

Business Objects [Desktop Intelligence] Lab Book

Document Revision History

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Note: The labs in this lab book are based on eFashion Universe.

Lab 1-1 Create a Simple Report

Goals	<ul style="list-style-type: none"> • Learn to create a simple report from the existing eFashion universe • Know the classes and objects existing in the universe
Time	15 – 20 Minutes
Lab Setup	Business Objects XI Rel 2 Client Installed.

Know the classes and objects in the eFashion Universe

1. Start Desktop Intelligence and login to the repository.
2. Click on **File -> New** menu, it starts with the new report wizard.
3. Use **Generate a standard report** option.

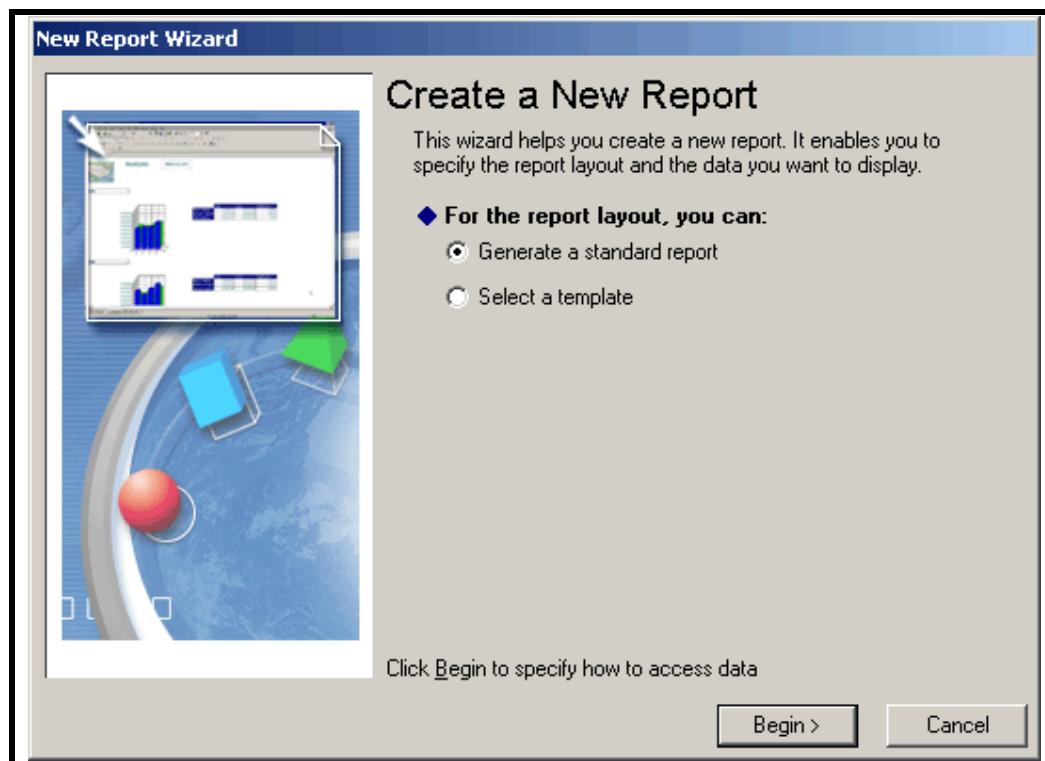


Figure 1: New Report Wizard

4. Choose the data access as **Universe** in **Specify Data Access** window, and click on **Next**.

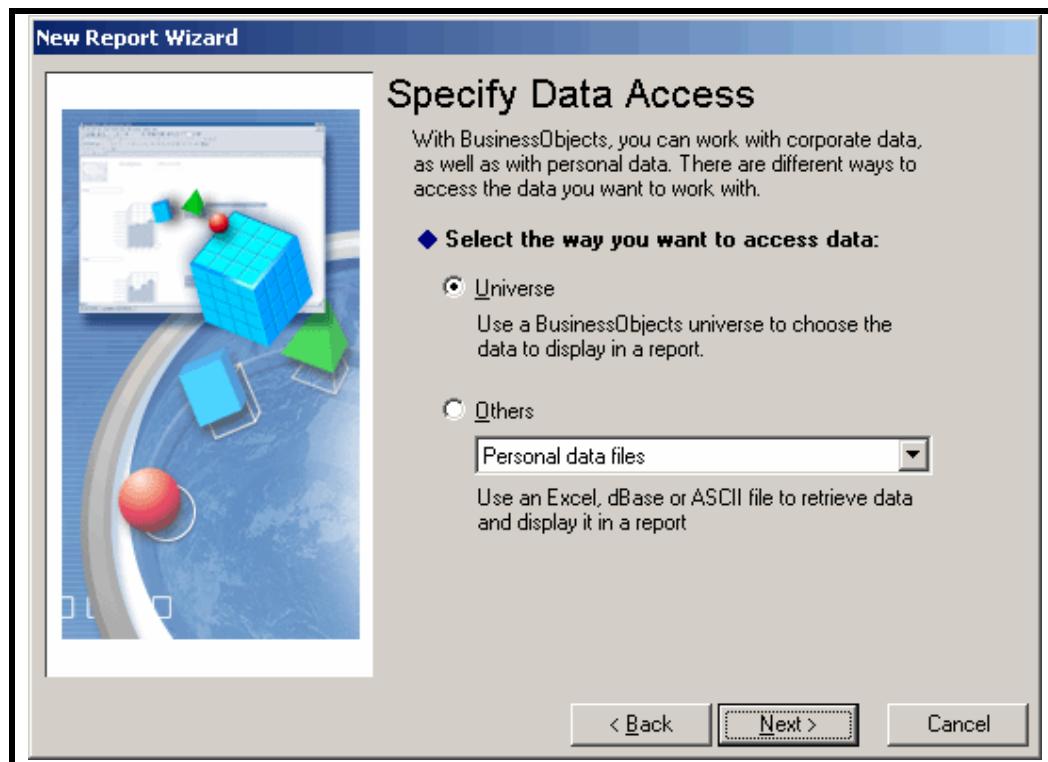


Figure 2: Specify Data Access

5. You can see a list of all available universes. Select the **eFashion** universe. You can also check **Set as My Default Universe** and click on **Finish**.

