

# ***BUSINESS OBJECTS***

*Integration Exercise*

## Overview

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Install Business Objects Edge evaluation software and build a report using Escendo data.

### ***Business Objects:***

Edge Series 3.1. Windows version.

"Express" install (i.e., no custom selections; take all defaults including MySQL repository and WACS for web applications)

Business Objects Administrator: Administrator/EAA\_esc01; CMS port: 6400 (default)

MySQL root: root/esc01; user: sa/esc01; MySQL port: 3306 (default)

Web Application Container Server Port: 6405 (default)

Server Intelligence Agent Node Name: SYMONS3 (installation picked up the computer name)

Installation Location: C:\Program Files\Business Objects

Installation Initial Size: 3.80 GB (3.93 GB on disk), 54,852 files, 5,390 folders

Installation Time: under 30 minutes

### ***Oracle***

Release: 11.1.0.7.0, 11gR1

Windows, 32 bit

### ***Server***

Dell PowerEdge 1420, 2 Xeon hyper threading cpus (O/S sees 4) 3.0 GHz

8 GB ram – Windows sees 4GB

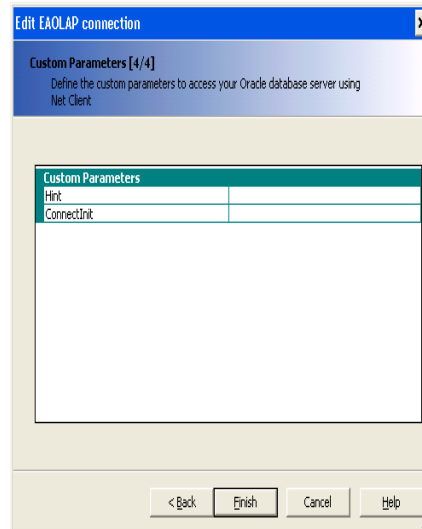
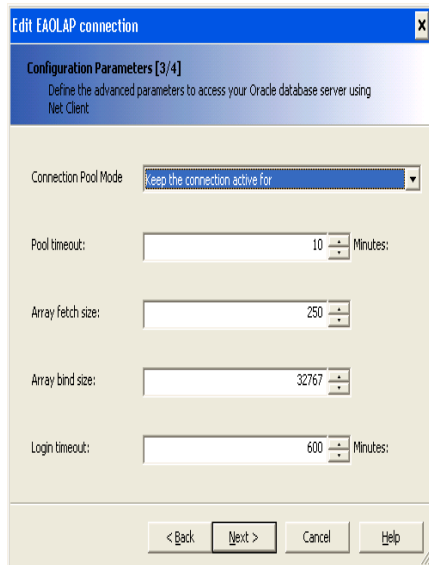
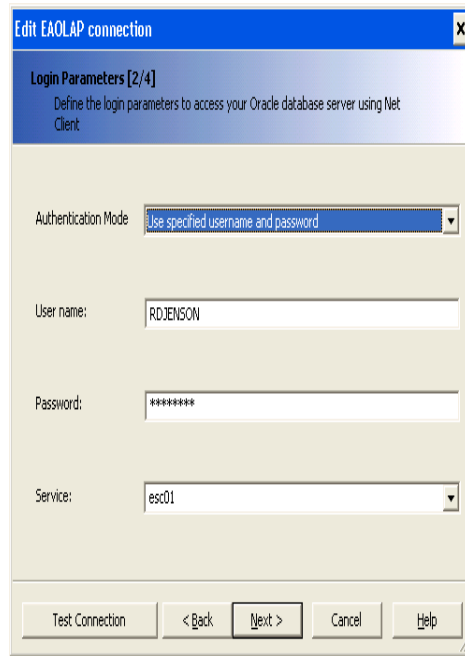
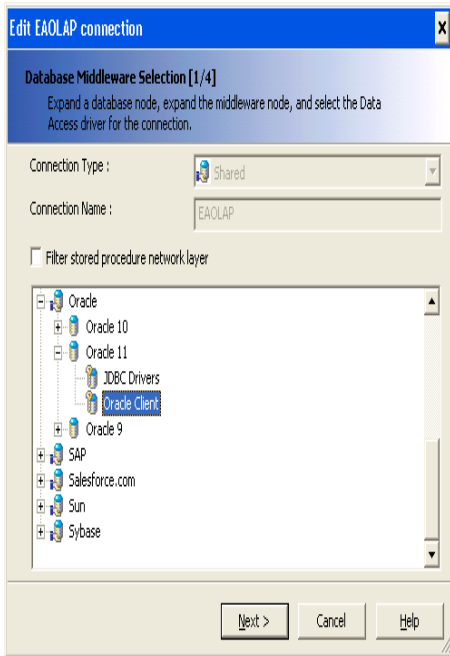
O/S: Windows XP SP3 32 bit

## Universe Creation

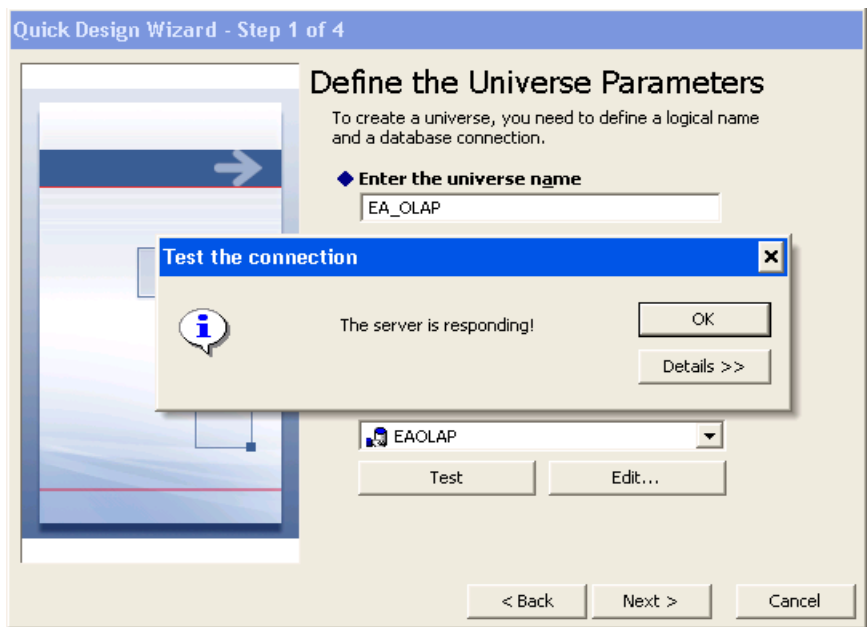
Start Designer and use the wizard to create a new universe and connection.

