAB (REPORT DESIGNER)

The XML Tab allows users to review the XML statement created by the Report Designer. This tab displays read-only information. Users can copy and paste the XML statements out of the Report Designer.

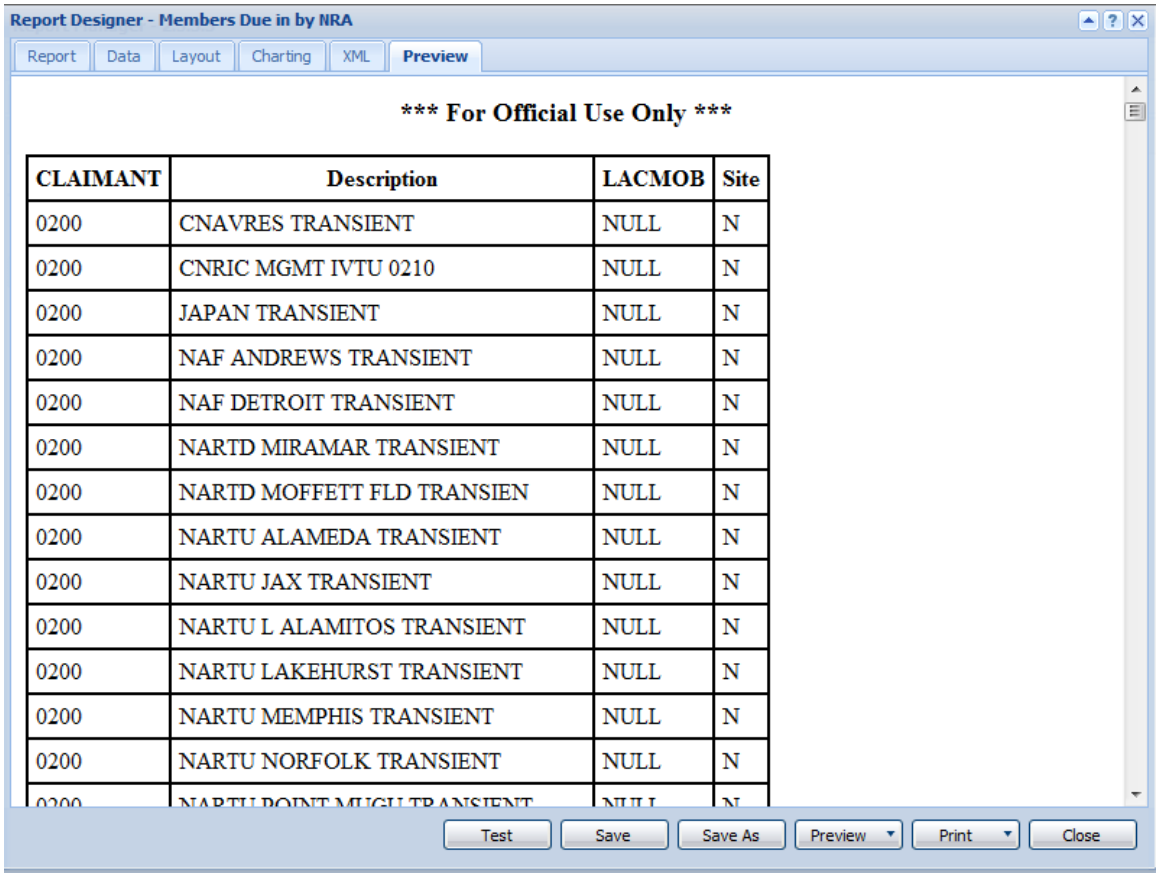
Figure 47: Report Designer - XML Tab



4.8 THE PREVIEW TAB (REPORT DESIGNER)

The Preview tab is used to preview the data and layout format of the designed report. When reports are previewed, only the first 500 records appear on the report. When selected, the Preview tab displays the report in the default output.

Figure 48: Report Designer - Preview Tab



CLAIMANT	Description	LACMOB	Site
0200	CNAVRES TRANSIENT	NULL	N
0200	CNRIC MGMT IVTU 0210	NULL	N
0200	JAPAN TRANSIENT	NULL	N
0200	NAF ANDREWS TRANSIENT	NULL	N
0200	NAF DETROIT TRANSIENT	NULL	N
0200	NARTD MIRAMAR TRANSIENT	NULL	N
0200	NARTD MOFFETT FLD TRANSIEN	NULL	N
0200	NARTU ALAMEDA TRANSIENT	NULL	N
0200	NARTU JAX TRANSIENT	NULL	N
0200	NARTU L ALAMITOS TRANSIENT	NULL	N
0200	NARTU LAKEHURST TRANSIENT	NULL	N
0200	NARTU MEMPHIS TRANSIENT	NULL	N
0200	NARTU NORFOLK TRANSIENT	NULL	N
0200	NARTU POINT MUGU TRANSIENT	NULL	N

When viewing reports through the Preview tab, clicking the **Close** button will close the Report Designer and will not save any changes.

Note:
To preview the report in a different output, click arrow next to the **Preview** button at the bottom of the window. Select the desired output from the displayed list. A secondary window will display a preview of the report. Click the **Close** button on the **Report Preview Window** to close the secondary screen and return to the Report Designer.

