

Supported Version: Oracle BAM 10.1.3

Objectives:

This document describes the steps to create a data object in the BAM ADC. These data objects reflect the business data that is captured in BAM for presentation, analysis, alerts etc. Data objects can also contain calculated or look up fields.

Prerequisites:

1. Basic knowledge of BAM and installed BAM software.
2. Completed previous tutorial steps.

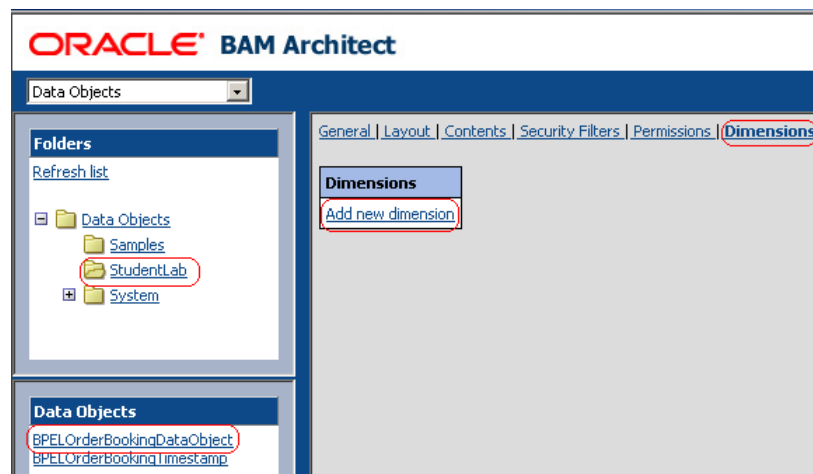
Create Dimension on BPELOrderBookingDataObject

In this section we will see how to edit the BPELOrderBookingDataObject(that was created in beginning in this part) to have dimension on OrderDateTime (time stamp) value (datetime format), and set it to year, quarter, month & day. This dimension enables the report to be navigated as per time periods. (Explained later in Report Design document)

Note: This data object is manipulated to add dimensions to show users how to design dimensions, in this case time variable based. The use of dimensions in the reports will be discussed in next documents

Open the Oracle BAM Architect window, and select “DataObjects” from drop down list. Click on the “StudentLab” folder.

Click on “BPELOrderBookingDataObject”, and click on “Dimensions” link.



Click on the “Add new Dimension” link. Create a new dimension. Name this dimension as “OrderDimension”

Tutorial: Oracle BAM – Creating Dimensions (Tutorial_4_BAM_CreatingDimensions.doc)

Select the data object attributes: OrderDateTime, SupplierName, OrderStatus.

The screenshot shows the Oracle BAM Architect web application. The 'Data Objects' list on the left includes 'BPFLOrderBookingDataObject' and 'BPFLOrderBookingTimestamp'. The 'Dimensions' tab is active, showing a form for 'OrderDimension'. The 'Data Object Fields' list includes 'instanceId', 'processName', 'updateName', 'OrderPrice', 'SupplierPrice', and 'Profit'. The 'Dimension Fields' list includes 'OrderDateTime', 'SupplierName', and 'OrderStatus'. The 'Save' and 'Cancel' buttons are at the bottom.

Click on “Save”. Click on “continue”. Click on “Add new hierarchy” for this dimension.

The screenshot shows the 'Dimensions' tab with a table listing 'OrderDimension'. The 'Edit' and 'Remove' buttons are next to it. Below the table, the 'Add new hierarchy' button is highlighted with a red rectangle. The 'Add new dimension' button is also visible at the bottom.

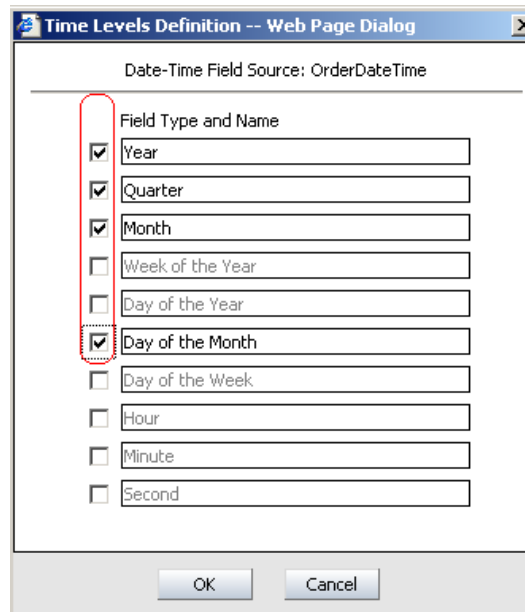
Give it a name –“Hierarchy”, Click on “OrderDateTime”.

The screenshot shows the 'Hierarchy' form. The 'Hierarchy Name' field is set to 'Hierarchy'. The 'Description' field is empty. The 'Dimension Fields' list includes 'OrderDateTime', 'SupplierName', and 'OrderStatus'. The 'Hierarchy Fields' list is empty. The 'OrderDateTime' field is highlighted with a red rectangle. The 'Save' and 'Cancel' buttons are at the bottom.

