Seagate Crystal Reports 8 and Hyperion Essbase

Seagate Crystal Reports 8 provides dramatic improvements in OLAP reporting for users of Hyperion Essbase and all other supported OLAP systems. Now more than ever, Seagate Crystal Reports provides the ideal solution for producing and delivering presentation quality reports from OLAP data to your users via the web and your applications.

All OLAP users will enjoy improvements in the Crystal Reports Grid Object. The new Grid Object provides greater formatting control, allowing you to create sharp professional reports against OLAP data. And finally, use of OLAP data has been extended into other components of Crystal Reports, including charts, maps, applications components and the web.

The new Essbase driver utilizes the enhanced Grid Object in Seagate Crystal Reports 8. Users of the Essbase Report Script driver from prior versions of Seagate Crystal Reports should refer to Appendix B to learn how existing reports can be leveraged. Information on the new Essbase driver and OLAP features, along with a "hands-on" example can be found in the **Seagate Crystal Reports Users Guide, Chapter 16**, *Creating and Updating OLAP Reports.* You will also find a few examples of how to create reports on Essbase data in the section below titled **SCR 8 Essbase Report Creation**.

Seagate Crystal Reports Essbase Features

New features and improvements in reporting from OLAP data in Seagate Crystal Reports 8 fall into the following categories:

- Predefined OLAP Grid Styles
- Custom formatting of OLAP Grids
- Grid label headings
- Use of OLAP data in Charts and Maps
- Grid Object support in Web and Windows applications

Predefined OLAP Grid Styles: Seagate Crystal Reports 8 includes a new OLAP Grid Expert. This new expert provides 18 pre-built style templates to choose from. The expert displays examples of each style, making it easy to choose the one which best suits the report.

Custom formatting of OLAP Grids: If none of the predefined styles are suitable for the report, then create your own style. The custom formatting features allow you to do any of the following:

- Add or delete Grid lines for certain levels
- Change the width of lines
- Change the background color of levels
- Change the font color for levels
- Adjust where a parent level will be located in the Grid (e.g. before or after the child)
- Indent Grid labels

Grid label headings: You now have the option of whether or not you want to display labels (Labels are generated for dimensions that don't appear in the Grid) and where they appear on the report (On top of the Grid, to the left of the Grid, or to not display at all). You can also set the spacing between each label.

Use of OLAP data in Charts and Maps: Use your Essbase data to create charts. Charts can be produced using Dimensions and Members as components that divide up the graph.

Grid Object support in Web and Windows applications: The Report Designer Component (RDC) in Seagate Crystal Reports 8 adds new properties for the OLAP Grid object. These new properties permit

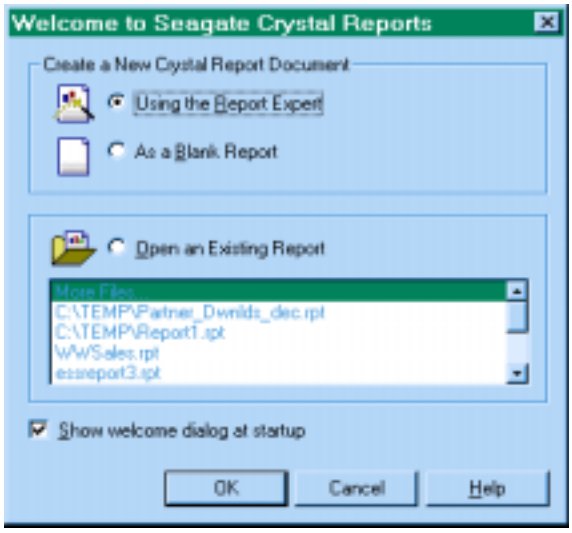
developers to change grid formatting, grid object position, suppression and more. For more information on how the RDC can be used to integrate reports into Windows and Web applications, refer to Chapter 3 (Report Designer Component Object Model) of the Technical Reference Guide.

For information on how to design a report using the grid object, please see the next section or the **Users Guide Chapter 16**, *Creating and Updating OLAP Reports*. **Appendix A** also shows sample reports created using the new features in the grid object.