SECTION 5: The DRT Ad-Hoc

5.1 THE DRT AD-HOC OVERVIEW

The DRT Ad-Hoc allows nontechnical users to build Ad-Hoc reports. The DRT Ad-Hoc, a subset of the DRT Report Builder, allows users to create and print custom reports that pertain to the information in the selected module.

Before accessing the DRT Ad-Hoc, users can specify search criteria on any of the following pages:

- PM Member Processing Page
- AMM Member Browse Page
- OWM Contact Browse Page
- OWM Reports Page
- SM Requirements Page
- SM Sourcing Browse Page

The DRT Ad-Hoc will automatically create filters based on the selected criteria.

5.2 ACCESSING THE DRT AD-HOC

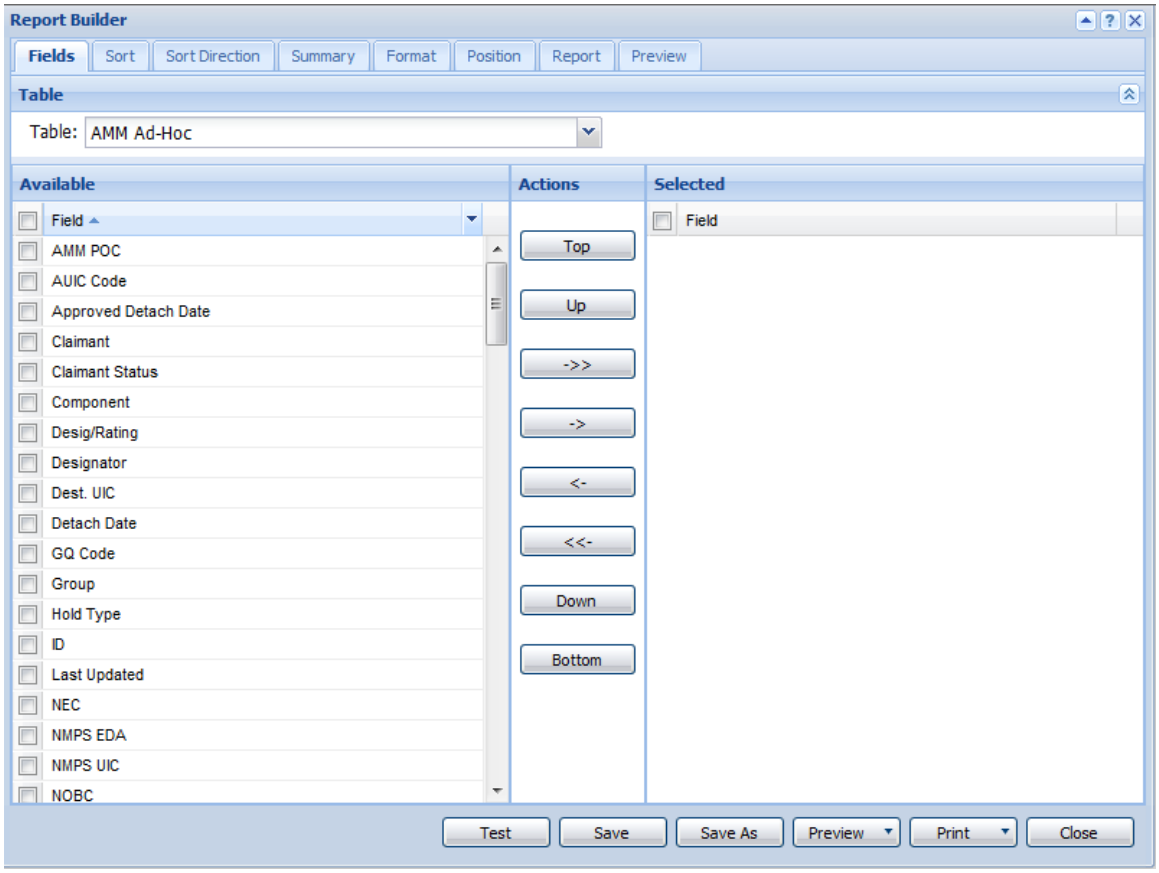
The DRT Ad-Hoc can be accessed through any page within NMCMPS that also offers access to the NMCMPS Ad-Hoc tool. The following table lists each module and the corresponding page that presents access to the DRT.

Table IV: NMCMPS Search Pages that Provide Access to DRT

Module	Search Page
Processing	Member Processing
Augmentation Management	Member Browse
Order Writing	Contact Browse Reports
Sourcing	Requirements Sourcing Browse

Once you have navigated to any of these pages, access the DRT Ad-Hoc by clicking the **DRT** button located above the WebGrid. When opened, the **Report Builder** page will display the Fields tab. The **Table** field will be populated with the Ad-Hoc table for that specific page or module.

Figure 49: DRT Ad-Hoc Page (accessed from AMM)



The DRT Ad-Hoc will create conditions used for filtering the data based on the criteria you entered into the fields on the module Search pages. Although not immediately visible from the DRT Ad-Hoc, these conditions can be viewed from the Filter tab which is available when DRT is accessed directly from the NMCMPS Site Map.

