What's New in Brio Intelligence 6.6

This document describes enhancements in the Brio Intelligence 6.6 release. The defect corrections are listed in the `Readme` file distributed with the product or available from Brio Customer Support.

This document contains:

- OLAP Query Section Enhancements
- Data Model and Connectivity Enhancements
- Brio Intelligence Server Enhancements
- Improved EIS Development Environment
- Object Model Enhancements
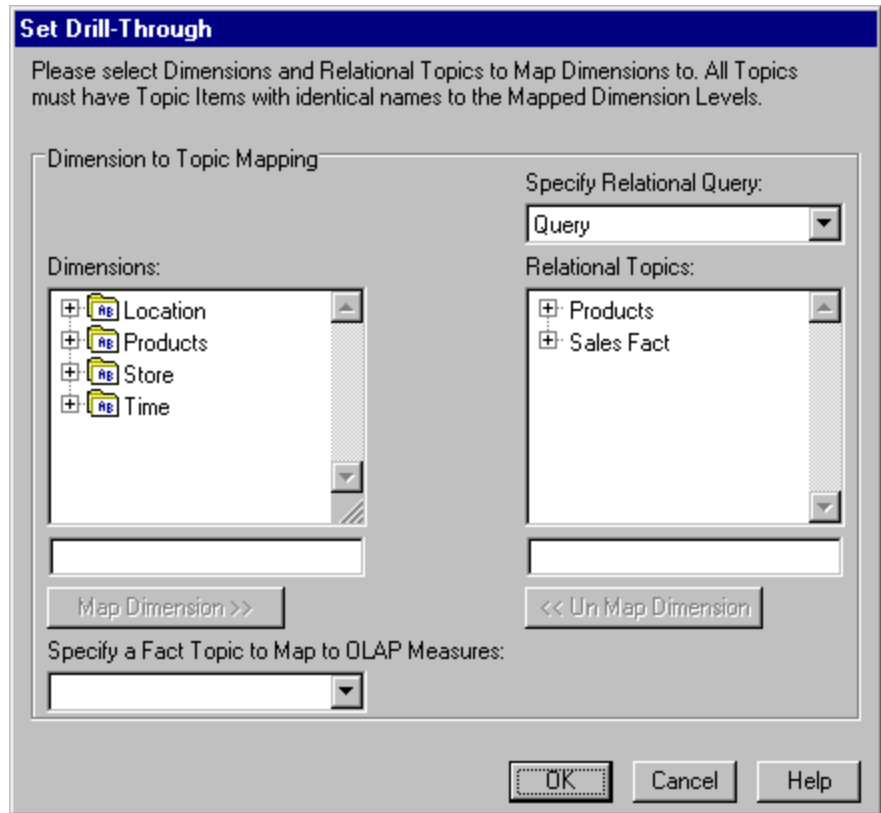- General Enhancements

OLAP Query Section Enhancements

Brio Intelligence 6.6 OLAP Query Section contains the following enhancements:

- Drill-Through To Relational Source Data

- Automatic Creation Of OLAP Query Results

- New OLAP Query Options Menu Item

- Ability To Hide Member Labels

- New OLAP Query Drill-Down Options

- Improved Performance Against SAP BW

Drill-Through To Relational Source Data

Brio Intelligence 6.6 adds the ability to link an OLAP Query to its relational source data. This ability is accessed through the new *Set Drill-Through* menu item of the OLAP menu. The dialog displayed by this menu item (see below) allows a Brio Intelligence user to map a Dimension of an OLAP cube to a table of a relational database (with the assumption that the OLAP cube is represented by a simple Star Schema model in the relational database).

If such a mapping has been done, when users try to drill past the lowest level of the OLAP cube, users are asked if they wish to drill through to the relational source data (thus allowing a lower level of data granularity to be exposed). If a user agrees , the OLAP and relational source data will be presented in a new Pivot Section display.

Set Drill-Through

Please select Dimensions and Relational Topics to Map Dimensions to. All Topics must have Topic Items with identical names to the Mapped Dimension Levels.

Dimension to Topic Mapping

Specify Relational Query:

Query

Dimensions:

- Location
- Products
- Store
- Time

Relational Topics:

- Products
- Sales Fact

Map Dimension >>   << Un Map Dimension

Specify a Fact Topic to Map to OLAP Measures:

OK   Cancel   Help

Automatic Creation Of OLAP Query Results

To enhance the similarity between the OLAP Query and relational Query Sections, Brio Intelligence 6.6 allows the user to automatically create a local Results Section when an OLAP Query is first Processed. This option (default is disabled) is enabled via a new property in the **Tools** →**Options** → **Program Options** menu item (under a new OLAP tab).

New OLAP Query Options Menu Item

Many of the OLAP properties that were previously available as distinct menu items under the OLAP menu are now found grouped together within a new *OLAP Query Options* menu item found under the OLAP menu. This new grouping is a more logical place for many of the OLAP specific properties.