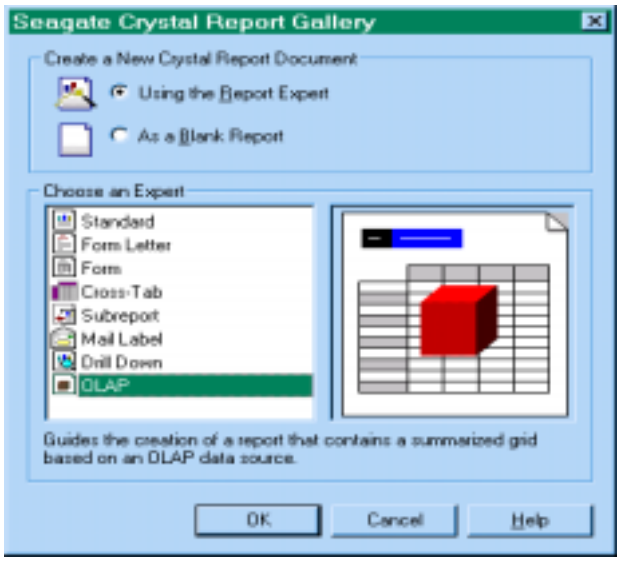
SCR 8 Essbase Report Creation

Below are a couple of steps on how to get started creating a new report on Essbase data in version 8 of Seagate Crystal Reports using the new driver.

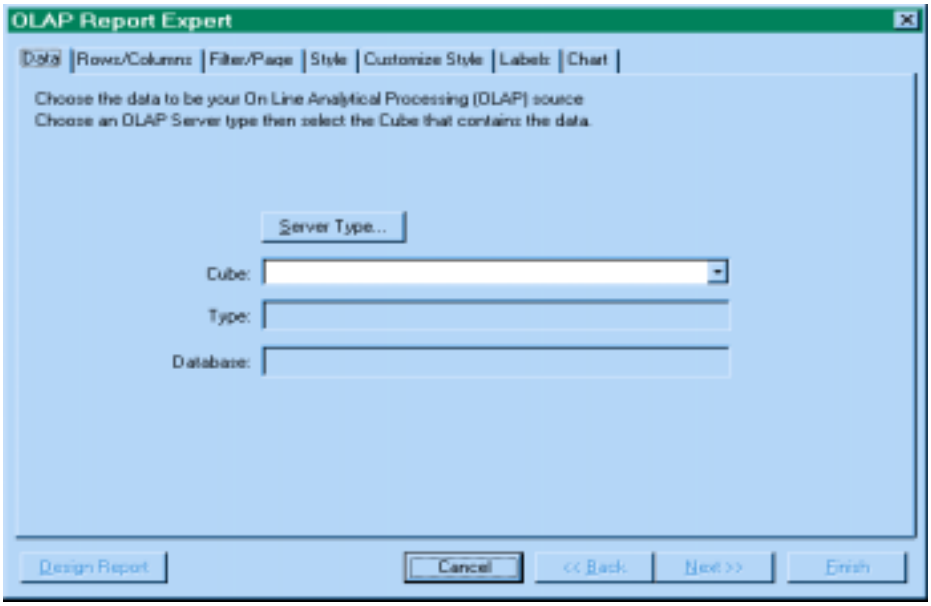
1. From the Welcome Screen, create a New Crystal Report Document by selecting the "Using the Report Expert" option.



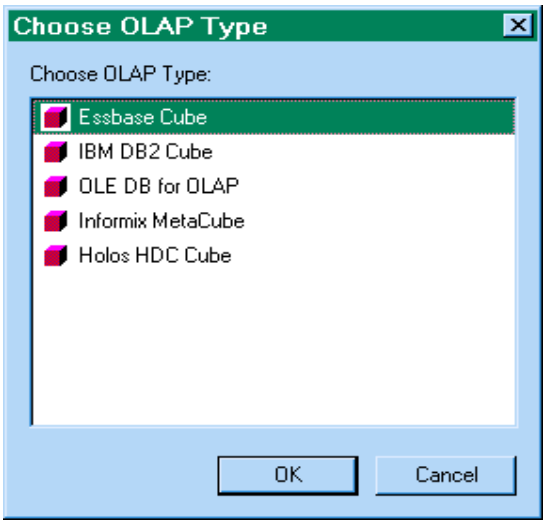
2. You will be prompted to select an expert to create a report. For Essbase data, you will want to select the "OLAP" Expert.



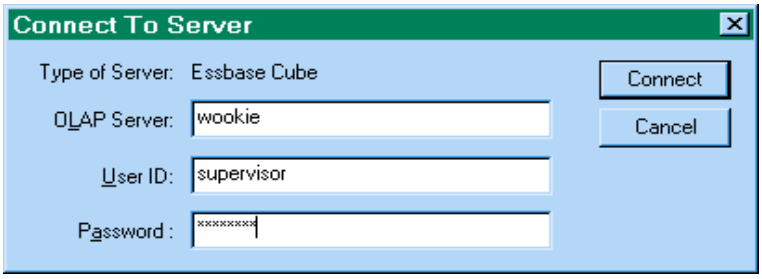
3. The OLAP Expert will appear, starting with the Data tab. Press the “Server Type” button to choose the type of OLAP data source that you wish to create a report on.