Note:
The Report Builder's Filter tab can also be viewed within the DRT Ad-Hoc by holding down the "Ctrl-Shift-F" keys.

5.3 CREATING AN AD-HOC REPORT

After navigating to one of the NMCMPS search pages listed above, enter search criteria on the top of the page as if you were going to conduct a standard WebGrid search.

By selecting the **DRT** button, the DRT Ad-Hoc displays eight of the nine Report Builder tabs. Users should start with the Fields tab and work across the screen from left to right, ending with the Preview tab.

When you initially select a tab, you will see the tab contents in view mode. Once you make changes or edit information, you will need to **Save** the changes before closing out of the Report Builder.

To Create an Ad-Hoc Report:

a. Access a NMCMPS search page that offers DRT Ad-Hoc access. (Refer to *Accessing the DRT Ad-Hoc* for a list of pages within NMCMPS that offer DRT Ad-Hoc access.)

b. Specify the search criteria for your report in the top portion of the screen and click the **DRT** button.

c. Use the Fields tab to specify the fields to be used within the report.

d. Engage the optional Sort, Summary, Format and Position tabs as desired.

e. If the report will be needed for future use, navigate to the Report tab and enter the report identifiers so that the report can be saved.

f. Click the **Save, Preview** or **Print** button as appropriate.

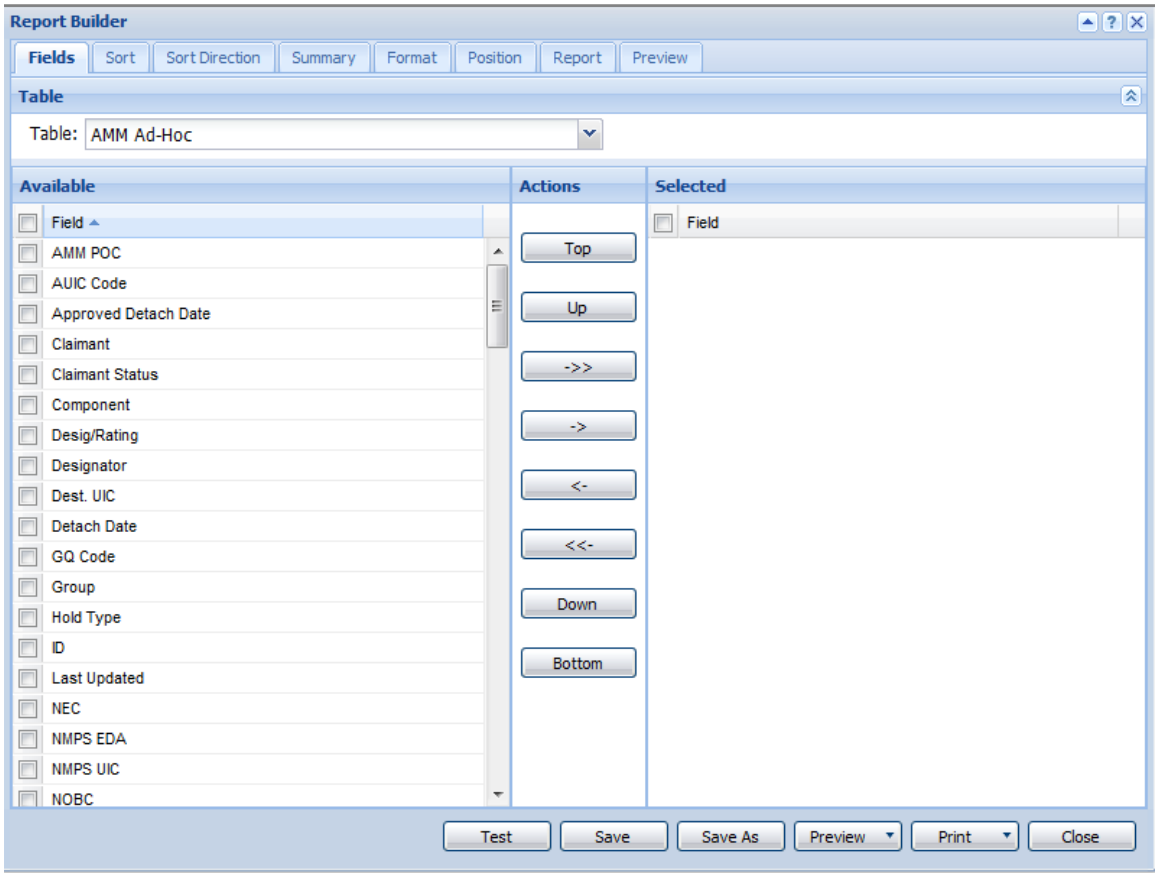
Note:
A report will not save unless all required information is entered into the Report tab.

Saved reports are accessible via the DRT Report Manager, which is accessed via the DRT link on the NMCMPS Site Map. To access a saved report from either the Report Builder or Report Designer, navigate to the Report tab and select the **Report** from the drop-down list.

