IBM Db2 Web Query for i InfoAssist+ Part 2

Release 2.4.0

Contents

Chapter 1

Manipulating Data

The robust features of InfoAssist+ enable you to perform such tasks as joining data or blending data. In environments where additional data sources may be utilized or combined, you can use the functionality in this section to manipulate your data and data source.

In particular, you may have data sources that you want to join with another data source. Optionally, you may want to blend the data in another data source with your data source. Both of these features enable you to create larger, more customized data sets for reporting, and charting, or for creating visualizations.

In this section, we describe and discuss the concepts of data manipulation, including Defines, Computes, Joins, Blends, and filtering options.

In this chapter:

Missing Data in a Chart

When working with charts, you can use the options for missing data to control the display of values that are missing in a chart.

Note: This option is disabled for reports.

Procedure: How to Specify an Option for Missing Data

1. Create a chart with at least one measure and one dimension.
2. On the *Data* tab, in the *Display* group, click *Missing Data*.

3. On the menu that displays, select one of the following options:

   - **Gap.** Displays missing values as a gap in bar, line, and area charts.
   - **Zero.** Displays a bar on the zero line in a bar chart. Displays a solid line that connects the missing value with the succeeding value in a line chart. Displays an area on the zero line in an area chart.
   - **Interpolated Line.** Displays missing values as an interpolated dotted line that connects the plot points preceding and succeeding the missing value in a line chart. Displays missing values as an interpolated bar in a bar chart. Displays missing values as an area in an area chart.

   Your chart displays based on the option you selected.

Adding and Switching Data Sources

When working in Document mode, you can add an additional data source. Once you have multiple data sources available, you can then switch between them. These options are on the Data tab, in the Data Source group. The ability to switch data sources is particularly useful in Document mode, as you may often switch between a report and a chart.

Note: The Data Source group is not available when working with Reporting Objects.

Procedure: How to Add and Switch Data Sources

1. Open InfoAssist+ in Document mode.
2. Add a report or chart.
3. On the *Data* tab, in the *Data Source* group, click *Add*.
4. In the Open dialog box, select a Master File and click *Open*.

   This option allows you to add additional data sources to a document, enabling you to insert reports from different data sources into the same document. The Resources panel refreshes with the newly selected data source.

5. Click *Switch* to select from the available data sources.

   This option opens a drop-down list of all the data sources that have been added. You can choose which data source is currently active and being used to create new reports. You can also switch data sources by selecting a report that is using a data source that is different from the one that is currently active. The Resources panel will reflect the structure of the data source that you choose.

Setting the Source of Your Data

You can preview your data using sample data, or data directly from the source that you have selected. You can also set the number of rows that should be retrieved from the data source when Live Preview is selected.

Note: In Live Preview, an exclamation point is placed next to fields that are too large to be displayed within the space allotted. The allotted space is determined by the page-level styling. Page-level styling includes page size, orientation, margins, and font size.

Content that fits or is displayed on a page depends on the font used and its size. Margins, gaps, and page elements, such as headers and footers, also determine how much material is displayed on a page.

Procedure: How to Set the Source of Your Data

1. Create a report, chart, or document using data from an available Master File (.mas).
2. On the *Home* tab, in the *Design* group, click *Use Sample Data*.

   Your report or chart displays using sample data, which reduces processing time by eliminating the need to access the actual data source.
3. Click *Data from Source* to use the data source that you originally selected.

   InfoAssist+ uses the selected data source to display a live preview of the output on the canvas.
4. Optionally, enter a number of rows or click the drop-down menu for Records, where you can set the number of rows to be retrieved from the data source when Live Preview is selected. The default is 500, but other preset choices include: All rows, 1, 10, 50, 100, 500, 1000, 2000, 5000, and 10000.

   Note: If you are working with a large amount of data, this feature is useful in reducing response time.

Creating Virtual Fields in Web Query

A temporary field is a field whose value is not stored in the data source, but can be calculated from the data that is there, or assigned an absolute value. A temporary field takes up no storage space in the data source, and is created only when needed. DEFINE fields and COMPUTE fields are two different types of temporary fields.

When you create a temporary field, you determine its value by writing an expression. You can combine fields, constants, and operators in an expression to produce a single value. For example, if your data contains salary and deduction amounts, you can calculate the ratio of deductions to salaries using the following expression: deduction / salary.

You can specify the expression yourself, or you can use one of the many supplied functions that perform specific calculations or manipulations. In addition, you can use expressions and functions as building blocks for more complex expressions, as well as use one temporary field to evaluate another.

Note: When creating a DEFINE or a COMPUTE field, the following characters are suppressed and cannot be entered in the Format text box.

space ! " # $ & ' ( ) * + , / : ; < = > ? @ [\ ] ^ _ ` { | } ~ %

Selecting a Temporary Field

The following information is provided to help you choose the kind of temporary field that you need.

- **Choose a virtual field** when you want to:
  - Use the temporary field to select data for your report. You cannot use a calculated value, since it is evaluated after data selection takes place.
  - Use the temporary field to sort on data values. A calculated value is evaluated after the data is sorted. With the BY TOTAL phrase, you can sort on this type of field.
- **Choose a calculated value** when you want to:
  - Evaluate the temporary field using total values or prefix operators (which operate on total values). You cannot use a virtual field, since it is evaluated before any totaling takes place.
  - Evaluate the temporary field using fields from different paths in the data structure. You cannot use a virtual field, since it is evaluated before the relationship between data in the different paths is established.

Detail (DEFINE)

A virtual field (DEFINE) is evaluated as each record that meets the selection criteria is retrieved from the data source. The result of the expression is treated as though it were a real field stored in the data source.

The calculation that determines the value of a virtual field is performed on each retrieved record that passes any screening conditions on real fields.

You can define a virtual field in the following ways:

- **In a Master File.** These virtual fields are available whenever the data source is used for reporting. These fields cannot be cleared by JOIN or DEFINE FILE commands.

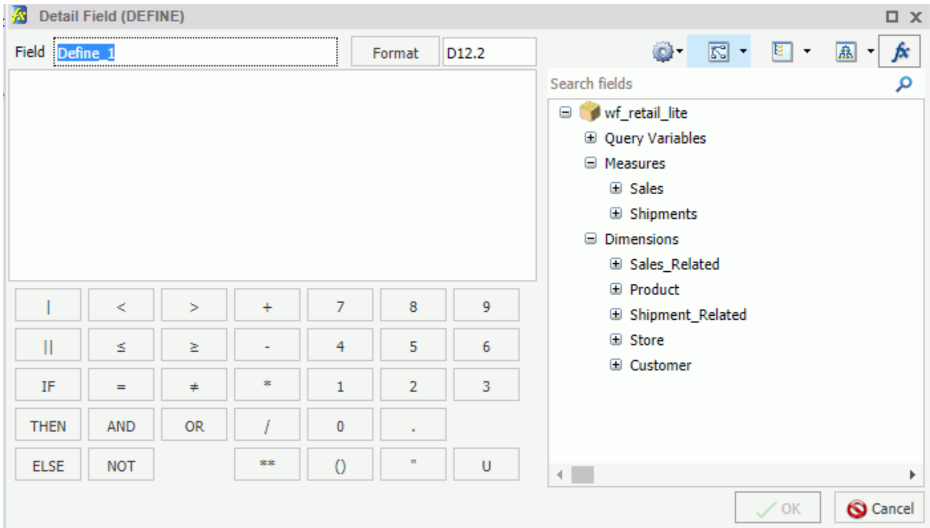
- **In a procedure.** A virtual field created in a procedure lasts only for that procedure.

A DEFINE field is an optional attribute used to create a virtual field for reporting. You can derive the virtual field value from information already in the data source (that is, from permanent fields).

You may define fields simultaneously (in addition to fields defined in the Master File) for as many data sources as desired. The total length of all virtual fields and real fields cannot exceed 32,000 characters.

The Detail Field (DEFINE) dialog box allows you to create a defined field, type a name for the field, and enter a format.

The Detail (DEFINE) dialog box is shown in the following image.



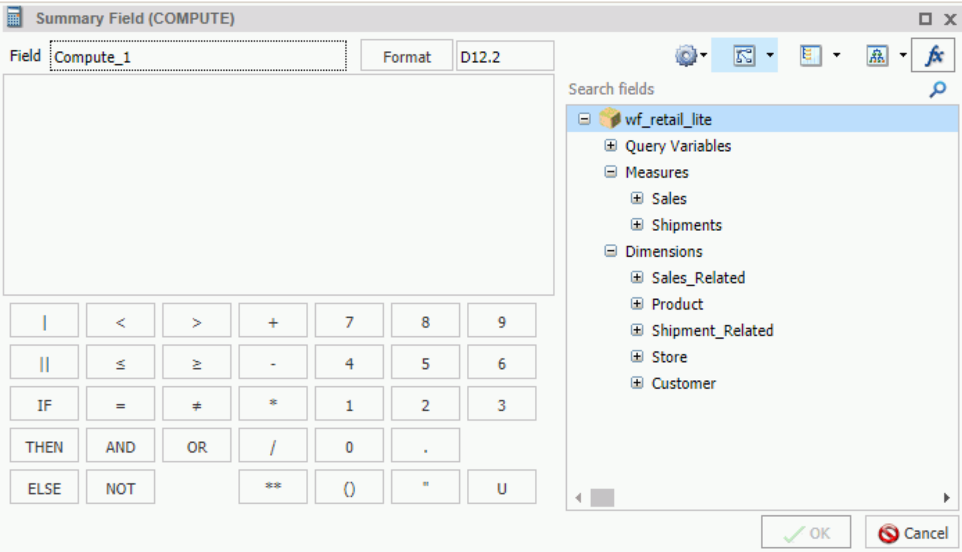
Summary (COMPUTE)

A calculated value (COMPUTE) is evaluated after all of the data that meets the selection criteria is retrieved, sorted, and summed. Therefore, the calculation is performed using the aggregated values of the fields. Calculated values are available only for the specified report request. You specify the COMPUTE command in the body of the report request, following the display command and optionally, introduced by AND. You can compute more than one field with a single COMPUTE command.

The Summary Field (COMPUTE) dialog box allows you to create a computed field, type a name for the field, and enter a format.

The Field List provides similar functionality, including options to display data source fields in a Logical, List, or Structured view. You can also view a complete set of functions, instead of data source fields, by clicking the *Functions* button.

The Summary (COMPUTE) dialog box is shown in the following image.

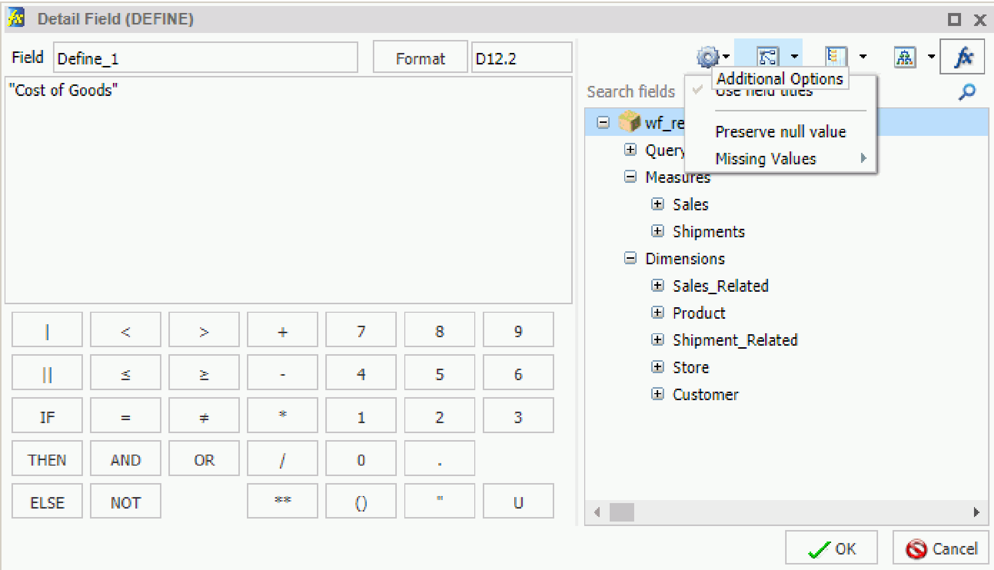


Using Field Titles in a Define or Compute

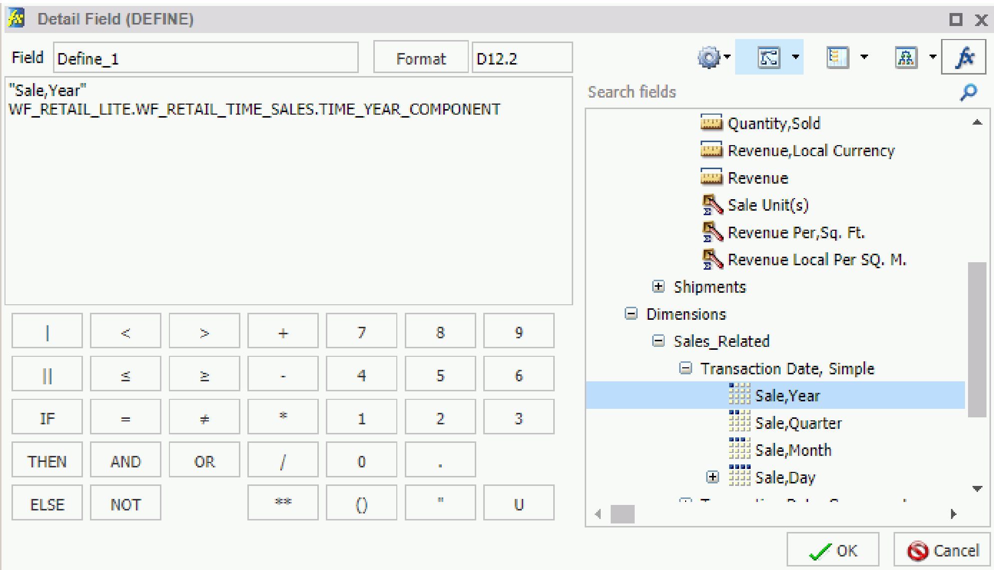
When working with Defines and Computes, field titles automatically display as you build your criteria in the Define (or Compute) text area.

Field titles are an attribute of a field. They are defined in the metadata and display only when specified for the field that you select. If a field title has not been defined in the metadata, the title that displays will be the physical field name.

The Use field titles feature enables you to see the field title (for example, Cost of Goods) rather than the fully qualified name of the field (for example, WF_RETAIL_LITE.WF_RETAIL_SALES.COGS_US). This facilitates easy identification of field names while building your Define or Compute. You can switch between the display of field titles and fully qualified field names by unchecking the Use field titles option, which you can access by clicking *Additional Options*, as shown in the following image.



If your Define or Compute uses more than one field with the same title (for example, Sale,Year), then only the first field will be added using field titles. Any other reference to this identical field will use the fully qualified field name. For example, in a sample InfoAssist+ data source, Sale,Year displays as the field title for two unique fields: WF_RETAIL_LITE.WF_RETAIL_TIME_SALES.TIME_YEAR and WF_RETAIL_LITE.WF_RETAIL_TIME_SALES.TIME_DATE_YEAR_COMPONENT. In this case, only WF_RETAIL_LITE.WF_RETAIL_TIME_SALES.TIME_YEAR would display (using field titles) as Sale,Year. The other field would display using the fully qualified field name, as shown in the following image.



Note: When reviewing a procedure (.fex) that contains Define or Compute code, field names always display as fully qualified field names, not field titles.

Procedure: How to Use Field Titles in a Define or Compute

1. In Report or Chart mode, create a Define or a Compute.
2. Add fields by double-clicking them in the metadata tree.

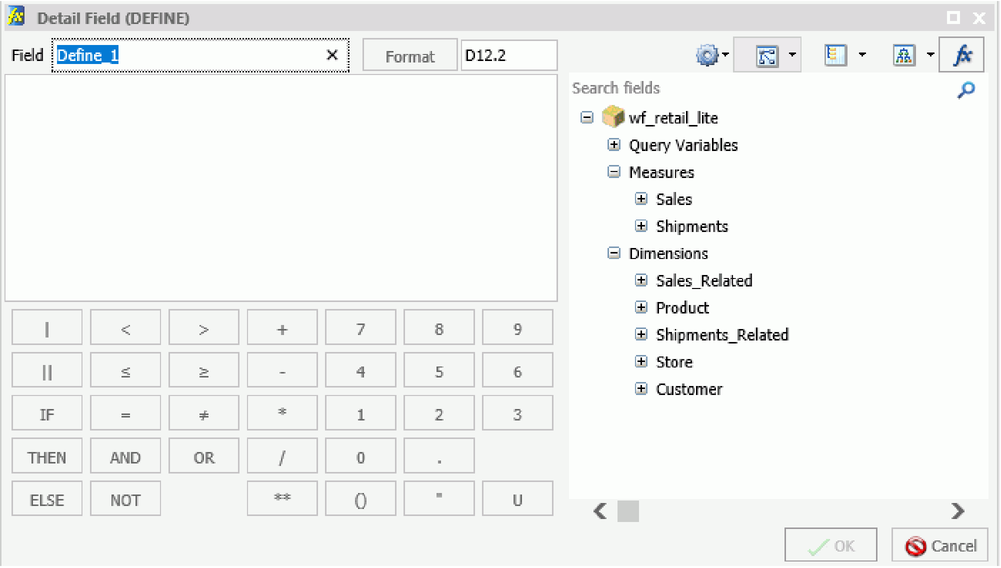
   Note: The fields that you select display with field titles, as this is the default option. If you specify a field with a duplicate field title, the fully qualified field name is used for the second (and any subsequent) instance.

3. Click *Additional Options* and then click *Use field titles* to disable the use of field titles, which results in the display of fields using the fully qualified field name.

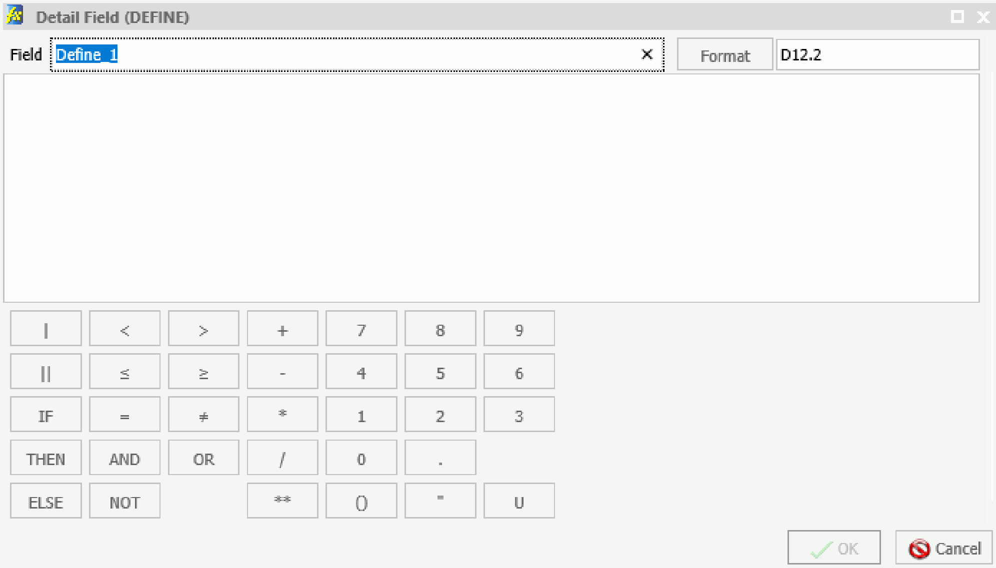
Resizing the Text Area of a Define or Compute

When working with Defines and Computes, you can adjust the width of the text area to accommodate the size of the fields in your query. This is particularly useful if you are using fully qualified names or long formulas, which can span more than the standard width of the text area.

In its original state, the text area is aligned with the calculator, as shown in the following image.



When fully expanded, the text area removes the metadata tree and toolbar from view, as shown in the following image.



Procedure: How to Resize the Text Area of a Define or Compute

1. Open InfoAssist+ in Report or Chart mode.
2. Select a Master File.
3. On the Data tab, click *Detail (Define)* or *Summary (Compute)*.

   The Define or Compute dialog box displays, respectively.
4. Hover over the right border of the text area until double arrows display.
5. Click and drag the field to the right.

   The text area is resized.

   Note:

   - If you expand the text area in a current session, InfoAssist+ will retain that expanded state for use in other areas of the application. For example, if you expand the text area when creating a Define, the expanded state will be present when you create a Compute.
   - When working with the text area in an expanded state, you can reinstate the metadata tree and toolbar by hovering over the right border of the text area until double arrows displays. Click and drag the arrows to the left and right, as needed.

Creating Temporary Fields Independent of a Master File

The temporary fields that you create with the DEFINE and COMPUTE commands are tied to a specific Master File, and in the case of values calculated with the COMPUTE command, to a specific request. However, you can create temporary fields that are independent of either a Master File or a request using the DEFINE FUNCTION command.

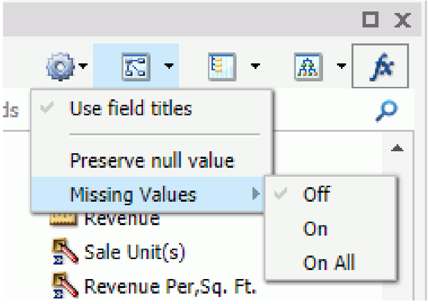
A DEFINE function is a named group of calculations that use any number of input values and produce a return value. When calling a DEFINE function, you must first define the function.

A DEFINE function can be called in most of the same situations that are valid for supplied functions. Data types are defined with each argument. When substituting values for these arguments, the format must match the defined format. Alphanumeric arguments shorter than the specified format are padded with blanks, while longer alphanumeric arguments are truncated.

All calculations within the function are done in double precision. Format conversions occur only across equal signs (=) in the assignments that define temporary fields.

Enabling the Display of Missing Values for a DEFINE or COMPUTE

When working with DEFINEs and COMPUTEs, you can use the Missing Values option to enable or disable the display of missing values for a DEFINE or COMPUTE field. This allows you to accurately display missing values in reports, charts, and visualizations. The Missing Values option, which is accessible through the Additional Options button, is shown in the following image.



The following descriptions explain each option on the Missing Values drop-down list:

- **Off.** When selected, MISSING syntax is removed from the DEFINE or COMPUTE field definition. This is the default selection. MISSING treats missing values for numeric fields as zeros and missing values for alphanumeric fields as blanks.
- **On.** When selected, MISSING ON is added after the format in the DEFINE or COMPUTE field definition. MISSING ON interprets the temporary field as missing.

- **On All.** When selected, MISSING ON ALL is added after the format in the DEFINE or COMPUTE field definition. MISSING ON ALL indicates that if all fields in the expression have values, then the temporary field has a value. If at least one field in the expression has a missing value, the temporary field also has a missing value.

Joining and Blending Data

You can join two or more related data sources to create a larger integrated data structure from which you can report in a single request. The joined structure is virtual. It is a way of accessing multiple data sources as if they were a single data source. This can greatly increase the number of fields available for use in your content, giving you an expanded selection for your reporting and charting purposes.

Joins

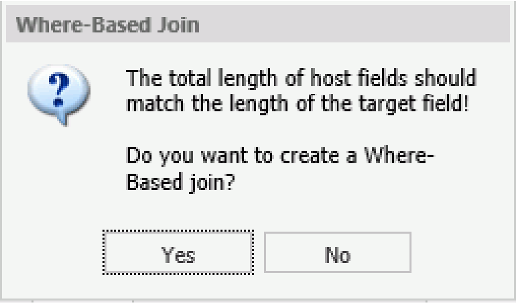
Using conditional joins, you can establish joins based on conditions other than equality between fields. In addition, the host and cross-referenced join fields do not have to contain matching formats, and the cross-referenced field does not have to be indexed.

Note: You can edit the description of a join by clicking *Edit* in the Join dialog box and typing in the Description section. You can only use letters and numbers in your description. The following special characters are not allowed.

space ! " # $ & ' ( ) * + , / : ; ? @ [¥] ^ _ ` { | } ~ %

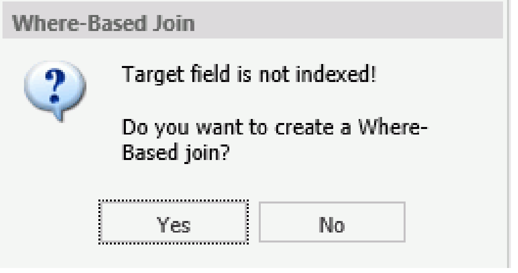
The conditional join is supported for all relational data adapters. Because each data source differs in its ability to handle complex conditional criteria, the optimization of the WHERE syntax differs depending on the specific data sources involved in the join and the complexity of the conditional criteria.

For data sources, if the host and cross-referenced join fields do not have common matching formats, the following message appears.



Note: If you click *Yes*, the Filter dialog box opens, where you can create a Where-Based Join.

If the cross-referenced join field does not have an index, the following message appears.



Note: If you click *Yes*, the Filter dialog box opens, where you can create a where-based join.

To create a where-based join, create a filtering condition.

Blending Data

The blend option allows you to explicitly select the data fields that you want to include. More specifically, you can join multi-fact data structures and combine pertinent external data into your current data source, creating a blended data resource. This can be from local or other system resources.

Blending is used to create customized data sources. For example, you may have some of the basic fields available in the current data source, but you can use the blend option to add relevant data fields from a different data source to the current data source in order to create a unique data set.

The blend option allows a new fact table to be added to a cluster master as a parent segment to an existing child segment. This option is available from the Join dialog box. You may want to blend data if you are reporting from two different fact tables that share a common dimension, such as a product dimension. For an example of this, you can view the sample retail database, wf_retail_lite. The wf_retail_lite Master File contains the WF_RETAIL_STORE_SALES segment and the WF_RETAIL_SALES segment. The WF_RETAIL_SALES segment is defined as the parent of the WF_RETAIL_STORE_SALES segment. You may want to add a second fact table to the report. The second fact table in this example will be an Excel spreadsheet that you upload to InfoAssist+ for use with a report or chart. The data in the spreadsheet file that you upload will be joined to the wf_retail_lite database using a common field.

Note: You can find supported, common fields in your selected database (for example, wf_retail_lite) using the search feature in the Data pane. If necessary, you may need to add a field in your spreadsheet to map your data to the structure of the database. For example, ID_CUSTOMER. In addition, the name of the primary sheet in Microsoft Excel becomes the name of your data source, so be sure to name the file accordingly.

The following list provides some general rules that apply to the Blend option:

1. The result of blending is that a single dimension is shared between two fact tables. The table must be based on a cluster with at least two segments. One segment is for Fact table 1, the second segment is for the dimension.
2. Two uploaded files cannot be blended because they result in single segment Master Files.
3. Do not use the fields from the blended table as a sort field, since these fields will not have a common field when used with fields from other fact tables.

Procedure: How to Blend Data

This procedure describes how to blend data from an external data source into an existing data source. This example uses a Microsoft Excel spreadsheet file.

1. On the *Data* tab, in the *Join* group, click *Join*.

   The Join dialog box displays.

2. Click *Add New*.

   The Open dialog box displays.

   Note: The options that display on the Open dialog box depend on your user privileges.

3. At the top of the Open dialog box, click *Upload Data*.

   The Upload wizard opens.

4. Drag your Microsoft Excel spreadsheet file on to the Upload pane, or click *Select Upload File* to locate the file on your local drive.

   The next screen of the Upload wizard opens. You can use the options on this screen to preview and change spreadsheets and delimited data files before you upload them to the target environment. This screen shows you the default breakdown of your data as measures, dimensions, and hierarchies.

5. On the ribbon, click *Load and Next*.

   The Target Load Options dialog box opens.

   Note: By default, the Bulk Load check box is selected. Clear this check box if you do not have a bulk load program that supports your target environment. For example, if you are using Microsoft SQL Server, you may use a Bulk Copy Program (BCP). If you are unsure about whether you have a bulk load program installed, contact your system Administrator.

6. Click *Proceed to Load*.

   The Upload wizard closes, and you return to the Open dialog box.

Note: If there are informational messages or if your upload is unsuccessful, the Status screen opens.

7. In the Open dialog box, click the name of your uploaded data source and then click *Open*.
8. In the Join dialog box, create a connection between the common fields by dragging your mouse pointer from the field in the Master File to the common field in the newly uploaded file.
9. Click *Blend*, and then click *OK*.

   The blended data source fields are now available in the Data pane.

Using Filters to Customize the Display of Data

Filters enable you to customize the display of data in your report, chart, document, or visualization. This gives you the advantage of viewing only the data that you want to see and use.

When creating a report, you refer to fields in several parts of the request. For example, in display commands (PRINT, SUM), in sort phrases (BY, ACROSS), and in selection criteria (WHERE, WHERE TOTAL, IF).

Note: When using ESSBASE hierarchical data sources, creating a filter on a sort field is not supported.