Selecting the new menu item will present the user with a new dialog (see below) from which the various OLAP properties can be set. The dialog further groups properties under the following two tabs:

- General OLAP tab – Properties pertaining to all OLAP analyses

- Database Specific tab – Properties available only for the particular database being queried

Properties previously under the OLAP menu, but now on the OLAP Query Options menu *General* tab are: Database Totals, Hardwire Mode, Slicer Display and the new Drill Down Options (see "New OLAP Query Drill-Down Options" on page 7).
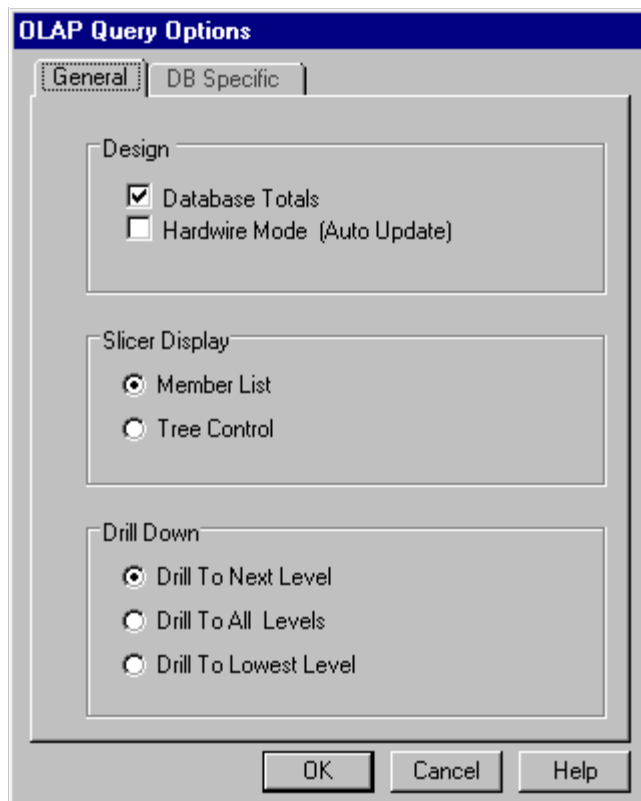

For connections to Essbase databases, the properties under the *DB Specific* tab are: Suppress missing rows, Suppress zero rows, Alias table selection.

For OLE DB for OLAP compliant databases, the *DB Specific* tab contains the Suppress empty rows property.

Support For Essbase Attribute Dimensions

Hyperion Essbase Attribute Dimensions are now fully supported in Brio Intelligence 6.6. Attribute Dimensions are displayed in the Catalog Pane OLAP Tree following the regular Dimension names (see below). The Attribute Dimensions have the text *(Attribute)* following their name. Attribute Dimension Levels can be used in combination with any Base Dimension to enhance the meaning of Essbase data. Additionally, Attribute Calculations are also visible as a separate dimension and the calculation functions can be used in combination with any Attribute Dimension Level or Member.
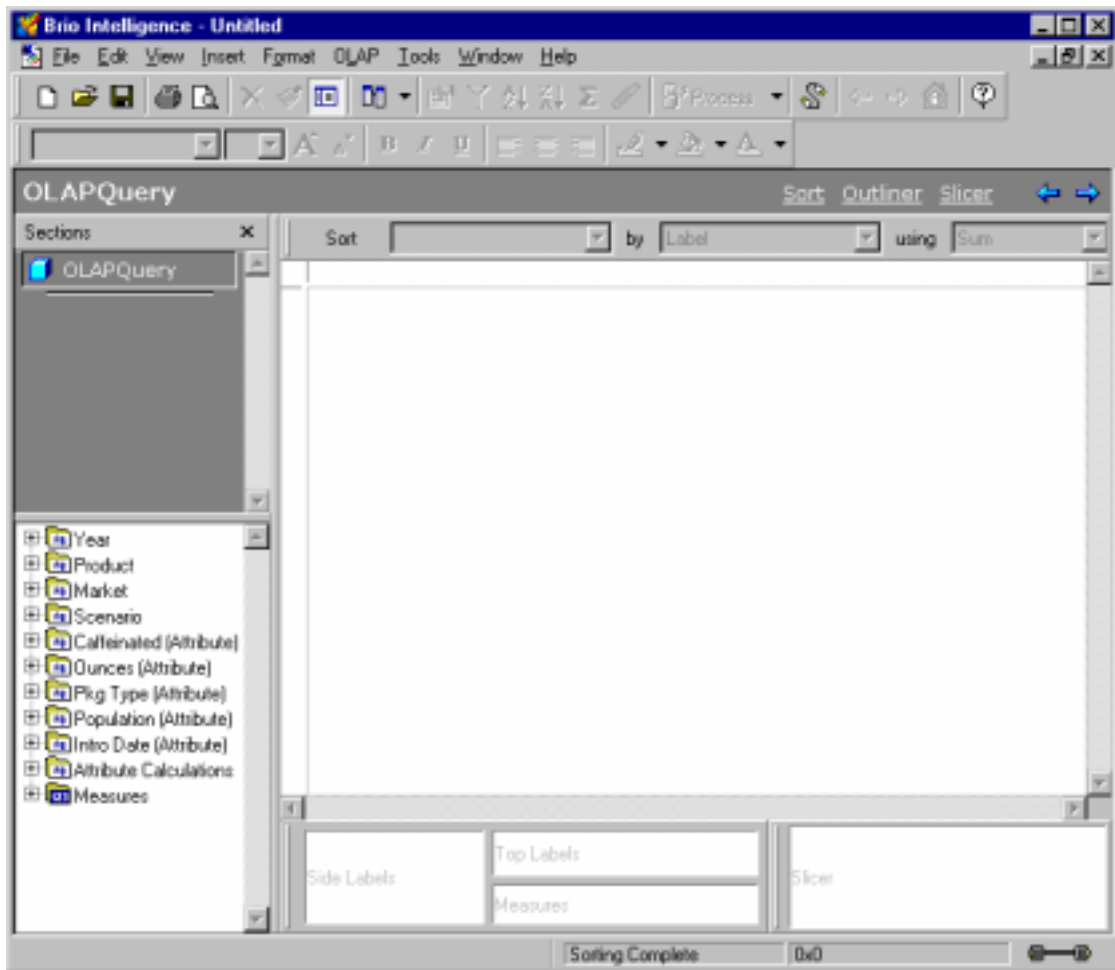
Ability To Hide Member Labels