5.4 THE FIELDS TAB (DRT AD-HOC)

The Fields Tab allows users to specify the fields that will be available for inclusion in the report output. The Table field will be populated with the tables available from within the module you accessed the DRT Ad-Hoc. The following image displays the Fields Tab.

Figure 50: DRT Ad-Hoc - Fields Tab



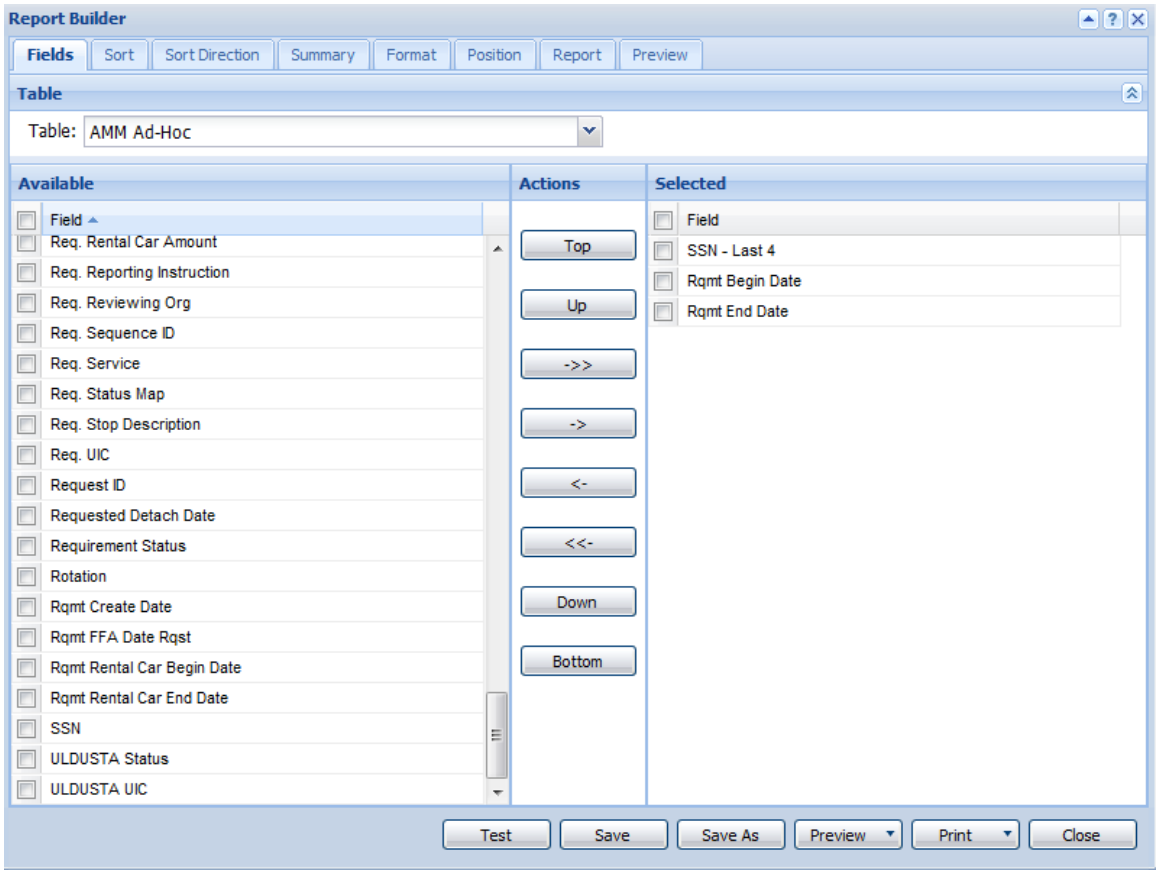
To Select Fields:

a. The **Table** field will populate with the Ad-Hoc table from the module in which you opened the DRT Ad-Hoc.

b. From the **Available** list, select the fields(s) you want to include in your report by clicking on the checkbox next to the table name. Once selected, a checkmark will appear in the box.

c. Click the right arrow (->) button to move the field (or fields) from the **Available** list to the **Selected** list. Repeat this step as necessary until all desired fields appear on the **Selected** list.

Figure 51: DRT Ad-Hoc - Selected Fields



d. When you finish selecting the fields, you can change the order of the list by clicking on a field name and clicking the **Up** or **Down** buttons. After selecting a field name, you can move it to the top or bottom of the list by clicking the **Top** or **Bottom** buttons.

e. (Optional) Click the **Save** button to save your work on the report.

5.5 THE SORT TAB (DRT AD-HOC)

The **Sort** Tab in the DRT Ad-Hoc is the same as the **Sort** tab in Report Builder. Please refer to *The Sort Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.6 THE SORT DIRECTION TAB (DRT AD-HOC)

The **Sort Direction** Tab in the DRT Ad-Hoc is the same as the **Sort Direction** tab in Report Builder. Please refer to *The Sort Direction Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.7 THE SUMMARY TAB (DRT AD-HOC)

The **Summary** Tab in the DRT Ad-Hoc is the same as the **Summary** tab in Report Builder. Please refer to *The Summary Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.8 THE FORMAT TAB (DRT AD-HOC)

The **Format** Tab in the DRT Ad-Hoc is the same as the **Format** tab in Report Builder. Please refer to *The Format Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.9 THE POSITION TAB (DRT AD-HOC)

The **Position** Tab in the DRT Ad-Hoc is the same as the **Position** tab in Report Builder. Please refer to *The Position Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.10 THE REPORT TAB (DRT AD-HOC)

The **Report** Tab in the DRT Ad-Hoc is the same as the **Report** tab in Report Builder. Please refer to *The Report Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

5.11 THE PREVIEW TAB (REPORT BUILDER)

The **Preview** Tab in the DRT Ad-Hoc is the same as the **Preview** tab in Report Builder. Please refer to *The Preview Tab (Report Builder)* section for more information on the features and procedures associated with this tab.