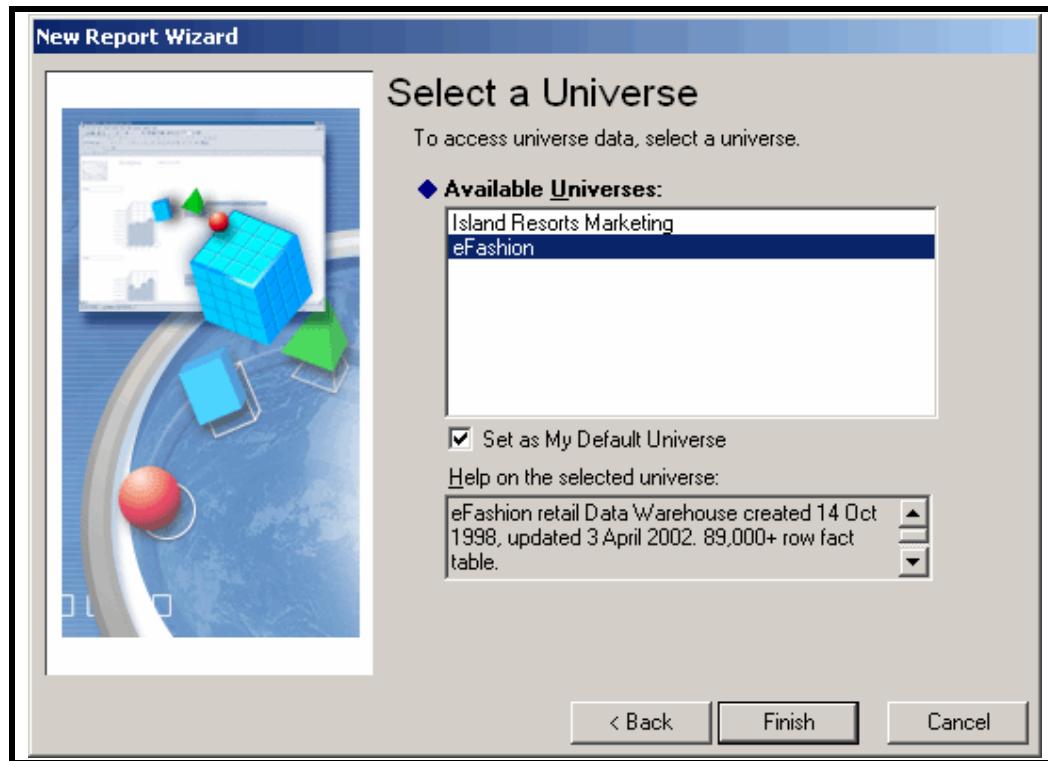


Figure 3: Select a Universe

6. This opens a Query Panel where you can see all the objects provided by **eFashion** universe.
7. Click on **Show/hide help on selected item** (the second icon in the Query Panel), which enables viewing the description of each object.

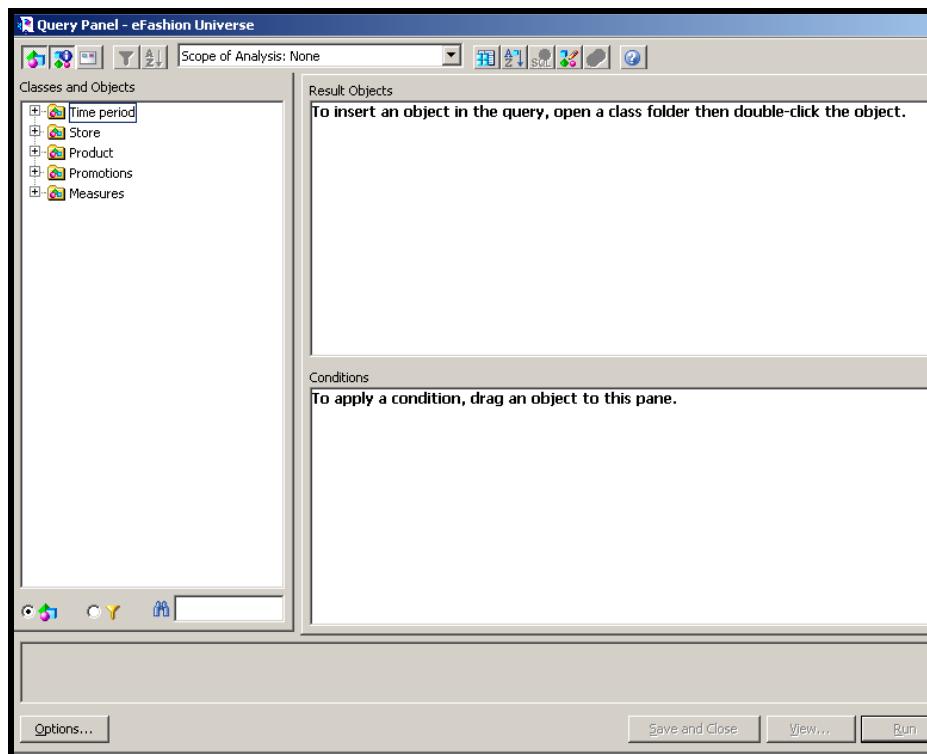


Figure 4: Query Panel

8. Have a look at the **Time period**, **Store**, **Product**, **Promotions**, and **Measures** classes. Spend some time understanding the various objects and what they mean. We will be using the same universe through out this session.