The OLAP Query Section now has the ability to hide any Top or Side Member Label in the Contents Pane display. This functionality exactly emulates the functionality found in the Brio Intelligence Pivot Section.

The ability to hide Member Labels allows the user to clarify the Contents Pane display by temporarily removing unwanted Member information. If a Member is hidden, any child or descendent Member information is also hidden.

The Hide command is available from the right-click speed menu after clicking on any Member Label(s) in the Contents Pane. Previously hidden items can be re-displayed by selecting *Show Hidden Items*, also from the right-click speed menu.

New OLAP Query Drill-Down Options

BI 6.6 makes available new drill down options that can speed up and clarify the display of information for dimensions that have large amounts of Level data.

Previously in Brio Intelligence, a user could only drill down on a Member to reveal data at the next Level of a dimension. For example, if a dimension contained Levels of: Country, State and City, a user would have to drill down on the "USA" Member to reveal all States in the USA and then subsequently drill down on the "California" Member to reveal all Cities in California.

In Brio Intelligence 6.6, the user has two new options for drill down:

■ *Drill To All Levels* shows all information about Member descendants in one drill down operation. That is, in the above example, Drilling Down on *USA* would show data for all States and all Cities in the USA at once.

■ *Drill To Lowest Level* shows only the data for Members at the lowest Level (while retaining the parent) in one drill down operation. That is, in the above example, Drilling Down on *USA* would show data for all Cities in the USA at once.

Additionally, the previously available *Drill To Next Level* option is also available and is the default drill-down option. With this option, Drilling Down on "*USA* would reveal only all States in the USA as described above.

The new drill-down options are found in the new OLAP Query Options menu item under the OLAP menu (see image in "New OLAP Query Options Menu Item" on page 3).

Improved Performance Against SAP BW

The OLAP Query Section has been updated to improve Query performance when accessing SAP BW databases. The improvements have been made by using more efficient MDX statements to reduce the number of accesses to the BW server and also by better caching of data at the Brio Intelligence client.

Data Model and Connectivity Enhancements

The data model and connectivity enhancements include:

- Upgraded Oracle Connectivity
- Oracle Stored Procedures
- Persistent Data Model Options

Upgraded Oracle Connectivity

Brio Intelligence 6.6 is upgraded to use the functions offered in the call interface to Oracle version 8. The version 7 functions do not allow access to the newer Oracle features planned for future releases of Brio Intelligence and are being dropped from support by Oracle. While it is still possible to connect to Oracle version 7 databases, when Brio Intelligence components require a connection to an Oracle database, these components require that Oracle version 8 clients be installed.

Oracle Stored Procedures

Starting with Brio Intelligence 6.6, Oracle stored procedures can be used to return result sets. This requires an ODBC connection to the Oracle database and the procedure must use Reference Cursors as a procedure parameter. This parameter type allows the ODBC driver to convert the returned data from the procedure into the standard ODBC method of reading results. Because these appear as a parameter to the procedure, version 6.6 recognizes this parameter type and will handle it appropriately when calling the procedure.

Persistent Data Model Options

Prior to version 6.6, each data model was created with a default set of options. The user could not change these defaults, and so for each new data model, the user might have had to make changes to the defaults to meet their particular requirements. For example, the user might require the join method *use all joined topics* for each data model created, but the default applied was *automatic join path generation*.