Go to All Programs → BusinessObjects XI 3.1 → BusinessObjects Edge Series → Designer

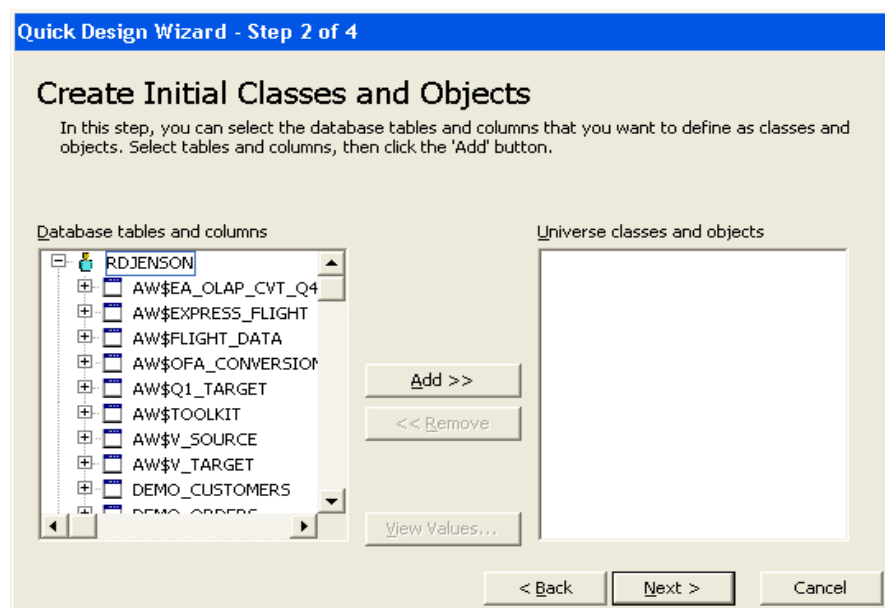
### Connection



Test the connection:

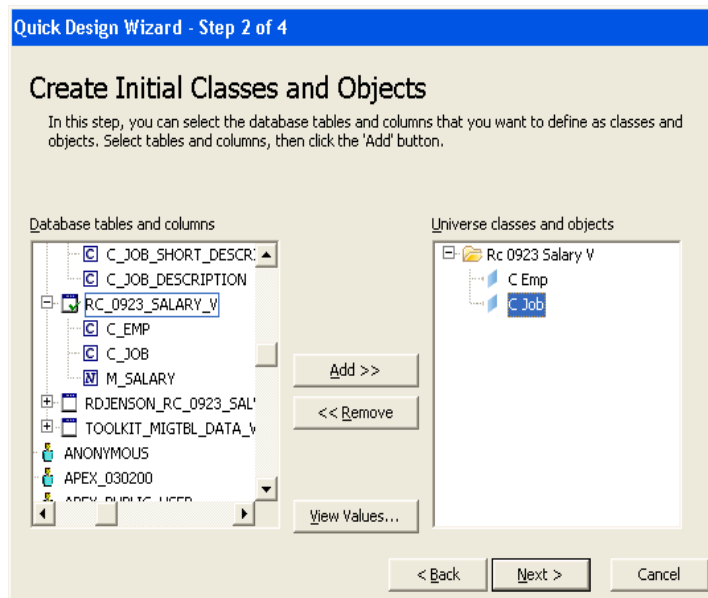


### Classes and Objects



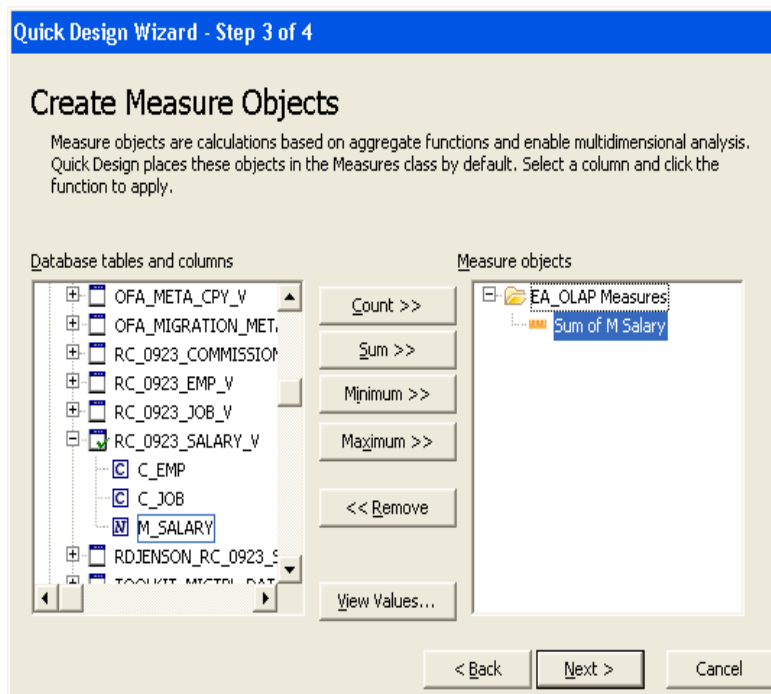
This step is for grabbing tables and defining dimensions, measures, etc. This connection picks up tables and views in the schema specified in the connection. Escendo-created views are also picked up. Expanding the table or view gives the columns with an icon indicating data type. In the Escendo-created view "RC\_0923\_SALARY\_V"

below, the two dimensions are listed as character, and the measure (M\_SALARY) is listed as numeric. The two dimensions are selected as objects.