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Appendix A: .NET Standards

Specifier	Name	Description
d	Short date pattern	Represents a custom DateTime format string defined by the current ShortDatePattern property.
D	Long date pattern	Represents a custom DateTime format string defined by the current LongDatePattern property.
f	Full date/time pattern (short time)	Represents a combination of the long date (D) and short time (t) patterns, separated by a space.
F	Full date/time pattern (long time)	Represents a custom DateTime format string defined by the current FullDateTimePattern property.
g	General date/time pattern (short time)	Represents a combination of the short date (d) and short time (t) patterns, separated by a space.
G	General date/time pattern (long time)	Represents a combination of the short date (d) and long time (T) patterns, separated by a space.
M or m	Month day pattern	Represents a custom DateTime format string defined by the current MonthDayPattern property.
o	Round-trip date/time pattern	Represents a custom DateTime format string using a pattern that preserves time zone information. The pattern is designed to round-trip DateTime formats, including the Kind property, in text. Then the formatted string can be parsed back using Parse or ParseExact with the correct Kind property value. Equivalent custom format string is "yyyy'-'MM'-'dd'T'HH':'mm':'ss.fffffffK".
R or r	RFC1123 pattern	Represents a custom DateTime format string defined by the current RFC1123Pattern property. The pattern is a defined standard and the property is read-only. Equivalent custom format string is "ddd, dd MMM yyyy HH':'mm':'ss 'GMT'". Does not convert DateTimes to UTC.
s	Sortable date/time pattern; ISO 8601	Represents a custom DateTime format string defined by the current SortableDateTimePattern property. This pattern is a defined standard and the property is read-only. Equivalent custom format string is "yyyy'-'MM'-'dd'T'HH':'mm':'ss".
t	Short time pattern	Represents a custom DateTime format string defined by the current ShortTimePattern property. For example, the custom format string for the invariant culture is "HH:mm".
T	Long time pattern	Represents a custom DateTime format string defined by the current LongTimePattern property. For example, the custom format string for the invariant culture is "HH:mm:ss".
u	Universal sortable date/time pattern	Represents a custom DateTime format string defined by the current UniversalSortableDateTimePattern property. Equivalent custom format string is "yyyy'-'MM'-'dd HH':'mm':'ss'Z'". Does not convert DateTimes to UTC.
U	Universal sortable date/time pattern	Represents a custom DateTime format string defined by the current FullDateTimePattern property. This pattern is the same as the full date/long time (F) pattern. However, formatting operates on the Coordinated Universal Time (UTC) that is equivalent to the DateTime object being formatted.
Y or y	Year month pattern	Represents a custom DateTime format string defined by the current YearMonthPattern property. For example, the custom format string for the invariant culture is "yyyy MMMM".
Any other single character	(Unknown specifier)	An unknown specifier throws a runtime format exception.

Specifier	Description
d	Represents the day of the month as a number from 1 through 31. A single-digit day is formatted without a leading zero.
dd	Represents the day of the month as a number from 01 through 31. A single-digit day is formatted with a leading zero.
ddd	Represents the abbreviated name of the day of the week as defined in the current System.Globalization.DateTimeFormatInfo.AbbreviatedDayNames property.
dddd	Represents the full name of the day of the week as defined in the current System.Globalization.DateTimeFormatInfo.DayNames property.
f	Represents the most significant digit of the seconds fraction. Note that if the "f" format specifier is used alone, without other format specifiers, it is interpreted as the "f" standard DateTime format specifier (full date/time pattern). When you use this format specifier with the ParseExact or TryParseExact method, the number of "f" format specifiers that you use indicates the number of most significant digits of the seconds fraction to parse.
ff...	Number of repeated specifiers represents most significant digits of the seconds fraction.
F	Represents the most significant digit of the seconds fraction. Nothing is displayed if the digit is zero. When you use this format specifier with the ParseExact or TryParseExact method, the number of "F" format specifiers that you use indicates the maximum number of most significant digits of the seconds fraction to parse.
FF...	Number of repeated specifiers represents most significant digits of the seconds fraction. Trailing zeros, or two zero digits, are not displayed.
g or gg	Represents the period or era (A.D. for example). This specifier is ignored if the date to be formatted does not have an associated period or era string.
h	Represents the hour as a number from 1 through 12, that is, the hour as represented by a 12-hour clock that counts the whole hours since midnight or noon. A single-digit hour is formatted without a leading zero.
hh	Represents the hour as a number from 01 through 12, that is, the hour as represented by a 12-hour clock that counts the whole hours since midnight or noon. A single-digit hour is formatted with a leading zero.
H	Represents the hour as a number from 0 through 23, that is, the hour as represented by a zero-based 24-hour clock that counts the hours since midnight. A single-digit hour is formatted without a leading zero.
HH	Represents the hour as a number from 00 through 23, that is, the hour as represented by a zero-based 24-hour clock that counts the hours since midnight. A single-digit hour is formatted with a leading zero.
K	Represents different values of the DateTime.Kind property, that is, Local, Utc, or Unspecified. This specifier round-trips the kind value in text and preserves the time zone. For the Local kind value, this specifier is equivalent to the "zzz" specifier and displays the local offset, for example, "-07:00". For the Utc kind value, the specifier displays a "Z" character to represent a UTC date. For the Unspecified kind value, the specifier is equivalent to "" (nothing).
m	Represents the minute as a number from 0 through 59. The minute represents whole minutes passed since the last hour. A single-digit minute is formatted without a leading zero.
mm	Represents the minute as a number from 00 through 59. The minute represents whole minutes passed since the last hour. A single-digit minute is formatted with a leading zero.
M	Represents the month as a number from 1 through 12. A single-digit month is formatted without a leading zero.
MM	Represents the month as a number from 01 through 12. A single-digit month is formatted with a leading zero.
MMM	Represents the abbreviated name of the month as defined in the current System.Globalization.DateTimeFormatInfo.AbbreviatedMonthNames property.
MMMM	Represents the full name of the month as defined in the current System.Globalization.DateTimeFormatInfo.MonthNames property.