Starting with Brio Intelligence 6.6, the user can specify persistent data model options. These options will be used each time a new data model is created. Subsequent changes to the options for a specific data model do not affect the user's preferred settings, and existing data models are not affected by changes to the preferences.
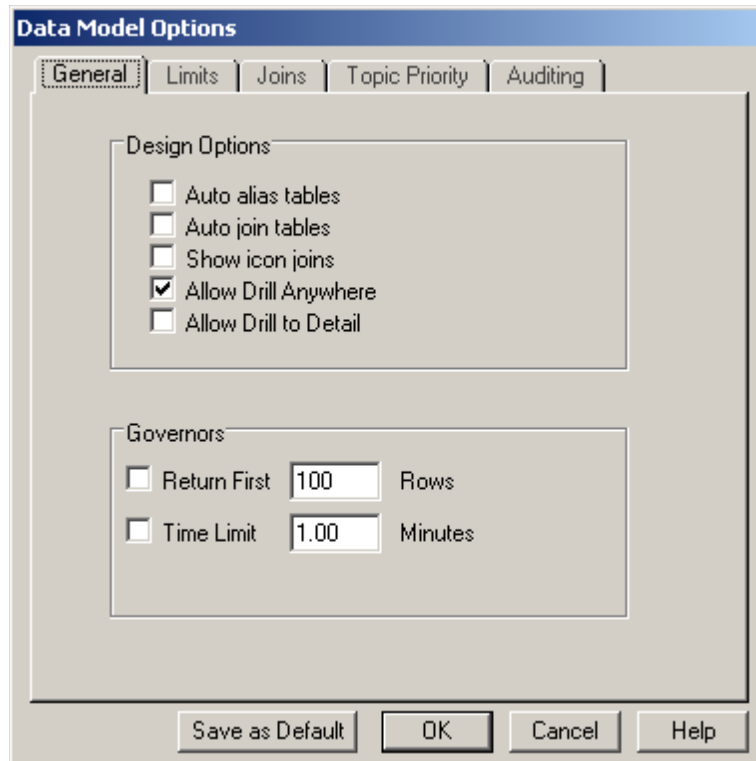
The *Save as Default* button stores the user's data model preferences. To make changes to the stored data model preferences without affecting the current data model, click **Save as Default** followed by **Cancel**. To make changes to the current data model without affecting the saved preferences, click **OK** only. To change the preferences and make them applicable to the current data model, click **Save as Default** followed by **OK**.

Certain data model options are specific to a given data model. These options are not preserved. In particular, topic priority and the enabled state of audit events are not preserved. The audit SQL statements are retained, however, and can be enabled at a later time. Consult the product documentation for additional information.

Brio Intelligence Server Enhancements

The Brio Intelligence servers include the following enhancements:

- "Run Next Poll" Scheduling Option
- Row Level Security

"Run Next Poll" Scheduling Option

Broadcast Server administrators, using the version 6.6 Server Administration program, can trigger any job to run the next time the server polls the repository connection. Previously, it was only possible to do this for ASAP jobs. With this new feature, jobs that might have failed due to a database issue or other problem without altering the scheduling parameters can now be rerun on demand.

For example, an end-of-month job might have run at its scheduled time, but not all the end-of-month data had been input by that deadline. Using this feature, the server administrator can rerun the job once the data entry has been completed without having to change the scheduling parameters to ASAP and then back to the monthly interval.

To use this feature, access the Job List in the Server Administrator, select the job that needs to be run, and click the *Run Next Poll* button. Between this action and the time of the poll, the Completion Status of the job will indicate the request to run the job at the earliest opportunity.
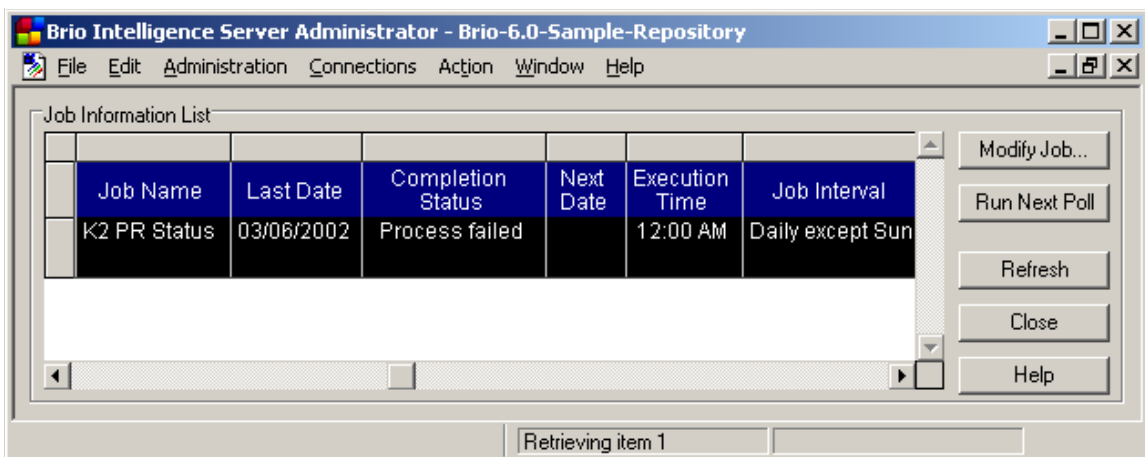
Row Level Security