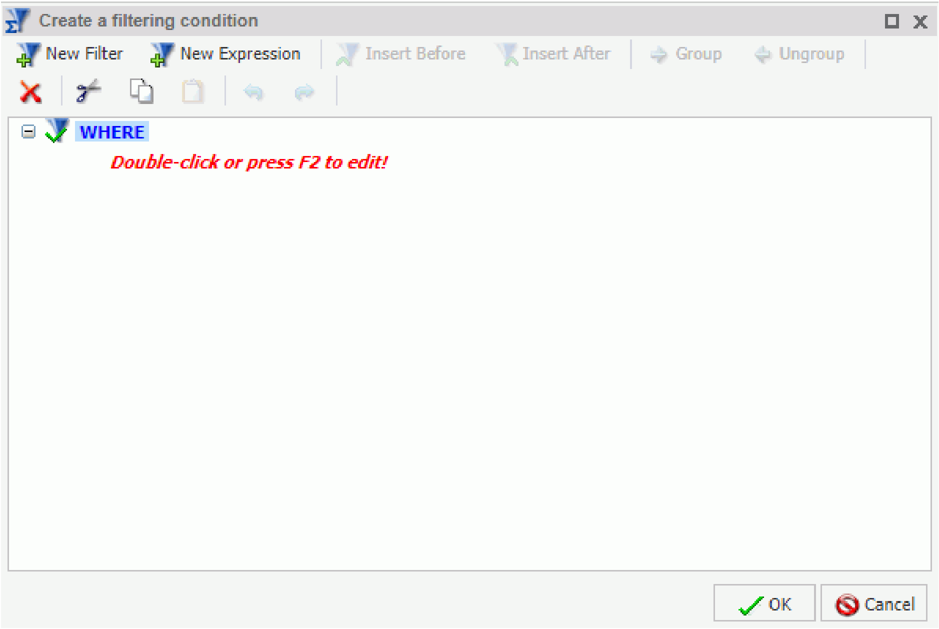
The WHERE phrase selects records from the data source to be included in a report. The data is evaluated according to the selection criteria before it is retrieved from the data source. You can use as many WHERE phrases as necessary to define your selection criteria.

In WHERE TOTAL tests, however, data is selected after all the data has been retrieved and processed.

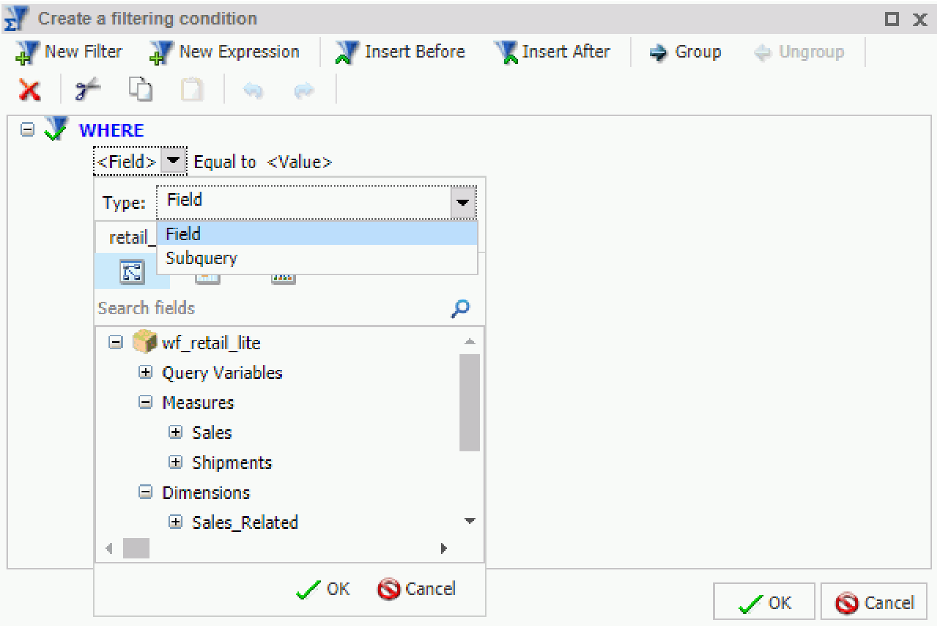
You can group conditions and expressions within filter criteria. In addition, you can apply functions and calculations within criteria. For more information on filtering options, see *Field Tab*.

You can create Where and Where Total filters in the Filter dialog box by clicking *WHERE*.

Double-clicking the *Double-click or press F2 to edit!* text opens drop-down menus for Fields and Subqueries, Operators, and Values, as shown in the second image to follow.

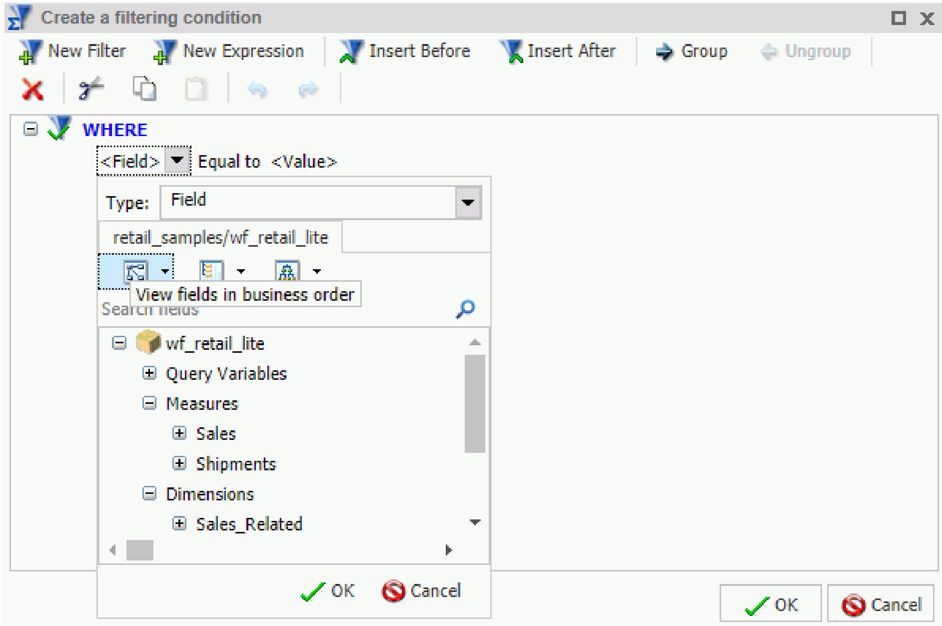


You can retrieve fields and values from the Master File and data source and Subqueries from a HOLD file.

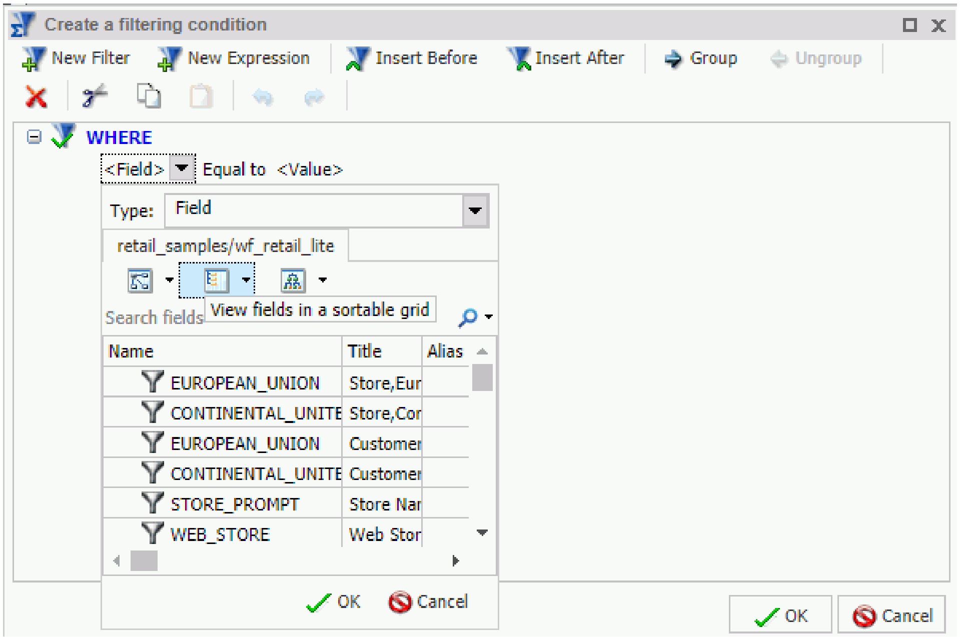


The Field drop-down menu provides a field list from the Master File. The Field list can be viewed as follows:

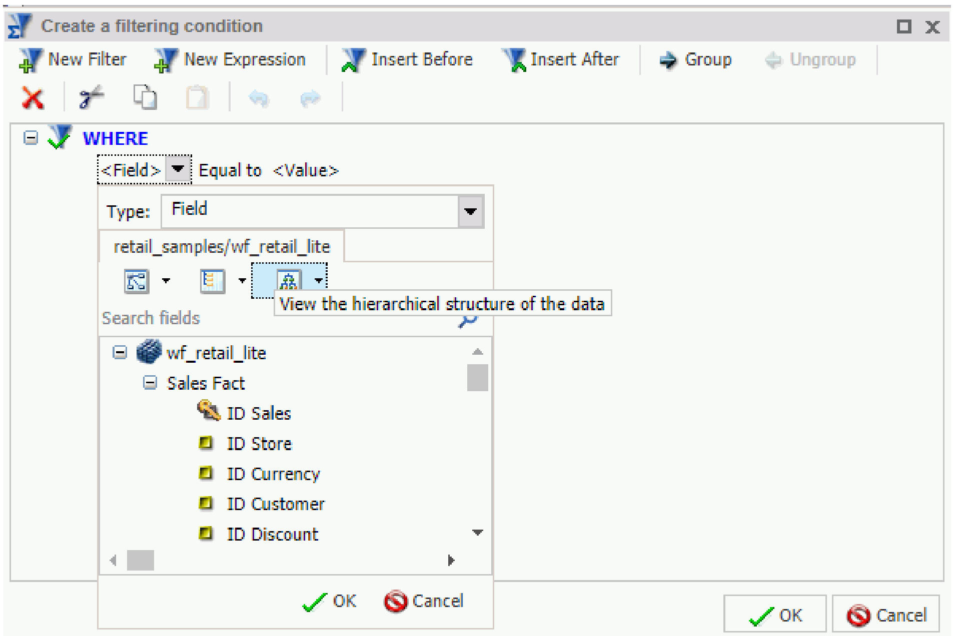
- In business order (default)



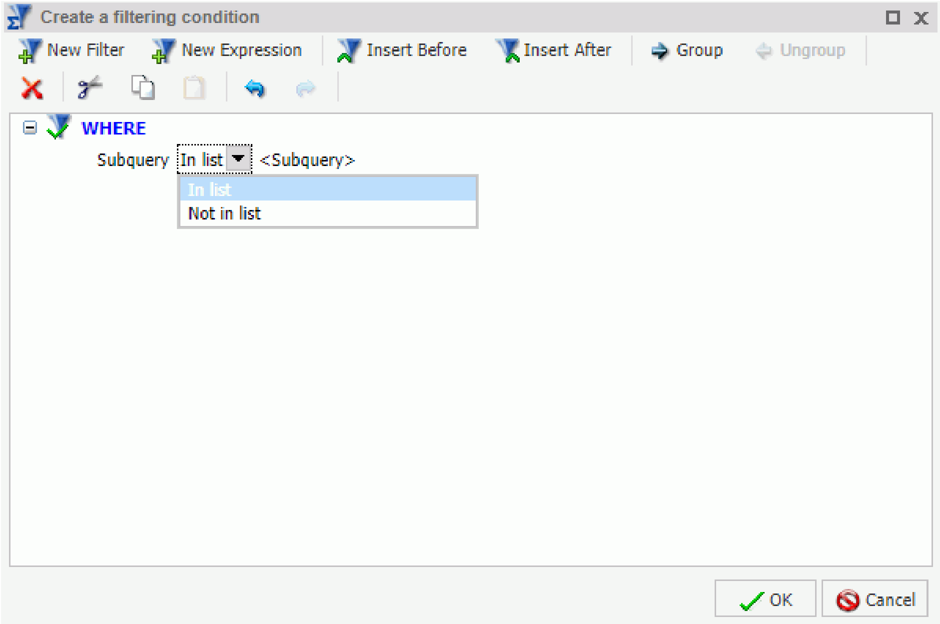
- In a sortable grid



- In a hierarchical structure of the data



- If you select Subquery, then the Operator drop-down menu is replaced by a menu with the options of *In list* and *Not in list*, as shown in the following image.



Note: The Subquery option is not available in the Filter dialog box if you are creating a report from a Reporting Object.

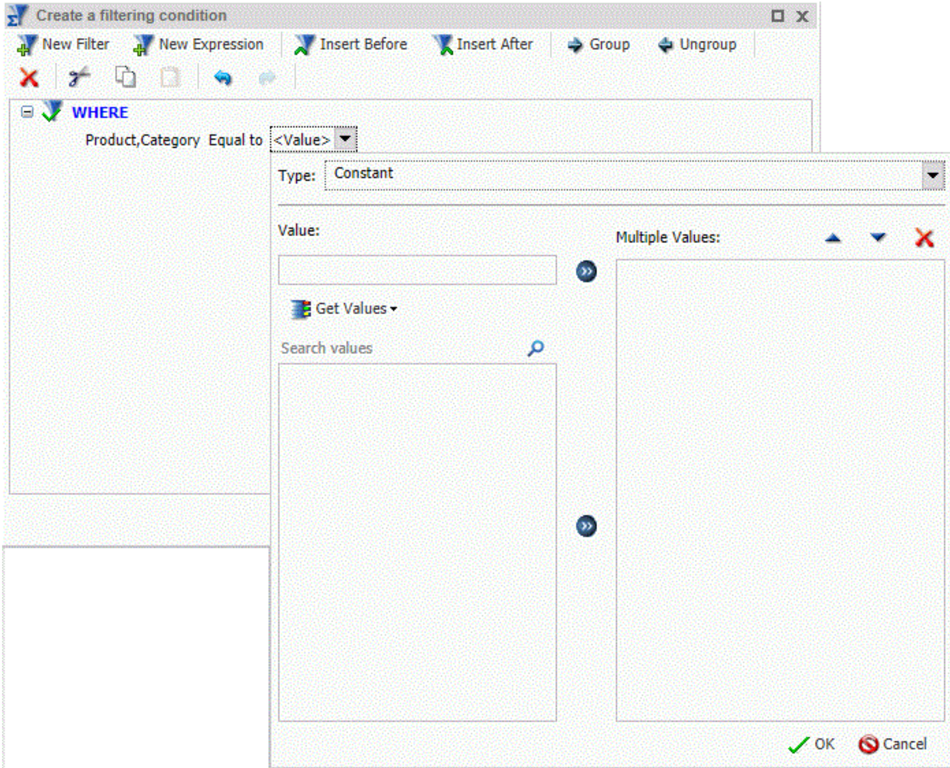
- **In list**. Activates a drop-down menu in the right-most part of the expression. The drop-down menu contains a list of all subqueries that you have created from the Master File in use, and an EXISTING option.

  Click *EXISTING* to open the Open dialog box, where you can select a subquery from a different Master File.

- **Not in list**. Opens the Open dialog box, where you can select a subquery from a different Master File.

The Operator (default) drop-down menu provides various operators for your filter. For example, Equal to.

The Value drop-down menu opens a dialog box with multiple options, as shown in the following image.



Note: If you are creating a filter on a full date field, the Value field will have a calendar icon adjacent to it. You can use this icon to select a date using a calendar control.

The Type drop-down menu contains the following options:

- **Constant.** Enables the entry of a literal value. This value can be a positive number, a negative number, or any character string.
- **Parameter.** Enables you to specify a parameter by entering a name and description in the provided text input areas, as well as selecting the type of parameter (Simple, Static, or Dynamic).

  Note: If you create a filter that specifies a simple parameter, QUOTEDSTRING will be inserted at the end of the line that defines the simple parameter, as specified in the procedure (.fex), by default. In this case, when you run a .fex that contains this value, you will not be able to enter multiple values, at run time, for simple parameters.

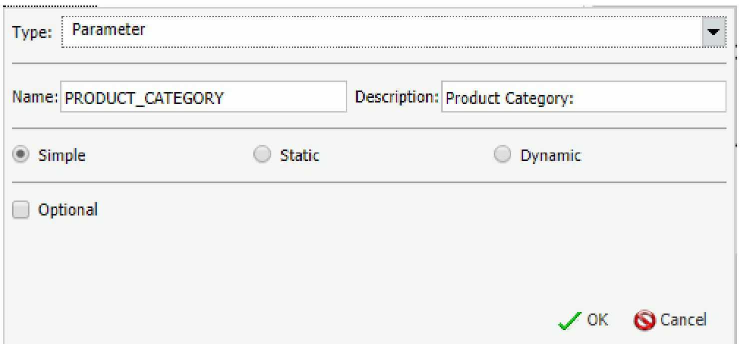
You can also select *Optional* to set the parameter as optional. This adds the default value of _FOC_NULL, which removes the parameter from the procedure. Indicating *Optional* also disables the prompt for parameters functionality within the procedure. Therefore, if a report has an optional parameter, it would run without any prompting. However, if another report drilled down to it, the parameter would be accepted and it would run with that value. The Optional option is used primarily for other reports that would be drilling down to the current report and passing the parameter to this report. For more information, see *Using Multi Drill* and *Using the Auto Linking Feature to Link Content*.

When defining WHERE clauses in the Create a filtering condition dialog box, you can also create simple, static, and dynamic parameters. These parameter values are transformed into local variables that allow the content of your report to be defined at runtime by a context in your data or a selection by the user. Additionally, you can change to scope of this parameter amper variable from local to a global scope so that its value is available across multiple components on a page or in a document. To transform the parameter to have global scope, enter a single & (amper) symbol in the first character position of the parameter name field.

Note: The & symbol can only be entered in the first position of the parameter name where it defines the parameter scope. Parameter field names cannot contain a & symbol in any other character position.

The parameter description is used as the defining parameter prompt. In the description, a space can be placed in any position. The first character cannot be a single quotation mark (') and the following characters cannot be used within the parameter prompt: & . ; ( )

The parameter options are shown in the following image.



- **Field.** Enables the specification of a field name to compare against.

The value area generally contains a text input box that you can use to manually insert values. However, if you are working with a date field, the Value field is set to *Today*. You can optionally select *Beginning of Month*, *End of Month*, *Beginning of Quarter*, *End of Quarter*, *Beginning of Year*, *End of Year*, or you can specify a Custom date using the calendar that displays when you make that selection.

Note: The default date of Today applies to Report, Chart, and Document modes only.

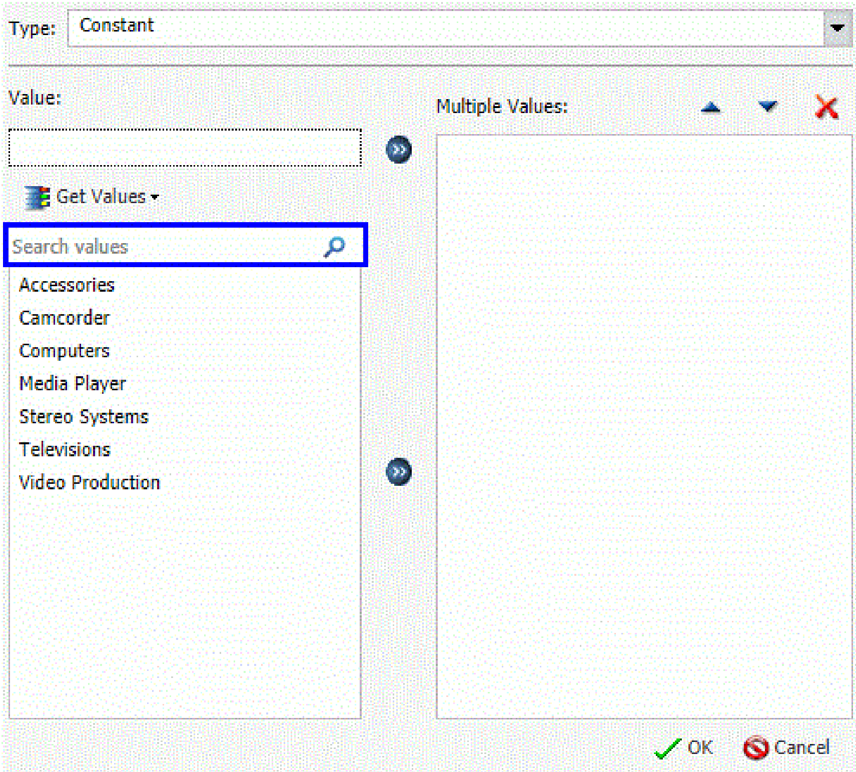
The value area also contains a Get Values drop-down menu, which supplies the following options:

- **All.** Retrieves all the values from the selected field.
- **First.** Retrieves the first value from the selected field.
- **Last.** Retrieves the last value from the selected field.
- **Minimum.** Retrieves the minimum value from the selected field.
- **Maximum.** Retrieves the maximum value from the selected field.
- **From File.** Retrieves a value that you specify. Selecting this option opens the Select From File dialog box, where you can browse to a local file and specify a file format, such as a flat file (CSV) or an Excel spreadsheet (XLS or XLSX).

  Numeric data values can be imported into the available filter values from a flat file or a CSV as pure numbers. This import supports numbers containing leading signs (negative), numeric digits, and decimal points. Numbers containing currency symbols or commas will be imported but as shown in the Values box in the Create a filtering condition dialog box, may not be interpreted correctly. Text or CSV files with values requiring complex formatting can be opened and saved with the appropriate formatting in Excel. This Excel file can then be imported with the formatting retained.

Note: The Get Values drop-down menu is only accessible if you have already selected a field.

Once you have retrieved the values for your filter using one of the Get Values options, you can use the Search values option to quickly locate a record in the list. For example, you can type in the letter S to go to that section in the list. Also known as type ahead search, this functionality can bring you directly to the value that you want to include, making it easy to identify the required values. Wildcards, such as an asterisk, are also supported. The Search values option is shown in the following image.



After selecting the values that you want, you can move them into and out of the Multiple Values area with the left and right arrows. You can also change the value order and delete values with the up and down arrows and the Delete icon.

After creating a condition, you can insert additional conditions before and after the selected condition by using the *Insert Before* and *Insert After* buttons at the top of the Filter dialog box. You can use either the *And* or the *Or* conjunction to link conditions and the *Group* and *Ungroup* buttons to nest and organize conditions.

You can also add an expression to your filter by clicking the *New Expression* button. This creates a new WHERE clause and allows you to build an expression dynamically.

You can create additional filters by clicking the *New Filter* button at the top of the Filter dialog box.

After creating the filters that you want, click *OK* to save and apply the filters. You can access them from the Filter pane of the Resources panel.

Note: Dates shown in the live preview reflect the format specified in the data source. However, when Filters are applied to a date formatted field, the format of dates shown in the Filter interface is derived from the locale. When the report, chart, or visualization is executed, the output, as well as any prompt will reflect the format specified in the data source.

Including or Excluding a Filter

Once you have created a filter, you can make decisions about when and where you want to include it in your report. For example, you might want to include one filter and exclude another. Using the Include and Exclude options in the Filter group on the Home or Field tabs, you can set filters accordingly.

You can use the following information to make decisions about your filters:

- **Exclude.** Removes, but does not delete, the filter from the report.
- **Include.** Restores a filter that was previously excluded from a report.

Using the Prompt Functionality to Select Field Information at Run Time

Using the prompt functionality, you can create an auto prompting parameter for which you can define a value at run time. This feature is located in the Filter Group on the Field tab.

To create an auto prompting parameter:

1. Select a field for which you want to create a parameter in your report.
2. On the Field tab, in the Filter group, click *Prompt*.

   The Create a filtering condition dialog box displays.
3. Double-click the *Value* field.

   Note: Parameter is selected, by default, when you are defining a prompt.

   The following options display, from which you can make a selection:

   - **Simple.** This is used for prompts using Text Input. This is the default value.
   - **Static.** This is used for prompts using Selection. This option allows you to select multiple values at run time.

- **Dynamic.** This is used for prompts using Data Values. This option allows you to select multiple values at run time.

  Note: You can also select *Optional* to indicate that the selected value (Simple, Static, or Dynamic) is optional.

4. Click *OK*, and click *OK* again to close the Create a filtering condition dialog box.

   When you run your report, you will be prompted for information based on the parameters you created.

Output Formats

You can change your output format on the Home tab, in the Format group.

- **Current Output Format.** Displays a drop-down menu of all supported output formats.
  - HTML (the default for charts and reports)
  - HTML5 (only available for charts)
  - active report (default for documents)
  - PDF
  - active PDF
  - Excel (xlsx) (reports designed in Live Preview and Query Design views only)
  - Excel Formula (xlsx) (reports designed in Live Preview and Query Design views only)
  - Excel (csv)

    Note: You can control the display of Excel output formats from the InfoAssist+ Properties section in the Db2 Web Query Administration Console.
  - PowerPoint (pptx)

  When you run a report, the output is created in the format that is currently selected. You can also select output format options on the status bar, from the Output Types menu.

- **Report** or **Chart.** Determines whether report-specific or chart-specific functionality is available in the InfoAssist+ tool. The default name *ReportX* or *ChartY* is given for each new report or chart created in a given InfoAssist+ session. X and Y are numbers that start at 1 and increase by 1 for each report or chart created. For more information on switching between multiple reports, see *View Tab*.

- **File.** Creates an image file from a chart, or a data file from a report. For more information, see *Output Formats for Reports and Charts*.

Format	Reports	Charts	Documents
HTML	Available (default)	Available (default)	Available
HTML5	Not Available	Available	Not Available
active report	Available	Available	Available
PDF	Available	Available	Available (document default)
active PDF (requires Adobe® Reader® 9.0 or later)	Available	Available	Available
Excel formats	Available	Available	Available
PowerPoint (pptx)	Available	Available	Available
PDF/GIF (must be set to display in InfoAssist+ Properties)	Not Available	Available	Not Available
PNG (must be set to display in InfoAssist+ Properties)	Not Available	Available	Not Available
GIF (must be set to display in InfoAssist+ Properties)	Not Available	Available	Not Available

Format	Reports	Charts	Documents
JPEG (must be set to display in InfoAssist+ Properties)	Not Available	Available	Not Available
SVG (must be set to display in InfoAssist+ Properties)	Not Available	Available	Not Available

HTML5

HTML5 is the default output format for charts. It allows you to render a chart in the browser using a built-in JavaScript engine. Charts with this output format utilize the very latest capabilities of the HTML5 web standard, including animation, high-quality vector output, and attractive alpha-channel and gradient effects.

Enabling Additional Output Types

The output types of PNG, GIF, JPEG, and SVG do not appear on the status bar, in the Output Types menu, by default. In addition, User Selection is not available, by default. You can enable these options by opening the Administration Console, selecting *Utilities*, and then *InfoAssist+ Properties*.

If these formats are not enabled and you try to open an existing procedure with PNG, then HTML becomes the output. In addition, the following warning messages could open:

- When opening an existing procedure with JPEG, GIF, or SVG, a warning message opens, indicating that the request is not allowed with the current configuration and that the procedure will be converted to HTML output.
- When opening an existing procedure with PDF or GIF, a warning message opens, stating that the request is not allowed with the current configuration and that the procedure will be converted to PDF output.

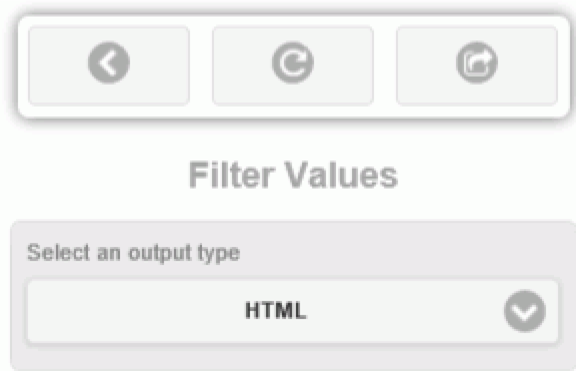
When you run a report, the output is created in the format that is currently selected. You can also set output format options from the output format button in the status bar.

User Selection

The User Selection output format allows you to change the output type of your report at run time. User Selection can be accessed on the status bar, in the Output Types menu.

Note: User Selection must be enabled in the Administration Console in order to access the functionality.

Once it is enabled, you are prompted, at run time, to select an output type. This is shown in the following image.



You can select one of the following output types for your report, chart, or document:

- For reports, you can select HTML, active report, PDF, active PDF, Excel (xlsx), Excel Formula (xlsx), and PowerPoint (pptx).
- For charts, you can select HTML, HTML5, active report, PDF, active PDF, Excel (xlsx), and PowerPoint (pptx).

  Note: When working with charts that do not employ the new chart attribute syntax, all output formats will display when User Selection is selected. If you are working with a chart that uses the new chart attribute syntax, HTML5 and active report are the only output formats available for selection. Exceptions to this rule are the HTML5 specific charts that do not use the new attribute syntax, but are only available in HTML5 or active formats, including: Tagcloud, Parabox, Mekko, and Streamgraph.

- For documents, you can select HTML, active report, PDF, active PDF, Excel (xlsx), and PowerPoint (pptx).

Chapter 2

Creating HOLD Files

A HOLD file is the output of a report request stored in a file that you can use as input to another Db2 Web Query procedure.

You can then create new report requests that extract data from the HOLD file, resulting in a multi-step report.

HOLD files can be created to use in a report, chart, document, or visualization.

In this chapter:

Valuable Applications of HOLD Files

A HOLD file is valuable when you want to do the following:

- Extract fields from a large data source for faster and more efficient retrieval in subsequent requests. This reduces processing time, enabling you to create reports and charts rapidly against a smaller, more specialized data set. This improves efficiency while giving you the flexibility that you need when working with smaller subsets of your data.
- Store virtual field values or summary values calculated in one request for further processing in another request. This allows you to reuse calculated values, decreasing the effort required to recreate certain scenarios.

Storing HOLD Files

HOLD files can be created for immediate use and saved temporarily or they can be stored for future and repeated use. This gives you the flexibility to use and store HOLD files, as needed, based on how you want to use the files that you create.

Output Formats for Reports and Charts

You can save a HOLD file for a report in the following formats:

- Binary (*.ftm)
- FOCUS (*.foc).
- Comma Delimited with Titles (*.csv)
- Plain Text (*.ftm)
- Tab Delimited (*.tab)
- Tab Delimited with Titles (*.tab)
- Database Table (*.sql)

  Note: The Database Table output is only available when working against an SQL database.
- SQL Script (*.sql)

Creating HOLD Files

This section contains examples of how you would use a HOLD file.