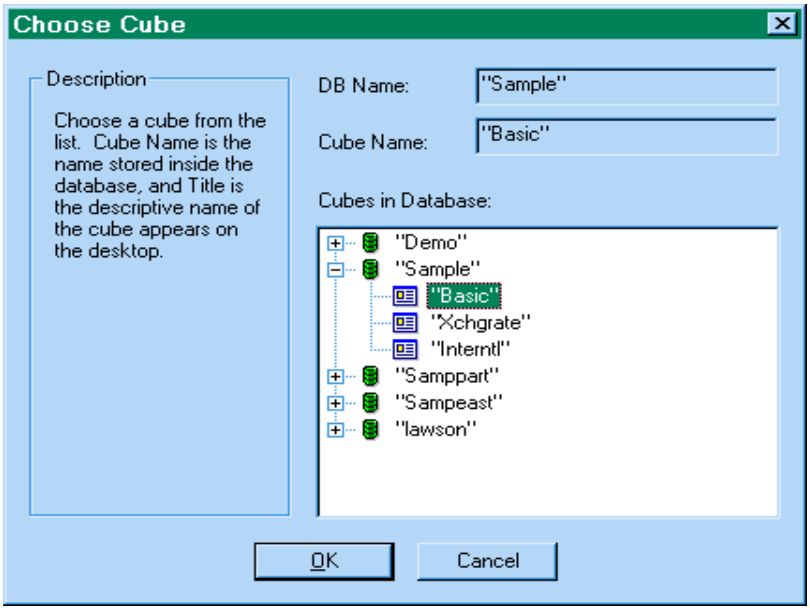
4. To create an Essbase report, select the Essbase Cube option.



5. You will now be prompted to logon to the Cube Server.

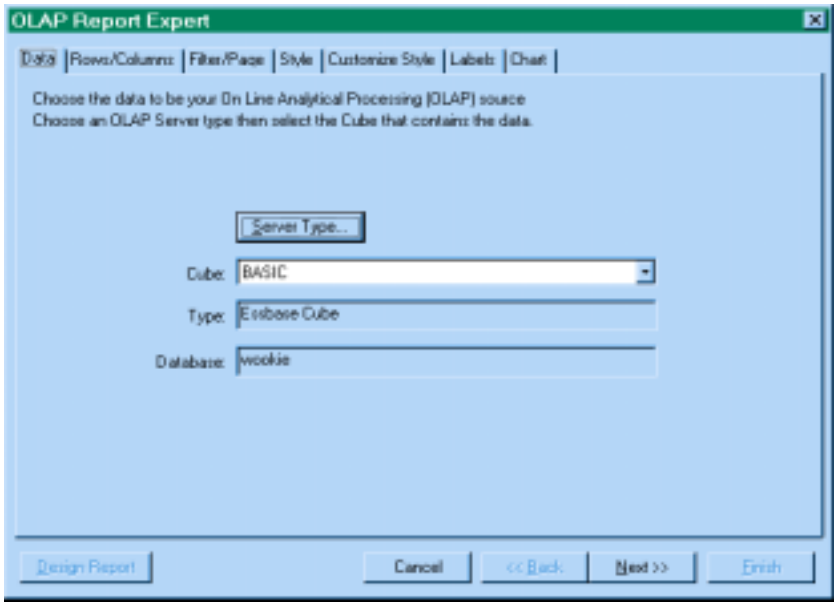


6. Now select the Cube Application that you wish to work with.



7. You are now back at the Data tab and can move along to the Rows/Columns tab to select the dimensions and members that you want on your report. Follow through the rest of the tabs to create an OLAP report with a unique formatting style and maybe even a chart! For more

information on formatting OLAP reports please refer to the **Users Guide Chapter 16**, *Creating and Updating OLAP reports.*