For the OnDemand and Broadcast Servers, Brio Intelligence version 6.6 introduces the ability to restrict the relational data a user can select based on the user's name and their membership in groups. For example, Sales data can be restricted such that a particular user can only see the data for the particular Sales Region to which that user reports.

Restrictions can be applied at both the row level and the column level. The Sales example above is an example of Row Level Security. To give access to all users to Human Resources data, except for the Salary field, specify that the Salary field is to always be restricted, regardless of whom the user is. In this case, the user will see NULL values for the Salary data.

Methods are provided for users who have special access requirements (for example, there will be people who need access to the Salary field) to get that access. These specifications are known as "override" conditions. If required, new restrictions can be added to the same field. For example, while all users are restricted from accessing Salary information, an override can be given to members of the MANAGER group, allowing access, but specifying that such access is only available to the Salary field of their own direct reports.

Regardless of the data model used, the specifications allow for the inclusion of required join tables not already present in the model, and the power of SQL can be used to produce sophisticated restrictive logic. To get a full understanding on the usage and implementation of the Row Level Security feature, contact the Brio Software Systems Consulting organization for the white paper, *An Introduction to Row Level Security.*

Improved EIS Development Environment

The following areas were improved in the EIS development environment:

- Toolbar
- Object Navigation
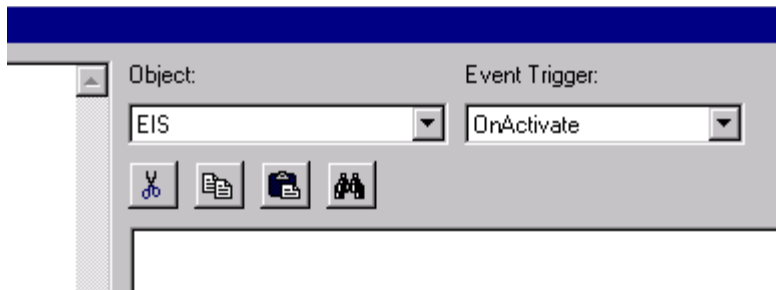- Search and Replace
- Resizable Text Editor

Toolbar

For easy access to commonly accessed functions, a new toolbar has been added to the EIS Development Environment. The toolbar provides the cut, copy, paste, and search/replace functions.


Object Navigation

It is now possible to navigate between all objects on a single EIS page from within the EIS Development Environment. Instead of having to open and close the Development Environment for every object, the user is able to open the Development Environment once per EIS page and effectively have access to all objects on that page and their associated events.

Search and Replace

Search and Replace capabilities are now available for the Text Editor in the EIS Development Environment. Users can search from top to bottom or from bottom to top, matching whole words or by case, and by replacing one or all occurrences of a matching string.
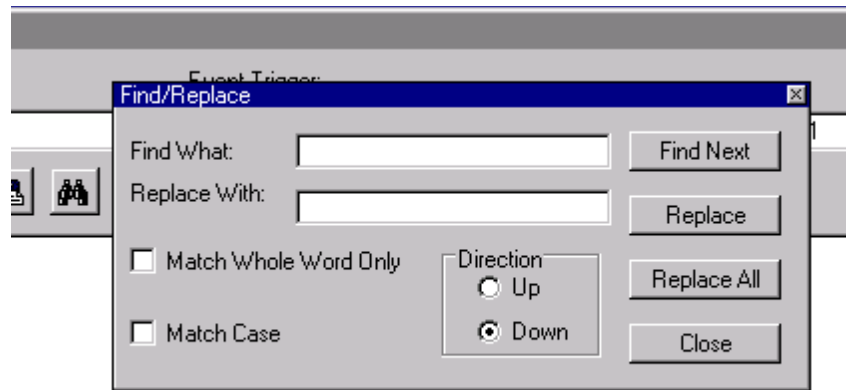
Resizable Text Editor