Note:

- Across fields are not allowed in HOLD files.
- Using the Change Title option in the Query pane, you can change the title of a field prior to creating a HOLD file. A blank space in the title will be replaced by an underscore. This functionality enables you to control the names used for the fields included in the HOLD file, and makes it easier to find the fields when creating a report, chart, or document.
- When creating a HOLD file, the Temporary dialog box displays only those Reporting Server applications to which you have access.
- You can use Auto Linking when working with HOLD files. For more information, see *Using the Auto Linking Feature to Link Content*.
- When working with charts in HTML5 format, you cannot create a HOLD file. You can do so, however, in HTML format.
- When a report contains a HOLD procedure, dots or periods (.) in the AS name of the Define field are automatically converted to an underscore (_).

- Within a single procedure, you cannot add a HOLD file and then build a table request based on that HOLD file, which contains a dynamic parameter requiring values from the HOLD file. InfoAssist has added special processing to allow this to work when the procedure is executed within InfoAssist. But the procedure, as generated in InfoAssist, will return a server error when it is executed outside of InfoAssist. The HOLD file must exist prior to the execution of the procedure.

Procedure: How to Create Multiple Components in a Document From a HOLD File

This procedure describes how to extract fields into a HOLD file and then create multiple components in a document from the HOLD file.

1. Open InfoAssist+ in Document mode.
2. Select a data source.
3. Add fields that need to be extracted for use in subsequent requests.
4. On the Home tab, in the Format group, click *FileFile & Printer*.
5. Click the *Destination* drop down list and select *File*.
6. Click the *Browse* button to open the Temporary dialog box.
7. In the Temporary dialog box, name the file, choose the format of the HOLD file from the format drop-down list, and click *Save*.

   Note: The default is to create a temporary HOLD file, which is deleted after the report or chart is run. Alternatively, you can create a permanent HOLD file by selecting an application path folder location. This file will remain in this location after the procedure is run for future use.

8. On the *Insert* tab, in the *Reports* group, click *Chart*.
9. Add fields to the chart.
10. Insert another chart.
11. Add fields to that chart.
12. On the Format tab, in the Chart Types group, click *Pie*.
13. On the Insert tab, in the Reports group, click *Report*.
14. Add fields to the report.
15. Add as many reports and charts as you want to complete your document.

Procedure: How to Create a Tabular Report From a HOLD File

To create a tabular report from a HOLD file, begin by creating a report.

1. In the Open dialog box, select the *wf_retail_lite* Master File.
2. Add the following measure fields to the report:
   - Cost of Goods
   - Discount
   - Gross Profit
   - Quantity,Sold
   - Revenue
3. Add the following dimension fields to the report:
   - Product Category
   - Product,SubCategory
   - Sale,Year
4. On the *Home* tab, in the *Format* group, click *File*.

   The Temporary dialog box opens.
5. In the Temporary dialog box, name the HOLD file, keep the default file type, Binary (*.ftm), and click *Save*.
6. At the bottom of the canvas, click *Create Report*.

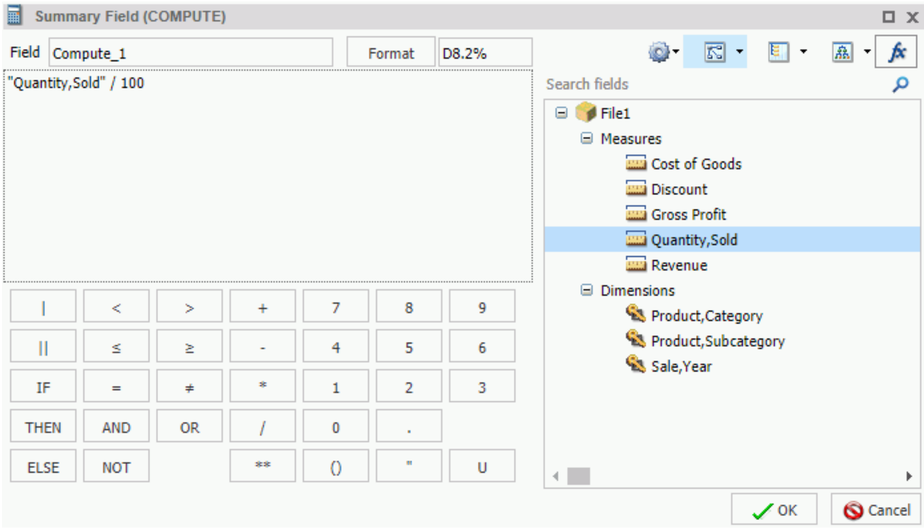
   The custom database structure displays in the Resources panel. The canvas is returned to a default blank state, enabling the development of a new report using the HOLD file.
7. From the HOLD file, drag *Quantity,Sold* to the canvas.
8. On the canvas, select the *Quantity,Sold* column heading.
9. On the *Field* tab, in the *Display* group, click *Aggregation*, and then click *First Value*.

   Note: The heading changes to FST Quantity Sold.
10. Select the FST Quantity Sold heading.
11. On the *Field* tab, in the *Display* group, click *Hide Field* to hide Quantity,Sold, as it will be used in a subsequent calculation.
12. On the *Data* tab, in the *Calculation* group, click *Summary (Compute)*.

13. In the Summary Field (COMPUTE) dialog box, do the following:

    - ❏ In the Format field, type D8.2%.
    - ❏ Double-click the *Quantity,Sold* field to add it to the formula box.
    - ❏ Add / 100 after the Quantity Sold field to calculate the percentage.

    The following image is an example of the Summary Field (COMPUTE) dialog.



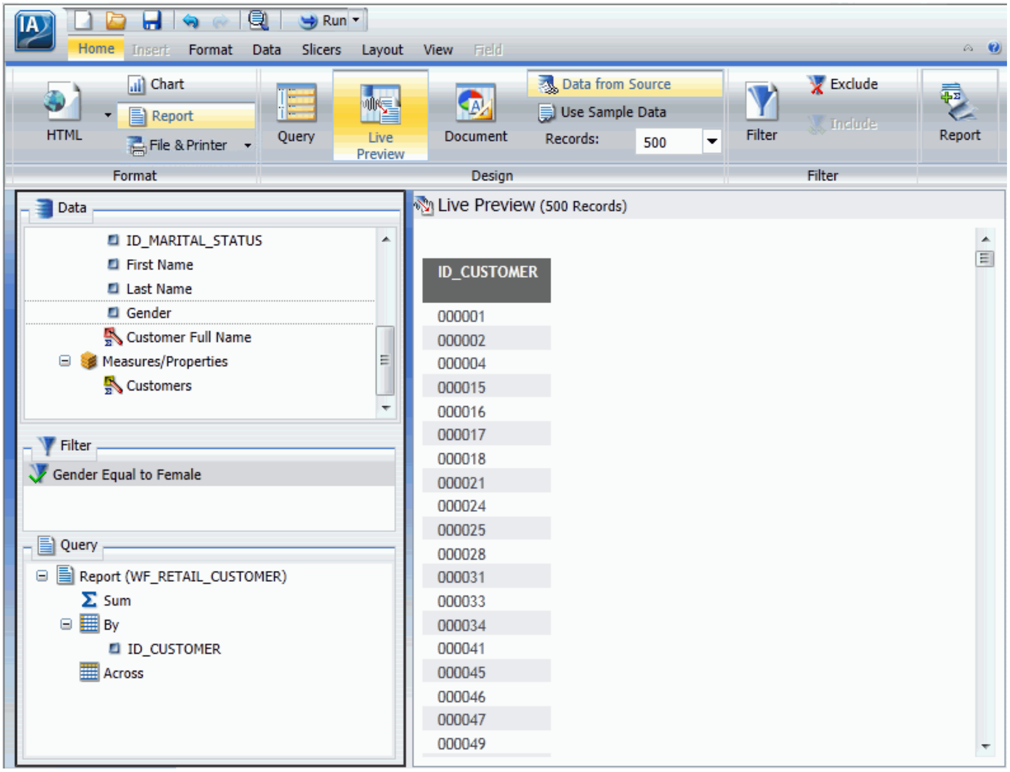
14. Click *OK* to close the dialog box.
15. Drag *Product,Category* to the By Query field container.
16. In the Query pane, select the *Product,Category* field.
17. On the *Field* tab, in the *Break* group, select *Subtotal* to create Subtotals on Product,Category.
18. Drag *Product, Subcategory* to the By Query field container.
19. Drag *Sale,Year* to Across.
20. On the *Home* tab, in the *Report* group, click *Row Totals*.

    The final report displays.

Procedure: How to Create a HOLD File for a Subquery

The following procedure describes how to create a HOLD file for use in a subquery.

1. Create a new report with at least one filter condition set.



2. Click *FileFile & Printer*.

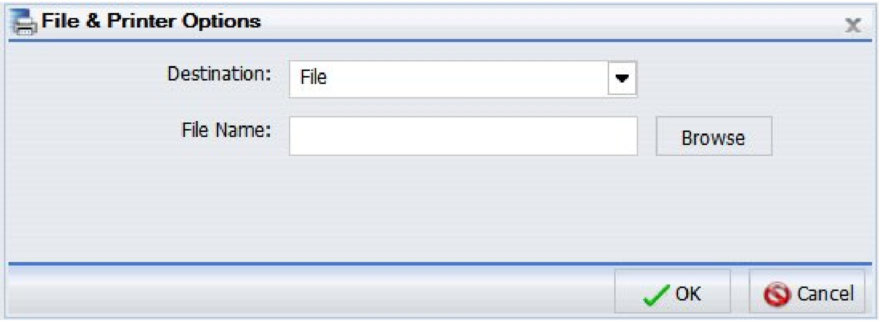
   The FileFile & Printer button is found on the Home tab, in the Format group, and on the Format tab, in the Destination group.

   The FileFile & Printer button is a split button. Click the left side of the button to launch the Temporary dialog box. The down arrow on the right side also opens the Save dialog box so you can change settings or set them for the first time.

   The Select a location and formatTemporary dialog box opens.

   Note: The label *Temporary* appears at the top of the dialog box. When you select a folder, the label changes to *Select a location and format*.

The File & Printer Options dialog box opens, as shown in the following image.



3. Click the *Destination* drop down list and select *File*, then click the *Browse* button.
4. In the Select a location and format dialog box, provide the following:
   a. In the File name text box, type a file name.

      The default file name is *File1*.
   b. From the list menu, select *SQL Script (*.sql)* as the file format.
   c. Select a location for the HOLD file.

      The location is either Temporary, which is the default, or a writable server application folder.

      Note: If the HOLD file name already exists in the specified location, it will be overwritten without warning, when you click *Save*.
5. Click *Save*.

   The Create Report button appears on the bottom of the InfoAssist+ Live Preview application window.

6. Repeat steps 2 - 4 to create as many HOLD files as you need.
7. To use the HOLD file right away, select the corresponding option.

Note: When you are working with a report created from a HOLD file, if you try to switch data sources, or add data sources to the report, you are presented with warning messages.

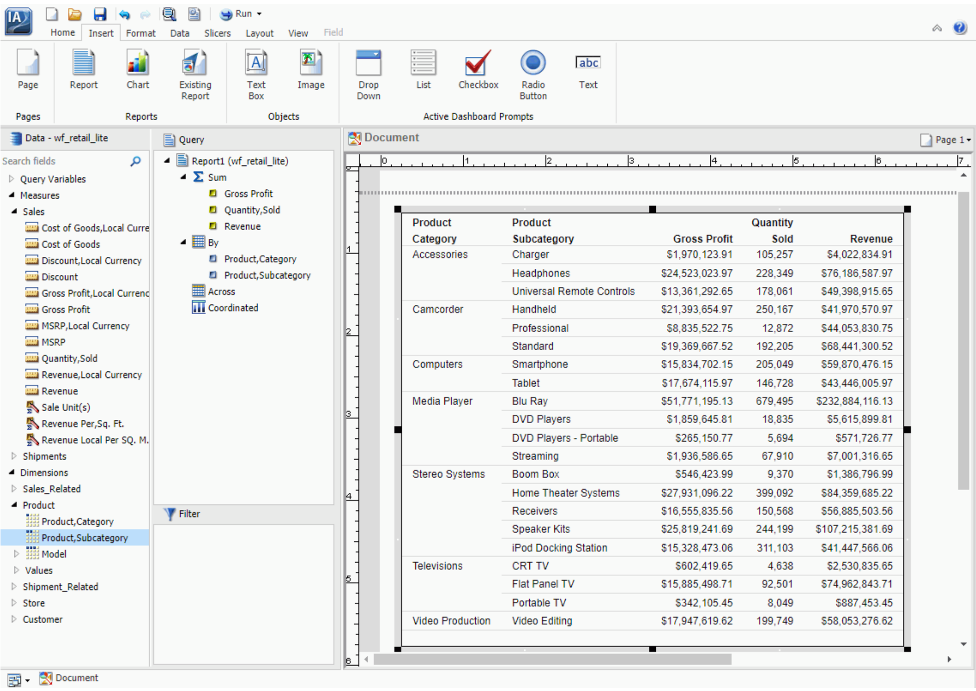
Procedure: How to Rearrange HOLD File Components

The following procedure describes how to rearrange file components in a HOLD file.

Note: This procedure creates a binary HOLD file and a subquery to illustrate how to rearrange HOLD files. It also shows the result of this rearrangement.

1. Create a new document, using the wf_retail_lite Master File for the data source.
2. On the *Insert* tab, in the *Reports* group, click *Report*. Populate the report with the following fields from the Data pane:
    - ❑ Gross Profit
    - ❑ Quantity,Sold
    - ❑ Revenue
    - ❑ Product,Category
    - ❑ Product,Subcategory

    The report is shown in the following image.

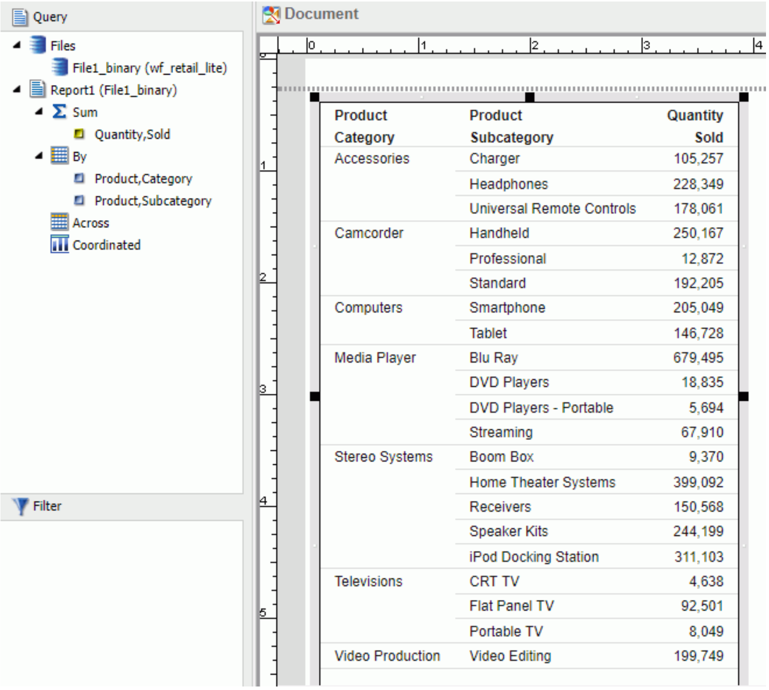


Product Category	Product Subcategory	Gross Profit	Quantity Sold	Revenue
Accessories	Charger	$1,970,123.91	105,257	$4,022,834.91
	Headphones	$24,523,023.97	228,349	$76,186,587.97
	Universal Remote Controls	$13,361,292.65	178,061	$49,398,915.65
Camcorder	Handheld	$21,393,654.97	250,167	$41,970,570.97
	Professional	$8,835,522.75	12,872	$44,053,830.75
	Standard	$19,369,667.52	192,205	$68,441,300.52
Computers	Smartphone	$15,834,702.15	205,049	$59,870,476.15
	Tablet	$17,674,115.97	146,728	$43,446,005.97
Media Player	Blu Ray	$51,771,195.13	679,495	$232,884,116.13
	DVD Players	$1,859,645.81	18,835	$5,615,899.81
	DVD Players - Portable	$265,150.77	5,694	$571,726.77
	Streaming	$1,936,586.65	67,910	$7,001,316.65
Stereo Systems	Boom Box	$546,423.99	9,370	$1,386,796.99
	Home Theater Systems	$27,931,096.22	399,092	$84,359,685.22
	Receivers	$16,555,835.56	150,568	$56,885,503.56
	Speaker Kits	$25,819,241.69	244,199	$107,215,381.69
	iPod Docking Station	$15,328,473.06	311,103	$41,447,566.06
Televisions	CRT TV	$602,419.65	4,638	$2,530,835.65
	Flat Panel TV	$15,885,498.71	92,501	$74,962,843.71
	Portable TV	$342,105.45	8,049	$887,453.45
Video Production	Video Editing	$17,947,619.62	199,749	$58,053,276.62

3. On the *Home* tab, in the *Format* group, click *File* to create a HOLD file.

    In the Temporary dialog box, enter a name for the file. For example, File1_binary.
4. Click *Save*.

5. Create a report using the HOLD file, specifying Product,Category, Product,Subcategory, and Quantity,Sold, as shown in the following image.



6. Next, using the following steps, add a subquery SQL script for use as a filter on the first report.

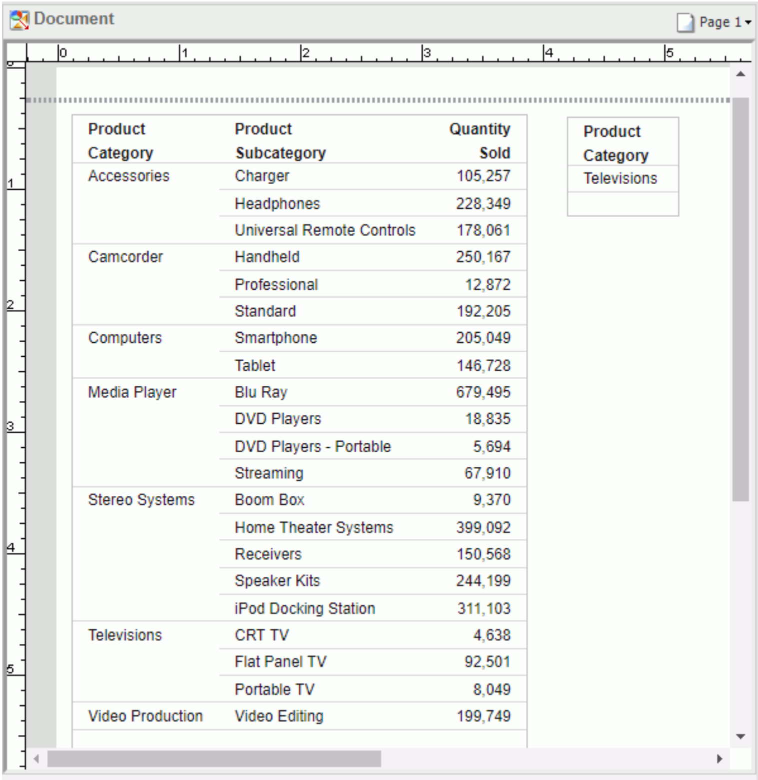
   a. On the *Data* tab, in the *Data Source* group, click *Switch*.

      Select the original Master File (*wf_retail_lite*).

   b. Locate and double-click the *Product,Category* dimension field.

      This creates a second report, which you can drag and resize as needed on the Document canvas.

c. Create a filter on Product,Category, where the product category is equal to Televisions.



Document | Page 1

Product Category	Product Subcategory	Quantity Sold
Accessories	Charger	105,257
	Headphones	228,349
	Universal Remote Controls	178,061
Camcorder	Handheld	250,167
	Professional	12,872
	Standard	192,205
Computers	Smartphone	205,049
	Tablet	146,728
Media Player	Blu Ray	679,495
	DVD Players	18,835
	DVD Players - Portable	5,694
	Streaming	67,910
Stereo Systems	Boom Box	9,370
	Home Theater Systems	399,092
	Receivers	150,568
	Speaker Kits	244,199
	iPod Docking Station	311,103
Televisions	CRT TV	4,638
	Flat Panel TV	92,501
	Portable TV	8,049
Video Production	Video Editing	199,749

Product Category
Televisions

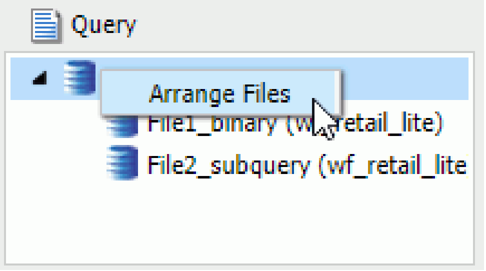
7. With the new component selected, click the *Home* tab and in the *Format* group, click *File*.

   In the File name field, enter File2_subquery and select the SQL Script (*.sql) format from the file types menu.

8. Click *Save*.

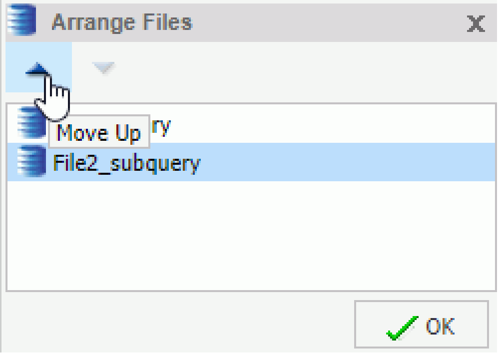
9. Rearrange the order of the HOLD files so that the File2_subquery is positioned above the File1_binary HOLD file using the following steps:

   a. Right-click *Files* in the Query pane and click *Arrange Files*, as shown in the following image.

   The Arrange Files dialog box opens.

   b. Using the Arrange Files dialog box that displays, select File2_subquery and click *Move Up* to move the file above File1_binary, as shown in the following image.

   c. Click *OK*.

10. Edit the first report and create a filter using the subquery.

11. Click *OK* to exit the Create a filtering condition dialog box.

    Your report is refreshed to reflect the filtering you have applied.

Creating a Subquery Filter Using a HOLD File

You can create a subquery using a HOLD file. A subquery is a nested query that is added to the Where clause of an SQL statement. A subquery is valuable because it is highly reusable.

Note: When creating a chart or report in InfoAssist, on the *Home* tab, in the *Design* group, you can click *Query* to create your content in Query mode. This hides the canvas and uses only the Query and Filter panes for content creation. In Query mode, if a subquery is present and there is no ACROSS field in the request, the data is refreshed only at run time. It is not refreshed at design time as you edit your content, improving performance. Since the canvas is hidden at design time, data does not need to be refreshed at that point.

Procedure: How to Create a Subquery Filter Using a HOLD File

This procedure describes how to create a subquery filter using a HOLD file created in the previous procedure.

1. Build a report.
2. On the Data tab, in the Filter group, click *Filter*.

   The Filter dialog box opens.
3. In the Create a filtering condition dialog box, from the Type drop-down menu, select *Subquery* as the filter type for the left-most part of the expression.
4. From the Subquery drop-down menu, select *In list* as the comparison operator.
5. From the list of subqueries, select the subquery that was created (in this example, File1) for the right-most part of the expression.
6. Click *OK*.

   The report is filtered by the subquery that you created.

   Note: To view the SQL statements generated by the request, go to the Quick Access Toolbar, open the Run drop-down menu, and select *SQL Trace*.

Chapter 3

Creating Multi-Page Documents

In Document mode, content can be created on multiple pages. The available output formats are: HTML, active report, PDF, active PDF, Excel (xlsx), and PowerPoint (pptx). Additional Excel formats are available, as well.

Note: When working in Document mode using the active report format, you can create a rich, multi-object document that integrates various reports and charts, closely resembling a dashboard.

Microsoft Excel 2007 and Microsoft PowerPoint 2007 are enabled, by default, in the Administration Console. To enable or disable formats, you must do so in the Administration Console.

- The active report output format combines multiple reports and charts into one document, resulting in a tabbed active dashboard.
- Excel combines multiple reports as different sheets in a workbook.
- PowerPoint combines multiple reports and charts in a single slide.

In this chapter:

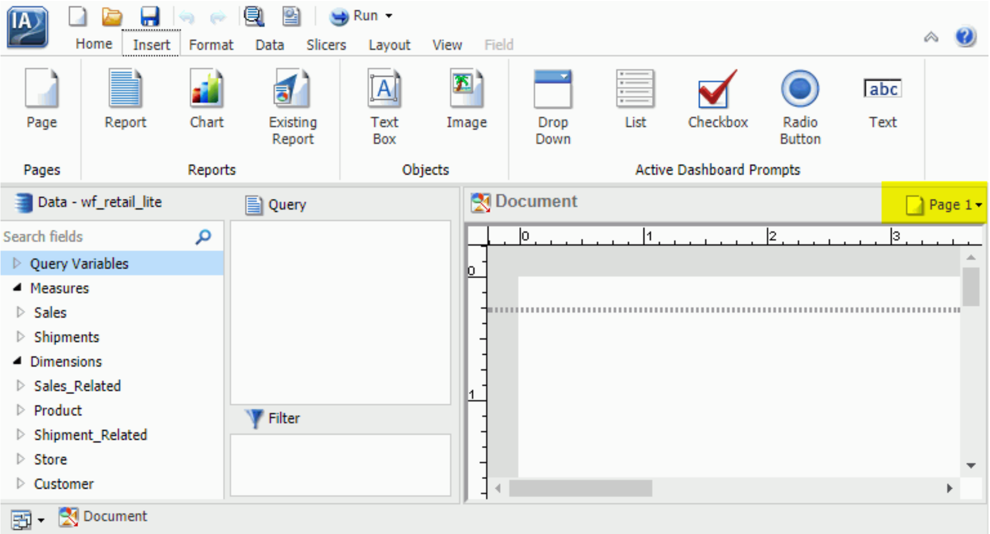
Creating Multi-Page Documents

You can create multi-page documents, allowing you to display an array of information across different pages.

Procedure: How to Create a Multi-Page Document

1. Create a new document.

Page 1 appears on the canvas title bar, as shown in the following image.

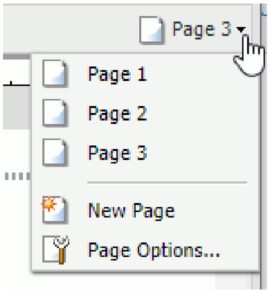


2. Add content, such as a new or existing report, chart, text, and images to Page 1.
3. To add another page, do one of the following:
   - ❑ On the Insert tab, in the Pages group, click *Page*.
   - ❑ On the canvas title bar, click the page icon. From the Page menu that opens, select *New Page*.

   A new page, for example, Page 2, is inserted after the current page, and appears on the canvas.

   Each new page that you add is named Page *n*, where *n* is a unique number increasing by an increment of 1.
4. Add content to Page 2.
5. Repeat steps 3 - 4 until your document is complete.

To navigate between pages, open the Page menu by clicking the Page icon at the top of the canvas, as shown in the following image.



Creating a Multi-page Active Technologies Dashboard

You can create a multi-page Active Technologies dashboard using InfoAssist+.

Procedure: How to Create a Multi-page Active Technologies Dashboard

1. Create a new active dashboard by setting the output format to active report.

   Page 1 appears on the canvas title bar.

2. Add content, such as a new or existing report, chart, text, images, and active dashboard prompts to Page 1.

3. To add another page, do one of the following:

   - On the Insert tab, in the Pages group, click *Page*.
   - On the canvas title bar, click the page icon. From the Page menu that opens, select *New Page*.

   A new page, for example, Page 2, is inserted after the current page, and appears on the canvas.

   Each new page that you add is named Page *n*, where *n* is a unique number increasing by an increment of 1.

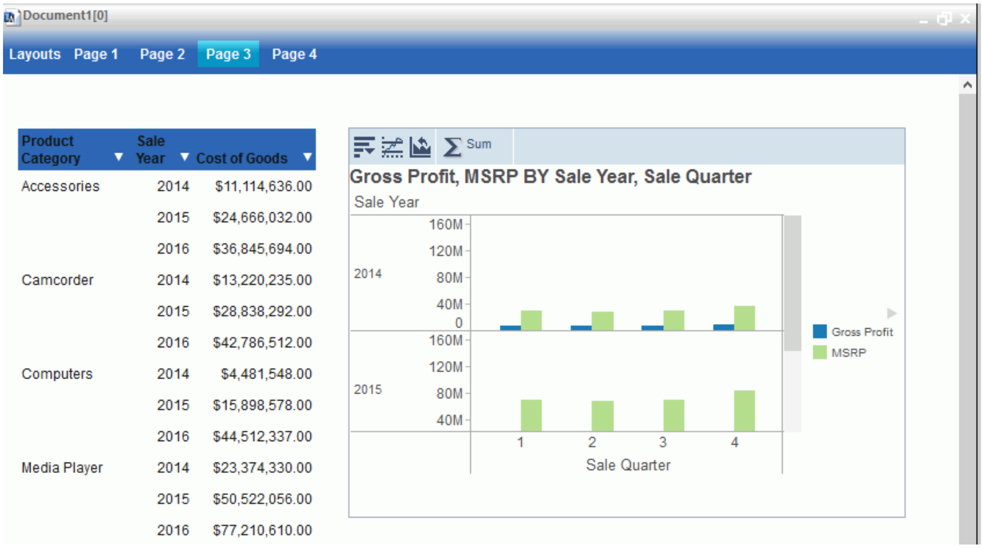
4. Add content to Page 2.