Create the first report

9. Choose the object from the Classes and Objects pane and drag it in the Result pane. The Objects to be selected are:

Time period \ Year
Product \ Lines
Measures \ Sales revenue
Measures \ Quantity sold

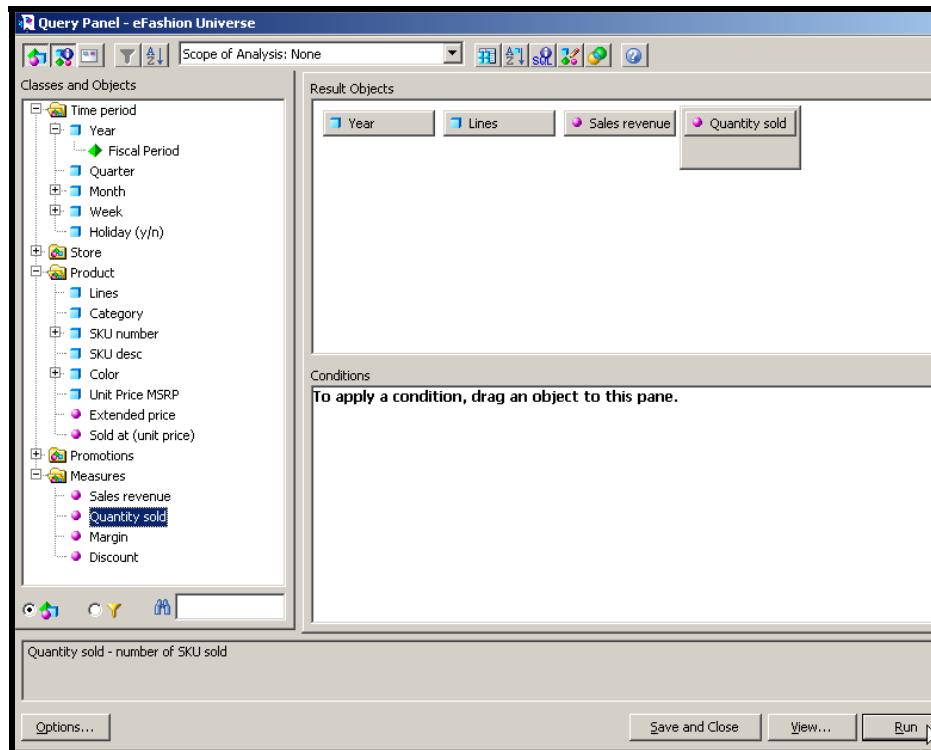


Figure 5: Drop objects in Results

10. Click on **Run**.
11. The partial output should be similar to the one shown in the figure below.

Report Title			
Year	Lines	Sales revenue	Quantity sold
2001	Accessories	\$2,546,222	17,529
2001	City Skirts	\$48,774	254
2001	City Trousers	\$73,823	483
2001	Dresses	\$549,631	4,183
2001	Jackets	\$145,888	910
2001	Leather	\$53,295	324
2001	Outerwear	\$352,016	2,973
2001	Overcoats	\$121,562	607
2001	Shirt Waist	\$984,727	5,958
2001	Sweaters	\$404,395	2,616
2001	Sweat-T-Shirts	\$2,591,895	15,708
2001	Trousers	\$223,587	1,533
2002	Accessories	\$5,468,919	34,440
2002	City Skirts	\$102,716	470
2002	City Trousers	\$144,380	783
2002	Dresses	\$957,395	6,597
2002	Jackets	\$226,738	1,228
2002	Leather	\$93,428	509

Figure 6: Sales Revenue Report

12. Click on File -> Save and save the report as **PRODUCT_LINE_SALES_LAB1-1.REP** file on your local machine.

Retrieve the data where Product Line contains City

13. Click on Data -> Edit Data Provider menu. This opens the Query Panel again.
14. Select **Product \ Lines** from the Classes and Objects section. Drag it in to the Conditions section.
15. Select the **Matches pattern** operator from the operators list double click on it. This opens a window using which you can specify the operand.
16. Click on **Type a new constant** as shown highlighted in the figure above, enter the text '%City%'. The % symbol is a wild card character for matching any set of characters. The Conditions section will be look like shown below. Click on **Run**.