s	Represents the seconds as a number from 0 through 59. The second represents whole seconds passed since the last minute. A single-digit second is formatted without a leading zero.
ss	Represents the seconds as a number from 00 through 59. The second represents whole seconds passed since the last minute. A single-digit second is formatted with a leading zero.
t	Represents the first character of the A.M./P.M. designator defined in the current System.Globalization.DateTimeFormatInfo.AMDesignator or System.Globalization.DateTimeFormatInfo.PMDesignator property.
tt	Represents the A.M./P.M. designator as defined in the current System.Globalization.DateTimeFormatInfo.AMDesignator or System.Globalization.DateTimeFormatInfo.PMDesignator property.
y	Represents the year as at most a two-digit number. If the year has more than two digits, only the two low-order digits appear in the result. If the year has fewer than two digits, the number is formatted without a leading zero.
yy	Represents the year as a two-digit number. If the year has more than two digits, only the two low-order digits appear in the result. If the year has fewer than two digits, the number is padded with leading zeroes to achieve two digits.
yyy	Represents the year as a three-digit number. If the year has more than three digits, only the three low-order digits appear in the result. If the year has fewer than three digits, the number is padded with leading zeroes to achieve three digits. Note that for the Thai Buddhist calendar, which can have five-digit years, this format specifier displays all five digits.
yyyy	Represents the year as a four-digit number. If the year has more than four digits, only the four low-order digits appear in the result. If the year has fewer than four digits, the number is padded with leading zeroes to achieve four digits. Note that for the Thai Buddhist calendar, which can have five-digit years, this format specifier renders all five digits.
yyyyy	Represents the year as a five-digit number. If the year has more than five digits, only the five low-order digits appear in the result. If the year has fewer than five digits, the number is padded with leading zeroes to achieve five digits. If there are additional "y" specifiers, the number is padded with as many leading zeroes as necessary to achieve the number of "y" specifiers.
z	Represents the signed time zone offset of your system from Greenwich Mean Time (GMT) measured in hours. For example, the offset for a computer in the Pacific Standard Time zone is "-8". The offset is always displayed with a leading sign. A plus sign (+) indicates hours ahead of GMT and a minus sign (-) indicates hours behind GMT. The offset ranges from –12 through +13. A single-digit offset is formatted without a leading zero. The offset is affected by daylight savings time.
zz	Represents the signed time zone offset of your system from Greenwich Mean Time (GMT) measured in hours. For example, the offset for a computer in the Pacific Standard Time zone is "-08". The offset is always displayed with a leading sign. A plus sign (+) indicates hours ahead of GMT and a minus sign (-) indicates hours behind GMT. The offset ranges from –12 through +13. A single-digit offset is formatted with a leading zero. The offset is affected by daylight savings time.
zzz	Represents the signed time zone offset of your system from Greenwich Mean Time (GMT) measured in hours and minutes. For example, the offset for a computer in the Pacific Standard Time zone is "-08:00". The offset is always displayed with a leading sign. A plus sign (+) indicates hours ahead of GMT and a minus sign (-) indicates hours behind GMT. The offset ranges from –12 through +13. A single-digit offset is formatted with a leading zero. The offset is affected by daylight savings time.
:	The time separator defined in the current System.Globalization.DateTimeFormatInfo.TimeSeparator property that is used to differentiate hours, minutes, and seconds.
/	The date separator defined in the current System.Globalization.DateTimeFormatInfo.DateSeparator property that is used to differentiate years, months, and days.
"	Quoted string (quotation mark). Displays the literal value of any string between two quotation marks ("). Precede each quotation mark with an escape character (\).
'	Quoted string (apostrophe). Displays the literal value of any string between two apostrophe (') characters.
%c	Represents the result associated with a custom format specifier "c", when the custom DateTime format string consists solely of that custom format specifier. That is, to use the "d", "f", "F", "h", "m", "s", "t", "y", "z", "H", or "M" custom format specifier by itself, specify "%d", "%f", "%F", "%h", "%m", "%s", "%t", "%y", "%z", "%H", or "%M".
\c	The escape character. Displays the character "c" as a literal when that character is preceded by the escape character (\). To insert the backslash character itself in the result string, use two escape characters ("\\").
Any other char.	Any other character is copied to the result string, and does not affect formatting.