Tutorial: Oracle BAM – Creating Dimensions

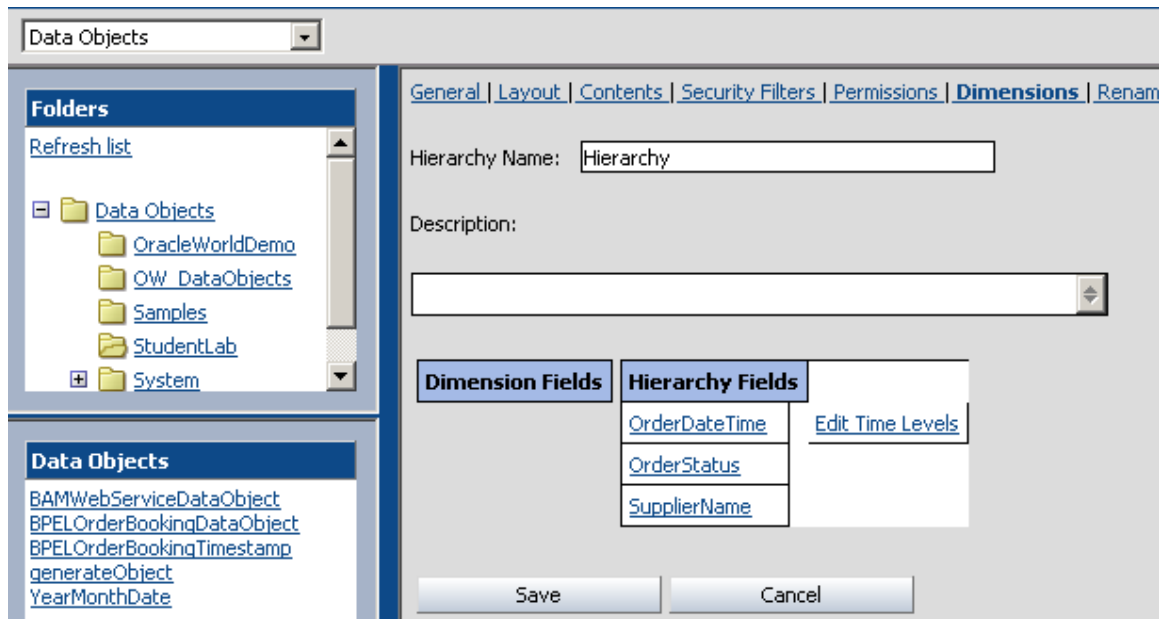
(Tutorial_4_BAM_CreatingDimensions.doc)

In the pop-up window, set time levels to “year”, “quarter” and “month” and “day of the month” as shown below.



The image shows a dialog box titled "Time Levels Definition -- Web Page Dialog". The "Date-Time Field Source" is set to "OrderDateTime". Under the "Field Type and Name" section, the following options are checked: Year, Quarter, Month, and Day of the Month. The other options (Week of the Year, Day of the Year, Day of the Week, Hour, Minute, and Second) are unchecked. The dialog has "OK" and "Cancel" buttons at the bottom.

Similarly add “OrderStatus” and “SupplierName” to this hierarchy.



The image shows a web-based configuration interface for Data Objects. The "Data Objects" dropdown is set to "Data Objects". The "Folders" list on the left includes "Data Objects", "OracleWorldDemo", "OW_DataObjects", "Samples", "StudentLab", and "System". The "Data Objects" list on the right includes "BAMWebServiceDataObject", "BPELOrderBookingDataObject", "BPELOrderBookingTimestamp", "generateObject", and "YearMonthDate". The "Hierarchy Name" is set to "Hierarchy". The "Description" field is empty. The "Dimension Fields" section is empty. The "Hierarchy Fields" section lists "OrderDateTime", "OrderStatus", and "SupplierName". The "Edit Time Levels" link is visible. The "Save" and "Cancel" buttons are at the bottom.

Click OK. Click on Save. Click “Continue”, and Close the Architect Window.

Tutorial: Oracle BAM – Creating Dimensions

(Tutorial_4_BAM_CreatingDimensions.doc)

This completes the operation for defining the “time stamp” and “supplier_status” related dimension, which can be used during report design.

Populating data into the data objects:

For the purpose of this tutorial, use the supplied student files and import data into these two data objects. ‘iCommand’ utility is used to import the data into the repository.

```
cd C:\XXX\OracleBAM\10.1.3_Folder\Samples\BPEL-BAM-sensor\BAMObjects
```

```
icommand cmd=IMPORT file=BPELOrderBookingDataObject.do
```

```
icommand cmd=IMPORT file=BPELOrderBookingTimestamp.do
```

Similarly using icommand, you can export and save the contents & layout of the data object. Type “icommand” on dos prompt for self help messages & usage.

Summary

- Manually create dimensions on ADC Objects.
- Create Dimensions & Hierarchy on Data Object.

Questions & Clarifications:

If you have any comments or need additional information, please communicate through the Oracle BAM forum at: <http://forums.oracle.com/forums/forum.jspa?forumID=252>