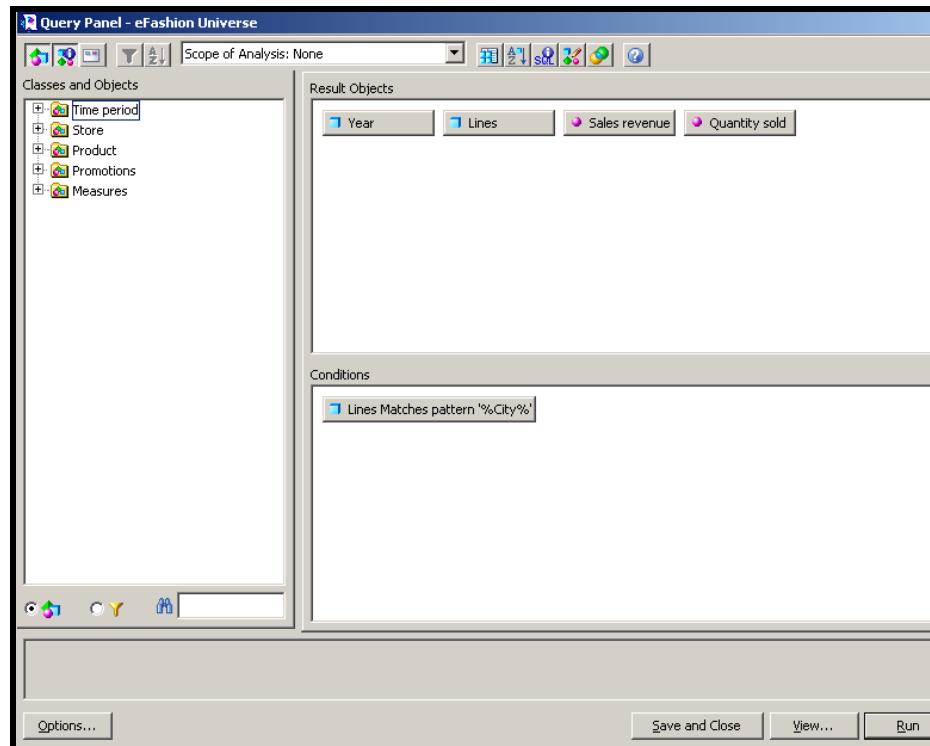
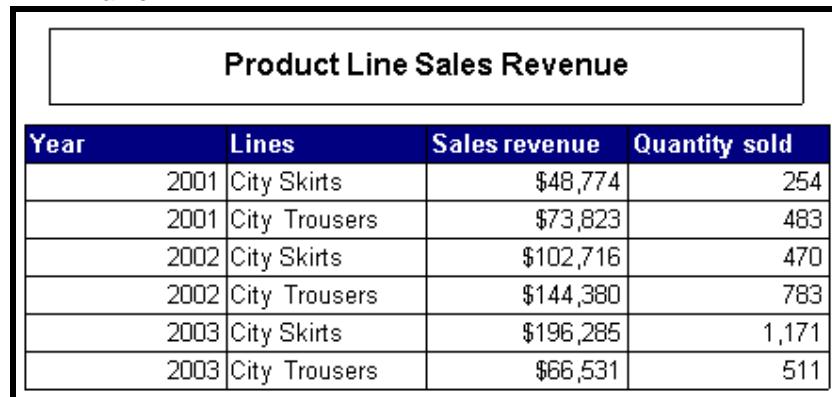


Figure 7: Insert Conditions

17. Save the report. Give the title as **Product Line Sales Revenue**. The report now shows the records only for Products where the **Lines** have 'City' in the name.



The report has a title 'Product Line Sales Revenue'. The data is presented in a table:

Year	Lines	Sales revenue	Quantity sold
2001	City Skirts	\$48,774	254
2001	City Trousers	\$73,823	483
2002	City Skirts	\$102,716	470
2002	City Trousers	\$144,380	783
2003	City Skirts	\$196,285	1,171
2003	City Trousers	\$66,531	511

Figure 8: Product Line Sales Revenue Report

18. Click on File -> Save and save the report as **PRODUCT_LINE_SALES_LAB1-2.REP** file on your local machine.

Lab 1-2 Restricting Report Data

Goals	<ul style="list-style-type: none"> • Use a predefined condition • Define a custom condition
Time	35 – 40 Minutes
Lab Setup	All previous labs complete

Use a predefined condition

1. Open the **PRODUCT_LINE_SALES_LAB1-1.REP** document created in the previous lab session. Save the Report as **PRODUCT_LINE_SALES_LAB1-2.REP**
2. Click **Data -> Edit Data Provider** menu option.
3. Remove the existing condition by dragging the Lines column out of the Conditions Pane. Select the **predefined conditions** view by clicking on predefined conditions radio button as shown in the figure below.
4. Select **Time Period \ Christmas Period** object. Double click the object to put it into Conditions section.