The Text Editor pane in the EIS Development Environment is resizable in height and width in proportion to the Object Browser pane. Using the lower right corner resize control of the Object Browser pane, users can resize the Text Editor and Object Browser areas.
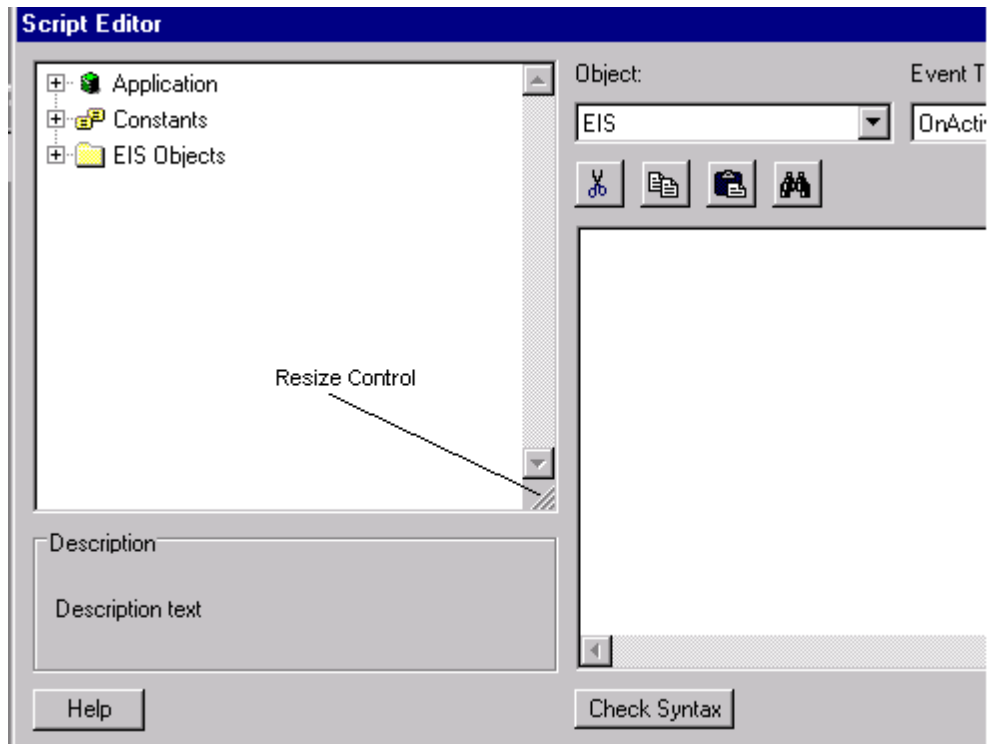
Object Model Enhancements

Object model enhancements include:

- Exposed Data Model and Query Section Limit Line Parentheses in Object Model
- Exposed Report Section in Object Model

Exposed Data Model and Query Section Limit Line Parentheses in Object Model

In both the Data Model and Query sections of a BQY document, users can create and manipulate expressions on the limit line. A limit line expression can include limit line values (column names/topic items), logical AND/OR operators, and parentheses for defining precedence or separating values.
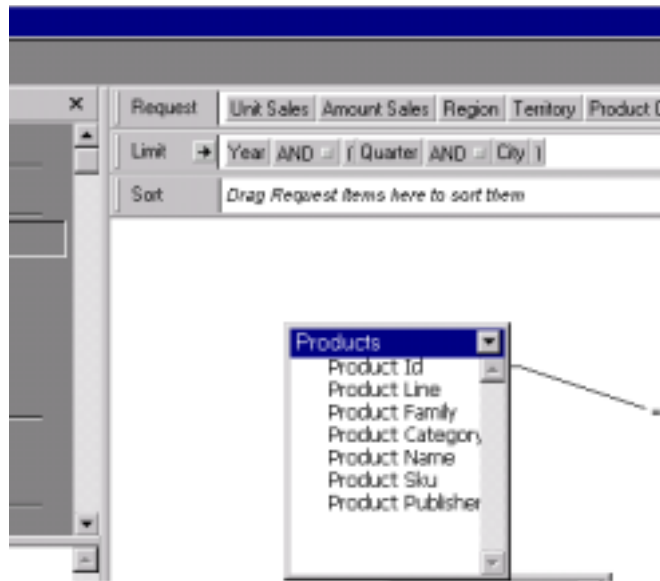
The object model already provides users with access to limit line values and the logical AND/OR operators. With this release, Brio Intelligence 6.6 exposes the limit line parentheses in the object model for both the Data Model and Query sections. Users can set and get values for limit line parentheses.

Given the following limit line expression: 'Region AND Quarter AND Year', applying the following methods will result in: '(Region AND ((Quarter) AND Year))':

```
ActiveDocument.Sections["Query"].Limits.Parentheses.Add('Quarter','Year');
ActiveDocument.Sections["Query"].Limits.Parentheses.Add('Region','Year');
ActiveDocument.Sections["Query"].Limits.Parentheses.Add('Quarter');
```