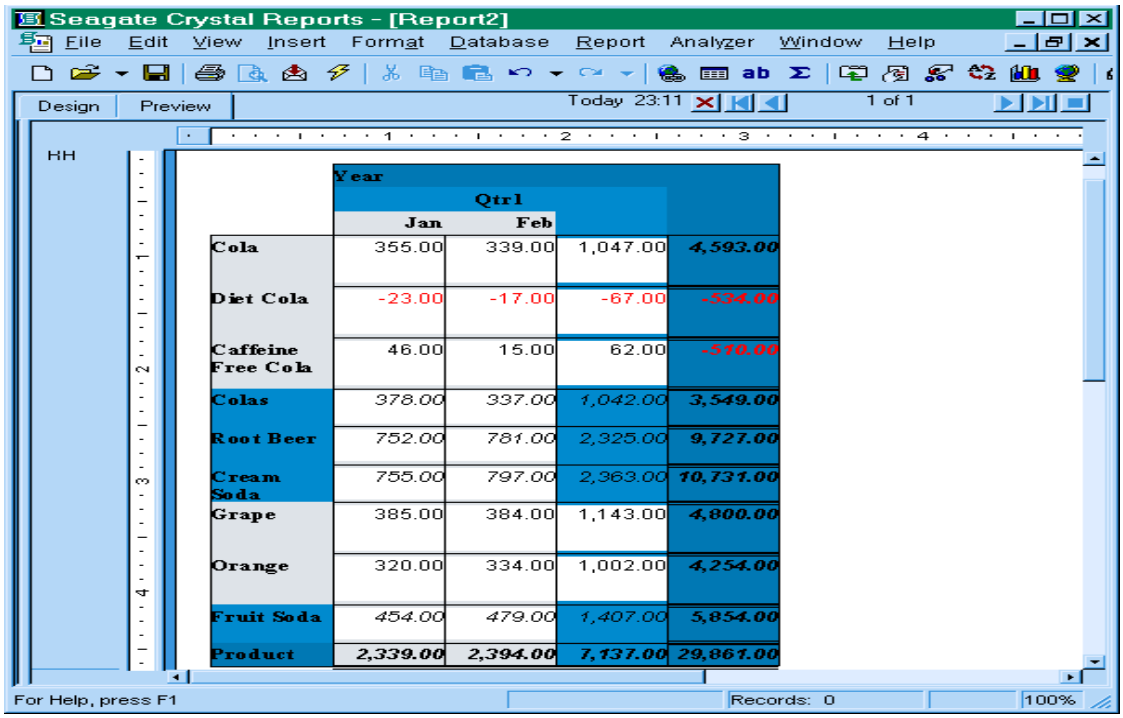
Contact Info

We want to hear from you. Please let us know if you run into any problems with the new driver or these instructions. We can be reached at ERS@seagatesoftware.com

Appendix A

The reports below each “show off” the new and improved capabilities of the Grid Object for OLAP reporting. The intent is to give users some ideas on how they can create reports on their OLAP data using the grid object

Figure 1.