5. Repeat steps 3 - 4 until your dashboard is complete.

   To navigate between pages, open the Page menu by clicking the Page icon at the top of the canvas.

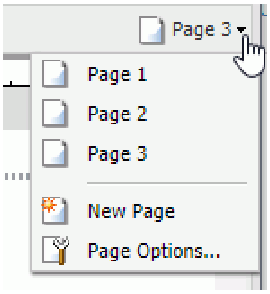
6. Run the active dashboard.

The tabs appear at the top of the canvas, as shown in the following image.



Navigating the Page Menu

You can access the Page menu by clicking the Page icon in Design mode, as shown in the following image.



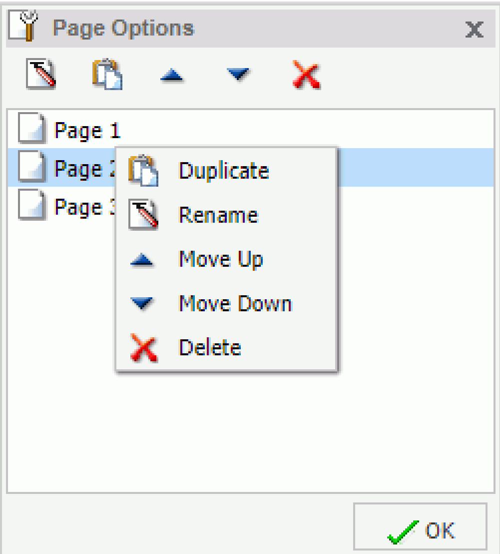
The Page menu lists the pages in the order in which you created them. You can rearrange the pages using drag-and-drop functionality. You can also select multiple pages and delete them.

In addition, the Page menu contains the *New Page* option to add a new page to the document. The *Duplicate* option creates a duplicate page.

The Page menu also contains *Page Options* which you can click to launch a dialog box of the following options:

- Rename Page
- Duplicate Page
- Move Page Up
- Move Page Down
- Delete

The Page Options dialog box is shown in the following image.



When you select a page, the Duplicate, Rename, Move Up, Move Down, and Delete options become active in the menu bar at the top of the dialog box. Also, when you right-click a page, a context menu of these same options opens.

The position of the page that you have selected determines which directional options are available. For example, *Move Up* would not be an option for Page 1. *Move Down* would not be an option for the last page.

To close the dialog box, click *OK*.

Using the Active Cache Option

Because all post-retrieval processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The active cache option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the Reporting Server.

Tip: It is recommended that you set the number of rows retrieved five times greater than the number of lines retrieved per page (as indicated in SET LINES). The minimum number of rows retrieved is 100.

Enabling Active Cache Through InfoAssist+

Active cache is enabled when you select *active report* as the output type and the *Pages on Demand* button (Format tab, Navigation group) is enabled.

The Advanced tab on the active report options dialog box contains the Rows Retrieved drop-down list. Use this setting to establish the increments in which the cached data stored in a binary file is returned to the output window. The default is 100.

Note: In a multi-page document, active cache must be enabled per component. It is not globally set. Therefore, when creating a document in AHTML format, you must select each component separately to enable active cache. When you do so, the Pages on Demand button is activated.

Chapter 4 Creating Active Technologies Components With InfoAssist+

This topic describes how to create a report, chart, or dashboard that is enabled for Active Technologies using InfoAssist+.

These reports, charts, and dashboards use the full capabilities of Active Technologies. They are also referred to as active reports, charts, and dashboards.

In this chapter:

Using Active Technologies

This topic provides an overview of Active Technologies and discusses security and cache processing. It includes additional information about the features of the product that will help you use it.

Note: When working with the new Designer style, only AHTML format is supported. If you want to produce content in APDF format, you must switch to the Legacy style using the Procedure Settings on the Quick Access toolbar.

Active Technologies Report Overview

An active report is a report that is designed for offline analysis.When working with a report that employs an interactive report format, it can be accessed and used offline. When using an active report, you can:

❏ Interact with the data, using analysis options similar to those found in an Excel® workbook, without any connection to a server. Analysis options include filtering, sorting, charting, and much more.

❏ Work offline without any additional plug-ins or programs. An active report is a self-containedreport, meaning that it contains all the data and JavaScript® within the HTML output file. Packaging the data and the interactive functions in the HTML file also makes the output highly compressible for email and transparent to security systems.

❏ Save the report on a local machine with active report functionality. Since no connection to a server is required to view the data or use the analysis options, you can save and use the report anywhere.

> **Note:** Performance may vary across browsers due to browser-specific memory limitations. For very large reports, Internet Explorer® may produce an error. For more information, refer to the Microsoft® website.

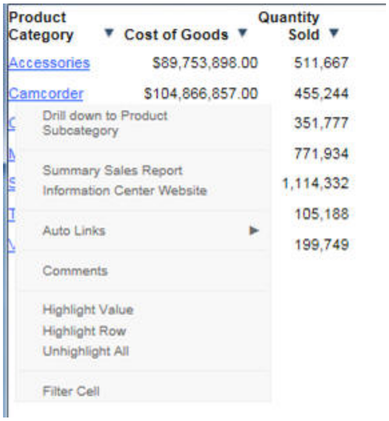
An active report for Adobe Flash Player includes most of the capabilities available in the HTML version of active reports in a visually enhanced, user-friendly report format. An active report delivered as a self-contained Adobe Flash SWF file that is Adobe Flash Player compatible allows for faster analysis of large data sets and interaction with the active report.

When working with an active report, you can:

- Filter or highlight data.
- Sort data within any column in ascending or descending order.
- Apply calculations to columns and choose the location at which to display results.
- Control the display of data by hiding columns, freezing columns, limiting the number of rows per page, and using graphic visualization to compare column values.
- Create a variety of simple or advanced charts (pie, line, bar, or scatter) and Rollup Tables.
- Apply a global filter to multiple reports within the same HTML page.
- Export report data and chart data.
- Restore original report settings.
- Run active reports on your mobile device with the Opera™ browser (Version 8.60 U2 or higher) installed. See the Opera website for a list of supported devices.

The following image shows an HTML active reportreport in interactive report format . The pop-up menu is open for the Sale Unit(s) column, with the Calculate Avg operator selected.

The following image shows the options that are available at the cell level for a report inactive report format. Included are the options that reflect Auto Drill, Multi Drill, and Auto Linking functionality. The applicable documentation for your graphical tool contains more information on that functionality.



Note:

- Depending on how your active report has been set up, some options may not be available in your report.
- When using active reports, it is recommended that you set the system font display to **normal** to ensure that the menu icons display correctly.
- Freeze options are only available when a report does not fit in the current window. Therefore if your report fits in the current window, Freeze options appear grayed out in the menu. If you resize the report, or a column or row extends beyond the proportion of the window, then Freeze options become activated and are available for use.

Security Features

You can password protect an active report. This feature restricts users from viewing the report by requiring them to enter a password before opening the report. The data is encrypted using the 256-bit Advanced Encryption Standard (AES) specification. The password is used as the key for decrypting and encrypting the data. Therefore, the password is not stored in the report, and you do not need a connection to go back to the server for password verification.

The HTML page that you receive contains both the JavaScript and the data for the report so that you can interact with the data in a disconnected mode. Internet Explorer detects the JavaScript and issues a warning. If you look at the Internet Explorer warning, it mentions explicitly the detection of active content, which is the JavaScript. The same warning appears when pop-ups are blocked in the browser.

Handling a Large Amount of Data

Because all post-retrieval processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The active cache option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the Web Query Reporting Server. The server also becomes the resource for performing all calculations, sorting, and filtering when active cache is enabled. Since active cache uses on-demand paging functionality, Web Query Viewer is not supported.

The active report with active cache option in the clustered server environment, using Cluster Manager (CLM), will maintain the connection with the Web Query Reporting Server on which the temporary cache is created. This enables the retrieval of subsequent pages from the browser, while the report is in the same browser session.

The active cache feature uses a POST instead of a GET in an HTTP request.

Distribution and Viewing Considerations

Active Technologies stores an active report as an HTML file. The HTML file created by Active Technologies contains both the report data and the JavaScript code that enables you to interact with the data in disconnected mode.

An active report is designed for distribution to users who need to perform offline analysis and interactive functions without connection to a server.

Note: Once you have created interactive content, you may want to zip the output files to reduce the file size and send them through your email client.

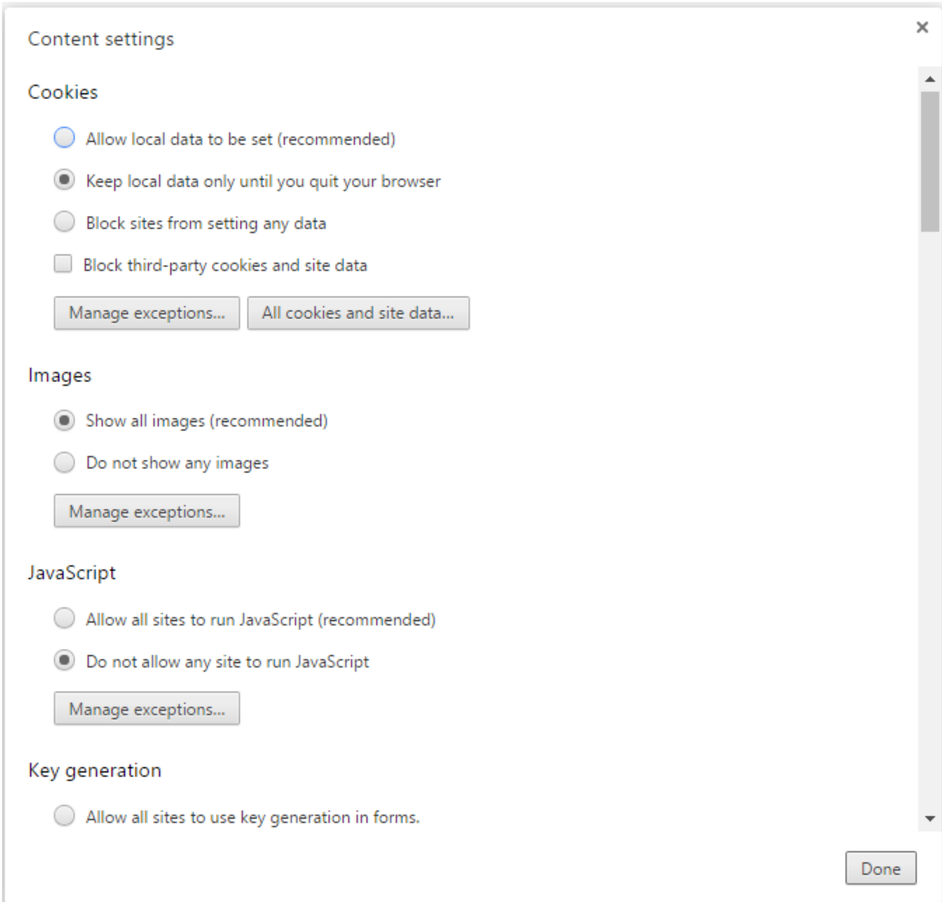
You can save an active report from your web browser to another location. You can also send an active report to another person by email, as an HTML attachment. However, when you distribute an active report, you must keep in mind how it will be viewed.

For example, when you send an active report as an HTML attachment to email, many client email programs on a mobile device can block the JavaScript in the attachment. A third-party tool, such as the Mobile Faves App for a mobile device, may be used to correctly view the attachment.

If you try to view an active report in a web browser, and JavaScript is blocked or disabled on your web browser, you will receive a message reminding you that JavaScript must be enabled on the browser. If you are using a mobile device, the message directs you to use the Mobile Faves App. If the Mobile Faves App is not installed, you can download it from the App Store® for iOS devices or from the Google Play™ store for Android™ devices. In the message, App Store and Google Play store are hyperlinks to the Mobile Faves App.

The message is displayed on the Desktop or on a supported mobile device when JavaScript is disabled in a web browser used to open an online or offline active report. It is also displayed on the Preview pane or window of an application used to preview the content of an offline active report.

The following image shows JavaScript disabled in Google Chrome™.



Usage Notes for Active Technologies

The following apply to browser support.

- Active PDF (APDF) is an Active Technologies output format. It is not supported in Microsoft Edge®, since APDF requires the Adobe Reader plug-in that supports Flash Player.
- ActiveX, a technology from Microsoft, is not supported in Microsoft Edge. Any Active Technologies feature that requires the use of ActiveX controls is therefore not available in Microsoft Edge. These features include the following, which are accessible in other browsers at run time, using the column drop-down menu on an active report:
  - Send as E-mail (supported only in Internet Explorer)
  - Save Changes (supported only in Internet Explorer)
  - Export to XML (Excel) when active cache is disabled
- If you are using a Firefox® browser and you export an AHTML report to Excel, the file extension that displays is incorrect (for example, .xls.xls). You can override this default value using the settings of the browser. Specifically, if you click the *Always ask me where to save files* radio button, which is located under Options, you will be prompted, upon download, to either open or save the file. You can then provide a name and extension for the file.

The following apply to Active Technologies reports.

- At run time, when fields are added to, or removed from, an active report that includes drilldowns that pass parameter values, the drilldowns are disabled. This is because the parameter values that are passed may no longer apply.
- If multiple report components with different security passwords are included in an AHTML document, the password for the last report component is used.
- Active reports employ left and right cell padding, by default. This enables you to view the active report consistently, without the concatenation of any values or spacing issues related to the cell padding. In cases where these settings are not defined in the StyleSheet, the default settings for the left and right cell padding are used.
- By default, Active Technologies displays the name specified in the Master File to identify a column in an ACROSS group on a tabular active report that has only one display field. With the following SET command, you can display the title specified in the Master File, instead of the name, to identify the column:

  ```
  SET ACRSVRBTITL = ON
  ```

Active Technologies derives the title from the TITLE attribute in the Master File (for example, TITLE = 'Product ID'). It derives the name from the FIELDNAME or FIELD attribute (for example, FIELD = PCD).

- The Sort Ascending, Sort Descending, and Restore Original options are accessible on a column drop-down menu on an active report. When active cache is enabled on the active report, the Restore Original option does not return the report output to its original state after sorting the data. Instead, you receive the following message: Warning: Original sort could not be determined.

- When using active content in Cache Mode, filtering may not work properly if the content contains a text field (for example, TX50). As a workaround, consider using an alphanumeric field (for example, A50).

The following apply to Active Technologies charts.

- The new chart attribute syntax has been applied to the following chart types: Dual Bar and Line, Tag Cloud, Streamgraph, Mekko, Funnel, and Pyramid. This process adds additional relevant field containers for these chart types, which can be used to specify fields in a specific area of the chart. For example, Horizontal Axis, Color, and Tooltip are field containers that are part of the new chart attribute syntax.

  In InfoAssist+, specific field containers display for each chart type.

The following applies to exporting in Active Technologies.

- If you create a report that contains ACROSS sort fields and you attempt to export the data, column titles and field values are not exported to CSV and XML (Excel) formats.

The following applies to Active Technologies tools.

- The comma inclusion edit option is not implemented in Rollup tables and Pivot tables when active cache is enabled.

The following applies when using the Active Technologies Cache option.

- Date-time format fields are not supported.

The following apply when using the Export to Excel functionality.

- When using the Export to Excel option while creating and generating an active report with active cache enabled, the request will be generated in XLSX format, rather than EXL2K. This applies to the following browsers: Microsoft Edge, Internet Explorer, Firefox, and Chrome.

The export behavior is controlled by the Reporting Server. When the export is performed, an Office Open XML document is produced, which you can download and save in the required format (the default is .xlsx).

- When using the Export to XML (Excel) option with active cache disabled, the export behavior is controlled by the active JavaScript layer. When the export is performed, a Microsoft Office XML document is produced, which you can download and save in the required format (the default is .xls). This applies to the following browsers: Microsoft Edge, Internet Explorer, Firefox, and Chrome.

The following apply when using mobile devices.

- The Chrome browser "Force enable zoom" Accessibility setting on Android mobile devices overrides a website request to prevent zooming. If this setting is enabled when executing an AHTML report on an Android mobile device using Chrome, it interferes with active report functionality, such as Freeze Column and manual resizing. The Accessibility setting needs to be disabled for active reports to be fully functional.

Chapter 5

Creating Interactive Content With In-Document Analytics

This content describes how you can enable In-Document Analytics to create interactive reports, charts, or dashboards that users can view and interact with offline.

In this chapter:

Creating an Active Technologies Report

An active report is a self-contained report that is designed for offline analysis.

Procedure: How to Create an Active Technologies Report

With InfoAssist+ in Report mode, you can perform this procedure in Query Design view or Live Preview.

1. On the status bar, in the Output Types menu, click *active report* or *active PDF*.
2. Populate the report with your data in one of the following ways:
   - Drag the dimension fields and measure fields onto the canvas.
   - Drag the dimension fields and measure fields into the appropriate field containers in the Query pane.

Active Technologies Report Menu Options

Menu options for an active report are described in the following table.

Note: The following options described in the table require the use of ActiveX controls. Since Microsoft Edge does not support ActiveX technology, these options are not available in that browser:

- Send as E-mail
- Save Changes
- Export to XML (Excel) when active cache is disabled

Option	Definition
Sort Ascending	Sorts the column in ascending order.
Sort Descending	Sorts the column in descending order.
Filter	Filters the data. Options are: ❑ Equals ❑ Not equal ❑ Greater than ❑ Greater than or equal to ❑ Less than ❑ Less than or equal to ❑ Between ❑ Not Between ❑ Contains ❑ Contains (match case) ❑ Omits ❑ Omits (match case)

Option	Definition
Calculate	Calculation types that you can apply to the column: ❑ Clear ❑ Clear All ❑ Count ❑ Distinct, which counts the number of distinct values within a field For numeric fields, you can also apply: ❑ Sum ❑ Avg ❑ Min ❑ Max ❑ Count ❑ Distinct, which counts the number of distinct values within a field ❑ % of Total
Chart	Creates an active chart from the report. Options are Pie, Line, Column, and Scatter.
Rollup	Lists the fields available to create a table.
Pivot (Cross Tab)	Lists the fields available to create a Pivot table.
Visualize	Adds visualization bars to, or removes them from, the selected column. The Visualize option is available for numeric data columns.
Hide Column	Suppresses the display of the selected column in the report.

Option	Definition
Show Columns	Lists the names of the columns that are hidden in the report, allowing you to individually restore a column. Select the name of a specific column in the hidden columns list to restore that column to the report.
Freeze Column	Freezes the report at a particular point so that columns to the left of the freeze point remain in view while the user scrolls through the other report columns. **Note:** If the report can be fully viewed in the browser window, freeze is not applied. The Freeze column option is not available for expandable report (Accordion) views.
Unfreeze All	Unfreezes the columns.
Grid Tool	Opens the Grid Tool, which you can use to change the column order, select multiple columns to sort ascending or descending, hide and show columns, add a calculation result to a column, and add subtotals to the active report.
Chart/Rollup Tool	Opens the Chart/Rollup Tool, which you can use to select multiple group fields to generate the chart or rollup table. The Chart/Rollup Tool contains a list of columns available in the active report to add to Group By and Measure fields. Drag the columns into the field that you want.
Pivot Tool	Opens the Pivot Tool, which you can use to select multiple group fields to generate the chart or pivot table. The Pivot Tool contains a list of columns available in the active report to add to Group By, Across, and Measure fields. Drag the columns into the field that you want.
Show Records	Opens the Show Records menu option to list the number of records available for display per page in the report. Select a number (for example, 10) to display, per page. Default displays the number of records (lines) per page that is specified in the report procedure.

Option	Definition
Comments	Options to display comments under cells or hide indicators for comments in the active report output.
Send as E-mail	Enables you to save the current state of the active report and send the report as email. **Note:** To use this feature, you must have ActiveX enabled in your browser security settings. This feature is only supported in Internet Explorer.
Save Changes	Saves the current state of the active report as an HTML file in the Downloads folder. Depending on your browser settings, you can optionally save the file to a different location on your local system. **Note:** When you save an active report using the browser Save as option, the report is saved in its original default state. In the browser Save as dialog box, we recommend that you select the *Webpage, HTML Only* save option to ensure that the page is saved properly.
Export	When active cache is enabled, exports all records or filtered only records to HTML, CSV, Excel, or PDF. **Note:** active cache is enabled on an active report when you click *Pages On Demand* on the Format tab, in the Navigation group. When active cache is disabled and with cases where a disconnected file is used for offline analysis, exports all records or filtered only records to HTML, CSV, or XML (Excel) and automatically places a copy in your Downloads folder. This applies to the export of all interactive output across all browsers. To use this feature, you must enable ActiveX in your browser security settings.
Print	Prints all records or filtered only records.
Window	Displays reports in a cascade or separate tabs.

Option	Definition
Restore Original	Restores the active report to the default state specified in the report procedure.

Active Technologies Cell Menu Options

When you are working in active report format, the following data cell options display.

Option	Definition
Drill down	Enables you to drill down one level in the hierarchy of your data source. This option displays for reports that have Auto Drill enabled.
Drill up	Enables you to drill up one level in the hierarchy of your data source. This option displays for reports that have Auto Drill enabled.
Restore Original	Restores the active report to the default state specified in the report procedure.
Auto Links	Displays a list of target reports that are linked to the Auto Link enabled report. This option displays for reports that have Auto Linking enabled.
Comments	Enables you to add comments about data in your report. The result is an annotation that displays when you hover over it at run time.
Highlight Value	Enables you to highlight a particular value in your report.
Highlight Row	Applies highlighting to the selected row in your report.
Unhighlight All	Removes any applied highlighting from values or rows in your report.
Filter Cell	Enables you to filter the output, showing only a selected row of data.
Remove Cell Filter	Removes any applied cell filters.

Configuring Active Technologies Report Options

You can configure active report options, including menu options, based on user role, through the active report options dialog box.

You can access the dialog box on the Format tab, in the Features group, by clicking the *active report options* button. The button is available when active report or active PDF is selected as the output type.

The active report Options dialog box contains the following tabs:

- General
- Menu Options
- Colors
- Advanced

General Tab

Use the General tab to set common properties specific to active reports.

The General tab contains the following options:

Display. This area contains options to set the window to cascade or tabs, and options to freeze columns.

- **Window.** Select the window setting. The options are Cascade and Tabs.

  Note: You can use the Cascade or Tabs options to modify how the output window displays. The Tabs option can be used with the Legacy style only.

- **Freeze Columns.** Select the columns you would like to freeze. You can also select None.

Page Options. This area contains options to set the number of records per page, enable the display of page information, edit the alignment, and set the location of the page information.

- **Records Per Page.** Select or type the number of records that you would like to display per page. The default value is 57.
- **Display Page Information.** Select this option to display page navigation information. Clear this option to disable the display of page navigation information.
- **Alignment.** Click the appropriate button to set the alignment of the page navigation information. Options are Left, Center, and Right.
- **Location.** Select the location for the page navigation information. The options are Top Row and Bottom Row.

Chart Options. This area contains options that pertain to charts when the output format is active PDF.

Note: Chart Options do not display when the output format is active report.

- **Legend (check box).** Select this option to collapse the legend if necessary. Clear this option if you do not want the legend to collapse.
- **Legend (menu).** Select the location for the legend. The choices are:
  - Bottom Left
  - Bottom Center
  - Bottom Right

Menu Options Tab

Use the Menu Options tab to select a user type and which options to display in the menu.

The Menu Options tab contains the following options:

- **User Type.** The options are Power, Analyst, Basic, and Custom.
  - **Power.** This is the default user type. It enables all functionality.
  - **Analyst.** This user type has the following functionality: Show Records, Freeze, Hide/Unhide, Export, Sorting, Pivot, Filter, Calculations, Chart, Visualize, Restore Original, Save Changes, and Accordion.
  - **Basic.** This user type has the following functionality: Show Records, Freeze, Hide/Unhide, Sorting, Filter, Calculations, Visualize, and Restore Original.
  - **Custom.** If you select a combination of options that does not match one of the existing user types (Power, Analyst, Basic), the User level name that appears in the User Type field is Custom. This is not a default user type or a selectable user type. It indicates that options for this user do not match any of the existing user types.

  The options available according to user type include the following:

  - **Show Records.** Shows all records or specific numbers of records.
  - **Freeze.** Freezes and unfreezes columns.
  - **Hide/Unhide.** Hides and shows columns.
  - **Export.** Exports data to HTML, CSV, Excel, or PDF if active cache is enabled, or to HTML, CSV, or XML (Excel) if active cache is disabled.

Note: If cache is disabled, the output is automatically sent to the Downloads folder. This applies to all interactive outputs, across all browsers, as well as when you are working with a disconnected file for offline analysis.

- **Sorting.** Sorts data in ascending or descending order.
- **Pivot.** Lists the fields available to create a Pivot table.
- **Window Type.** Shows windows as cascade or tabs.
- **Send as Email.** Enables you to save the current changes and send a report as email.
- **Print.** Prints all records or filtered-only records.
- **Advanced Tools.** Accesses the Chart/Rollup, Pivot, and Grid Tools.
- **Filter.** Opens the Filter Selection dialog box.
- **Calculations.** Performs the following calculations: Sum, Avg, Min, Max, Count, Distinct, % of Total.
- **Chart.** Converts a report to a pie, line, bar, or scatter chart.
- **Visualize.** Adds data visualization bars to a report.
- **Rollup.** Performs rollup on data.
- **Comments.** Adds comments.
- **Restore Original.** Restores the active report to the default state specified in the report procedure.
- **Save Changes.** Saves the current changes.
- **Accordion.** Produces accordion reports.
- **Grid Tool.** Opens the Grid Tool dialog box.

Colors Tab

Use the Colors tab to select colors for various objects on the report.

The Colors tab contains the following options:

Page. This area contains options to set the colors for the font and background of the page text.

- **Font.** Opens the Color dialog box, where you can select the font color.

- **Background.** Opens the Color dialog box, where you can select the background color for the page text.

Row Selection. This area contains options to set the colors that appear when you point to or select a row on the report.

- **Hover.** Opens the Color dialog box, where you can select the color that the row becomes when you hold the mouse over the row.
- **Selected.** Opens the Color dialog box, where you can select the highlight color that the row becomes when you use the highlight option.

Visual. This area contains options to set the colors for the data visualization bars.

- **Positive.** Opens the Color dialog box, where you can select the color for a data visualization bar that represents a positive number.
- **Negative.** Opens the Color dialog box, where you can select the color for a data visualization bar that represents a negative number.

Calculations. This area contains options to set the colors for values in a calculation.

- **Font.** Opens the Color dialog box, where you can select the font color for the calculation.
- **Background.** Opens the Color dialog box, where you can select the background color for the calculation.

Menu. This area contains options to change the color of the menu.

- **Normal**
    - **Font.** Opens the Color dialog box, where you can select the color for the text of the options on the column menus.
    - **Background.** Opens the Color dialog box, where you can select the background color for the column menus.
    - **Border.** Opens the Color dialog box, where you can select the color for the border of the column menus.
- **Hover**
    - **Font.** Opens the Color dialog box, where you can select the color for the text of the options on the column menus when you point to them.
    - **Background.** Opens the Color dialog box, where you can select the background color that appears behind options on the column menus when you point to them.

Advanced Tab

Use the Advanced tab to control the number of rows retrieved from active cache and to add security settings.

Note: active Cache is enabled when you select *active report* as the output type, and click *Pages On Demand* on the Format tab, in the Navigation group.

The Advanced tab contains the following options:

active Cache. Enables a report to cache the data in a binary file and return the data to the output window in pre-set increments.

- **Rows Retrieved.** Select the number of rows retrieved in the output. The default value is 100.

Security. This area allows you to set a password to access the report and enable expiration by date or by days. This option is only available for the active report output.

Note: When setting security options for active reports, be aware that security options can be set for each individual component on the canvas, but only one password can be set for the entire document.

Creating an Active Technologies Chart

An active chart is a chart that is designed for offline analysis. For more information, see *Active Technologies Report Overview* on page 55.

Note: Active Technologies supports the use of HTML5 extensions, which are user-supplied, custom chart types that access resources external to Web Query.

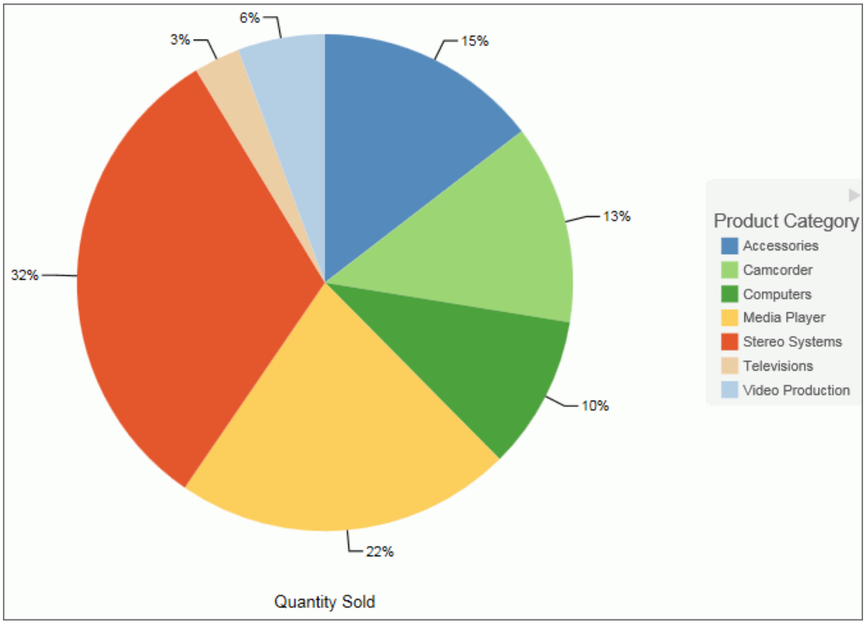
Procedure: How to Create an Active Technologies Chart

With InfoAssist+ in Chart mode, you can perform this procedure in Query Design view or Live Preview.