Based on the same limit line expression from above, the following properties can be read:

```
//Returns 'Quarter'
FirstBegLimitName =
ActiveDocument.Sections["Query"].Limits.Parentheses[1].BegLimtName;
//Returns 'Year'
FirstEndLimitName =
ActiveDocument.Sections["Query"].Limits.Parentheses[1].EndLimtName;
//Returns 'Quarter'
SecondLimitName= =
ActiveDocument.Sections["Query"].Limits.Parentheses[2].BegLimtName;
Or
SecondLimitName= =
ActiveDocument.Sections["Query"].Limits.Parentheses[2].EndLimtName;
//Returns 3;
ParenthesesPairCount = ActiveDocument.Sections["Query"].Limits.Parentheses.Count;
```
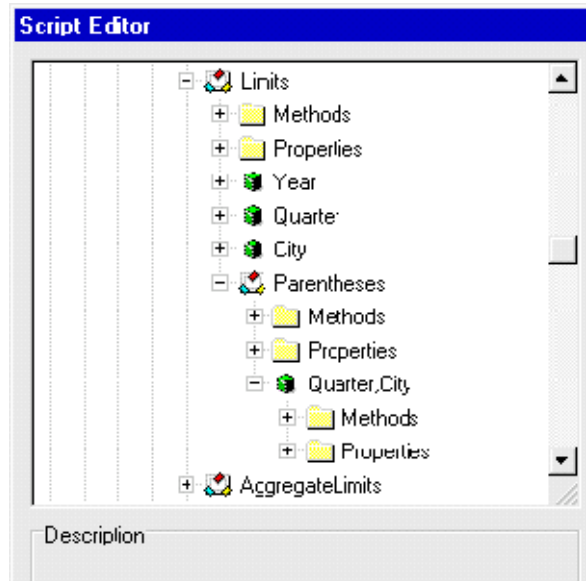
Exposed Report Section in Object Model

With Brio Intelligence 6.6, the Report section of a BQY document is exposed in the object model. Users can programmatically manipulate section attributes, headers, footers, groups, and body areas of a Report section. Users have access to graphics objects, field objects, embedded objects, and table objects. Also available are functions such as sorting, expressions, page break, keep with next, keep together, spring/unspring, color, font, and line width. Much more is available that is not mentioned in this document.
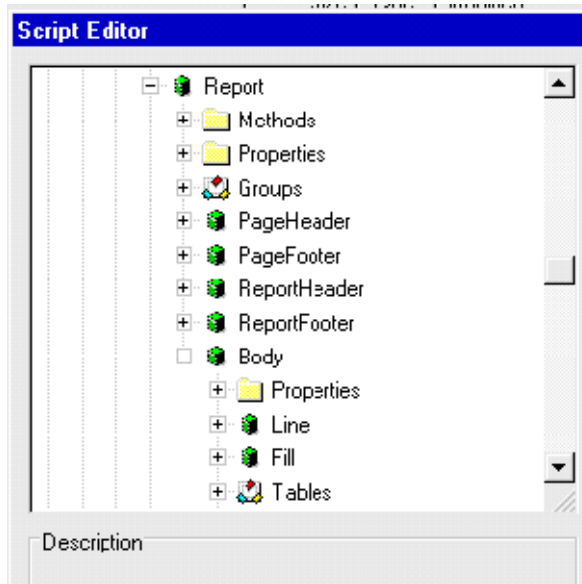
General Enhancements

Brio.Enterprise 6.6 includes the following general enhancements:

- Support for Section Export to PDF Format
- Export to Lotus 1-2-3 in Report Section
- Optional CSS File on HTML Export
- Support for Report Table Break Totals
- Addition of Table Column Background Properties
- Display of Logarithmic Scale in Chart Section

Support for Section Export to PDF Format

Brio Intelligence 6.6 introduces support for PDF export of all printable sections except for the Query and Data Model sections. PDF export is available from Brio Intelligence client, web-based clients, and the Broadcast Server.

For each supported section, the new export PDF functionality is available from the UI through the **File→Export→Section** dialog.   A new option of "Acrobat (*.pdf)" is available from the Save as type field in the Export Section dialog.
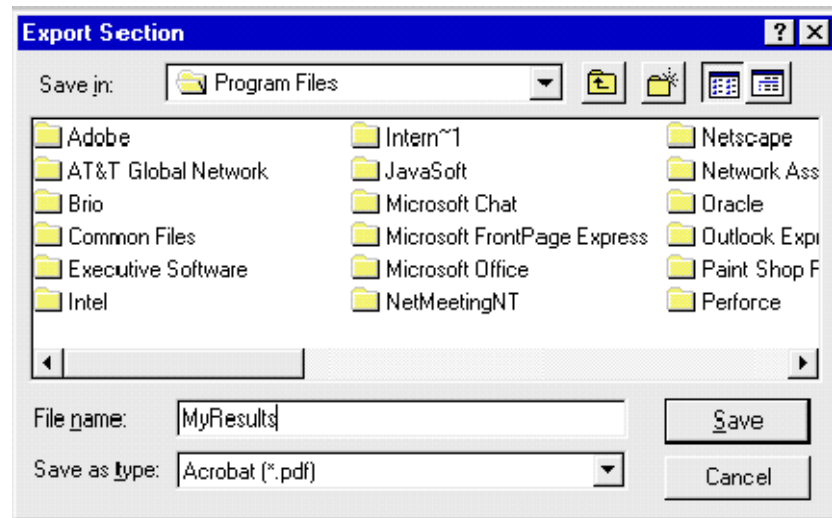
PDF Export is also available from the Object Model. Section Export already exists as an object model method. An additional constant, bqExportFormatPDF, has been added to the BqExportFileFormat constant group to support PDF Export.

```
//Export Report section to PDF format
Documents["MyBasic.BQY"].Sections["Report"].Export("C:\\Temp\\M
yReport",bqExportFormatPDF,0,0)
```