Specifier	Name	Description
C or c	Currency	The number is converted to a string that represents a currency amount. The conversion is controlled by the currency format information of the current NumberFormatInfo object. Precision specifier (eg. "{0:C5}" allowed.
D or d	Decimal	This format is supported only for integral types. The number is converted to a string of decimal digits (0-9), prefixed by a minus sign if the number is negative. Precision specifier (eg. "{0:d3}" allowed.
E or e	Scientific (exponential)	The number is converted to a string of the form "-d.ddd...E+ddd" or "-d.ddd...e+ddd", where each 'd' indicates a digit (0-9). The string starts with a minus sign if the number is negative. One digit always precedes the decimal point. Precision specifier (eg. "{0:E5}" allowed. The case of the format specifier indicates whether to prefix the exponent with an 'E' or an 'e'. The exponent always consists of a plus or minus sign and a minimum of three digits. The exponent is padded with zeros to meet this minimum, if required.
F or f	Fixed-point	The number is converted to a string of the form "-ddd.ddd..." where each 'd' indicates a digit (0-9). The string starts with a minus sign if the number is negative. Precision specifier (eg. "{0:f4}" allowed.
G or g	General	The number is converted to the most compact of either fixed-point or scientific notation, depending on the type of the number and whether a precision specifier is present.
N or n	Number	The number is converted to a string of the form "-d,ddd,ddd.ddd...", where '-' indicates a negative number symbol if required, 'd' indicates a digit (0-9), ',' indicates a thousand separator between number groups, and '.' indicates a decimal point symbol. The actual negative number pattern, number group size, thousand separator, and decimal separator are specified by the current NumberFormatInfo object. Precision specifier (eg. "{0:N5}" allowed.
P or p	Percent	The number is converted to a string that represents a percent as defined by the NumberFormatInfo.PercentNegativePattern property if the number is negative, or the NumberFormatInfo.PercentPositivePattern property if the number is positive. The converted number is multiplied by 100 in order to be presented as a percentage. Precision specifier (eg. "{0:p6}" allowed.
R or r	Round-trip	This format is supported only for the Single and Double types. The round-trip specifier guarantees that a numeric value converted to a string will be parsed back into the same numeric value. When a numeric value is formatted using this specifier, it is first tested using the general format, with 15 spaces of precision for a Double and 7 spaces of precision for a Single. If the value is successfully parsed back to the same numeric value, it is formatted using the general format specifier. However, if the value is not successfully parsed back to the same numeric value, then the value is formatted using 17 digits of precision for a Double and 9 digits of precision for a Single. Precision specifier NOT allowed.
X or x	Hexadecimal	This format is supported only for integral types. The number is converted to a string of hexadecimal digits. The case of the format specifier indicates whether to use uppercase or lowercase characters for the hexadecimal digits greater than 9. Precision specifier (eg. "{0:x4}" allowed. If required, the number is padded with zeros to its left to produce the number of digits given by the precision specifier.
Any other single char.	(Unknown specifier)	An unknown specifier throws a runtime format exception.

Examples (en-US)

Format String	Data type	Value	Output
C	Double	12345.6789	$12,345.68
D	Int32	12345	12345
D8	Int32	12345	00012345
E	Double	12345.6789	1.234568E+004
E10	Double	12345.6789	1.2345678900E+004
E	Double	12345.6789	1.2346e+004

Format String	Data type	Value	Output
F	Double	12345.6789	12345.68
F0	Double	12345.6789	123456
F6	Double	12345.6789	12345.678900
G	Double	12345.6789	12345.6789
G7	Double	12345.6789	12345.68
G	Double	0.0000023	2.3E-6

Format String	Data type	Value	Output
G2	Double	1234	1.2E3
G	Double	Math.PI	3.14159265358979
N	Double	12345.6789	12,345.68
N4	Double	123456789	123,456,789.0000
P	Double	.126	12.60 %
r	Double	Math.PI	3.141592653589793