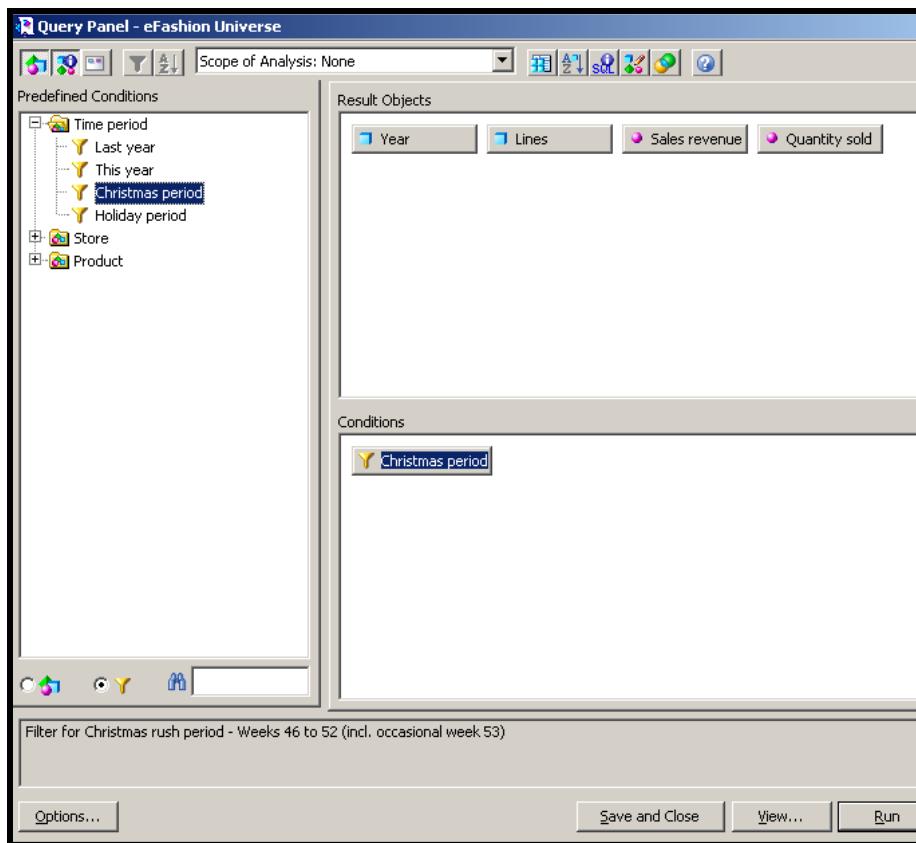


Figure 9: Select predefined condition

5. Click on **Run**. The partial view of the output is as shown below.

Product Line Sales Revenue			
Year	Lines	Sales revenue	Quantity sold
2001	Accessories	\$26,958	161
2001	City Skirts	\$15,405	68
2001	City Trousers	\$29,437	135
2001	Dresses	\$170,410	1,237
2001	Jackets	\$11,191	60
2001	Leather	\$4,287	20
2001	Outerwear	\$3,655	18
2001	Overcoats	\$28,903	129
2001	Shirt Waist	\$209,710	1,233
2001	Sweaters	\$35,421	163
2001	Sweat-T-Shirts	\$318,761	1,801
2001	Trousers	\$14,184	66
2002	Accessories	\$103,126	551
2002	City Skirts	\$37,956	158
2002	City Trousers	\$85,517	375
2002	Dresses	\$455,398	3,210
2002	Jackets	\$35,368	199
2002	Leather	\$22,280	97
2002	Outerwear	\$9,103	40
2002	Overcoats	\$68,687	288
2002	Shirt Waist	\$611,366	3,283
2002	Sweaters	\$86,758	392
2002	Sweat-T-Shirts	\$794,929	4,099
2002	Trousers	\$36,237	157
2003	Accessories	\$218,814	1,211
<hr/>			

Figure 10: Product Line Sales Revenue report using Predefined Conditions

6. Edit the Data provider using **Data -> Edit Data Provider** menu option. Switch to predefined conditions.
7. Remove the existing predefined filter and create two prompts so that at run time the user is prompted to select values for City & Year.
8. The prompts should be as shown in the figure below. Select 'All' the values for all the prompts. Allow multiple value selection for the prompt

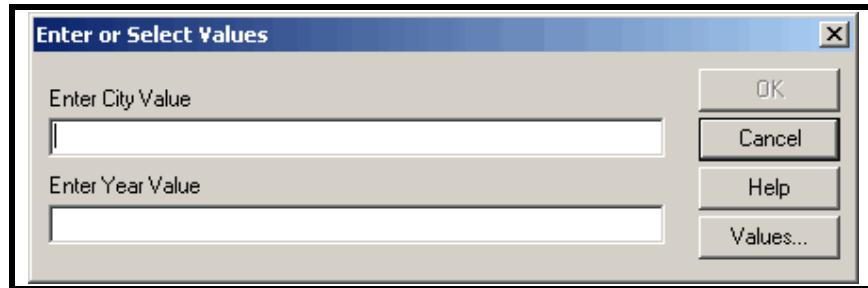


Figure 11: Enter or Select Values

9. Run the Report.
10. The output for Year '2002' and City 'Dallas' is as shown below. Save this document as **PRODUCT_LINE_SALES_LAB1-2.REP**.

Product Line Sales Revenue				
Year	Lines	City	Sales revenue	Quantity sold
2002	Accessories	Dallas	\$296,960	
2002	City Skirts	Dallas	\$4,941	
2002	City Trousers	Dallas	\$8,503	
2002	Dresses	Dallas	\$44,368	
2002	Jackets	Dallas	\$6,546	
2002	Leather	Dallas	\$11,463	
2002	Outerwear	Dallas	\$31,641	
2002	Overcoats	Dallas	\$13,516	
2002	Shirt Waist	Dallas	\$81,707	
2002	Sweaters	Dallas	\$45,372	
2002	Sweat-T-Shirts	Dallas	\$172,483	
2002	Trousers	Dallas	\$21,867	

Figure 12: Product Line Sales Revenue report

Lab 2-1 Applying Report Filters

Goals	• Use report filters to view subset of data
Time	5 – 10 Minutes
Lab Setup	All previous labs complete

Use filters to view only City data.

1. Create a new report based on the following objects.
Store \ City
Product \ Lines
Measures \ Sales revenue
Measures \ Quantity sold
2. Specify the report title as **City-wise Sales Report**. Save the report as **City-wise Sales Report LAB 2-2**.
3. From the menu bar, select **Format -> Filters** option. The Filters Dialog Box appears. Click on the **Global** folder. Click on **Add** button. The **Variable(s) to Filter** Dialog box appears. Select the variable **City** and click on **OK**.
4. Choose **New York** from the Values list and click on **Apply** followed by **OK**.
5. The output should appear as shown in the figure below. To get the summary of **Sales revenue** and **Quantity sold**, select the columns and click on the **Insert Sum** icon available on the toolbar.