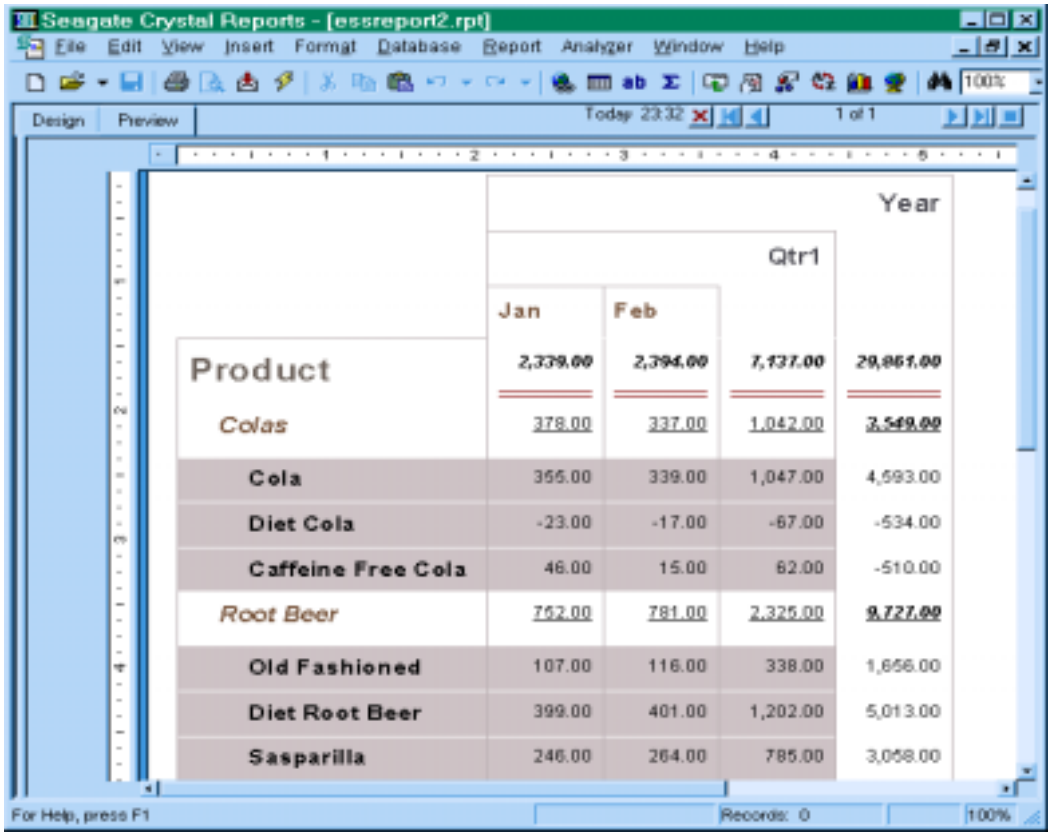


Year	Qtr1			
	Jan	Feb		
Cola	355.00	339.00	1,047.00	4,593.00
Diet Cola	-23.00	-17.00	-67.00	-934.00
Caffeine Free Cola	46.00	15.00	62.00	-570.00
Colas	378.00	337.00	1,042.00	3,549.00
Root Beer	752.00	781.00	2,325.00	9,727.00
Cream Soda	755.00	797.00	2,363.00	10,731.00
Grape	385.00	384.00	1,143.00	4,800.00
Orange	320.00	334.00	1,002.00	4,254.00
Fruit Soda	454.00	479.00	1,407.00	5,854.00
Product	2,339.00	2,394.00	7,137.00	29,861.00

Tips on creating Figure 1 report

- KPI (Key Performance Indicator) highlighting for negative numbers. The highlighter is accessed via the formatting toolbar.
- Make labels bold. Highlight the label and select the bold button from the toolbar.
- Double underline level 0 (totals). This can be accomplished by either underlining the value or using the border feature. To underline, select the level to underline and press the underline button from the formatting toolbar. To use the border feature, select the value and right click to get the “Format Objects” menu. Now select the border tab, and choose the border that is right for your report.
- Background color for each level changed. This can be done using the “Format OLAP Grid” Expert. Under the “Style” tab or “Customize Style” tab the background of each level can be customized.
- Increase width of row label. Use your mouse to adjust the size of cells.
- Indent row labels with zero indent. This can be done using the “Format OLAP Grid” Expert. Under the “Customize Style” tab the option to “indent row labels” is available.

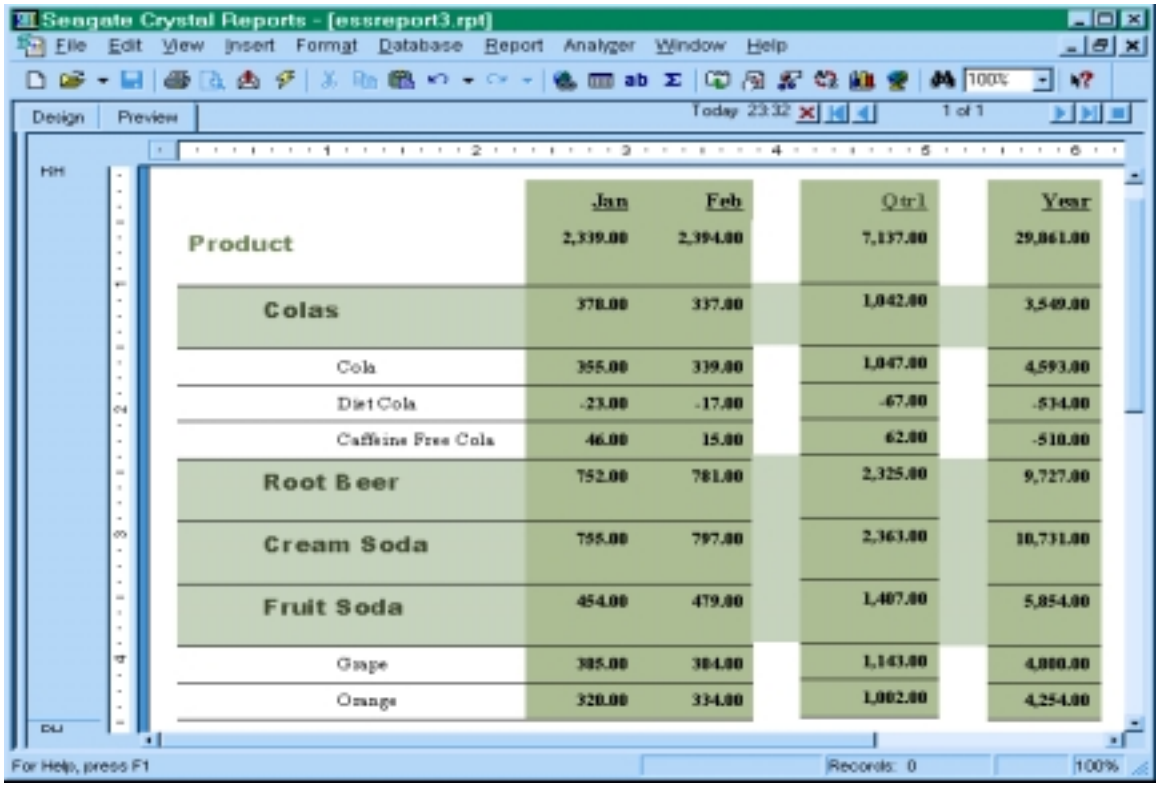
Figure 2.