1. On the status bar, in the Output Types menu, click *active report* or *active PDF*.
2. On the *Format* tab, in the *Chart Types* group, click the button of the chart that you want to create. Bar chart is the default.

   The chart appears on the canvas.
3. Populate the chart with your data in one of the following ways:
   - Drag the dimension fields and measure fields onto the chart.
   - Drag the dimension fields and measure fields into the appropriate field containers in the Query pane.

The following image shows an HTML5 pie chart that displays the sum of the values in the Quantity Sold field by Product Category.



Active Technologies Options for Charts

Options for an active chart are described in the following table.

Note: For charts that employ the new attribute syntax, only the following four icons display: More Options, Advanced Chart, Original Chart, and Aggregation. If you have applied a filter, the Remove Filter icon displays.

Option	Definition
More Options 	**New.** Creates a new instance of the chart. This option is available only when the chart is created from a column menu on a tabular report.
	Group By (X). Changes groups by the horizontal sort field.
	Add (Y). Adds a vertical sort field.
	X-Axis. Specifies a measure or dimension sort field. Applies to scatter charts.
	Y-Axis. Specifies a measure. Applies to scatter charts.
	Arrange By. Specifies the marker color. The marker color depends on the field assigned to the color attribute. If no field is assigned to this category, then all of the markers will be the same color. Applies to scatter charts.
	Export to. Exports to Excel, Word, or PowerPoint.
	Stacked. Stacks the risers on top of each other, with the length of each riser representing the data value. Applies to column charts.
	Top. Displays the top values. Options are Top 3, Top 5, Top 10, and Clear Top. Applies to pie charts.
	Trend. Draws a trendline and equation label for an individual series. Applies to scatter charts.
	Chart/Rollup Tool. Opens the Chart/Rollup Tool, which you can use to select multiple group fields in the chart or rollup table generated. The Chart/Rollup Tool contains a list of columns available in the active report and Group By and Measure sort fields. Drag the columns into the desired sort field. **Note:** When working with the Chart/Rollup Tool for active charts (specifically those with the new chart attribute syntax), the Series tab is not supported. It is available with charts that are created with tabular reports or stand-alone charts that do not use the new chart attribute syntax.
	Restore Original. Restores the active report to the default state specified in the report procedure.
Column 	Displays data as a column chart.

Option	Definition
Pie	Displays data as a pie chart.
Line	Displays data as a line chart.
Scatter	Displays data as a scatter chart.
Rollup	Displays the chart as a rollup table.
Advanced Chart	Opens the Chart/Rollup Tool.
Original Chart	Restores the active chart to the chart type specified in the report procedure.
Lock/Unlock	Freezes the chart or rollup table. You can link or unlink a chart or rollup table to the filters that you have applied in your report using the Freeze Chart or Freeze Rollup icon. The icon indicates whether the report is linked to the filter (Freeze Chart or Freeze Rollup) or not (Unfreeze Chart or Unfreeze Rollup). This option is available only when the chart is created from a column menu on a tabular report.
Aggregation	Applies the following options to a Measure field: Sum, Avg, Min, Max, Count, and Distinct. The default value is Sum.

Option	Definition
Remove Filter 	Removes a filter from a chart. You can apply a filter by pointing to or lassoing an area of the chart and then clicking the *Filter Chart* or *Exclude from Chart* option from the chart tooltip.

Usage Notes for Active Technologies Charts

If you are working with an AHTML chart that does not have the new chart properties (specifically, non-bucket AHTML charts), you will encounter problems if you change the chart type to one of the following chart types using the Advanced Chart tool at run time:

- Tag Cloud
- Funnel
- Pyramid
- Waterfall
- Histogram
- Radar Line
- Radar Area
- 3D Area

By default, these chart types are hidden in the Advanced Chart tool when the original chart is an AHTML bucket chart. These chart types are available under the following circumstances:

- When the original chart is a non-bucket chart
- When the chart is created from a tabular report

Creating an Active Technologies Dashboard

You can create an active dashboard by inserting multiple content types, such as reports, charts, images, and text, into a document. An active dashboard will run any report or chart using the active output format, even if the report or chart itself is not in active output format.

You can also insert active dashboard prompts into a document to act as filters for the reports and charts on the dashboard. You can cascade (chain) prompts to populate them based on the selections from the previous prompts.

The output format of the active dashboard must be active report or active PDF in order to add active dashboard prompts.

Active Technologies Dashboard Prompts

The active dashboard prompts group contains buttons that insert active dashboard prompts into your dashboard. This group is only visible when the output format of the dashboard is set to active report or active PDF. You can access the active dashboard prompts on the Insert tab, in the active dashboard prompts group.

The following are the types of active dashboard prompts that you can use to apply filters to an active dashboard:

- **Drop Down.** Inserts a drop down prompt placeholder in the upper-left corner of the canvas.
- **List.** Inserts a list prompt placeholder in the upper-left corner of the canvas.
- **Checkbox.** Inserts a check box prompt placeholder in the upper-left corner of the canvas.
- **Radio Button.** Inserts a radio button prompt placeholder in the upper-left corner of the canvas.
- **Text.** Inserts a text area prompt placeholder in the upper-left corner of the canvas.

Note: The display of values populated in active dashboard prompts is dependent on the data setting. For example, if sample data is turned on, then active dashboard prompts will show sample data, such as:

```
WF_RETAIL1
WF_RETAIL2
WF_RETAIL3
```

Target Reports

When you bind a field to an active dashboard prompt, the default target report is the report from which you dragged the field. You can add or remove target reports from an active dashboard prompt through the active dashboard properties dialog box.

A report must meet one of the following requirements to be a target report:

- The report must contain a field with the same name as the source field (actual field name or AS name).
- The Master File of the report must contain a field with the same name as the source field.

If a report is eligible to be a target report because the field has the same user-supplied title and the title is changed, the report is automatically removed as a target.

Procedure: How to Add an Active Technologies Dashboard Prompt to a Dashboard

This procedure describes how to begin to create a dashboard by creating one report and binding a single prompt to one of the fields of the report.

With InfoAssist+ in Document mode:

1. On the status bar, in the Output Types menu, accept the default output type (active report), or click *active PDF*.
2. On the *Insert* tab, in the *Reports* group, click *Report*.

   A placeholder appears on the canvas.
3. Drag fields onto the canvas, or into the Query pane, to create the report and start building the dashboard.
4. On the *Insert* tab, in the *active dashboard prompts* group, select a dashboard prompt to insert into the document.

   An active dashboard prompt appears in the upper-left corner of the canvas. If the report is located in the upper-left corner of the canvas, you will have to drag the prompt off the report.
5. Select the report and bind one of its data source fields to the prompt in one of the following ways:

   - **Query pane:** Select the report. From the Query pane, drag the field that you want to bind onto the prompt.
   - **Report on the canvas:** Click the report on the canvas. You can now edit it. Highlight the column that contains the data that you want and drag it onto the prompt.

   Once you have bound the field to the prompt, the values of the field appear in the prompt.

   Note: Once an active dashboard prompt is added to the canvas, the document is locked in an active output format. You cannot change the active report or active PDF format if there are prompts present on the canvas. To switch to a non-active output format, you must remove all prompts.

Using Multiple Reports as Targets and Sources

You can add multiple reports and charts to an active dashboard. Each report can have multiple prompts associated with it.

Procedure: How to Build a Dashboard With Multiple Reports as Targets and Sources

The following procedure describes how to set up active dashboard prompts for two reports on a dashboard. In the example that is used, the first report contains information about the categories of electronics products sold in various regions. The Product,Category field will be bound to a group of radio buttons. Each radio button will represent a particular product category of electronics. When you select a radio button for a product category, for example, Accessories, the report will be filtered by your selection.

The second report contains information about the gender and geographic location of electronics consumers. The Gender field will be bound to a drop-down list. The list will display the values, F (female) and M (male). When you select a gender from the drop-down list, the report will be filtered by your selection.

1. Open InfoAssist+ in Document mode using the wf_retail_lite Master File.
2. Create an active dashboard by adding two reports with the following components, respectively:

   Report 1:

   - Product,Category
   - Store,Business,Region
   - Discount
   - Gross Profit

   Report 2:

   - Gender
   - Customer,Continent
   - Product,Category
3. On the *Insert* tab, in the *active dashboard prompts* group, add the following active dashboard prompts to the dashboard, positioning them relative to each respective report.

   - **Radio Button:** This prompt will be used for Report1.
   - **Drop Down:** This prompt will be used for Report2.

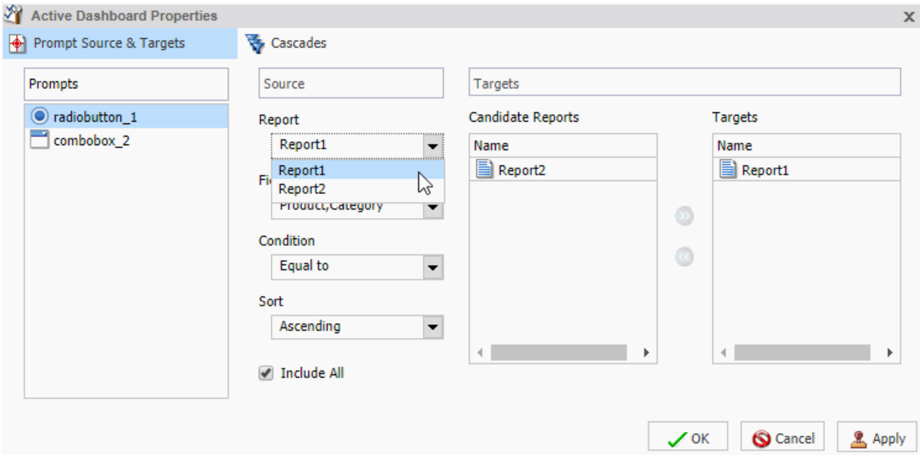
   For more information on working with active dashboard prompts, see *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 81.
4. Right-click the radio button active dashboard prompt for which you want to bind a field to and click *Properties*.

   The active dashboard properties dialog box opens.

The Prompts list displays the two prompts (for example, radiobutton_1 and combobox_2) that were added to the dashboard in Step 3.

5. From the Report drop-down menu, select the report that contains the field to which you want to bind an active dashboard prompt.

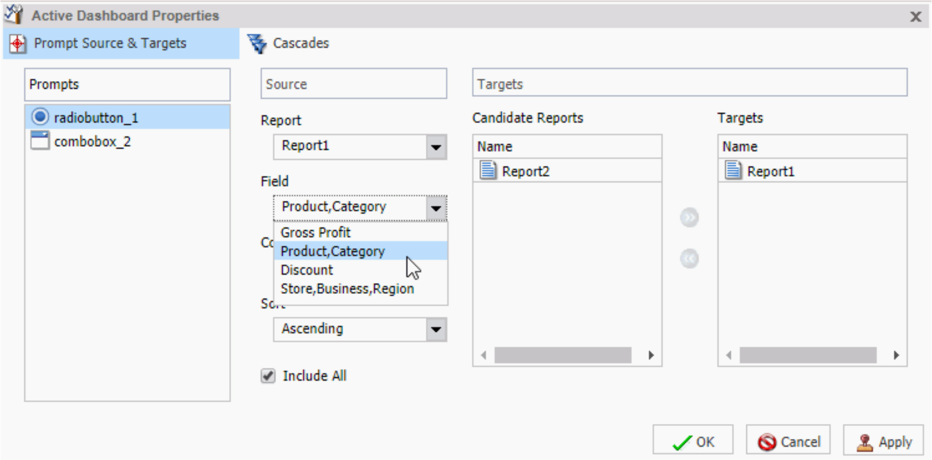
   In this example, the radio button list (radiobutton_1) has been selected as the prompt for the region report (Report 1), as shown in the following image.



   The next step describes how to bind the Product,Category field from the region report to the radio button list to filter that report.

6. From the Field drop-down menu, select the field to which you want to bind the active dashboard prompt.

In this example, the Product,Category field has been selected for the radio button list (radiobutton_1), as shown in the following image.



Note: You can optionally specify an ascending or descending sort order for the current scenario.

7. Click *OK*.

   The prompt is now bound to the field on the dashboard.

In the following image, the radio button list is bound to the Product,Category field. It displays all product categories by which you can filter the report.

Product Category	Store Business Region	Discount	Gross Profit
Accessories	EMEA	$2,437,956.41	$15,898,776.98
	North America	$3,416,809.19	$22,879,859.37
	South America	$153,257.58	$1,027,460.88
Camcorder	EMEA	$2,840,963.46	$19,928,603.81
	North America	$4,075,160.76	$28,304,171.49
	South America	$185,793.84	$1,309,721.34
Computers	EMEA	$1,700,675.30	$12,147,362.23
	North America	$2,999,148.76	$20,556,914.70
	South America	$100,862.80	$753,505.60
Media Player	EMEA	$4,678,461.09	$22,897,933.25
	North America	$6,522,133.78	$31,364,927.54
	South America	$304,865.09	$1,499,928.75
Stereo Systems	EMEA	$5,428,981.57	$34,639,882.85
	North America	$7,744,502.52	$49,228,757.29
	South America	$341,022.82	$2,214,130.64
Televisions	EMEA	$1,518,099.74	$6,990,404.98
	North America	$2,013,911.63	$9,358,461.12
	South America	$102,362.82	$462,120.21
Video Production	EMEA	$1,066,117.73	$7,195,930.82
	North America	$1,552,040.11	$10,272,127.15
	South America	$73,964.80	$460,856.91

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The following steps describe how to bind the Gender field in the gender report (Report2) to the drop-down list prompt.

8. Right-click the Drop Down active dashboard prompt for which you want to bind a field and click *Properties*.

   The active dashboard properties dialog box opens again.

   Notice that combobox_2, the prompt selected on the dashboard, is selected in the Prompts list.

9. From the Report drop-down menu, select the report (Report2) that contains the field to which you want to bind an active dashboard prompt.

   The next step describes how to bind the Gender field from the gender report to the drop-down list to filter that report.

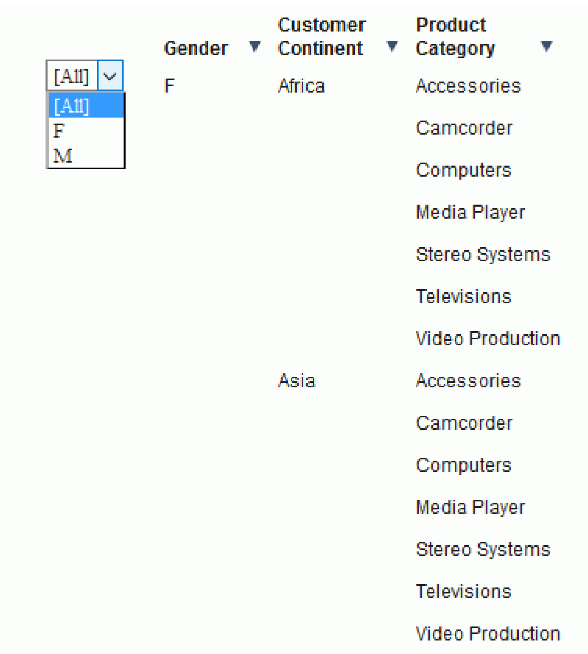
10. From the Field drop-down menu, select the field (Gender) to which you want to bind the active dashboard prompt.

    Once the Gender field has been selected, Report2 (gender report) appears in the Targets list and Report1 (region report) appears in the Candidate Reports list.

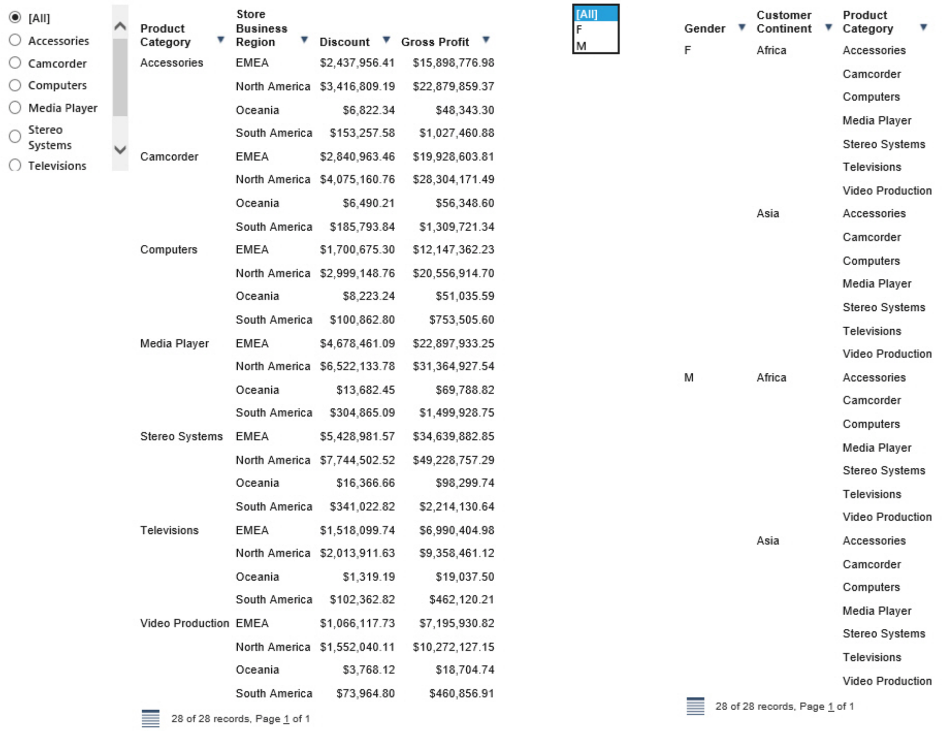
    Note: To move a report from the Candidate Reports list box to the Targets list box, select it and click the *Add to List* arrow. To remove a report from the Targets list box, select it and click the *Remove from List* arrow. You can select multiple reports by holding down the Ctrl key and clicking each one.

11. Click *OK*.

    The prompt is now bound to the Gender field on the dashboard. You can now filter the gender report by female or male, as shown in the following image.



The final active dashboard displays, as shown in the following image.



Product Category	Store Business Region	Discount	Gross Profit
Accessories	EMEA	$2,437,956.41	$15,898,776.98
	North America	$3,416,809.19	$22,879,859.37
	Oceania	$6,822.34	$48,343.30
	South America	$153,257.58	$1,027,460.88
Camcorder	EMEA	$2,840,963.46	$19,928,603.81
	North America	$4,075,160.76	$28,304,171.49
	Oceania	$6,490.21	$56,348.60
	South America	$185,793.84	$1,309,721.34
Computers	EMEA	$1,700,675.30	$12,147,362.23
	North America	$2,999,148.76	$20,556,914.70
	Oceania	$8,223.24	$51,035.59
	South America	$100,862.80	$753,505.60
Media Player	EMEA	$4,678,461.09	$22,897,933.25
	North America	$6,522,133.78	$31,364,927.54
	Oceania	$13,682.45	$69,788.82
	South America	$304,865.09	$1,499,928.75
Stereo Systems	EMEA	$5,428,981.57	$34,639,882.85
	North America	$7,744,502.52	$49,228,757.29
	Oceania	$16,366.66	$98,299.74
	South America	$341,022.82	$2,214,130.64
Televisions	EMEA	$1,518,099.74	$6,990,404.98
	North America	$2,013,911.63	$9,358,461.12
	Oceania	$1,319.19	$19,037.50
	South America	$102,362.82	$462,120.21
Video Production	EMEA	$1,066,117.73	$7,195,930.82
	North America	$1,552,040.11	$10,272,127.15
	Oceania	$3,768.12	$18,704.74
	South America	$73,964.80	$460,856.91

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Gender	Customer Continent	Product Category
F	Africa	Accessories
		Camcorder
		Computers
		Media Player
		Stereo Systems
		Televisions
		Video Production
	Asia	Accessories
		Camcorder
		Computers
		Media Player
		Stereo Systems
		Televisions
		Video Production
M	Africa	Accessories
		Camcorder
		Computers
		Media Player
		Stereo Systems
		Televisions
		Video Production
	Asia	Accessories
		Camcorder
		Computers
		Media Player
		Stereo Systems
		Televisions
		Video Production

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Procedure: How to Change the Field

You can change the field to which the active prompt is bound.

1. Create an active dashboard in Document mode, or open an existing dashboard, and bind an active prompt to a field.
2. Right-click theactive dashboard prompt that you want to configure, and click *Properties*.

   The active dashboard properties dialog box opens.
3. From the Field menu, select a different field.

   A warning message alerts you that changing the source field for the prompt will remove the existing prompt and any dependent (child) prompts from the cascades.
4. Click *OK* to close the warning.
5. Click *OK* to close the active dashboard properties dialog box.

   The active dashboard prompt is updated with the new source field.

Procedure: How to Change the Filter Condition

1. Create an active dashboard in Document mode, or open an existing dashboard, and bind an active dashboard prompt to a field, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 81.
2. Right-click the active dashboard prompt that you want to work with, and from the shortcut menu, select *Properties*.

   The active dashboard properties dialog box opens.
3. From the Condition drop-down menu, select the filter condition for the active dashboard prompt. The options are Equal to, Not equal to, Less than, Less than or equal to, Greater than, and Greater than or equal to.
4. Click *OK*.

   The filter condition is applied to the active dashboard prompt.

Procedure: How to Add Multiple Prompts to a Dashboard

1. Create an active dashboard in Document mode, or open an existing dashboard containing at least one report, and add at least two active dashboard prompts, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 81.
2. Bind the fields to prompts that you have added, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 81.

Procedure: How to Cascade Prompts

When you have more than one prompt on the canvas, you can cascade prompts to populate them based on the selections of the previous prompts. Cascading prompts have a parent-child relationship, in which the parent filters the available options of the child.

An active prompt can be the parent of more than one other prompt, but cannot be a child of more than one prompt.

1. Create an active dashboard in Document mode, or open an existing dashboard, and bind at least two active prompts to fields.
2. Right-click the active dashboard prompt that you want to configure, and click *Properties*.

   The active dashboard properties dialog box opens.
3. Click *Cascades*.

   By default, a cascade named Cascade1 appears in the Cascades section of the active dashboard properties dialog box.

   - You can click the *Create a new cascade*  button to create a new cascade.

- You can click the *Delete selected cascade*  button to delete the selected cascade.

4. Select the cascade to which you want to add prompts.
5. From the Available Prompts list box, select the prompt that you want to add.
6. Click the *Add to List* arrow to move the selected prompt to the Selected Prompts list box.

   Note: You can remove prompts from the Selected Prompts list box by selecting them and clicking the *Remove from List* arrow.

7. Add any additional prompts you want to be part of the cascade by repeating steps 5 and 6.

   By default, the hierarchy of the prompts is determined by the order in which they are added to the Selected Prompts list. The cascade of the prompts is from top to bottom. The prompts that come first in the Selected Prompts list are the parents of the lower prompts.

8. You can change the hierarchy of the prompts by selecting a prompt in the Selected Prompt list box and clicking the Move Up and Move Down arrows.
9. Click *OK*.

   The cascade is created.

10. Run the report.

    Note: If you set up more than one cascade, the cascade that you interact with last is the one that filters the report.

Chapter 6

Using Slicers

Slicers provide a quick and easy way to add dynamic user controls to a chart, report or document, giving you the ability to filter the data in use as you create or view content. Slicers are dynamic filters that can be changed by making a selection from a menu of fields. You can use them to filter your content by modifying a slicer in the Slicers tab and running the chart or report, or you can use them at run time when running a report in InfoMini with the Slicers tab selected.

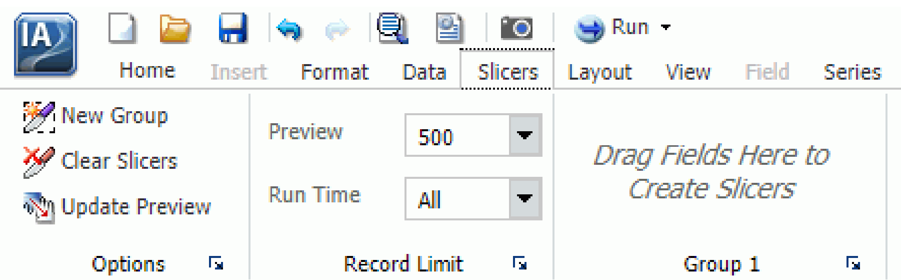
In this chapter:

Creating Slicers

You can create slicers by dragging fields to the Slicers tab or through the context menu of a field.

Note: If you are working in Chart mode in Developer Workbench, slicer functionality is not available.

When you create a slicer group, it appears on the Slicers tab, as shown in the following image.



You can use slicers to dynamically filter reports at design time.

You can dynamically filter reports at run time when they are included in an InfoMini application. For more information on InfoMini, see *Building InfoMini Applications* on page 103.

Procedure: How to Create a Slicer

1. Click the *Slicers* tab.
2. Create a new slicer by using one of the following methods:

❑ Click the *New Group* button to create a new slicer group.

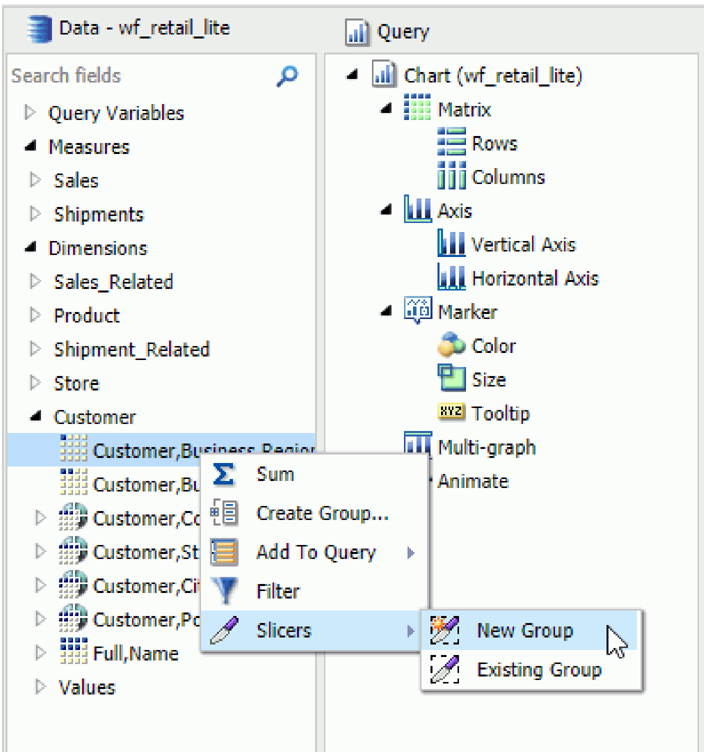
Select a field from the Data pane and drag it onto the *Drag Fields Here to Create Slicers* text on the Slicers tab.

Note: You cannot drag parent-child hierarchies onto the Slicers tab.

The field is added to the new group.

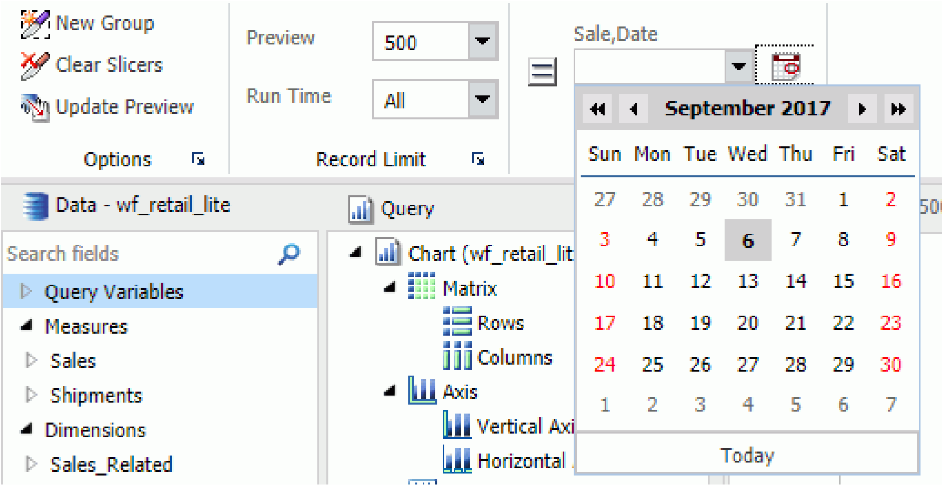
or

❑ Right-click a field in the Data pane, point to *Slicers*, and then click *New Group*, as shown in the following image.



The field is added to the new group.

If you are creating a slicer on a full date field, a calendar icon displays adjacent to the field. You can use this icon to select a date using a calendar control, as shown in the following image.



Procedure: How to Add a Field to an Existing Slicer Group

1. Click the *Slicers* tab.
2. Add a field to an existing slicer group using one of the following methods:

   ❑ Select a field from the Data pane and drag it onto an existing slicer group.

   or

   ❑ Right-click a field in the Data pane, point to *Slicers*, and then click *Existing Group*.

   Select an existing group from the menu, and then click *OK.*

   The field is added to the existing group. For more information, see Group Tab on page 101.

Procedure: How to Add a Hierarchy as a Slicer Group

Note: You cannot drag parent-child hierarchies onto the Slicers tab.

1. Click the *Slicers* tab.
2. Add a hierarchy as a slicer group using one of the following methods:

   ❑ Select a hierarchy from the Data pane and drag it onto an existing slicer group.