City-wise sales report			
City	Lines	Sales revenue	Quantity sold
New York	Accessories	\$2,248,134	14,509
New York	City Skirts	\$80,193	443
New York	City Trousers	\$75,984	509
New York	Dresses	\$660,168	4,442
New York	Jackets	\$138,313	811
New York	Leather	\$24,232	119
New York	Outerwear	\$306,859	2,305
New York	Overcoats	\$111,569	531
New York	Shirt Waist	\$771,176	4,312
New York	Sweaters	\$695,291	4,555
New York	Sweat-T-Shirts	\$2,330,098	13,051
New York	Trousers	\$140,204	771
	Sum:	\$7,582,221	46,358

Figure 13: City-wise sales report

6. Save the report.

Lab 3-1 Use an Excel File as a Data Source

Goals	<ul style="list-style-type: none"> Specify Data Range in Excel Create report based on Excel file
Time	25 – 30 Minutes
Lab Setup	All previous labs complete

Create report based on Excel file

1. Open the **Budget.xls** file. Select the complete data. Name the Data as **Budget**. Refer to the figure shown below.

	A	B	C
1	Year	Quarter	Sales revenue
2	2001	Q1	\$2,650,000
3	2001	Q2	\$2,280,000
4	2001	Q3	\$1,350,000
5	2001	Q4	\$1,790,000
6	2002	Q1	\$3,325,000
7	2002	Q2	\$2,850,000
8	2002	Q3	\$2,880,000
9	2002	Q4	\$4,175,000
10	2003	Q1	\$3,750,000
11	2003	Q2	\$4,010,000
12	2003	Q3	\$4,000,000
13	2003	Q4	\$3,350,000

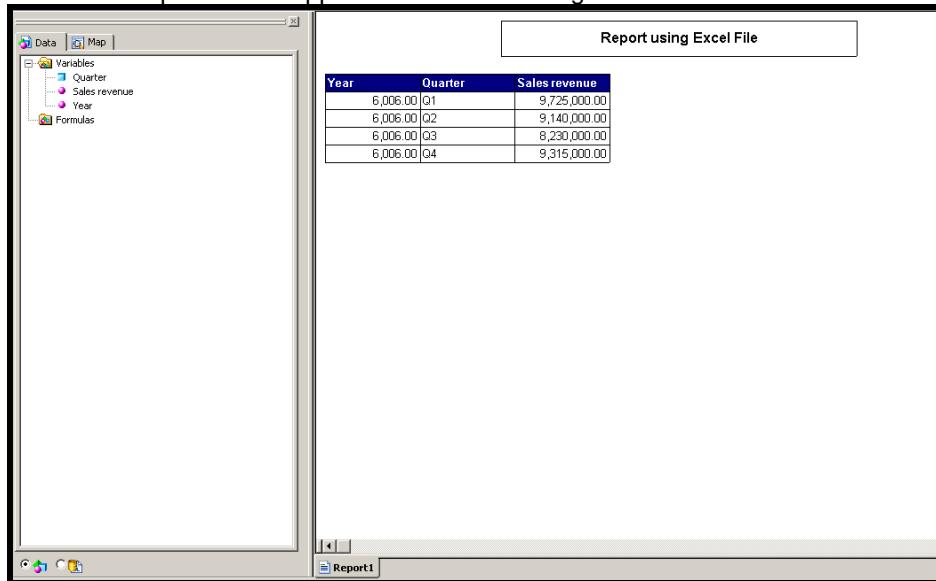
Figure 14: Sample Excel file

2. In Desktop Intelligence Report tool. Click on **File -> New** to create a new report. The **New Report Wizard** dialog box appears.
Select **Generate a standard report** and **Specify how to Access Data** options. Click on **Begin**.
3. In Specify Data Access select **Others**. From the drop down select **Personal data files**. Click on **Finish**.
4. The Access Personal Data dialog box appears.
- Specify the **File Format** as **Microsoft Excel Files (*.xls)**
 - Click on **Browse** button select the Budget Excel file.

- c. **Field Selection -> All Fields**
- d. Check the **First row contains column names** check box.

Click on **Run** to see the report.

5. The report should appear as shown in the figure below.



The screenshot shows the Business Objects desktop environment. On the left, there's a 'Data' browser window titled 'Variables' containing items like 'Quarter', 'Sales revenue', and 'Year'. On the right, a report preview window is titled 'Report using Excel File'. It displays a table with three columns: 'Year', 'Quarter', and 'Sales revenue'. The data in the table is as follows:

Year	Quarter	Sales revenue
6,006.00	Q1	9,725,000.00
6,006.00	Q2	9,140,000.00
6,006.00	Q3	8,230,000.00
6,006.00	Q4	9,315,000.00

Figure 15: Report using Excel file

6. Save the report as **Efashion_BUDGET_SALES_EXCEL 7_1.REP**.

Lab 3-2 Manage Data Providers

Goals	<ul style="list-style-type: none"> Rename the existing Data Provider Create a new data provider Create a Report by combining objects from two data providers Link the data providers to create a report taking the data from both the data providers
Time	15 – 20 Minutes
Lab Setup	All previous labs complete

Rename Data Provider.

1. Create a new report named **Actual Sales** based on the following objects.

Dimensions

Time period/Year

Time period/Quarter

Measures

Measures/Sales revenue

The report appears as shown in the figure below.