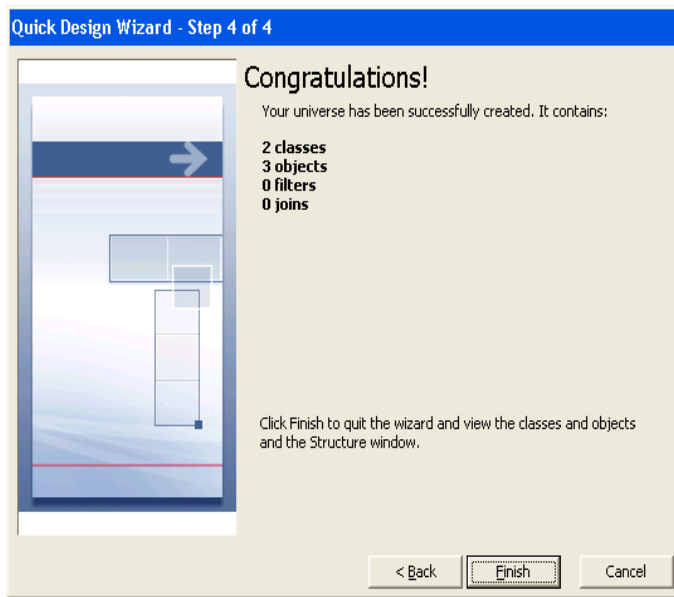
## Measures

Measures are seen as calculated columns. Select the measure M\_SALARY and use the sum function.

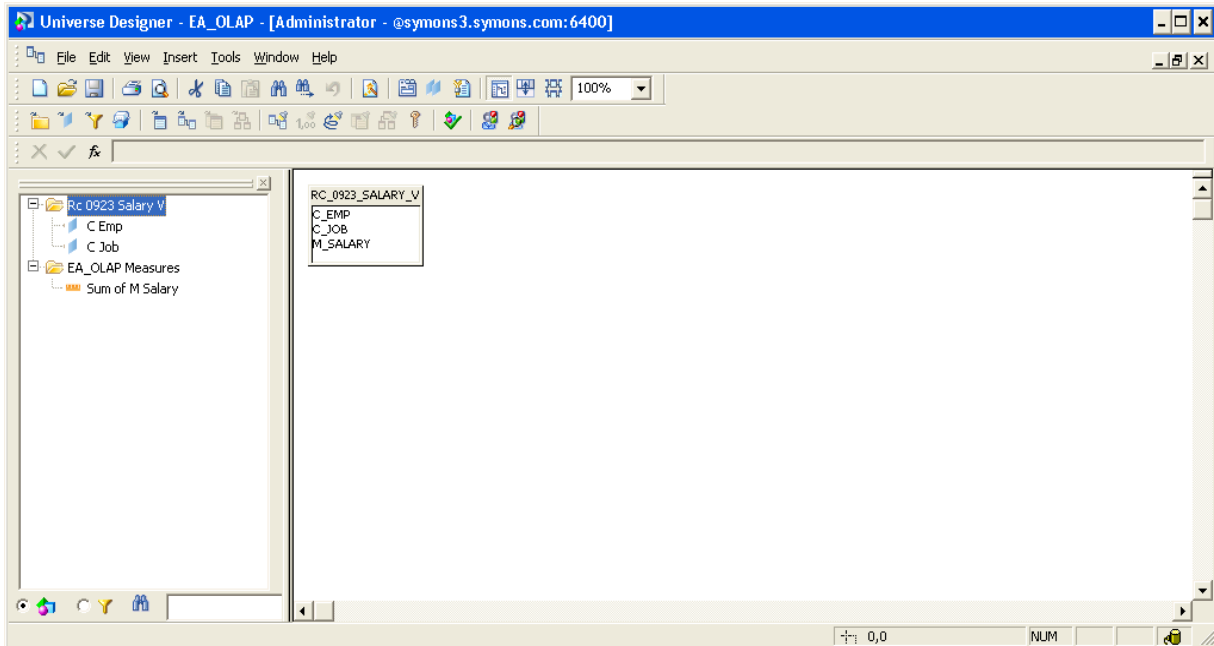


## Save

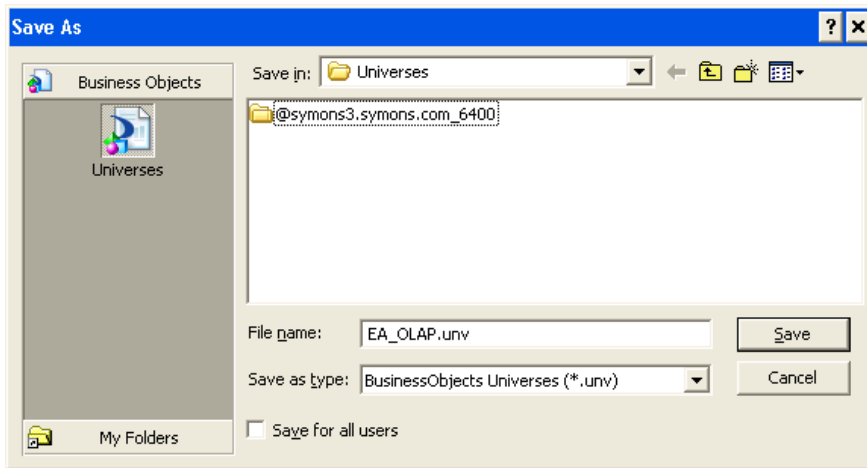
That was it.