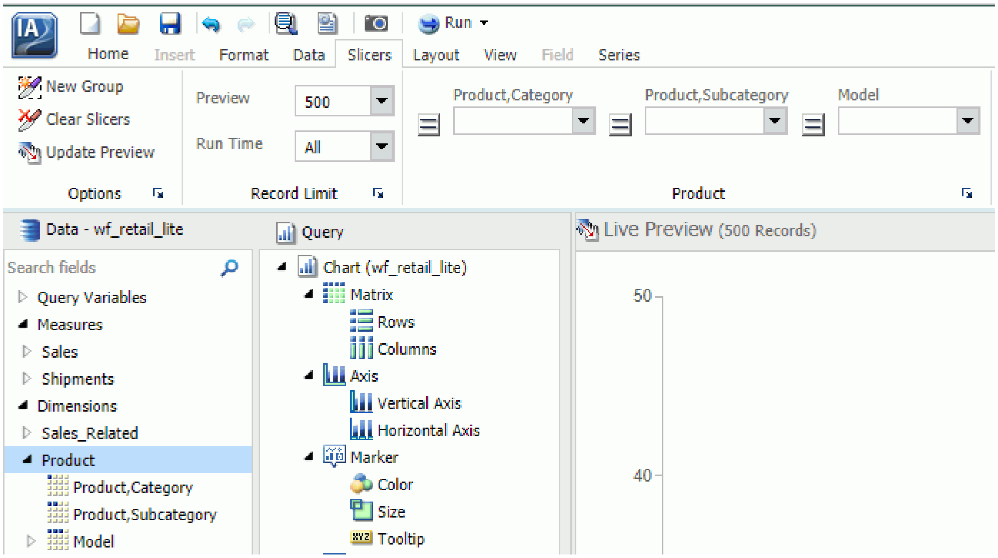
The hierarchy is added as a new group, not as a slicer in the existing group. The new group is given the same name as the hierarchy.

or

- ❑ Click the *New Group* button to create a new slicer group.

Select a hierarchy from the Data pane and drag it onto the *Drag Fields Here to Create Slicers* text of the Slicers tab.

The hierarchy is added to the new group. The name of the new group changes to the name of the hierarchy automatically. For example, if you create a slicers group using the Product hierarchy, Product,Category, Product,Sub,Category, and Model are added and the group is automatically named *Product*.



Note: Hierarchies cannot be added to existing slicer groups. If a hierarchy is dragged onto an existing slicer group, a new group is created automatically.

There is no right-click context menu for hierarchies. To add a hierarchy as a slicer group, you must drag it into a new slicer group.

Filtering With Slicers

Once you add slicers to an InfoAssist+ report, you can use them to filter the report. You can select values from the slicers menus, change the number of records that appear, create new slicer groups, clear existing slicer groups, and update the report preview.

Slicers that are not selected have their values filtered by the selected slicers. Only values that meet the criteria for previously selected slicers will appear in the menu for the next slicer. Slicers are not filtered in the order they appear in the slicer group, but by the order they are selected. Cascading of slicers is only valid for hierarchies.

Procedure: How to Change the Relationship Operator in a Slicer

1. With at least one slicer added to the report, click the *Slicers* tab.
2. Click the operators button on the slicer for the operation you want to change.

   A list of operators (numeric) appears in the menu.

   Note: Alpha fields just flip between equal and not equal.
3. Select the operator that you want from the menu. You can rest the mouse on an operator to display a tooltip describing the operation.

How Slicers Cascade Together

Slicers cascade within a hierarchy (cube or dimension builder-based), rather than in the order of user interaction, eliminating potential performance issues.

Procedure: How to Cascade Slicers

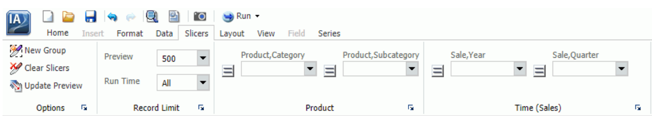
Controls with fields from the same hierarchy are cascaded together.

In the following example, a report has been created that shows the quantity of products, by category, sold each year.

Product Category	Sale Year	Quantity Sold
Accessories	2014	63,836
	2015	139,977
	2016	209,571
Camcorder	2014	56,782
	2015	123,972
	2016	187,033
Computers	2014	34,626
	2015	89,626
	2016	188,736
Media Player	2014	92,435
	2015	199,311
	2016	315,783
Stereo Systems	2014	138,850
	2015	302,717
	2016	451,751
Televisions	2014	11,542
	2015	24,940
	2016	38,123
Video Production	2014	25,032
	2015	54,953
	2016	81,585

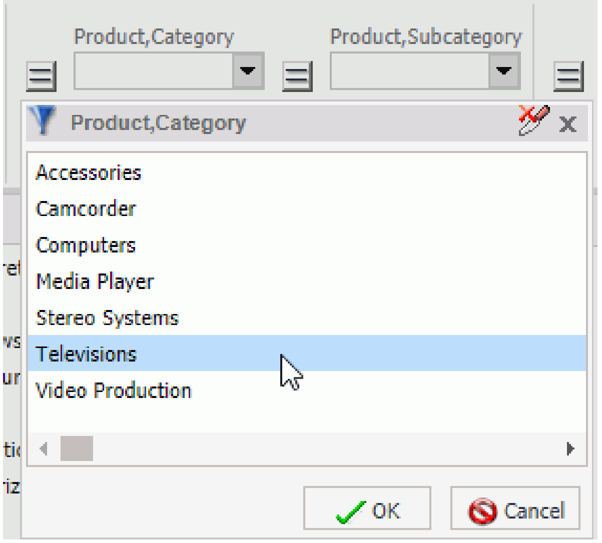
1. Create a report.
2. Create multiple slicer groups, as described in *Create a Slicer*.

   In the following example, two groups have been created for this report: Product and Time (Sales). Both are from hierarchies, so they will cascade.

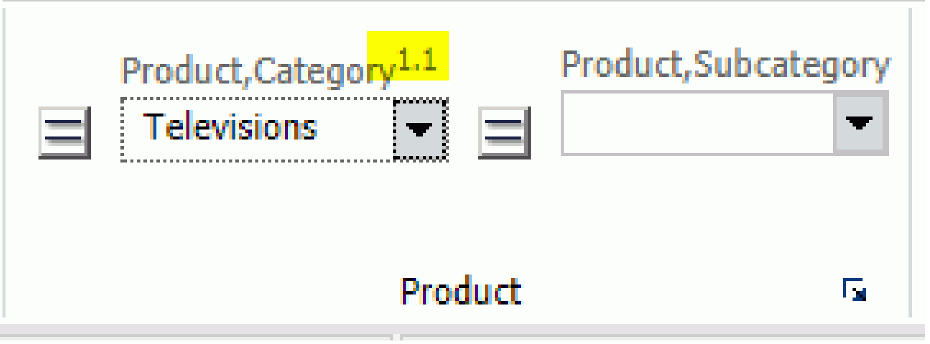


In the next example, Televisions is selected as the first control for the Product group.

Note: You can select multiple values by holding down the Ctrl key while selecting items in the drop-down list box. In cases where multiple items are selected, the label for the drop-down list is set to Multiple. You can click the drop-down list to review the selections.

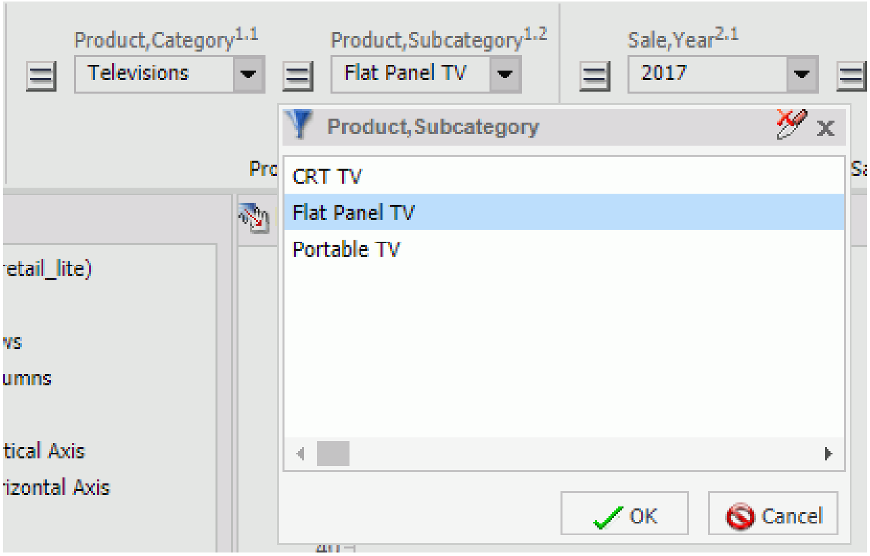


Once you click *OK*, the new control appears in the drop-down menu.



The 1 prior to the decimal point indicates that this is the first cascade you have interacted with. The 1 after the decimal point indicates that it is the first control in that cascade.

In the next example, Flat Panel TV is selected as the second control for the Product group, as shown in the following image. This is filtered to only show subcategories for Televisions.



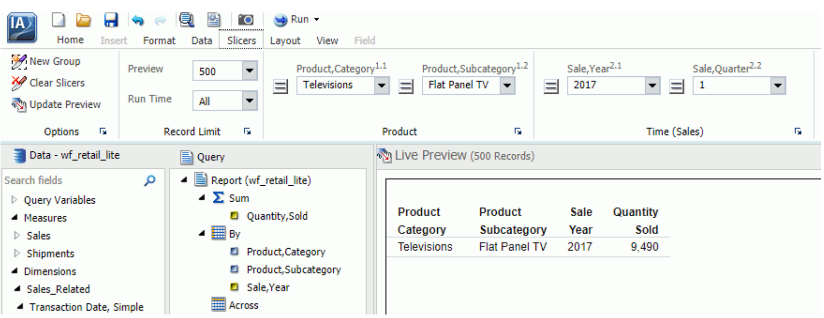
Flat Panel TV appears in the Product Subcategory drop-down menu.

The number 1.2 indicates that this is the second control for the first cascade.

Now, a second group, Time (Sales) is created. It has two controls: the first is Sale,Year and the second is Sale,Quarter.

3. Filter the report using the controls in the slicer groups that you created.

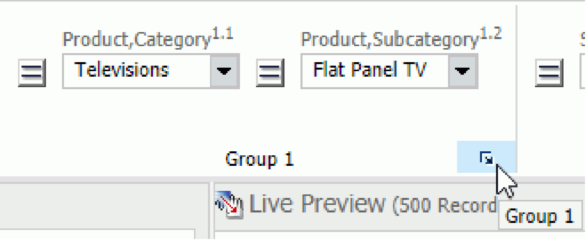
   In the following example, the report has been filtered to show the number of flat panel televisions that were sold in the first quarter of 2017.



Note: The order of a cascade is dynamic. For example, if you selected Camcorder from Product Subcategory first, then the Product Category control would have a value of Video Production.

Edit Slicers Dialog Box

You can access the Edit Slicers dialog box by clicking the edit button next to the group labels on the Slicers tab, as shown in the following image.



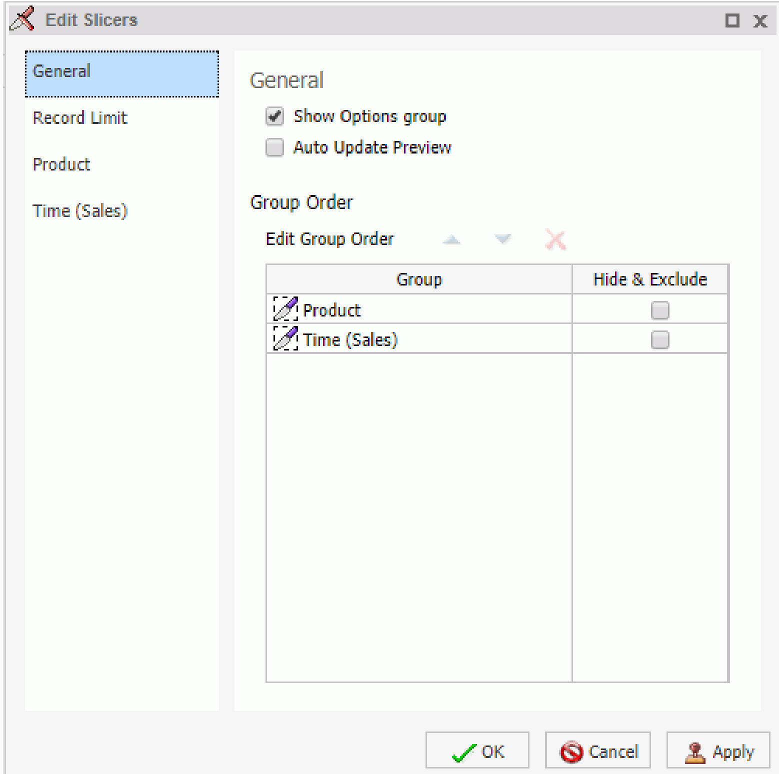
The Edit Slicers dialog box contains the following tabs:

- General
- Record Limit
- Group # (tab for each slicer group)

General Tab

Use the General tab to show or hide the Options group and to automatically update the Interactive preview. You can also reorder or delete existing groups on this tab.

The General tab is shown in the following image.



The General tab contains the following options:

- **Show Options group.** Select this option to display the Options group on the Slicers tab.

  The Options group contains the following options:

  - **New Group.** Adds a new slicers group to the Slicers tab.
  - **Clear Slicers.** Clears all selected values from existing slicers.
  - **Update Preview.** Updates the design time canvas with any changes that have been made.
- **Auto Update Preview.** Enables auto updating of the canvas.
- **Edit Group Order.** Select a group, then use the up and down arrows to change its position.
- **Hide & Exclude.** Select a group, then select this option to hide and exclude the group.

Note: To delete the group completely, select the group and click *Remove from List*.

Record Limit Tab

Use the Record Limit tab to show or hide the Record Limit group, the Preview control, and the Run Time control. You can also use this tab to select the number of preview and run-time records that will be shown.

The Record Limit tab contains the following options:

- **Show Record Limit group.** Select this option to display the Record Limit group on the Slicers tab.

  The Record Limit group contains the following menus:

  - **Preview.** Use this menu to control how many records are displayed in the design-time preview.
  - **Run Time.** Use this menu to control how many records are displayed at run time.

- **Show Preview control.** Select this option to display the Preview menu in the Record Limit group on the Slicers tab. You can set the default number of records to be shown at design time with the Records menu in the Preview section.
- **Show Run Time control.** Select this option to display the Run Time menu in the Record Limit group on the Slicers tab. You can set the default number of records to be shown at run time with the Records menu in the Run Time section.

Group Tab

Use the Group tab to change the name of the group, change the order of the slicers in the group, and set a required option for slicers. Selecting a slicer and clicking the Remove from List button deletes the slicer.

The Group tab contains the following options:

- **Group Name.** Use this field to enter or edit the name of a Slicer group.
- **Edit Slicer Order.** Select a slicer, then use the up and down arrows to change its position.
- **Required.** Select this option to set a slicer to be required. A slicer that is set to required must have a value selected before the report can run. A required slicer is indicated by an asterisk (*).

Chapter 7

Building InfoMini Applications

InfoMini applications are built from an InfoAssist+ report and contain a subset of InfoAssist+ functionality available at run time.

You can build an InfoMini application and provide the run-time user with the option to interact with and edit the report.

In this chapter:

Understanding InfoMini Applications

When you create a report in InfoAssist+, you have the option to activate InfoMini. You can run a report with InfoMini activated, which creates an InfoMini application. An InfoMini application contains a subset of the functionality available in the full version of the report or chart interface. You can limit or expand the functionality that is available to the user at run time when you build the report or chart in InfoAssist+.

An InfoMini application opens in its own browser window when it is run from within InfoAssist+.

An InfoMini application has many of the components an InfoAssist+ report has, with the following exceptions:

- The main menu is not accessible.
- The New, Open, and View code buttons on the Quick Access Toolbar are not available.
- Certain tabs and groups are unavailable or limited.
- The status bar is not accessible.
- The navigation taskbar is not accessible.
- InfoMini does not support referencing existing procedures.

For more information on the available components and their functionality, see *InfoAssist+ Application Window*.

Using the InfoMini Button

The InfoMini button can be found on the Format tab, in the Destination group. You can click the *InfoMini* button to activate the InfoMini option. With the InfoMini button active, you can run a report to open the InfoMini application.

To deactivate the InfoMini option, click the *InfoMini* button again. There must be at least one option selected from the InfoMini button menu for InfoMini to be activated.

You can set the options available to the user at run time from the menu on the InfoMini button. If you select an option from the menu when the InfoMini button is inactive, the InfoMini option is activated. The options are:

- Format Tab
- Slicers Tab
- Run Immediately

When you select an option from the menu, a check mark appears next to the option. The check mark indicates the option is available for the user at run time within the InfoMini application. If you select a checked option to clear it, the check mark disappears, and the option is no longer available through the InfoMini application. If you clear all of the options from the menu, InfoMini is deactivated. All options are selected by default.

The Run Immediately option enables reports to run immediately when InfoMini first launches. You might want to clear this option so that the user can choose a format and pick slicers before running a report.

Understanding the InfoMini Layout

The InfoMini layout is similar to the InfoAssist+ layout. The options that are available in InfoMini vary based on what you select from the InfoMini menu in InfoAssist+. Since it is customized, the InfoMini ribbon contains subsets of the InfoAssist+ ribbon.

Ribbon

This section defines the tabs on the InfoMini ribbon.

Depending on the options that you enable for InfoMini in InfoAssist+, the tab options vary.

Format Tab

In Edit mode, the following groups display for reports on the Format tab: Output Types and Auto Linking. For charts, the following additional groups display: Chart Types, Labels, and Interactive.

In InfoMini mode, the Format tab has the following exceptions:

- The Destination and Features groups, which are on the Format tab in InfoAssist+, are not available in an InfoMini application. The Navigation group is available for charts only.
- The Other button, which is on the Format tab, in the Chart Types group in InfoAssist+, is not available in an InfoMini application.

The Output Types group contains commands to create output in any of the supported formats.

For reports and charts, you also have access to the Auto Linking group. This group contains options for enabling the functions of Auto Linking, a feature that allows you to create a suite of referenceable reports or charts in your Enterprise.

For more information on the functionality of the available groups on the Format tab, see *Format Tab*.

Slicers Tab

In Edit mode, the following groups display on the Slicers tab: Options, Record Limit, and Group 1.

In InfoMini mode, the Slicers tab has the following exceptions:

- The Update Preview option, which is on the Slicers tab, in the Options group in InfoAssist+, is not available in an InfoMini application.
- The Preview list, which is on the Slicers tab, in the Record Limit group in InfoAssist+, is not available in an InfoMini application.

For more information on the functionality of the available groups on the Slicers tab, see *Slicers Tab*.

Creating an InfoMini Application

To create an InfoMini application in InfoAssist+, build a report as you normally would, then activate InfoMini and add the functionality you want the user to have available to them at run time. For more information on what functionality is available to InfoMini applications, see *Understanding InfoMini Applications* on page 103.

Procedure: How to Activate InfoMini

1. With a report or chart open, click the *Format* tab.
2. In the Destination group, click InfoMini.

Note: At least one option from the InfoMini menu must be selected in order to activate InfoMini. By default, the Format tab and Slicers tab are selected on the menu when you activate InfoMini in a new report. For more information on enabling InfoMini options, see *How to Enable and Disable InfoMini Application Options* on page 106.

The InfoMini button is highlighted and the InfoMini mode is activated. For more information about running an InfoMini application, see *How to Test an InfoMini Application* on page 106.

Procedure: How to Enable and Disable InfoMini Application Options

You can choose which options will be available at run time in an InfoMini application. By default, the Format tab and Slicers tab are selected on the menu when you activate InfoMini in a new report. For more information about the functionality of each option, see *Understanding InfoMini Applications* on page 103.

1. With a report or chart open, click the *Format* tab.
2. Click the arrow next to the *InfoMini* button. A menu of available tabs and options displays.

   InfoMini does not have to be active for you to access the menu. When you select an option from the menu, InfoMini is activated.
3. From the menu, select any options you want to display in your InfoMini application.

Procedure: How to Test an InfoMini Application

1. With an InfoAssist+ report open, activate InfoMini as described in *How to Activate InfoMini* on page 105.
2. Enable the options that you want, as described in *How to Enable and Disable InfoMini Application Options* on page 106.
3. Run the report.

   An InfoMini application opens in a new window.

Procedure: How to Interact With an InfoMini Application

You have the ability to alter the InfoMini application at run time using the Interactive mode. Changes to the application are not reflected on the canvas dynamically and you must run the report to see the updates.

1. Run a report with InfoMini activated, as described in *How to Test an InfoMini Application* on page 106.

   An InfoMini application opens in a new window.

2. By default, the ribbon is hidden in an InfoMini application. To display the ribbon, do one of the following:

   - In Interactive mode, click one of the tabs.
   - Click the down arrow next to the Help icon.

   The available options on these tabs provide the same functionality as they do in InfoAssist +. You can use this embedded functionality to change the report at run time.

3. After making your changes, click *Run* to see an updated version of the report.

Chapter 8

Ribbon Command Reference

The ribbon is contextual and changes depending on the type of file that you are developing. This topic describes each of the available ribbons and commands for each InfoAssist+ tool.

In this chapter:

Ribbon Commands for Reports

When creating and customizing reports in Report mode, you can use the following ribbons and commands to customize report functionality.

Home Tab

Command	Description
Format Group	
Output File Format	Displays a drop-down menu of all supported output formats.
Chart	Switches to Chart mode. Converts a report to a chart using the fields specified in the report.
Report	Indicates that you are in Report mode.
File	Creates a data file from a report.
Design Group	

Command	Description
Query (Design view)	Displays the Data, Query, and Filter panes across the entire canvas, eliminating Live Preview. This view provides a larger work area for creating the report.
Live Preview (Design view)	Displays the report on the canvas as you create the report. You can use the Live Preview to add, remove, and arrange fields, as well as style the report.
Document (Design view)	Converts a report into a document. Opens the document on canvas, which you can use to add text, images, lines, reports, and charts to create documents.
Data from Source	Uses the selected data source to display a live preview of the output on the canvas.
Use Sample Data	Displays sample data, which reduces processing time by eliminating the need to access the actual data source.
Records	Limits the number of rows retrieved from the data source when Live Preview is selected. This feature is useful in reducing response time if you are working with a large amount of data. Type the number of rows that you want directly in the Records field, or use the drop-down menu to select one of the preset record limits. The preset choices are All rows, 1, 10, 50, 100, 500, 1000, 2000, 5000, and 10000.
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Exclude	Turns off a filter.
Include	Turns on a filter.
Report Group	

Command	Description
Theme	Opens a dialog box where you can select a theme to style your report or chart. You can use the default style sheet by clicking the *Use Default Stylesheet* button. You can also select a document styling theme or an application theme to style all reports created. Use the Environment and Styling section of the Options window, which is accessible by clicking *Options* in the Application main menu.
Style	Opens a Report Style dialog box for applying global styling to the entire report. For more information about styling reports, see *Styling Reports*.
Banded	Opens a Color dialog box for choosing a color that provides an alternating color scheme for the report. The report output displays alternating rows of data, using a white background for one row and a background of the selected color for the next row. This pattern continues throughout the report.
Header & Footer	Opens the Header & Footer dialog box, from which you can add and style headings and footings.
Column Totals	Adds a grand total row to the bottom of the report to sum numeric data in each column.
Row Totals	Adds a grand total column to the right side of the report to sum numeric data in each row.

Format Tab

Command	Description
Destination Group	

Command	Description
InfoMini	Enables the creation of an InfoMini application. For more information on using InfoMini, see *Building InfoMini Applications* on page 103.
Chart	Switches to Chart mode. Converts a report to a chart using the fields specified in the report.
Report	Indicates that you are in Report mode.
File	Creates a data file from a report.
Navigation Group	
Table	Generates standard browser output. This is the default.
Table of Contents	Generates output by displaying a table of contents icon in the upper-left corner where report output typically appears. Clicking *Table of Contents* opens a menu that enables you to select (view) individual values of the first Sort By (By) field, one value at a time. You can also select options to view the entire report or remove the table of contents.
Freeze	Generates output with column titles that freeze (remain in view) when you scroll through pages of the report output.
Pages On Demand	Provides access to two distinct features, depending upon the output type that you have selected.
OLAP Analysis	Enables Online Analytical Processing capabilities for online reports, including showing or hiding the OLAP panel. You can select from different options using the drop-down menu on the split button.
Features Group	
Title Popup	Displays pop-up titles when the mouse pointer hovers over a column title in the report output.

Command	Description
Accordion	Creates expandable views of data for each vertical sort field. This option displays data values only for the first vertical sort field when you first view the output. You can manually expand your view to expose the data values of lower-level sort fields.
Repeat Sort Value	Displays all repeated sort values instead of blanks in the output after the first instance of a new sort value, which is the default behavior.
Stack Measures	Displays all numeric measure field names in a column of the report output with the corresponding numeric data values.
active report Options	Opens the active report options dialog box where you can configure your active report options such as menu items, graph engine, and colors. For more information, see *Creating Interactive Content*.
Accessibility	Allows a title to be added to a report, chart, or document that is Section 508-compliant.
Run with Group	
Auto Drill	Enables you to navigate through different levels within the dimension hierarchy of your data source. Click *Auto Drill* to enable the functionality. For more information, see *Using Auto Drill*.
Auto Linking Group	
Enable Auto Linking	Enables auto linking. For more information, see *Using the Auto Linking Feature to Link Content*.
Auto Link Target	Sets procedure as an available target for auto linking.

Data Tab

Command	Description
Calculation Group	
Detail (Define)	Opens the Detail Field (DEFINE) dialog box, where you can create a defined field, type a name for the field, and enter a format. A Define field is an optional attribute used to create a virtual field for reporting. You can derive the virtual field value from information already in the data source (that is, from permanent fields).
Summary (Compute)	Opens the Summary Field (COMPUTE) dialog box, where you can create a computed field, type a name for the field, and enter a format.
Join Group	
Join	Opens the Join dialog box, where you can create a new join, edit or delete existing joins, and add data sources to a join.
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Display Group	
Missing Data	This option is disabled for reports.
Data Source Group	
Add	Opens the Open dialog box, where you can add additional data sources to a document, enabling you to insert reports from different data sources into the same document. This option is activated when you add a HOLD file. This option is unavailable, by default.

Command	Description
Switch	Opens a drop-down list of all the data sources that have been added. You can choose which data source is currently active and being used to create new reports. This option is activated when you add a HOLD file. This option is unavailable, by default.

Slicers Tab

Command	Description
Options Group	
New Group	Creates a new group of similar slicers.
Clear Slicers	Resets all slicers so that no filtering is done.
Update Preview	Applies slicers to preview.
Options	Opens the Edit Slicers dialog box to the General tab, where you can set general options for your slicers.
Record Limit Group	
Preview	Sets the number of records retrieved from the data source for preview.
Run Time	Sets the number of records retrieved at run time.
Record Limit	Opens the Edit Slicers dialog box to the Record Limit tab, where you can set record limits for your slicers.
Group Number Group	
Group *n*	Contains a group for each Slicer group that is added. Group 1 is the default slicer group to which you can drag fields to create slicers. To access slicer group options, click Group *n* to open the Edit Slicers dialog box where you can rename the slicer group and modify the order of the slicers in the group.

Layout Tab

Command	Description
Page Setup Group	
Margins	Enables you to set margin values by choosing Normal (1 inch all around), Narrow (.5 inch all around), Moderate (.5 inch left or right), Wide (1.5 inch left or right), or Custom. Choosing *Custom* opens the Margins dialog box, where you can set specific margins as needed.
Orientation	Enables you to set the orientation of your report to portrait or landscape.
Size	Enables you to select the size of the paper for printing output. You can choose A3, A4, A5, Letter, Tabloid, Legal, PowerPoint, or Large Size (34 x 44 Inches).
Units	Enables you to select the unit of measurement used for customizing the dimension fields of your report. You can choose Inches, Centimeters, or Points.
Page Numbers	Enables you to select page numbering options. You can choose one of the following: ❑ No Lead (no space for headers) ❑ On (page numbers only in headers) ❑ Off (space for headers, but no page numbering) The Page Numbers value is overridden by header and footer text options.
Report Group	
Cell Padding	Opens the Cell Padding dialog box, where you can set specific values to control the amount of space inserted between rows and columns in a report. For more information, see *Use Cell Padding in a Report*.

Command	Description
AutoFit	Limits the width of columns in a report to be no wider than the largest value in each column. AutoFit Column is selected, by default.

View Tab

Command	Description
Design Group	
Query (Design view)	Displays the Data, Query, and Filter panes across the entire canvas, eliminating Live Preview. This view provides a larger work area for creating the report.
Live Preview (Design view)	Displays the report on the canvas as you create the report. You can use the Live Preview to add, remove, and arrange fields, as well as style the report.
Document (Design view)	Converts a report into a document. Opens the document on canvas, which you can use to add text, images, lines, reports, and charts to create documents.
Show/Hide Group	
Resources	Minimizes the Resources panel and expands the size of the canvas to also occupy the area where the Resources panel typically appears. The canvas can display a preview of a report, output of a report, or the Query Design pane.
Data Panel Group	
Logical	Displays the data source fields by type. This is the default view. The Logical view options include Title, Description, Field, and Alias.

Command	Description
List	Displays the data source fields in a tabular list format. This list contains a header row. You can sort fields differently by clicking a column header. The List view options include Title, Description, Field, Alias, Format, Segment, Filename, and Reference.
Structured	Displays the hierarchical structure of the data source files. The Structured view options include Title, Description, Field, and Alias.
Query Panel Group	
Areas 2x2	Displays data in a two column by two-row grid.
Areas 1x4	Displays data in a one column by four-row grid.
Tree	Displays data in a tree. This is the default.
Output Window Group	
Arrange	Opens a drop-down menu where you can choose how to display multiple output windows. The options are Cascade, Tile Horizontally, and Tile Vertically.
Output Location	Opens a drop-down menu where you can choose how to direct new output. The options are Single tab (default), New Tab, Single Window, and New Window.
Switch Output	Opens a drop-down menu for choosing to view any active output window.
Report Group	
Switch Report	Lists any active reports, charts, documents, and visuals to which you can switch.