Tips on creating Figure 2 report

- Make labels bold and different colors. Highlight the label and right click to format the field. The font tab allows use to access all the font properties.
- Double underline level 0 (totals). This can be accomplished by either underlining the value or using the border feature. To underline, select the level to underline and press the underline button from the formatting toolbar. To use the border feature, select the value and right click to get the "Format Objects" menu. Now select the border tab, and choose the border that is right for your report.
- Background color for each level changed. This can be done using the "Format OLAP Grid" Expert. Under the "Style" tab or "Customize Style" tab the background of each level can be customized.
- Indent row labels with .20 indent. This can be done using the "Format OLAP Grid" Expert. Under the "Customize Style" tab the option to "indent row labels" is available. It gives the report a more hierarchical look and feel.
- Parent values are placed on top of their child. This can be done using the "Format OLAP Grid" Expert. Under the "Customize Style" tab the option to have the "Row totals on Top" is available.
- Suppressing columns with no data. This can be done using the "Format OLAP Grid" Expert. Under the "Customize Style" tab the option to "Suppress empty Rows" is available.

Figure 3. (aka. Simulated Breaking out of Grid)



Product	Jan	Feb	Qtr1	Year
	2,339.00	2,394.00	7,137.00	29,861.00
Colas	378.00	337.00	1,042.00	3,549.00
Cola	355.00	339.00	1,047.00	4,593.00
Diet Cola	-23.00	-17.00	-67.00	-534.00
Caffeine Free Cola	46.00	15.00	62.00	-510.00
Root Beer	752.00	781.00	2,325.00	9,727.00
Cream Soda	755.00	797.00	2,363.00	10,731.00
Fruit Soda	454.00	479.00	1,407.00	5,854.00
Grape	385.00	384.00	1,141.00	4,880.00
Orange	320.00	334.00	1,002.00	4,254.00

Tips on creating Figure 3 report

- To make the months, qtr1, and year, all appear on one line, I've actually created 3 grids (one for each level) and placed them side by side in the report header.
  - Make sure all 3 grids select the same dimension and member values.
  - Suppress the row labels by right clicking on each label and "formatting field" to suppress it.
  - Line all the levels (Rows) up.
- Make labels bold and different colors. Highlight the label and right click to format the field. The font tab allows use to access all the font properties.
- Background color for each level changed. This can be done using the "Format OLAP Grid" Expert. Under the "Style" tab or "Customize Style" tab the background of each level can be customized.
- Indent row labels with .50 indent. This can be done using the "Format OLAP Grid" Expert. Under the "Customize Style" tab the option to "indent row labels" is available. It gives the report a more hierarchical look and feel.

Appendix B

Converting reports designed in a previous version of SCR

To convert reports designed in a previous version of SCR, convert your old report to the new driver by following the steps below. This way you will not have to recreate the report from the beginning.
(note – the report conversion would have to take place in version 7 on SCR.)

1. Insert OLAP grid with new data. (You report will now have data in the report from both drivers).
2. From the Database menu, select Convert Database Driver. Change PDOEsbse.dll to PDSOLAP.dll.
3. Refresh the report.
4. From the Database menu, click Remove from Report, then choose your old Essbase connection.
5. Refresh the report.