Here is the Universe:



Save the universe.



Log out.

## Reporting on Analytics Views

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The above steps show how to create a connection and a universe. Now apply this to Escendo generated cube views.

### ***Escendo AW and Cube Objects***

We have an AW with flight data:

Dimensions are Airport, carrier, Destination, Time and Type of flight (e.g., charter).

Measures are Passengers, Seats and Departures.

Calculated measures are Average number of seats, Average number of seats filled, and Density (% seats filled)

These are combined into a Cube, and a SQL View has been created on that cube:

```
CREATE OR REPLACE FORCE VIEW "RDJENSON"."FLIGHT_DATA_FLIGHTS_V2"  
  ("C_AIRPORT",  
   "C_CARRIER",  
   "C_DESTINATION",  
   "C_FPROP",  
   "C_TIME",  
   "M_PASSENGERS",  
   "M_SEATS",  
   "M_DEPARTURES",  
   "M_TOT_DENSITY",  
   "M_AVG_SEATS",  
   "M_AVG_FILLED")
```

AS

```
select ... etc from OLAP_TABLE... etc
```

This will return all the data. To reduce the amount of data returned, another view has been hand-crafted on top of this to return one carrier, one destination and one airport for "Total" flights. This criteria has been used to build APEX reports on top of the Cube View, and we will use the criteria to build a BusinessObjects report also.

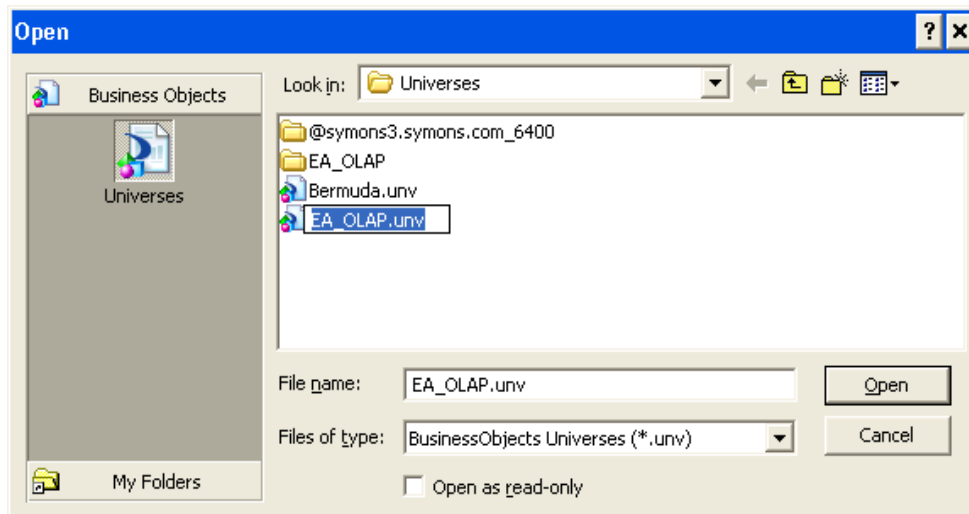
This view is:

```
CREATE OR REPLACE FORCE VIEW "RDJENSON"."BERMUDA_V"  
  ("C_TIME", "M_PASSENGERS", "M_SEATS", "M_DEPARTURES",  
   "M_TOT_DENSITY", "M_AVG_SEATS", "M_AVG_FILLED") AS  
SELECT  
  C_TIME, M_PASSENGERS, M_SEATS, M_DEPARTURES,  
  M_TOT_DENSITY, M_AVG_SEATS, M_AVG_FILLED  
FROM rdjenson.flight_data_flights_v2  
where C_AIRPORT = 'BOS'  
AND C_CARRIER = 'CDL'  
AND C_DESTINATION = 'BDA'  
AND C_FPROP = 'TOT'  
AND C_TIME LIKE('%07');
```

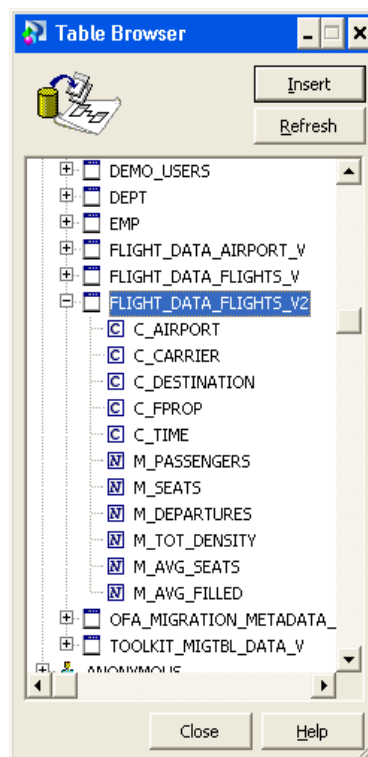
## Universe Designer

The universe created above, EA\_OLAP will be reused for this.

Go to All Programs → BusinessObjects XI 3.1 → BusinessObjects Edge Series → Designer. Click Cancel if the Quick Design Wizard starts up. Click on the Open icon on the menu bar and select EA\_OLAP.