Specifier	Name	Description
`0`	Zero placeholder	If the value being formatted has a digit in the position where the '0' appears in the format string, then that digit is copied to the result string. The position of the leftmost '0' before the decimal point and the rightmost '0' after the decimal point determines the range of digits that are always present in the result string. The "00" specifier causes the value to be rounded to the nearest digit preceding the decimal, where rounding away from zero is always used. For example, formatting 34.5 with "00" would result in the value 35.
`#`	Digit placeholder	If the value being formatted has a digit in the position where the '#' appears in the format string, then that digit is copied to the result string. Otherwise, nothing is stored in that position in the result string. This specifier never displays the '0' character if it is not a significant digit, even if '0' is the only digit in the string. It will display the '0' character if it is a significant digit in the number being displayed. The "##" format string causes the value to be rounded to the nearest digit preceding the decimal, where rounding away from zero is always used. For example, formatting 34.5 with "##" would result in the value 35.
`.`	Decimal point	The first '.' character in the format string determines the location of the decimal separator in the formatted value; any additional '.' characters are ignored. The actual character used as the decimal separator is determined by the NumberDecimalSeparator property of the NumberFormatInfo that controls formatting.
`,`	Thousand separator and number scaling	**Thousand Separator Specifier** If one or more ',' characters is specified between two digit placeholders (0 or #) that format the integral digits of a number, a group separator character is inserted between each number group in the integral part of the output. The NumberGroupSeparator and NumberGroupSizes properties of the current NumberFormatInfo object determine the character used as the number group separator and the size of each number group. **Number Scaling Specifier** If one or more ',' characters is specified immediately to the left of the explicit or implicit decimal point, the number to be formatted is divided by 1000 each time a number scaling specifier occurs. For example, if the string "0,," is used to format the number 100 million, the output is "100". You can use thousand separator and number scaling specifiers in the same format string.
`%`	Percentage placeholder	The presence of a '%' character in a format string causes a number to be multiplied by 100 before it is formatted. The appropriate symbol is inserted in the number itself at the location where the '%' appears in the format string. The percent character used is dependent on the current NumberFormatInfo class.

`E0`
`E+0`
`E-0`
`e0`
`e+0`
`e-0`
	Scientific notation	If any of the strings "E", "E+", "E-", "e", "e+", or "e-" are present in the format string and are followed immediately by at least one '0' character, then the number is formatted using scientific notation with an 'E' or 'e' inserted between the number and the exponent. The number of '0' characters following the scientific notation indicator determines the minimum number of digits to output for the exponent. The "E+" and "e+" formats indicate that a sign character (plus or minus) should always precede the exponent. The "E", "E-", "e", or "e-" formats indicate that a sign character should only precede negative exponents.

`\`	Escape character	In C# and C++, the backslash character causes the next character in the format string to be interpreted as an escape sequence. It is used with traditional formatting sequences like '\n' (new line). In some languages, the escape character itself must be preceded by an escape character when used as a literal. Otherwise, the compiler interprets the character as an escape sequence. Use the string "\\" to display '\'. Note that this escape character is not supported in Visual Basic; however, ControlChars provides the same functionality.
`'ABC'` `"ABC"`	Literal string	Characters enclosed in single or double quotes are copied to the result string, and do not affect formatting.
`;`	Section separator	The ';' character is used to separate sections for positive, negative, and zero numbers in the format string.
Other	All other characters	Any other character is copied to the result string, and does not affect formatting.

Section Separators and Conditional Formatting

Different formatting can be applied to a string based on whether the value is positive, negative, or zero. To produce this behavior, a custom format string can contain up to three sections separated by semicolons. These sections are described in the following table.

No. of Sections	Description
One section	The format string applies to all values.
Two sections	The first section applies to positive values and zeros, and the second section applies to negative values. If the number to be formatted is negative, but becomes zero after rounding according to the format in the second section, then the resulting zero is formatted according to the first section.
Three sections	The first section applies to positive values, the second section applies to negative values, and the third section applies to zeros. The second section can be left empty (by having nothing between the semicolons), in which case the first section applies to all nonzero values. If the number to be formatted is nonzero, but becomes zero after rounding according to the format in the first or second section, then the resulting zero is formatted according to the third section.

Section separators ignore any preexisting formatting associated with a number when the final value is formatted. For example, negative values are always displayed without a minus sign when section separators are used. If you want the final formatted value to have a minus sign, you should explicitly include the minus sign as part of the custom format specifier.

Custom Numeric Format Strings Output Examples

The following table illustrates the output created by applying some custom numeric format strings to specific data types and values. The output was generated using the ToString method and the English-United States (en-US) culture.

Format string	Data type	Value	Output
`#####`	Double	123	123
`00000`	Double	123	00123
`(###) ### - ####`	Double	1234567890	(123) 456 – 7890
`#.##`	Double	1.2	1.2
`0.00`	Double	1.2	1.20
`00.00`	Double	1.2	01.20
`#,#`	Double	1234567890	1,234,567,890
`#,,`	Double	1234567890	1235
`#,,,`	Double	1234567890	1
`#,##0,,`	Double	1234567890	1,235
`#0.##%`	Double	0.086	8.6%
`0.###E+0`	Double	86000	8.6E+4
`0.###E+000`	Double	86000	8.6E+004
`0.###E-000`	Double	86000	8.6E004
`[##-##-##]`	Double	123456	[12-34-56]
`##;(##)`	Double	1234	1234
`##;(##)`	Double	-1234	(1234)

Appendix B: DRT Tool Flow

The following diagram provides an overview of the Dynamic Reporting Tool.