Field Tab

Command	Description
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Exclude	Removes, but does not delete, the filter from the report.
Include	Restores a filter that was previously excluded from a report.
Prompt	Opens the Create a filtering condition dialog box for creating an auto prompting parameter that you can select when you run a report. The Create a filtering condition dialog box is used to create both filters and auto prompting parameters. The following prompt options are available when Parameter is selected from the Type drop-down menu: ❑ **Simple.** This is used for prompts using Text Input. This is the default value. ❑ **Static.** This is used for prompts using Selection. This option allows you to select multiple values at run time. ❑ **Dynamic.** This is used for prompts using Data Values. This option allows you to select multiple values at run time. ❑ **Optional.** This is used for prompts using Single or Multiselect parameters.
Sort Group	
Up	Sorts the selected field in ascending order. This option is activated when you click on a measure or dimension.

Command	Description
Down	Sorts the selected field in descending order. This option is activated when you click on a measure or dimension.
Rank	Inserts a rank column immediately to the left of the report if a Sort By field is selected. It also adds a rank column to the left of the Sort By field if a Measure field is selected. Ranking a Measure field results in two copies of the field, the original Measure field, and the Sort By field that is created during ranking. This option is activated when you click on a measure or dimension.
Group	Opens the Create a Group dialog box where you can create a group to combine values together. This option is activated when you click on a dimension.
Limit	Opens a drop-down menu that allows you to specify the number of unique values to display for a sort group that has been added. This option is activated when you click on a measure or dimension.
Break Group	
Page Break	Starts a new page when the primary sort field changes. Clicking the drop-down icon enables you to select *Reset Page Numbers*, which allows you to reset page numbers on a page break to start at 1. This option is activated when you click on a dimension.
Line Break	Inserts a line in the report output when the primary sort field changes. This option is activated when you click on a dimension.
Subtotal	Inserts a line, total text (TOTAL FIELD Value), and subtotals for all numeric fields when the primary sort field changes. This option is activated when you click on a dimension.

Command	Description
Sub Header	Opens a dialog box where you can type text to add a subheading just below the column titles in the report output when the primary sort field changes. This option is activated when you click on a dimension.
Sub Footer	Opens a dialog box where you can type text to add a subfooting at the end of the data on each page of the report output when the primary sort field changes. This option is activated when you click on a dimension.
Style Group	
Font	Opens the Font list, which you can use to change the font.
Font Size	Opens the Font Size list, which you can use to change the numeric value for the font size.
Font Color	Opens the Color dialog box, where you can select the font color.
Style Reset	Resets all settings to the default settings from the template.
Bold	Applies bold font formatting to the selected text.
Italic	Applies italic font formatting to the selected text.
Underline	Underlines the selected text.
Justify Left	Aligns the text to the left of the report.
Justify Center	Aligns the text to the center of the report.
Justify Right	Aligns the text to the right of the report.
Background Color	Opens the Color dialog box, where you can select the background color for the report.
Data Style	Styles only the data for the selected data source field.

Command	Description
Title Style	Styles only the column title for the selected data source field.
Data + Title	Styles both the data and the column title for the selected data source field.
Format Group	
Decimal	The default value for the data format of the selected measure is Decimal. Use the drop-down menu to select Alphanumeric, Integer, or More options to open the Field Format Options dialog box.
Change currency options	Changes the currency options for the selected field. This option is activated when you click on a measure.
Percent	Specifies the value of the field as a percentage. This option is activated when you click on a measure.
Comma	Specifies the use of commas for the selected field. This option is activated when you click on a measure.
Increase Decimal Places	Increases the number of decimal places that display for the selected field. This option is activated when you click on a measure.
Decrease Decimal Places	Decreases the number of decimal places that display for the selected field. This option is activated when you click on a measure.
Display Group	
Hide Field	Allows you to hide a selected field.
Hide Missing	Allows you to hide fields that have no value.

Command	Description
Aggregation	Enables you to apply an aggregation function to a field in a report. Opens a drop-down menu of the following options: None (default), Sum, Average, Count, Count Distinct, Percent of Count, First Value, Last Value, Maximum, Minimum, Total, Percent, Row Percent, Median, Average Square.
Traffic Lights	Opens the Traffic Light Condition dialog box. From this dialog box, you can add new conditional styling by applying traffic light (and other) colors to a selected field in the output when the field meets specified criteria, modify existing conditional styling, and enable conditional drill-down.
Data Bars	Adds a data visualization column to the right of a selected numeric field. The column displays values in each row using horizontal bars that extend from left to right in varying lengths, depending on the corresponding data values.
Within	Allows you to use specific aggregation tasks at different report levels. You can use the Within phrase to manipulate display field values as they are aggregated within a sort group rather than a report column.
Column(s)	This option is disabled for reports.
Links Group	
Drill Down	Opens the Drill Down dialog box, where you can configure a hyperlink or a drill-down procedure for the selected field. Clicking that field in the report output, at run time, redirects you to the URL you specified or executes the indicated procedure.

Ribbon Commands for Charts

When creating and customizing charts in Chart mode, you can use the following ribbons and commands to customize chart functionality.

Home Tab

Command	Description
Format Group	
Output File Format	Displays a drop-down menu of all supported output formats.
Chart	Indicates that you are in Chart mode.
Report	Switches to Report mode. Converts a chart to a report using the fields specified in the chart.
File	Creates an image file from a chart. This option is disabled by default and is only enabled for HTML format.
Design Group	
Query (Design view)	Displays the Data, Query, and Filter panes across the entire canvas, eliminating Live Preview. This view provides a larger work area for creating the chart.
Live Preview (Design view)	Displays the chart on the canvas as you create the chart. You can use the Live Preview to add, remove, and arrange fields, as well as style the chart.
Document (Design view)	Opens the document on canvas, which you can use to add text, images, lines, reports, and charts to create documents.
Data from Source	Uses the selected data source to display a live preview of the output on the canvas.
Use Sample Data	Displays sample data, which reduces processing time by eliminating the need to access the actual data source.

Command	Description
Records	Limits the number of rows retrieved from the data source when Live Preview is selected. This feature is useful in reducing response time if you are working with a large amount of data. Type the number of rows that you want directly in the Records field, or use the drop-down menu to select one of the preset record limits. The preset choices are All rows, 1, 10, 50, 100, 500, 1000, 2000, 5000, and 10000.
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Exclude	Turns off a filter.
Include	Turns on a filter.
Report Group	
Theme	Opens a dialog box where you can select a theme to style your report or chart. You can use the default style sheet by clicking the *Use Default Stylesheet* button. You can also select a document styling theme or an application theme to style all reports created. Use the Environment and Styling section of the Options window, which is accessible by clicking Options in the Application main menu.
Style	This option is disabled for charts.
Banded	This option is disabled for charts.
Header & Footer	Opens the Header & Footer dialog box, from which you can add and style headings and footings.
Column Totals	This option is disabled for charts.

Command	Description
Row Totals	This option is disabled for charts.

Format Tab

Command	Description
Destination Group	
InfoMini	Enables the creation of an InfoMini application. For more information on using InfoMini, see *Building InfoMini Applications* on page 103.
Chart	Indicates that you are in Chart mode.
Report	Switches to Report mode. Converts a chart to a report using the fields specified in the chart.
File	Creates an image file from a chart. This option is disabled by default and is only enabled for HTML format.
Chart Types Group	
Bar	Changes the chart type to a bar chart.
Pie	Changes the chart type to a pie chart.
Line	Changes the chart type to a line chart.
Area	Changes the chart type to an area chart.
Scatter	Changes the chart type to a scatter chart.
Choropleth	Changes the chart type to a choropleth map.
Proportional Symbol	Changes the chart type to a proportional symbol (bubble) map.

Command	Description
Other	Opens the Select a chart dialog box. The chart types, depicted by icons, display on the left side of the dialog box. The first chart type represents the bar chart category, which is selected by default. When a chart type is selected, the dialog box displays thumbnail images of bar chart variations that are supported.
Map Group	
Background	Provides terrain options and various other geographical views. This option only displays when a map is selected as the chart type.
Demographic Layers	Allows you to apply one or more pre-defined demographic layers, which can narrow the scope of your data using these underlying layers of demographic categorization. This option only displays when a map is selected as the chart type.
Reference Layers	Enables you to define one or more reference layers, which creates borders based on your geographical selection. This option only displays when a map is selected as the chart type.
Features Group	
3D Effect	Sets the three-dimensional view to on or off. The 3D Effect feature is disabled for 3D, stock, gauge, gauge thermometer, Pareto, spectral map, and funnel chart types. This is the default. This option is not available for maps.
Rotate	Toggles between a vertical display or horizontal display of a chart. For more information, see *Rotate a Chart*. The Rotate feature is disabled for pie, scatter, 3D, stock, gauge, gauge thermometer, Pareto, spectral map, and funnel chart types. This option is not available for maps.

Command	Description
Reference	Opens a drop-down menu that provides the Add Reference Line to Y-Axis and Add Reference Line to X-Axis options. Selecting one of these options opens the appropriate Reference Line dialog box, where you can set the specific X-axis or Y-axis value, type the text that you want, and position the reference line on a chart. For more information, see *Display a Static Reference Line*. The Reference feature is disabled for pie, 3D, stock, gauge, gauge thermometer, Pareto, spectral map, and funnel chart types. This option is not available for maps.
Annotate	Opens a drop-down menu that provides the Add an annotation option. Selecting this option opens the Annotation dialog box, where you can type the text that you want and position the annotation on a chart. For more information, see *Display Annotations*. The annotation option is not available in HTML5. This option is not available for maps.
Grid	Opens a drop-down menu allowing you to expand options for Horizontal or Vertical Gridlines. Both selections allow you to enable or disable Major and Minor Gridlines. Clicking *More Options* opens the Format Grid Lines dialog box. This option is not available for maps. For more information, see *Formatting Gridlines*.
Frame & Background	Opens the Frame & Background dialog box where you can edit the background style and frames for charts. The dialog contains different options depending on the chart type selected. For more information, see *Formatting a Frame and a Background*.
Gauges	Opens the Gauge dialog box where you can edit your gauge chart. This button is only available when a gauge chart type is selected. This option is not available for maps. For more information, see *Style a Gauge Needle*.

Command	Description
active report Options	Opens the active report options dialog box where you can configure your active report options, such as menu items, graph engine, and colors. This button is available when the output type is set to active report. This option is not available for maps.
Accessibility	Allows a title to be added to a report, chart, or document that is Section 508 compliant. This option is available for reports and charts when the output type is HTML, HTML5, or PDF. This includes JS Charts, which encompasses any chart that is drawn in an HTML environment using a defined data set and JavaScript Option Notation (JSON) definitions. For documents, the output type must be set to PDF. The chart features are unavailable when designing a chart that will be output in active report HTML Analytic Documentformat.
Labels Group	
Axes	Opens a drop-down menu, where you can enable and rotate horizontal and vertical axis labels, and stagger horizontal axis labels. You can also edit the axis labels by clicking *More Horizontal Axis Options* or *More Vertical Axis Options*. For more information, see *Format Axis Labels*. This option is not available for maps.
Legend	Opens a drop-down menu, where you can select the Show Legend option to display the legend on the chart, or clear your selection to hide the legend, change the default legend position, and change the default legend orientation. For more information, see *Format Legend Dialog Box*.
Interactive Group	

Command	Description
Interactive Options	Opens the Interactive Options dialog box, which enables you to specify animation and mouse over effects in your chart. This option is only available for HTML5 and active outputs. This option is not available for maps.
Run with Group	
Auto Drill	Enables you to navigate through different levels within the dimension hierarchy of your data source. Click *Auto Drill* to enable the functionality. **Note:** Auto Drill functionality requires the specification of at least one dimension sort field in the request. For more information, see *Using Auto Drill*.
Auto Linking Group	
Enable Auto Linking	Enables auto linking.
Auto Link Target	Sets procedure as an available target for auto linking.

Data Tab

Command	Description
Calculation Group	
Detail (Define)	Opens the Detail Field (DEFINE) dialog box, where you can create a defined field, type a name for the field, and enter a format. A Define field is an optional attribute used to create a virtual field for reporting. You can derive the virtual field value from information already in the data source (that is, from permanent fields).
Summary (Compute)	Opens the Summary Field (COMPUTE) dialog box, where you can create a computed field, type a name for the field, and enter a format.

Command	Description
Join Group	
Join	Opens the Join dialog box, where you can create a new join, edit or delete existing joins, and add data sources to a join.
Filter Group	
Filter	Opens the Filter dialog box, enabling you to set filtering options. Filter options include Where, Where Total, the And conjunction, and the Or conjunctions in a single expression.
Display Group	
Missing Data	Includes options for how to display missing values in charts.
Data Source Group	
Add	Opens the Open dialog box, where you can add additional data sources to a document, enabling you to insert reports from different data sources into the same document. This option is only enabled if the chart was created from a HOLD file.
Switch	Opens a drop-down list of all the data sources that have been added. You can choose which data source is currently active and being used to create new reports. This option is only enabled if the chart was created from a HOLD file.

Slicers Tab

Command	Description
Options Group	

Command	Description
New Group	Creates a new group of similar slicers.
Clear Slicers	Resets all slicers so that no filtering is done.
Update Preview	Applies slicers to preview.
Options	Opens the Edit Slicers dialog box to the General tab, where you can set general options for your slicers.
Record Limit Group	
Preview	Sets the number of records retrieved from the data source for preview.
Run Time	Sets the number of records retrieved at run time.
Record Limit	Opens the Edit Slicers dialog box to the Record Limit tab, where you can set record limits for your slicers.
Group Number Group	
Group *n*	Contains a group for each Slicer group that is added. Group 1 is the default slicer group to which you can drag fields to create slicers. To access slicer group options, click Group *n* to open the Edit Slicers dialog box where you can rename the slicer group and modify the order of the slicers in the group.

Layout Tab

Command	Description
Page Setup Group	
Margins	Enables you to set margin values by choosing Normal (1 inch all around), Narrow (.5 inch all around), Moderate (.5 inch left or right), Wide (1.5 inch left or right), or Custom. Choosing *Custom* opens the Margins dialog box, where you can set specific margins as needed.

Command	Description
Orientation	Enables you to set the orientation of your report to portrait or landscape.
Size	Enables you to select the size of the paper for printing output. You can choose A3, A4, A5, Letter, Tabloid, Legal, PowerPoint, or Large Size (34 x 44 Inches).
Units	Enables you to select the unit of measurement used for customizing the dimension fields of your report or chart. You can choose Inches, Centimeters, or Points.
Page Numbers	This option is disabled for charts.
Size & Arrange Group	
Height	Sets the height of the chart.
Width	Sets the width of the chart.
Auto Overflow	This option is disabled for charts.
Aspect Ratio	Lock the height and width aspect ratio. With the aspect ratio locked, changing the width automatically changes the height to keep the component to scale, and changing the height automatically changes the width.
AutoFit	Expands the chart, at design time, when additional fields are added. At run time, the chart is resized dynamically to fit into the container in which it is placed. AutoFit is enabled, by default.
Align	This option is available in Document mode only.
Relative Position	This option is available in Document mode only.

View Tab

Command	Description
Design Group	
Query (Design view)	Displays the Data, Query, and Filter panes across the entire canvas, eliminating Live Preview. This view provides a larger work area for creating the chart.
Live Preview (Design view)	Displays the chart on the canvas as you create the report. You can use the Live Preview to add, remove, and arrange fields, as well as style the chart.
Document (Design view)	Converts a chart into a document. Opens the document on canvas, which you can use to add text, images, lines, reports, and charts to create documents.
Show/Hide Group	
Resources	Minimizes the Resources panel and expands the size of the canvas to also occupy the area where the Resources panel typically appears. The canvas can display a preview of a report, output of a report, or the Query Design pane.
Data Panel Group	
Logical	Displays the data source fields by type. This is the default view. The Logical view options include Title, Description, Field, and Alias.
List	Displays the data source fields in a tabular list format. This list contains a header row. You can sort fields differently by clicking a column header. The List view options include Title, Description, Field, Alias, Format, Segment, Filename, and Reference.
Structured	Displays the hierarchical structure of the data source files. The Structured view options include Title, Description, Field, and Alias.
Query Panel Group	

Command	Description
Areas 2x2	Displays data in a two column by two-row grid. This option is disabled for charts that use the new field container syntax.
Areas 1x4	Displays data in a one column by four-row grid. This option is disabled for charts that use the new field container syntax.
Tree	Displays data in a tree. This is the default.
Output Window Group	
Arrange	Opens a drop-down menu where you can choose how to display multiple output windows. The options are Cascade, Tile Horizontally, and Tile Vertically.
Output Location	Opens a drop-down menu where you can choose how to direct new output. The options are Single tab (default), New Tab, Single Window, and New Window.
Switch Output	Opens a drop-down menu for choosing to view any active output window.
Report Group	
Switch Report	Lists any active report or chart to which you can switch.

Field Tab

Note: The Format group is disabled in Chart mode.

Command	Description
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.

Command	Description
Exclude	Removes, but does not delete, the filter from the chart.
Include	Restores a filter that was previously excluded from a chart.
Prompt	Opens the Create a filtering condition dialog box for creating an auto prompting parameter that you can select when you run a chart. The Create a filtering condition dialog box is used to create both filters and auto prompting parameters. The following prompt options are available when Parameter is selected from the Type drop-down menu: ❑ **Simple.** This is used for prompts using Text Input. This is the default value. ❑ **Static.** This is used for prompts using Selection. This option allows you to select multiple values at run time. ❑ **Dynamic.** This is used for prompts using Data Values. This option allows you to select multiple values at run time. ❑ **Optional.** This is used for prompts using Single or Multiselect parameters.
Sort Group	
Up	Sorts the selected field in ascending order.
Down	Sorts the selected field in descending order.
Rank	This option is disabled for charts.
Group	Opens the Create a Group dialog box where you can create a group to combine values together. This option is enabled for dimension fields only.

Command	Description
Limit	Opens a drop-down menu that allows you to specify the number of unique values to display for a sort group that has been added.
Format Group **Note:** These options are disabled for charts.	
Display Group	
Hide Field	Allows you to hide a selected field.
Hide Missing	Allows you to hide fields that have no value. This option is disabled for charts.
Aggregation	Opens a drop-down menu of the following options: None (default), Sum, Average, Count, Count Distinct, Percent of Count, First Value, Last Value, Maximum, Minimum, Total, Percent, Row Percent, Median, Average Square. This option is only available for measure fields or dimensions (alpha field only) that are in a numeric field container. Otherwise, aggregations will not display.
Traffic Lights	Opens the Traffic Light Condition dialog box. From this dialog box, you can add new conditional styling by applying traffic light (and other) colors to a selected field in the output when the field meets specified criteria, modify existing conditional styling, and enable conditional drill-down. This option is only available for measure fields.
Data Bars	This option is disabled for charts.
Within	Allows you to use specific aggregation tasks at different report levels. You can use the Within phrase to manipulate display field values as they are aggregated within a sort group rather than a report column. This option is disabled for charts.

Command	Description
Column(s)	Allows you to indicate the number of columns in which you wish to display multiple graphs. The value can be between 1 and 512. The default is 1. This option is also available from the Query Design pane shortcut menu for a Multi-graph component. This option is only enabled when the multi-graph field container is populated.
Links Group	
Drill Down	Opens the Drill Down dialog box, where you can configure a hyperlink or a drill-down procedure for the selected field. Clicking that field in the report output, at run time, redirects you to the URL you specified or executes the indicated procedure. This option is available for measure fields only. If you are working in PDF format, this option is disabled.

Series Tab

Command	Description
Select Group	
Series drop-down list	Lists the available series in the current chart.
Style Group	
Style	Opens the Format Series dialog box, where you can edit the styling options for the selected series. You can also open this dialog box by right-clicking a series, and then clicking *More Style Options*.
Properties Group	

Command	Description
Data Labels	Adds data labels to the chart. The drop-down menu contains the following data position options for selecting where to display data values as labels on a chart: Above (default), On top edge, Below top edge, Center, and Base. If you are working with a Pie chart, the options are: On Slice, Outside Slice, and Outside with feeler lines. Clicking *More Data Label Options* opens the Format Labels dialog box, where you can further edit your data labels.
Type	Opens a drop-down menu with the following options for selecting different chart types: None (default), Bar, Line, and Area. **Note:** When you make a change to the chart type using the Type button on the Series tab, changes to the chart type on the Format tab are overwritten.
Trendline	Opens a drop-down menu that provides options for adding a trendline to a chart.
Equation	Displays the associated mathematical equation for the selected trendline on the chart. The equation is not available in HTML5.
Line Group	
Smooth Line	Draws the chart using smooth lines.
Connect Lines	Controls the display of connecting lines between markers on a line or scatter chart. By default, lines are connected on a line chart and disconnected on a scatter chart.
Marker	Opens a drop-down menu from which you can select options to change the display of the default data and legend markers on line and scatter chart types. For more information, see *Change the Appearance of a Marker*.

Command	Description
Pie Group	
Note: The following options are only enabled when you are working with a pie chart.	
Expand	Expands pie slices.
Hide	Hides pie slices.

Ribbon Commands for Documents

When creating and customizing documents in Document mode, you can use the following ribbons and commands to customize document functionality.

Home Tab

Command	Description
Format Group	
Output File Format	Displays a drop-down menu of all supported output formats.
Chart	Determines whether chart-specific functionality is available in the InfoAssist+ tool. The default name Chart (data source) is given for each new chart created in a given InfoAssist+ session, where data source is the name of the underlying data source you are using. You can rename the chart by right-clicking *Chart* in the Query pane and clicking *Rename*.
Report	Determines whether report-specific functionality is available in the InfoAssist+ tool. The default name Report (data source) is given for each new report created in a given InfoAssist+ session, where data source is the name of the underlying data source you are using. You can rename the report by right-clicking *Report* in the Query pane and clicking *Rename*.

Command	Description
File	Creates a data file from a report component of a document.
Design Group	
Query (Design view)	This option is disabled in Document mode.
Live Preview (Design view)	This option is disabled in Document mode.
Document (Design view)	Once you are in Document mode, it is selected by default in the Design group. The document displays on the canvas, to which you can add text, images, lines, reports, and charts.
Data from Source	Uses the selected data source to display a live preview of the output on the canvas.
Use Sample Data	Displays sample data, which reduces processing time by eliminating the need to access the actual data source.
Records	Limits the number of rows retrieved from the data source when Live Preview is selected. This feature is useful in reducing response time if you are working with a large amount of data. Type the number of rows that you want directly in the Records field, or use the drop-down menu to select one of the preset record limits. The preset choices are All rows, 1, 10, 50, 100, 500, 1000, 2000, 5000, and 10000.
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Exclude	Turns off a filter.
Include	Turns on a filter.
Clipboard Group	

Command	Description
Paste	Enables you to paste a text, report, or chart object that you have copied to or placed on the clipboard.
Cut	Enables you to cut a text, report, or chart object from your document, placing it on the clipboard.
Copy	Enables you to copy a text, report, or chart object to the clipboard.
Duplicate	Enables you to duplicate a text, report, or chart object in your document, placing it on the clipboard.
Report Group	
Theme	Opens a dialog box where you can select a theme to style your report or chart. You can use the default style sheet by clicking the *Use Default Stylesheet* button. You can also select a document styling theme or an application theme to style all reports created. Use the Environment and Styling section of the Options window, which is accessible by clicking *Options* in the Application main menu.
Style	Opens a Report Style dialog box for applying global styling to the entire report. This option is disabled for charts in Document mode. For more information about styling reports, see *Styling Reports*.
Banded	Opens a Color dialog box for choosing a color that provides an alternating color scheme for the report. The report output displays alternating rows of data, using a white background for one row and a background of the selected color for the next row. This pattern continues throughout the report. This option is disabled for charts in Document mode.
Header & Footer	Opens the Header & Footer dialog box, from which you can add and style headings and footings.

Command	Description
Column Totals	Adds a grand total row to the bottom of the report to sum numeric data in each column. This option is disabled for charts in Document mode.
Row Totals	Adds a grand total column to the right side of the report to sum numeric data in each row. This option is disabled for charts in Document mode.

Insert Tab

Command	Description
Pages Group	
Page	Adds a new page to a document.
Reports Group	
Report	Inserts a report placeholder on the canvas.
Chart	Inserts a chart placeholder on the canvas.
Existing Report	Opens the Open dialog box, where you can browse to the report that you want to insert in the upper-left corner of the canvas.
Objects Group	
Text Box	Inserts an inline text object in the upper-left corner of the canvas.
Image	Opens the Open dialog box, where you can browse to the image that you want to insert in the upper-left corner of the canvas.
active dashboard Prompts group	
Drop Down	Inserts a drop-down control placeholder in the upper-left corner of the canvas.

Command	Description
List	Inserts a list control placeholder in the upper-left corner of the canvas.
Checkbox	Inserts a check box control placeholder in the upper-left corner of the canvas.
Radio Button	Inserts a radio button control placeholder in the upper-left corner of the canvas.
Text	Inserts a text area control placeholder in the upper-left corner of the canvas.

Format Tab

Command	Description
Destination Group	
InfoMini	Enables the creation of an InfoMini application. For more information on using InfoMini, see *Understanding and Building InfoMini Applications*.
Report	Makes report-specific functionality available. In Document mode, if you select a report object, the Report option is enabled on the Home tab and the ribbon options change. For more information, see *Ribbon Commands for Reports* on page 109.
Chart	Makes chart-specific functionality available. In Document mode, if you select a chart object, the Chart option is enabled on the Home tab and the ribbon options change. For more information, see *Ribbon Commands for Charts* on page 124.
File	Creates a data file from a report component of a document.
Navigation Group	

Command	Description
Table	Generates standard browser output. This is the default. This option is only available for reports in Document mode.
Table of Contents	Generates output by displaying a table of contents icon in the upper-left corner where report output typically appears. Clicking *Table of Contents* opens a menu that enables you to select (view) individual values of the first Sort By (By) field, one value at a time. You can also select options to view the entire report or remove the table of contents. This option is unavailable for charts in Document mode, and is disabled for reports in Document mode.
Freeze	Generates output with column titles that freeze (remain in view) when you scroll through pages of the report output. This option is unavailable for charts in Document mode, and is disabled for reports in Document mode.
Pages On Demand	Provides access to two distinct features depending upon the output type that you have selected. This option is available for reports in Document mode.
Features Group	
Title Popup	Displays pop-up titles when the mouse pointer hovers over a column title in the report output. When working with reports in Document mode, this option is disabled.
Accordion	Creates expandable views of data for each vertical sort field. This option displays data values only for the first vertical sort field when you first view the output. You can manually expand your view to expose the data values of lower-level sort fields.
Repeat Sort Value	Displays all repeated sort values instead of blanks in the output after the first instance of a new sort value, which is the default behavior.

Command	Description
Stack Measures	Displays all numeric measure field names in a column of the report output with the corresponding numeric data values.
active report Options	Opens the active report options dialog box where you can configure your active report options such as menu items, graph engine, and colors. For more information, see *Creating Interactive Content*.
Accessibility	Allows a title to be added to a report, chart, or document that is Section 508-compliant.
Run with Group	
Auto Drill	This option is disabled in Document mode.

Data Tab

Command	Description
Calculation Group	
Detail (Define)	Opens the Detail Field (DEFINE) dialog box, where you can create a defined field, type a name for the field, and enter a format. A Define field is an optional attribute used to create a virtual field for reporting. You can derive the virtual field value from information already in the data source (that is, from permanent fields).
Summary (Compute)	Opens the Summary Field (COMPUTE) dialog box, where you can create a computed field, type a name for the field, and enter a format.
Join Group	
Join	Opens the Join dialog box, where you can create a new join, edit or delete existing joins, and add data sources to a join.

Command	Description
Filter Group	
Filter	Opens the Filter dialog box, enabling you to set filtering options. Filter options include Where, Where Total, the And conjunction, and the Or conjunctions in a single expression.
Display Group	
Missing Data	Includes options for how to display missing values in charts.
Data Source Group	
Add	Opens the Open dialog box, where you can add additional data sources to a document, enabling you to insert reports from different data sources into the same document.
Switch	Opens a drop-down list of all the data sources that have been added. You can choose which data source is currently active and being used to create new reports.

Slicers Tab

Command	Description
Options Group	
New Group	Creates a new group of similar slicers.
Clear Slicers	Resets all slicers so that no filtering is done.
Update Preview	Applies slicers to preview.
Options	Provides access to the Edit Slicers dialog box. For more information, see *Using Slicers* on page 91.
Record Limit Group	

Command	Description
Preview	Sets the number of records retrieved from the data source for preview.
Run Time	Sets the number of records retrieved at run time.
Record Limit	Provides access to the Edit Slicers dialog box, where you can modify record limit settings. For more information, see *Using Slicers* on page 91.
Group Number Group	
Group *n*	Contains a group for each Slicer group that is added. Group 1 is the default slicer group to which you can drag fields to create slicers.

Layout Tab

Command	Description
Page Setup Group	
Margins	This option is disabled in Document mode.
Orientation	Enables you to set the orientation of your report to portrait or landscape.
Size	Enables you to select the size of the paper for printing output. You can choose A3, A4, A5, Letter, Tabloid, Legal, PowerPoint, or Large Size (34 x 44 Inches).
Units	Enables you to select the unit of measurement used for customizing the dimension fields of your report or chart. You can choose Inches, Centimeters, or Points.