Year	Quarter	Sales revenue
2001	Q1	\$2,660,700
2001	Q2	\$2,279,003
2001	Q3	\$1,367,841
2001	Q4	\$1,788,580
2002	Q1	\$3,326,172
2002	Q2	\$2,840,651
2002	Q3	\$2,879,303
2002	Q4	\$4,186,120
2003	Q1	\$3,742,989
2003	Q2	\$4,006,718
2003	Q3	\$3,953,395
2003	Q4	\$3,356,041

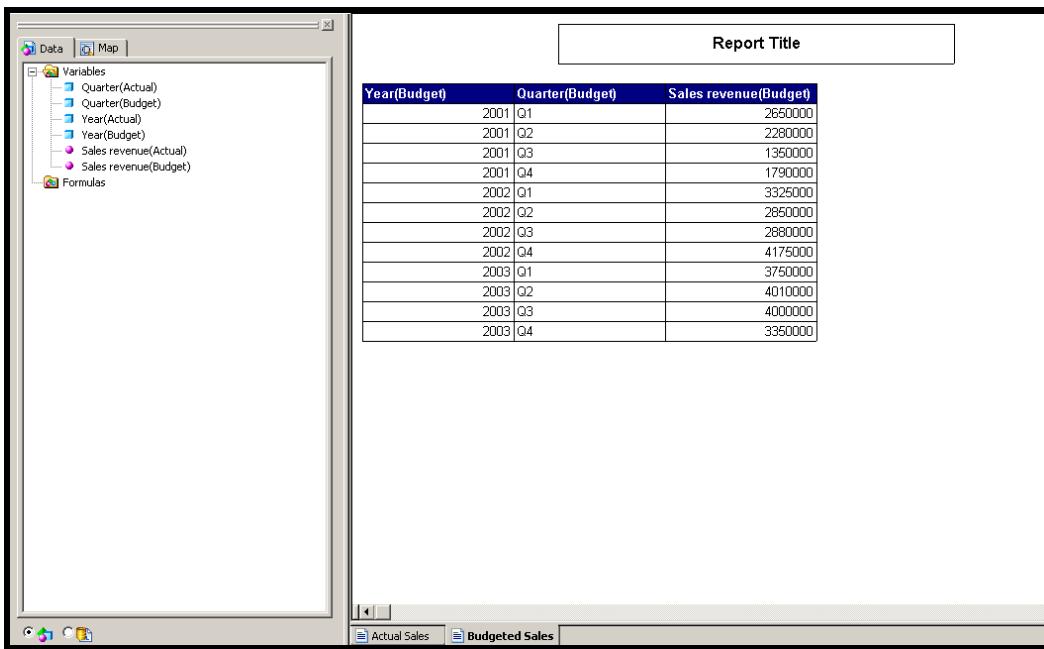
Figure 16: Report to change the name of the Data Provider

2. Use **Data -> View Data** menu item, which opens Data Manager window.
3. Select the Data Provider and click the **Definition** tab.
4. Change the name of the data provider to **Actual Sales**.
5. Click on **OK**.

Add a new Data Provider.

To Add data about Budgeted Sales Revenue

1. Use **Data -> New Data Provider** menu item to add a new data provider to the existing report document. It starts with New Data Wizard.
2. Select the **Access new data in a different way.**
3. Specify the data access as **Others -> Personal Data Files**. Click Finish to proceed further. It opens the Access Personal Data window. Select the excel file **Budget.xls**.
4. Use **Data -> View Data** menu item, which opens Data Manager window. Rename the Data Provider name as **Budgeted Sales**.
5. Create the following report tab having table of objects as specified below. Rename the tab as **Budgeted Sales**. Add necessary titles to the report.



The screenshot shows the Business Objects Data Manager window. On the left, there is a tree view under the 'Variables' node containing items like Quarter(Actual), Quarter(Budget), Year(Actual), Year(Budget), Sales revenue(Actual), and Sales revenue(Budget). On the right, there is a report preview area with a table titled 'Report Title'. The table has three columns: Year(Budget), Quarter(Budget), and Sales revenue(Budget). The data in the table is as follows:

Year(Budget)	Quarter(Budget)	Sales revenue(Budget)
2001	Q1	2650000
2001	Q2	2280000
2001	Q3	1360000
2001	Q4	1790000
2002	Q1	3325000
2002	Q2	2860000
2002	Q3	2880000
2002	Q4	4175000
2003	Q1	3750000
2003	Q2	4010000
2003	Q3	4000000
2003	Q4	3360000

Figure 17: Report after adding a new Data Provider

Create a Report by combining objects from two data providers

1. Add a new tab and create a table using the following objects
 Quarter (Actual Sales)
 Budget Sales Revenue
 Sales revenue

Rename the report tab as **Actual and Budgeted Sales Revenue**. Specify the title of the report as **Actual and Budgeted Sales**.

Year(Query 1 with)	Quarter(Query 1)	Sales revenue(B \$)
2001	Q1	36410000
2001	Q2	36410000
2001	Q3	36410000
2001	Q4	36410000
2002	Q1	36410000
2002	Q2	36410000
2002	Q3	36410000
2002	Q4	36410000
2003	Q1	36410000
2003	Q2	36410000
2003	Q3	36410000
2003	Q4	36410000

Figure 18: Rename the Report

Link Data Providers.

1. Open the Data Manager window by using **Data -> View Data** menu option. Select **Year** from the **Actuals** Data Provider.
2. Click the **Definition** tab. You can see a button **Link to** there. Click the button. Select **Year** from **Budget** Data Provider.
3. The output will appear as shown as shown in the figure below. Change the format of the **Budgeted Sales Revenue** and **Sales Revenue** column as **Number #,##0.00**.
4. Convert the report to a Chart and apply the necessary formats. The report should appear as shown below.