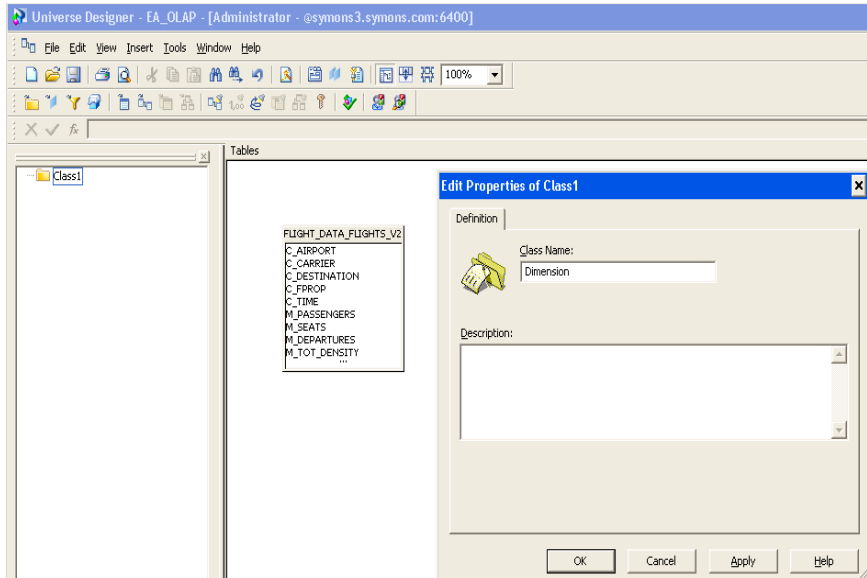


Remove the existing items by selecting, right-click, and select Clear (del). Click on the Table Browser icon, then expand FLIGHT\_DATA\_FLIGHTS\_V2. Then double click to put it in the tables pane.

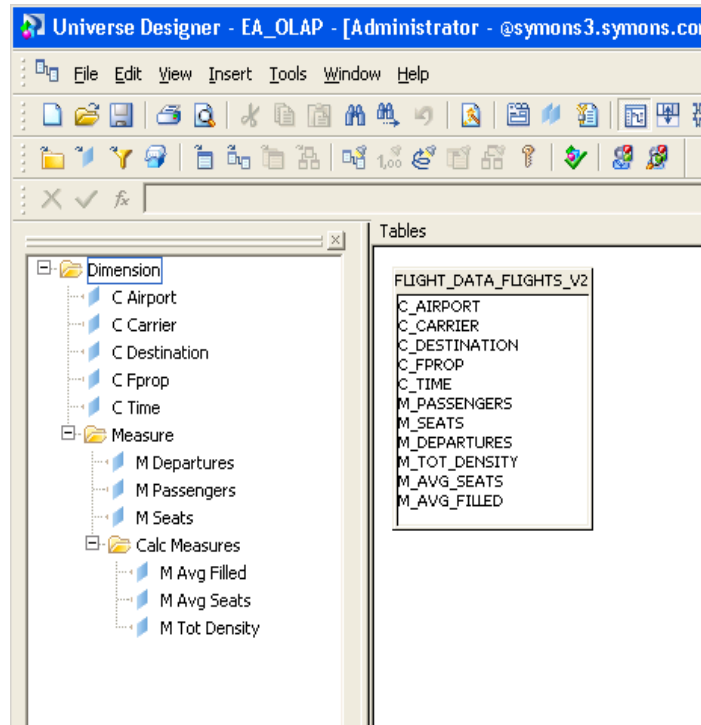


## Business Objects How-To Exercise

Click on the Insert Class icon to get the properties box. Create a class called Dimension, then click OK.



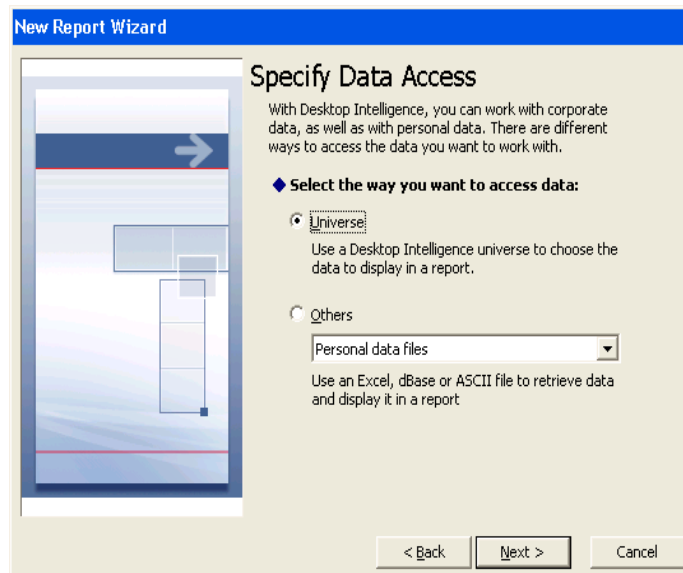
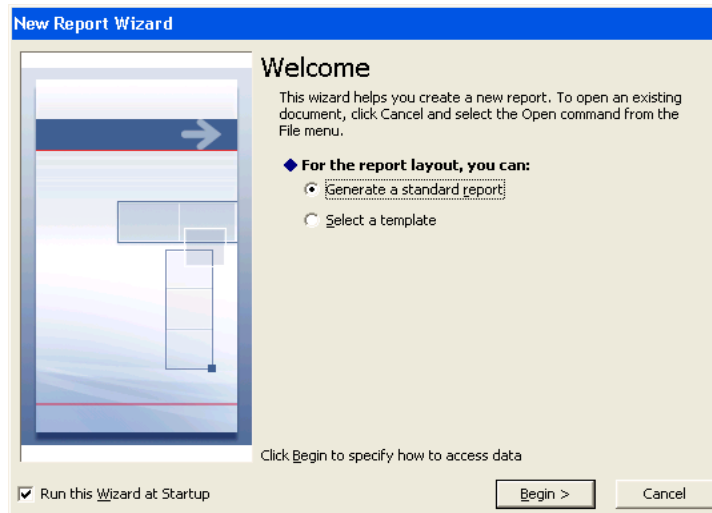
Drag and drop the 5 dimension from the Tables pane to the Dimension class. Create a Measure class underneath Dimension and add the 3 measures. Finally, create a Calc Measure class under Measure and drag and drop the remaining objects, so the finished universe looks like:

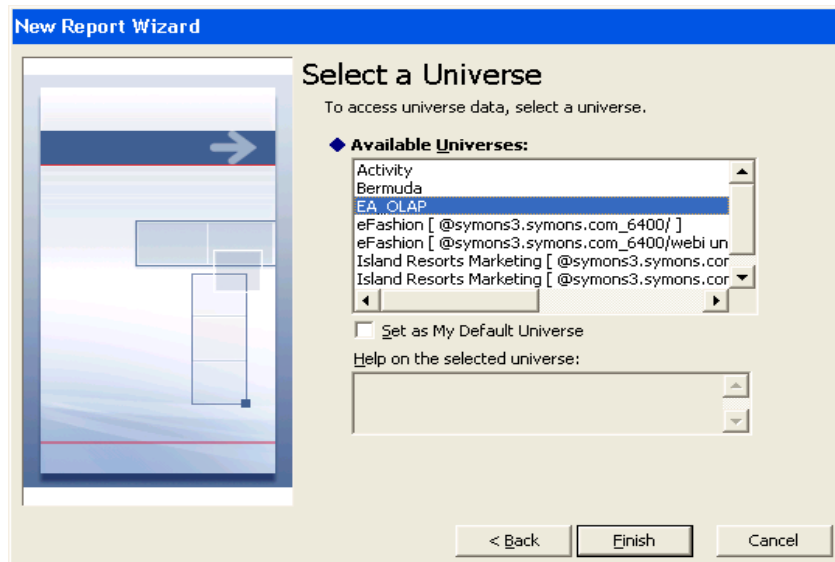


Save, then close Universe Designer.

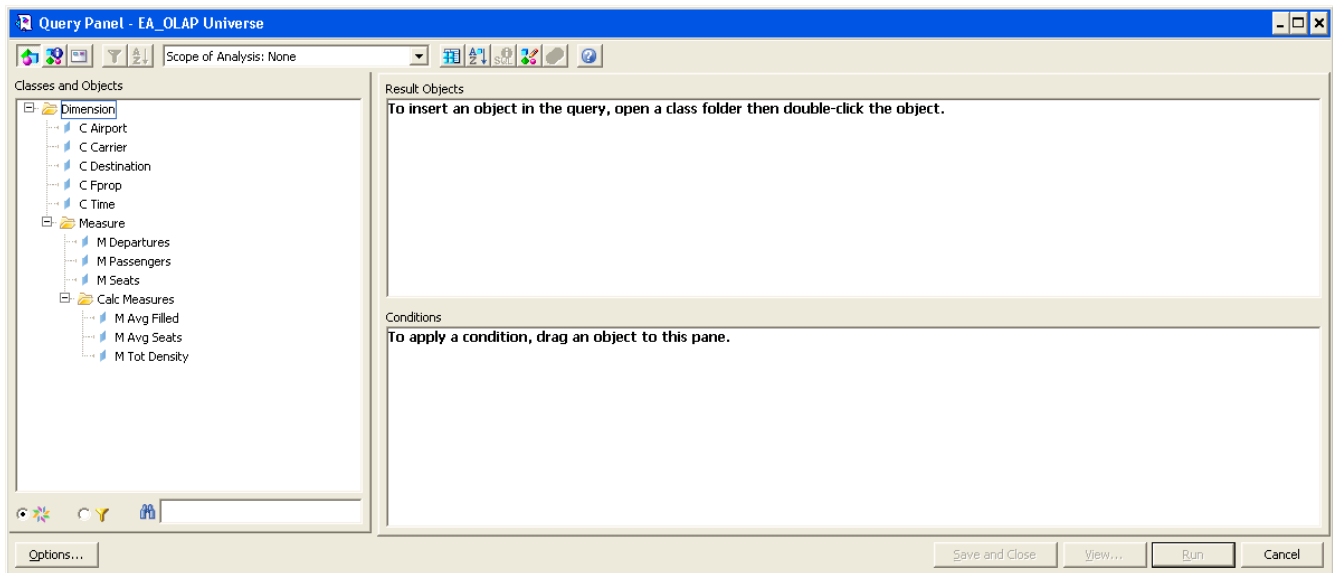
### **Desktop Intelligence Report**

Go to All Programs → BusinessObjects XI 3.1 → BusinessObjects Edge Series → Desktop Intelligence and log in. Use the New Report Wizard.