Command	Description
Page Numbers	Enables you to select page numbering options. You can choose one of the following: ❑ No Lead (no space for headers) ❑ On (page numbers only in headers) ❑ Off (space for headers, but no page numbering) The Page Numbers value is overridden by header and footer text options.
Size & Arrange Group	
Height	Sets the height of the selected document component.
Width	Sets the width of the selected document component.
Auto Overflow	Automatically expands the query area to show all data.
Aspect Ratio	Lock the height and width aspect ratio.
AutoFit	In Document mode, this option is disabled.
Align	Opens a drop-down menu of available alignment options, when two or more document components are selected.
Relative Position	Positions the top-left corner of the lower component, to the bottom-left corner of the higher component, when two or more document components are selected.
Size and Arrange	Opens the Size and Position dialog box where you can set size and position options for the object in your document.
Report Group	
Cell Padding	Opens the Cell Padding dialog box, where you can set specific values to control the amount of space inserted between rows and columns in a report. For more information, see *Use Cell Padding in a Report*.

Command	Description
Autofit Column	When working with a report component, this option automatically compresses the columns in the report to the width of the widest data instance. Autofit Column is selected, by default.

View Tab

Command	Description
Design Group	
Query (Design view)	This option is unavailable in Document mode.
Live Preview (Design view)	This option is unavailable in Document mode.
Document	Enables Document mode by default.
Show/Hide Group	
Resources	Minimizes the Resources panel and expands the size of the canvas to also occupy the area where the Resources panel typically appears. The canvas can display a preview of a report, output of a report, or the Query Design pane.
Ruler	Displays a ruler above the canvas and to the left of the canvas for a document.
Grid	Displays a grid as a visual aid for aligning objects in a document.
Relationships	Shows the relative positioning relationship among objects.
Data Panel Group	
Logical	Displays the data source fields by type. This is the default view. The Logical view options include Title, Description, Field, and Alias.

Command	Description
List	Displays the data source fields in a tabular list format. This list contains a header row. You can sort fields differently by clicking a column header. The List view options include Title, Description, Field, Alias, Format, Segment, Filename, and Reference.
Structured	Displays the hierarchical structure of the data source files. The Structured view options include Title, Description, Field, and Alias.
Query Panel Group	
Areas 2x2	Displays data in a two column by two-row grid. When working with the new field container syntax, this option is unavailable.
Areas 1x4	Displays data in a one column by four-row grid. When working with the new field container syntax, this option is unavailable.
Tree	Displays data in a tree. This is the default.
Output Window Group	
Arrange	Opens a drop-down menu where you can choose how to display multiple output windows. The options are Cascade, Tile Horizontally, and Tile Vertically.
Output Location	Opens a drop-down menu where you can choose how to direct new output. The options are Single tab (default), New Tab, Single Window, and New Window.
Switch Output	Opens a drop-down menu for choosing to view any active output window.
Report Group	
Switch Report	Lists any active report or chart to which you can switch.

Field Tab

Command	Description
Filter Group	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.
Exclude	Removes, but does not delete, the filter from the report or chart.
Include	Restores a filter that was previously excluded from a report or chart.
Prompt	Opens the Create a filtering condition dialog box for creating an auto prompting parameter that you can select when you run a report. The Create a filtering condition dialog box is used to create both filters and auto prompting parameters. The following prompt options are available when Parameter is selected from the Type drop-down menu: ❑ **Simple.** This is used for prompts using Text Input. This is the default value. ❑ **Static.** This is used for prompts using Selection. This option allows you to select multiple values at run time. ❑ **Dynamic.** This is used for prompts using Data Values. This option allows you to select multiple values at run time. ❑ **Optional.** This is used for prompts using Single or Multiselect parameters.
Sort Group	
Up	Sorts the selected field in ascending order.
Down	Sorts the selected field in descending order.

Command	Description
Rank	Inserts a rank column immediately to the left of the report if a Sort By field is selected. It also adds a rank column to the left of the Sort By field if a Measure field is selected. Ranking a Measure field results in two copies of the field, the original Measure field, and the Sort By field that is created during ranking.
Group	Opens the Create a Group dialog box where you can create a group to combine values together.
Limit	Opens a drop-down menu that allows you to specify the number of unique values to display for a sort group that has been added.
Break Group	
Page Break	Starts a new page when the primary sort field changes. Clicking the drop-down icon enables you to select *Reset Page Numbers*, which allows you to reset page numbers on a page break to start at 1.
Line Break	Inserts a line in the report output when the primary sort field changes.
Subtotal	Inserts a line, total text (TOTAL FIELD Value), and subtotals for all numeric fields when the primary sort field changes.
Sub Header	Opens a dialog box where you can type text to add a subheading just below the column titles in the report output when the primary sort field changes.
Sub Footer	Opens a dialog box where you can type text to add a subfooting at the end of the data on each page of the report output when the primary sort field changes.
Style Group **Note:** The options in this group are only available for reports in Document mode.	

Command	Description
Font	Opens the Font list, which you can use to change the font.
Font Size	Opens the Font Size list, which you can use to change the numeric value for the font size.
Font Color	Opens the Color dialog box, where you can select the font color.
Style Reset	Resets all settings to the default settings from the template.
Bold	Applies bold font formatting to the selected text.
Italic	Applies italic font formatting to the selected text.
Underline	Underlines the selected text.
Justify Left	Aligns the text to the left of the visual.
Justify Center	Aligns the text to the center of the visual.
Justify Right	Aligns the text to the right of the visual.
Background Color	Opens the Color dialog box, where you can select the background color for the visual.
Data Style	Styles only the data for the selected data source field.
Title Style	Styles only the column title for the selected data source field.
Data + Title	Styles both the data and the column title for the selected data source field.
Format Group **Note:** The options in this group are only available for reports in Document mode.	
Change currency options	Changes the currency options for the selected field.
Percent	Specifies the value of the field as a percentage.

Command	Description
Comma	Specifies the use of commas for the selected field.
Increase Decimal Places	Increases the number of decimal places that display for the selected field.
Decrease Decimal Places	Decreases the number of decimal places that display for the selected field.
Display Group	
Hide Field	Allows you to hide a selected field.
Hide Missing	Allows you to hide fields that have no value.
Aggregation	Opens a drop-down menu of the following options: None (default), Sum, Average, Count, Count Distinct, Percent of Count, First Value, Last Value, Maximum, Minimum, Total, Percent, Row Percent, Median, Average Square.
Traffic Lights	Opens the Traffic Light Condition dialog box. From this dialog box, you can add new conditional styling by applying traffic light (and other) colors to a selected field in the output when the field meets specified criteria, modify existing conditional styling, and enable conditional drill-down.
Within	Allows you to use specific aggregation tasks at different report levels. You can use the Within phrase to manipulate display field values as they are aggregated within a sort group rather than a report column.
Data Bars	Adds a data visualization column to the right of a selected numeric field. The column displays values in each row using horizontal bars that extend from left to right in varying lengths, depending on the corresponding data values.

Command	Description
Column(s)	Allows you to indicate the number of columns in which you wish to display multiple graphs. The value can be between 1 and 512. The default is 1. This option is also available from the Query Design pane shortcut menu for a Multi-graph component.
Links Group	
Drill Down	Opens the Drill Down dialog box, where you can configure a hyperlink or a drill-down procedure for the selected field. Clicking that field in the report output, at run time, redirects you to the URL you specified or executes the indicated procedure. This option is disabled in Document mode.

Series Tab

In Document mode, the Series tab is enabled for chart components.

Command	Description
Select Group	
Series drop-down list	Lists the available series in the current chart.
Style Group	
Style	Opens the Format Series dialog box, where you can edit the styling options for the selected series. You can also open this dialog box by right-clicking a series, and then clicking *More Style Options*.
Properties Group	

Command	Description
Data Labels	Adds data labels to the chart. The drop-down menu contains the following data position options for selecting where to display data values as labels on a chart: Above (default), On top edge, Below top edge, Center, and Base. If you are working with a Pie chart, the options are: On Slice, Outside Slice, and Outside with feeler lines. Clicking *More Data Label Options* opens the Format Labels dialog box, where you can further edit your data labels.
Trendline	Opens a drop-down menu that provides options for adding a trendline to a chart.
Equation	Displays the associated mathematical equation for a trendline on a chart.
Line Group	
Smooth Line	Draws the chart using smooth lines.
Connect Lines	Controls the display of connecting lines between markers on a line or scatter chart. By default, lines are connected on a line chart and disconnected on a scatter chart.
Marker	Opens a drop-down menu from which you can select options to change the display of the default data and legend markers on line and scatter chart types. For more information, see *Change the Appearance of a Marker*.
Pie group **Note:** The following options are only enabled when you are working with a pie chart.	
Expand	Expands pie slices.
Hide	Hides pie slices.

Ribbon Commands for Visualizations

When creating and customizing visualizations in Visualizations mode, you can use the following ribbons and commands to customize visualization functionality.

Home Tab

Command	Description
Clipboard Group	
Paste	Enables you to paste a text, report, or chart object that you have copied to or placed on the clipboard.
Cut	Enables you to cut a text, report, or chart object from your document, placing it on the clipboard.
Copy	Enables you to copy a text, report, or chart object to the clipboard.
Duplicate	Enables you to duplicate a text, report, or chart object in your document, placing it on the clipboard.
Data Group	
Calculation	Opens a menu from which you can choose to create Define or Compute fields.
Join	Opens the Join dialog box, where you can create a new join, edit or delete existing joins, and add data sources to a join. You can also create blends, which allow you to combine data from local or system resources into your current data source.
Visual Group	
Insert	Inserts a new visual. The left side of the Insert button inserts the default visual, which is a stacked bar chart. Click the down arrow next to the Insert button to specify a visual type, such as a chart, grid, or text.

Command	Description
Change	Opens the Select a Visual menu, from which you can select the type of chart, map, or grid that you want to add to your visualization.
Swap	Changes the vertical or horizontal orientation of data in a visual. When you add one or more fields to the canvas, Swap is enabled. When you have data fields in the vertical and horizontal field containers, clicking Swap switches the axis of these data fields to display on the opposite axis. When working with matrix charts, the rows and columns are similarly switched when you click Swap. Swap is available for bar, line, area, scatter, bubble, and matrix marker charts. It is also available for grids. **Note:** ❑ Swap is disabled when the canvas is empty. ❑ Swap is unavailable for maps.
Clear	Clears the current visual. You can use the split button to select the option to clear a component, or the entire visualization, which clears all visuals on the canvas. If you have created a filter, you can also clear it. The Clear button is disabled until you begin developing a visual on the canvas.
Storyboard Group	
Add	Takes a snapshot of the current visual or visualization, adding it to the storyboard.
Show	Opens your storyboard as a PowerPoint presentation, where you can choose to view or save your storyboard. All storyboards display in Microsoft PowerPoint format.

Format Tab

Command	Description
Report Group	
Theme	Opens the Templates dialog box, where you can select a theme to style your grid. You can use the default style sheet by clicking the *Use Default Stylesheet* button. You can also select a styling theme for your grid or an application theme to style all visualizations created.
Header & Footer	Opens the Header & Footer dialog box, from which you can add and style headings and footings.
Column Totals	Adds a grand total row to the bottom of the grid object to sum numeric data in each column.
Row Totals	This option is not supported in Visualization mode.
Features Group **Note:** These options do not display for grids or maps, with the exception of Frame & Background.	
Reference	Opens the reference menu, where you can access the Add Reference Line to Y-Axis and Add Reference Line to X-Axis options. Selecting one of these options opens the Reference Line dialog box, where you can set the following: the X-axis or Y-axis value, the text that you want to appear, and the position of the reference line on a chart.
Grid	Opens the grid menu, where you can access the Horizontal or Vertical Gridlines options. Both selections allow you to enable or disable Major and Minor Gridlines. Clicking *More Grid Lines Options* opens the Format Grid Lines dialog box.

Command	Description
Frame & Background	Opens the Frame & Background dialog box, where you can edit the background style and frames for charts. This dialog box contains different options depending on the chart type that you have selected.
Labels Group	
Axes	Opens the Axes menu, where you can enable and rotate horizontal and vertical axis labels, as well as stagger horizontal axis labels. You can also edit the axis labels by clicking *More Vertical Axis Options* or *More Horizontal Axis Options*. This option does not display for grids or maps.
Legend	Opens the Legend menu, where you can select the Show Legend option to display the legend on the chart. You can also clear your selection to hide the legend. In addition, you can change the default legend position and orientation. This option displays for maps but does not display for grids.
Interactive Group **Note:** These options do not display for grids or maps.	
Interactive Options	Opens the Interactive Options dialog box, which enables you to specify animation and mouse over effects in your chart.

View Tab

Command	Description
Show/Hide Group	

Command	Description
Resources	Minimizes the Resources panel, expanding the size of the canvas to occupy the area where the Resources panel typically appears. When you click the Resources button again, the Resources panel displays and the chart, map, or grid adjusts accordingly.
Data Panel Group	
Logical	Displays the data source fields by type. This is the default view. The Logical view options include Title, Description, Field, and Alias.
List	Displays the data source fields in a tabular list format. This list contains a header row. You can sort fields differently by clicking a column header. The List view options include Title, Description, Field, Alias, Format, Segment, Filename, and Reference.
Structured	Displays the hierarchical structure of the data source files. The Structured view options include Title, Description, Field, and Alias.
Report Group	
Switch Report	Lists any active report or chart to which you can switch.

Field Tab

Command	Description
Filter Group **Note:** Options on the Field tab are contingent on the visual type that you select.	
Filter	Opens the Filter dialog box for creating filters. Filters enable you to select only the data that you want and to exclude unwanted data.

Command	Description
Exclude	Select an existing filter in the Filter pane and choose *Exclude* to remove, but not delete, the filter from the visual.
Include	Select an existing filter in the Filter pane and choose *Include* to restore the filter, which was previously excluded from the visual.
Sort Group	
Up	Displays the data source fields by type. This is the default view. The Logical view options include Title, Description, Field, and Alias.
Down	Displays the data source fields in a tabular list format. This list contains a header row. You can sort fields differently by clicking a column header. The List view options include Title, Description, Field, Alias, Format, Segment, Filename, and Reference.
Group	Opens the Create a Group dialog box where you can create a group to combine values together. For grids, this option is activated when you select a dimension.
Display Group	
Hide Field	Hides a selected field.
Aggregation	Specifies an aggregation for a specific field. Commonly used options include: Sum, Average, Count, Minimum, and Maximum.
Traffic Lights	Specifies conditional styling to the selected field.

Series Tab

Command	Description
Select Group **Note:** This group is not available for grids. For maps, this group is disabled.	
Series drop-down list	Lists the available series in the current visualization.
Style Group	
Style	Opens the Format Series dialog box, where you can edit the styling options for the selected series. You can also open this dialog box by right-clicking a series, and then clicking *More Style Options*.
Properties Group	
Data Labels	Adds data labels to the chart. The drop-down menu contains the following data position options for selecting where to display data values as labels on a chart: Above (default), On top edge, Below top edge, Center, and Base. If you are working with a Pie chart, the options are: On Slice, Outside Slice, and Outside with feeler lines.
Type	Opens a drop-down menu with the following options for selecting different chart types: None (default), Bar, Line, and Area.
Trendline	Opens a drop-down menu that provides options for adding a trendline to a chart.
Line Group	
Smooth Line	Draws the chart using smooth lines.
Connect Lines	Controls the display of connecting lines between markers on a line or scatter chart. By default, lines are connected on a line chart and disconnected on a scatter chart.

Command	Description
Marker	Opens a drop-down menu from which you can select options to change the display of the default data and legend markers on line and scatter chart types. For more information, see *Change the Appearance of a Marker*.
Pie Group **Note:** The following options are only enabled when you are working with a pie chart.	
Expand	Expands pie slices.
Hide	Hides pie slices.

Chapter 9 Understanding Warning Messages in InfoAssist+

This topic describes InfoAssist+ warning messages.

In this chapter:

InfoAssist+ Warning Messages

Message	Description	OK	Cancel
Are you sure you want to switch data source? Doing so will delete your current report.	This warning message displays when a report is first saved in a different format and one or more additional reports are created and saved, and the user clicks *Switch* on the Data tab and selects a different report from the shortcut menu.	Deletes the current report.	Preserves the current report.

Message	Description	OK	Cancel
Are you sure you want to add a data source? Doing so will delete your current report.	This warning message displays when a report is first saved in a different format and an additional report is created and saved, and *Add* on the Data tab is selected.	Deletes the current report.	Preserves the current report.
Output to Printer syntax found. This feature is not supported. Your report will be converted to PDF output.	This warning message displays when opening a procedure created in HTML Graph Assistant when certain criteria are met.	Converts the report to PDF format.	Aborts the process of opening the procedure.
Unsupported Graph Applet syntax found. Your report will be converted to use server-side graphics.	As of Web Query 2.1.0, Graph Applet functionality is no longer supported. This warning message displays when opening a procedure that contains Graph Applet syntax.	Converts your report to use server-side graphics.	Aborts the process of opening the procedure.

Message	Description	OK	Cancel
Unsupported OLD graph engine syntax found. Your report will be converted to use NEW graph engine syntax.	As of Web Query 2.1.0, OLD graph engine functionality is no longer supported. This warning message displays when opening existing procedures with OLD graph engine syntax, informing the user that unsupported syntax was detected and that the procedure will be converted to use NEW graph engine syntax.	Converts the procedure from the OLD graph engine to the NEW graph engine.	No changes are made to the original procedure and it is closed.
Unsupported chart type syntax found. Your report will be converted to use the default chart type.	This warning message displays when opening an existing procedure, and certain criteria have been met.	Converts the report to use the default chart type.	Cancels the conversion of the report to the default chart type.

Message	Description	OK	Cancel
User Selection in this request is not allowed with your configuration. Your report will be converted to default output.	This warning message displays when the user selection option is not available on restore, or when you are restoring a user selection option when it is disabled at global preference.	Converts the report to use the default output type.	No changes are made to the original procedure and it is closed.
File Was Modified Outside of InfoAssist+. Continue?	This warning message displays when there is any modification done to an report in the text editor.	Proceeds to open the modified procedure in InfoAssist +.	Closes the warning message and returns to the Web Query Home Page.

Unsupported Syntax and Objects

This section describes the syntax and objects that are not supported.

- SUB-TOTAL syntax is not supported. If you try to open an existing procedure in InfoAssist+ from a legacy tool that contains SUB-TOTAL syntax, an unsupported syntax warning message displays. If you choose to continue, InfoAssist+ will convert the syntax to SUBTOTAL and add the converted syntax to all higher level sort breaks.
- SUMMARIZE syntax is not supported. If you try to open an existing procedure in InfoAssist+ from a legacy tool that contains SUMMARIZE syntax, an unsupported syntax warning message displays. If you choose to continue, InfoAssist+ will convert the syntax to RECOMPUTE.
- HTML FULL, FIXED, and PAGED syntax is not supported. If you try to open an existing procedure in InfoAssist+ from a legacy tool that contains any of these three options, an unsupported syntax warning message displays. If you choose to continue, InfoAssist+ will convert the procedure to regular HTML output.

- COLUMN-TOTAL syntax is not supported. If you try to open an existing procedure in InfoAssist+ from a legacy tool that contains this syntax, an unsupported syntax warning message displays. If you choose to continue, InfoAssist+ will convert it to use RECOMPUTE syntax.
- Line objects in a compound document imported from a legacy tool are not supported. If you try to open an existing procedure that includes line objects, an unsupported syntax warning message displays. If you choose to continue, InfoAssist+ will remove these line objects.

Glossary

3D Effect	A customized charting feature that sets the three-dimensional view to be on or off.
Accessibility	A specialized reporting feature that allows a title to be added to a report, chart, or document that is Section 508 compliant. This option is only available for reports and charts when the output type is HTML or PDF.
Accordion	A specialized reporting feature in which expandable views of data are created for each vertical sort field. This option displays data values only for the first vertical sort field when the user first views the output. The view can be expanded manually to expose the data values of lower-level sort fields.
accordion report	Report output that is expandable for each vertical sort field.
active chart	A chart that uses the full capabilities of Active Technologies.
active dashboard	A dashboard that uses the full capabilities of Active Technologies.
active dashboard prompts	Controls from Active Technologies that act as filters on the reports of the document, such as text box, image, drop down, list, check box, radio button, and text field.
active PDF	An output format available for reports, charts, documents, and dashboards. Requires Adobe® Reader® 9.0 or later.
active report	A report that uses the full capabilities of Active Technologies.

active report Options	A customized charting feature. Opens the active report options dialog box where you can configure your active report options, such as menu items, graph engine, and colors. This option is only available when the output type is set to active report or active PDF.
Aggregation	A report custom feature in which the user can display numeric measure data using a variety of aggregation options other than the default of Sum.
aggregation value	A value assigned to a numeric measure field in a report.
Annotate	A customized charting feature that allows the user to add an annotation and position it on a chart.
annotation	Explanatory note or comment.
application button	A button on the InfoAssist+ Application window that provides access to the application menu of procedure-related commands.
axis	A reference line drawn on a chart.
axis labels	Labels generated automatically based upon the scale of the axis. They appear along the axis.
axis title	Descriptive text that provides meaningful information about the data measured by an axis.
background	The area that appears behind the frame of a chart.

canvas	A component of the InfoAssist+ application window. The canvas displays a preview of the report being created or modified on the canvas when the user is in Live Preview (default). The canvas is always fully maximized and cannot be minimized, cascaded, or tiled. A blank canvas opens when there is no report.
cascade	An output view option in which multiple output windows are cascaded diagonally across the canvas.
cascade controls	Controls that have a parent-child relationship, in which the parent filters the available options of the child. An active form control can be the parent of more than one other control, but cannot be a child of more than one control.
cell padding	The amount of space inserted between rows and columns in a report.
color bands	Basic design elements of a chart. Color bands come in a pair, with each band uniquely colored. They appear in a continually repeating pattern behind a series on a chart. The contrast of colors is designed to make a chart easier to read.
color mode	The mode that controls how color is applied to a series (measure field) on a chart. The possible settings are By Series (default) and By Group.
data bars	A report custom feature in which data visualization bars are added to numeric data.
data labels	Descriptive names that identify specific data points within a series.

Data tab	A tab on the ribbon that contains data manipulation and data display options in the Calculation, Join, Filter, Display, and Data Source groups.
Demographic Layers	Display a layer of information about people and businesses in a specific demographic area. This includes the United States and 120 other countries. Demographic Layers are thematic maps that provide additional information about the location, such as spending habits, population, and lifestyles.
dimension filtering	An option to display dimension filters at the top of a report.
document theme	A theme selected by the user to distinctly style reports and charts.
Environment and Styling	Area of the InfoAssist+ Options window that contains settings to select an application theme for the user interface or a document theme to apply styling to reports and charts.
feeler line	A line that connects the data label to a chart.
Field tab	A tab on the ribbon that appears when the user selects a data source field in the Query pane or the canvas. The options available in the Field tab are specific to the data type that is selected. The options available for numeric fields are different from the options available for non-numeric and date fields. The Field tab provides access to the Filter, Sort, Break, Style, Format, Display, and Links groups.
Filter pane	A component of the Resources panel that is located under the Data pane. You can drag fields from the Data pane to the Filter pane to filter your report. You can also manage filters in the Filter pane.

Format Axis dialog box	A dialog box of options for formatting for both vertical and horizontal axes.
Format Gauge dialog box	A dialog box of options for formatting a gauge chart. Such options include setting and styling a title for the gauge chart, setting tick marks, and color bands, as well as advanced settings, such as setting the gauge start and stop angle.
Format Grid Lines dialog box	A dialog box of options to format horizontal and vertical gridlines, color bands, and frames on a chart.
Format Labels dialog box	A dialog box that contains options for editing data labels.
Format Series dialog box	A dialog box that contains options to format the fill and border of each series on a chart.
Format tab	A tab on the ribbon that contains different options for selecting output formats and other reporting features, depending on whether you are creating a report. For reports, the Format tab provides access to the Destination, Navigation, and Feature groups.
frame	The area of a chart that contains all of the basic chart elements, such as the plot points, gridlines, legend, and chart title. The frame appears as a rectangle.
Frame & Background	A customized charting feature. Through the Frame & Background dialog box, the user can set frame and background options specific to the chart type selected.

Freeze

A custom report output format that allows the user to view output with column titles that freeze (remain in view) when the user scrolls through pages of the report output.

gauges

A customized charting feature. Through the Gauge dialog box the user can set options specific to a gauge chart.

grid

A customized charting feature that allows the user to set options for horizontal and vertical gridlines.

gridlines

Lines that run horizontally and vertically to enhance the readability of a chart. Gridlines can be major or minor.

Home tab

A tab on the ribbon that contains the most commonly-used commands and options from the Format, Design, Filter, and Report groups.

InfoMini

An application built from an InfoAssist+ report that contains a subset of InfoAssist+ functionality at run time.

Insert tab

A tab on the ribbon that contains options to add reports, charts, existing reports, text, images, and active form control (for active report, and active PDF outputs only) to a canvas in Document mode.

Interface theme

A theme selected by the user to style all menus and dialog boxes.

Layout tab

A tab on the ribbon that provides access to page display and layout options from the Page setup, Size & Arrange, and Report groups.

legend	A chart element that displays each series that appears on a chart.
Lightweight Mapping	The Lightweight Mapping functionality offers the ability to view data that is bound to a geo-location. Using a powerful HTML5 map viewer, you can view data using a variety of popular formats, such as bubble markers and heat filled polygons (also known as choropleths). The HTML5 map viewer contains zoom, pan, and scale controls. You can use this functionality to visualize patterns, trends, and relationships related to the location information in data.
limit	A report custom feature in which the number of unique variables in a column is limited.
markers	Visual elements found on line charts that represent data points on a chart.
Navigation taskbar	A component of the InfoAssist+ Application window that displays groups and icons that provides different views and quick access to all active reports and report access.
Page Breaks	A custom report Pages on Demand feature in which a new page is started in the output when the primary sort field changes.
Pages On Demand	A custom report output format that allows the user to view output, one page at a time, and to use a menu bar at the bottom of the report output, from which the user can view a specific page.
Pop-up Title	A report custom feature in which pop-up titles are added to a report and appear when the mouse pointer hovers over a column title.

quadrant lines	Horizontal and vertical lines that cross to divide a chart into four sections.
Query pane	The Query pane is located at the bottom of the Resources panel. It contains the field containers that hold the data fields that you select.
Quick Access Toolbar	A toolbar on the InfoAssist+ Application window that displays frequently used commands, such as New, Open, save, Undo, Redo, View code, Run, and Preview.
Rank	A report custom feature in which a ranking column is inserted for By and Measure fields in a report.
Recompute	A report custom feature in which the result of a Compute command is recalculated.
Reference	A customized charting feature that allows the user to add a reference line to the Y-axis and a reference line to the X-axis.
Reference Layers	Display a layer of boundaries and locations that range from a continental scale to country, state, and even local neighborhood.
reference line	A line designed to draw attention to specific data locations on a chart. A maximum of three horizontal (X axis) and three vertical (Y axis) reference lines can be added to a chart.
Repeat Sort Values	A report custom feature in which all repeated sort values appear instead of blanks after the first instance of a new sort value appears in the report.

Resources panel	A panel that is comprised of the Data pane, the Filter pane, and the Query pane.
ribbon	A component of the InfoAssist+ Application window that displays commands needed to create reports, charts, documents, and dashboards.
ring label	Descriptive name for a concentric ring found on a ring chart.
Rotate	A customized charting feature that allows the user to toggle between a vertical or horizontal display of a chart.
Row Totals	A report custom feature in which a grand total column is inserted to the right side of the report to sum numeric data in each row.
series	A group of data points that are plotted on a chart
Series tab	A tab on the ribbon that only appears when the user is working with charts. It provides access to chart options through the Select, Properties, Line, Pie, and Display groups.
slicers	Dynamic filters that you can use with reports, charts, documents, and dashboards.
Slicers tab	A tab on the ribbon that provides the ability to create and edit slicers.
Stack Measures	An option to stack all measure fields on a report.

splash screen	A screen of available Getting Started and Help options that opens when a user clicks New on the InfoAssist+ application main menu.
Status bar	A component of the InfoAssist+ Application window that contains an output button that the user clicks to see the selected format and an output target button that the user clicks to view the selected option for displaying new output windows or tabs.
Sub Footer	A report custom feature, in which a subfooting is added at the end of the data on each page of the report output when the primary sort field changes.
Sub Header	A report custom feature in which a subheading added just below the column titles in the report output when the primary sort field changes.
Subtotal	A report custom feature in which a subtotal is inserted in the output for all numeric fields when the primary sort field changes.
switch output	An output view option in which a drop-down menu opens, where the user can select any active report to view the output.
Table of Contents	A custom report output format that allows the user to view output for individual values of the first sort (By) field, one value at a time.
tile horizontally	An output view option in which multiple output windows are tiled horizontally, one above another, across the canvas.
tile vertically	An output view option in which multiple output windows are tiled vertically, side by side, across the canvas.

Title Popup

A specialized reporting feature in which a pop-up title appears when the mouse pointer hovers over a column title in the report output.

traffic light conditional styling

Color styling applied to data for a selected measure field. By default a report displays the values that satisfy the first condition in green, and the values that satisfy the second condition in red.

trendline

A line drawn between any two points on a data series that shows the direction that the values of the data series are going in.

View

Area of the InfoAssist+ Options window that provides settings for establishing the design view in which the user will work, the type of data that the user will use when previewing output, the limit that needs to be set on record input, how data and query panels will look, and the output target that will be used.

View tab

A tab on the ribbon that provides access to report design viewing options in the Design, Show/Hide, Data Panel, Query Panel, Output Window, and Reports groups.

Within

Functionality that allows you to use specific aggregation tasks at different report levels. You can use the Within phrase to manipulate display field values as they are aggregated within a sort group rather than a report column.

Legal and Third-Party Notices