Year(Actual)	Quarter(Actual)	Sales revenue(Budget)	Sales revenue(Actual)
2,001.00	Q1	\$2,650,000.00	
2,001.00	Q2	\$2,280,000.00	
2,001.00	Q3	\$1,350,000.00	
2,001.00	Q4	\$1,790,000.00	
2,002.00	Q1	\$3,325,000.00	
2,002.00	Q2	\$2,850,000.00	
2,002.00	Q3	\$2,880,000.00	
2,002.00	Q4	\$4,175,000.00	
2,003.00	Q1	\$3,750,000.00	
2,003.00	Q2	\$4,010,000.00	
2,003.00	Q3	\$4,000,000.00	
2,003.00	Q4	\$3,350,000.00	

Figure 19: Convert Report to a Chart

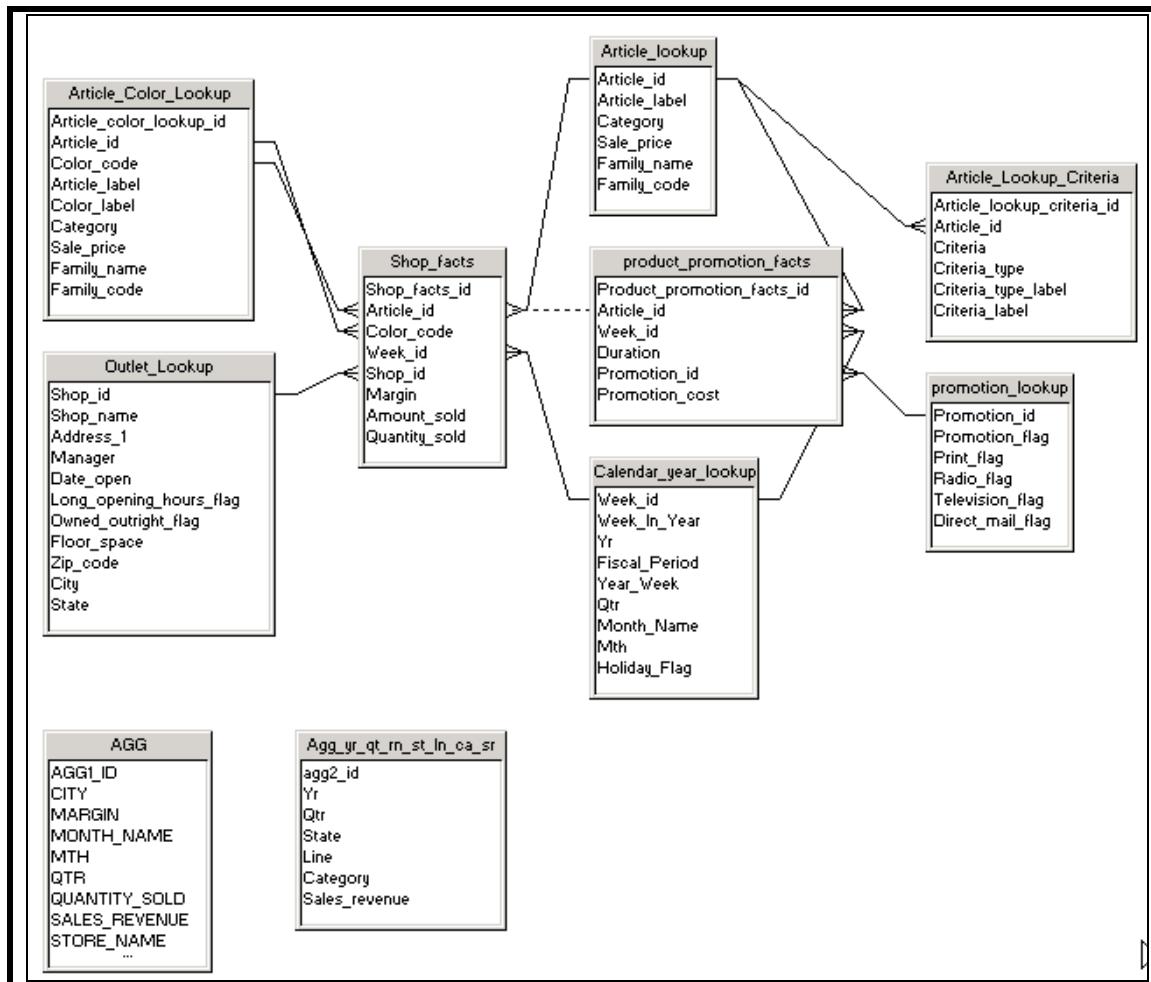
5. Save the Report as **MULTIPLE DATA PROVIDER.REP7-2.REP**.

Appendices

Appendix A: List of eFashion Universe Classes and Objects

Classes and Objects	Pre-defined Conditions
<ul style="list-style-type: none"> - Time period <ul style="list-style-type: none"> - Year <ul style="list-style-type: none"> ◆ Fiscal Period - Quarter - Month <ul style="list-style-type: none"> ◆ Month Name - Week <ul style="list-style-type: none"> ◆ Year/week - Holiday (y/n) - Store <ul style="list-style-type: none"> - State - City - Store name <ul style="list-style-type: none"> ◆ Zip Code ◆ Address - Store details <ul style="list-style-type: none"> - Long opening hours - Name of manager - Opening date - Owned (y/n) - Sales floor size group <ul style="list-style-type: none"> ◆ Sales floor size sqft - Extended sales floor size 	<ul style="list-style-type: none"> - Product <ul style="list-style-type: none"> - Lines - Category - SKU number <ul style="list-style-type: none"> ◆ Label - SKU desc - Color <ul style="list-style-type: none"> ◆ Color number - Unit Price MSRP - Extended price - Sold at (unit price) - Promotions <ul style="list-style-type: none"> - Promotion (y/n) <ul style="list-style-type: none"> ◆ Print ◆ Radio ◆ Television ◆ Direct mail - Duration - Promotion Cost USD - Measures <ul style="list-style-type: none"> - Sales revenue - Quantity sold - Margin - Discount

Appendix B: Universe Structure



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