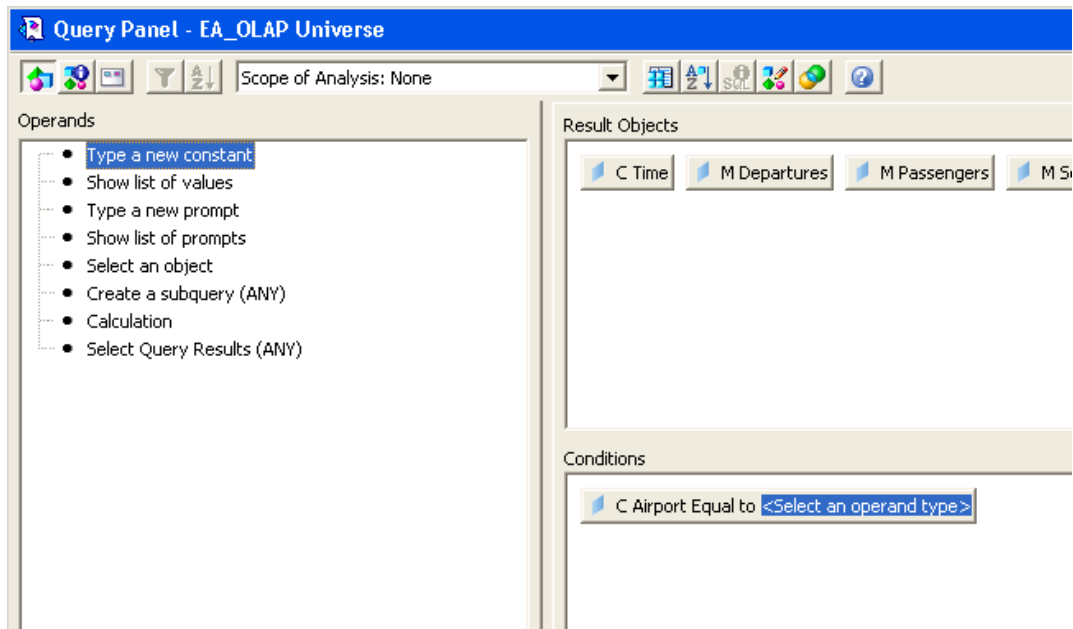
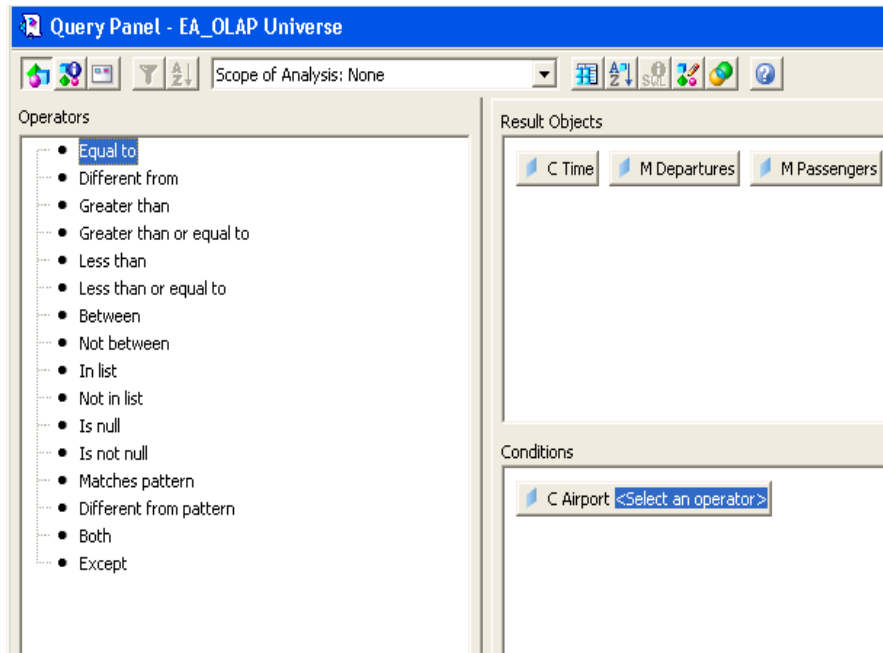
Expand the classes so all objects are shown. The directions in the Result Objects and Conditions panes are self



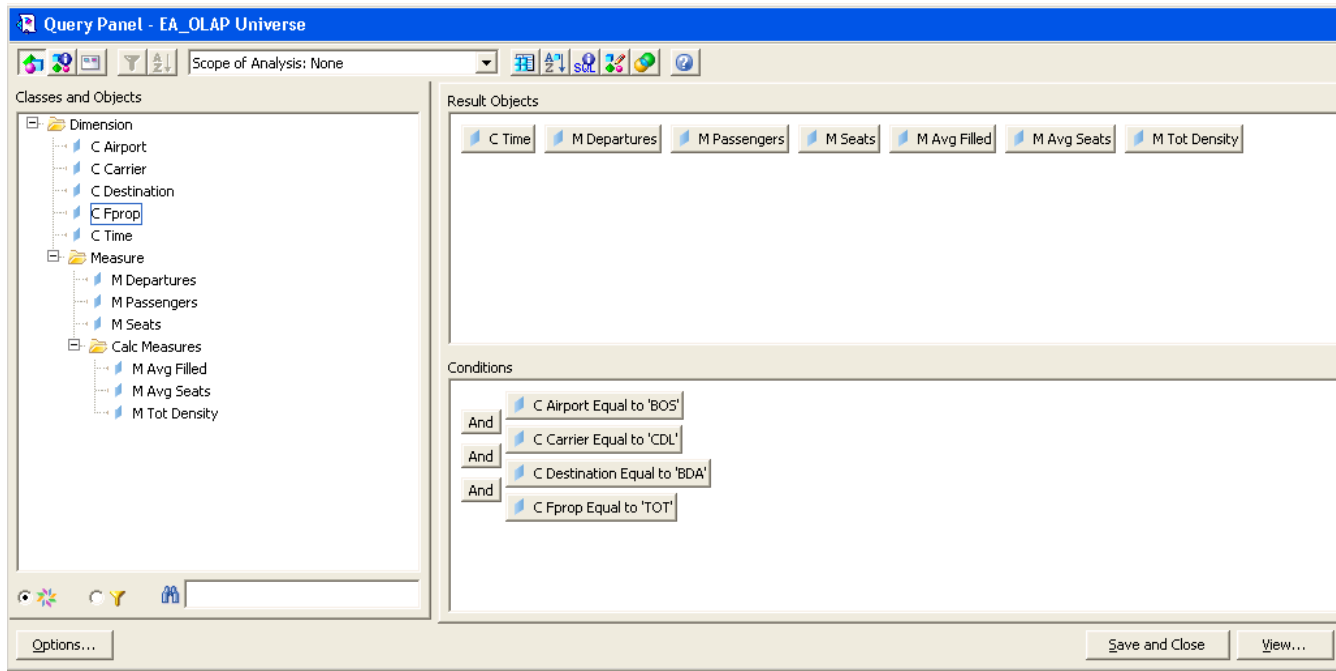
explanatory.

Select C\_Time and all the measures by double clicking on them.