## Export to Lotus 1-2-3 in Report Section

It is now possible to export the content of a Report Section in WKS format.

Optional CSS File on HTML Export

The Cascading Style Sheet (CSS) file is used to apply a common "look and feel" to a set of related HTML pages. Brio Intelligence creates this file by default when exporting most sections to HTML format, giving each a "high fidelity" rendition in HTML of the section as seem in the Brio client itself.

Because it is an extra file, it is sometimes less convenient, such as when emailing an HTML page for example. Brio Intelligence 6.6 makes it possible to have the style information embedded in the HTML file itself.

To embed the style information in the HTML file, access the Export properties dialog off the Format menu and uncheck the box labeled *Export with Style Sheet (CSS)*. This box is checked by default. To further fully take advantage of this feature, it may also be useful to set the option to export without page breaks. (In a Report section, set the page dimensions to a custom size to eliminate page breaks.)
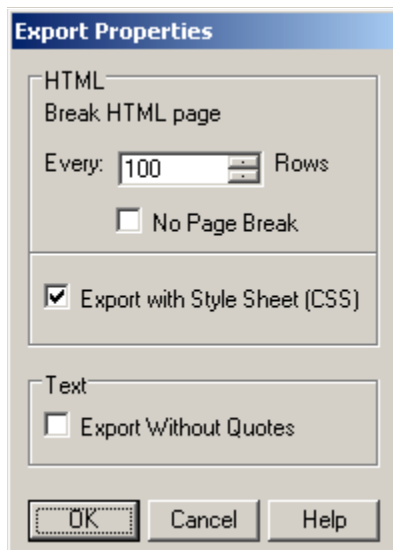
Support for Report Table Break Totals

Brio Intelligence 6.6 introduces support for break totals in Report Tables. This feature is similar to what is available in the Results/Table sections, providing users the ability to easily create break totals on a selected column by a particular data function.

The default data function for Break Totals is SUM. Note that the data function option applies to the entire report table (facts, grand total). Therefore on creating a Break Total, it is possible that the user might reset the data function for the entire report table. Also note that any existing sorts in a report table are overwritten when a Break Total is applied.

Addition of Table Column Background Properties

Prior to this release, it was possible to set the background properties for an entire table. With Brio Intelligence 6.6, it is now also possible to apply the background properties for individual columns of a table as well. The alternating row color functionality is preserved for both individual columns and the entire table. Users can now alternate row colors at the column level or table level.

Do note that the last applied color is the current color. Take caution when applying entire table border and background properties after setting individual column colors—the individual column color schemes will be overwritten by the entire table settings.

Along with this functionality, the Borders and Background option has been added to the Right Mouse PopUp Menu for easier access.

The Borders and Background feature for table and column is now also available in the Brio Object Model.

```
//Set the border color and width for the entire table
ActiveDocument.Sections["Results"].Border.Color=bqBlue
ActiveDocument.Sections["Results"].Border.Width=2

//Set the background color and alternating row colors for an entire table
ActiveDocument.Sections["Results"].Background.Color=bqBlue
ActiveDocument.Sections["Results"].Background.AlternateColor=bqRed
ActiveDocument.Sections["Results"].Background.AlternateFrequency=2
ActiveDocument.Sections["Results"].Background.ShowAlternateColor=true

//Set the background color and alternating row colors for an individual column
ActiveDocument.Sections["Results"].Columns["Unit
Sales"].Background.Color=bqYellow
ActiveDocument.Sections["Results"].Columns["Unit
Sales"].Background.AlternateColor=bqPink
ActiveDocument.Sections["Results"].Columns["Unit
Sales"].Background.AlternateFrequency=1
ActiveDocument.Sections["Results"].Columns["Unit
Sales"].Background.ShowAlternateColor=true
```

Display of Logarithmic Scale in Chart Section

The Chart Section will now allow the display of a logarithmic scale when data values less than one are present. In prior versions of Brio Intelligence, an error message would be displayed when values less than one were present and the Chart would revert back to non-logarithmic scaling.

In Brio intelligence 6.6, if a logarithmic scale is selected and values less than one are present, these values will be represented as zero on the logarithmic scale (and a suitable informational message will be displayed on the Status Bar).