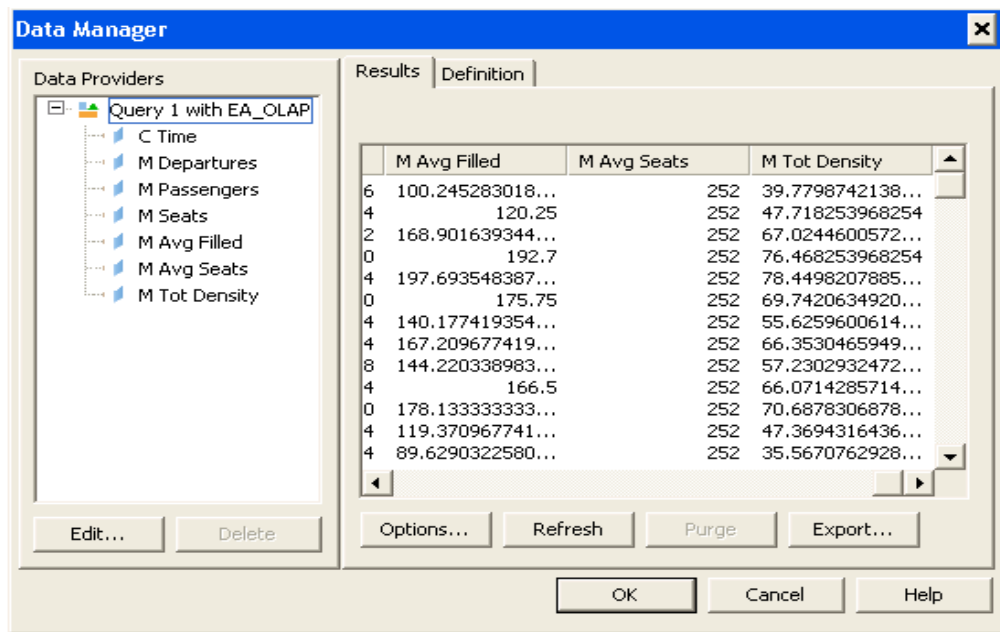
Drag and drop the 4 non display dimensions to the Conditions pane. As soon as an object is dropped into the pane, a guided prompt appears. To enter the values, double click on the Equal to operator, then on the Type a new constant Operand, and type in the dimension value as in the Bermuda\_V SQL view above. You do not have to enter the quotes around the constant.



The completed specification will look like:

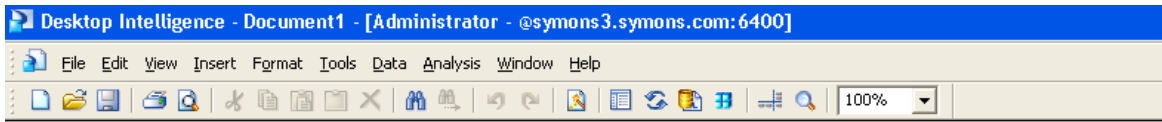


Click on View. If there is an error message, click on View a second time. A Data Manager window will give you a preview. You can scroll to see the columns of data.



## Business Objects How-To Exercise

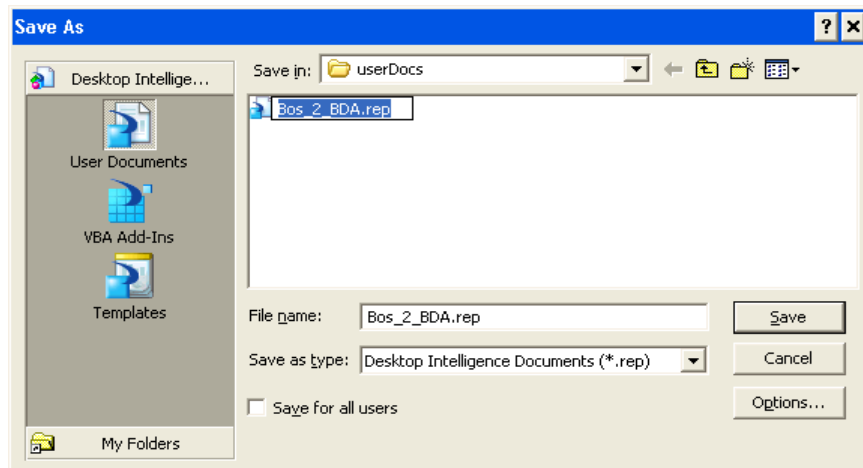
Click OK and the Report will come up.



Report Title

C Time	M Departures	M Passengers	M Seats	M Avg Filled	M Avg Seats	M Tot Density
APR00	60.00	11,496.00	14,989.00	191.60	249.82	76.70
APR01	59.00	10,320.00	14,868.00	174.92	252.00	69.41
APR02	60.00	10,910.00	14,361.00	181.83	239.35	75.97
APR03	60.00	9,368.00	14,352.00	156.13	239.20	65.27
APR04	60.00	7,549.00	12,506.00	125.82	208.43	60.36
APR05	60.00	7,222.00	9,000.00	120.37	150.00	80.24
APR06	60.00	7,103.00	9,000.00	118.38	150.00	78.92
APR07	59.00	7,213.00	8,950.00	122.25	151.69	80.59
APR08	60.00	7,672.00	9,500.00	127.87	158.33	80.76
APR96	60.00	11,562.00	15,120.00	192.70	252.00	76.47
APR97	58.00	10,802.00	14,616.00	186.24	252.00	73.91
APR98	61.00	12,504.00	15,232.00	204.98	249.70	82.09
APR99	60.00	12,458.00	15,132.00	207.63	252.20	82.33
AUG00	62.00	9,041.00	15,638.00	145.82	252.23	57.81
AUG01	62.00	9,451.00	15,624.00	152.44	252.00	60.49
AUG02	62.00	8,367.00	15,624.00	134.95	252.00	53.55
AUG03	62.00	7,567.00	14,292.00	122.05	230.52	52.95
AUG04	61.00	7,236.00	15,372.00	118.62	252.00	47.07
AUG05	60.00	5,544.00	9,000.00	92.40	150.00	61.60
AUG06	60.00	7,170.00	9,000.00	115.00	150.00	77.10

Save the report and close out.



This completes a short exercise of using Escendo Analytics data in a Business Objects Report.