This document will demonstrate how to utilize aliases, subsets, and TM1 Cube Views to display TM1 cubes in a different language.

Introduction

Purpose of Document
This document will demonstrate how to utilize aliases, subsets, and TM1 Cube Views to display TM1 cubes in a different language.

Applicability
This document was written and tested against IBM Cognos TM1 9.5.2, 10.1.1, and 10.2. The final test was done on 10.2 and uses the 10.2 GO_New_Sales samples that ship with the product. Please refer to the product documentation on how to setup the samples should you wish to follow along with the steps found in this document.

Assumptions
This document assumes readers have experience with IBM Cognos TM1 and understand basic TM1 operations such as how to create a TM1 Cube View and how to add new element attributes.

Overview
For TM1 developers, there is often a need after a model is built to display the cube in another language. With the current product design, TM1 does not provide alias support for many of its
objects, including Cube Views and Dimension Subsets. For the objects that do have alias support, TM1 lacks a mechanism that could quickly switch the object alias from one to another.

This document will demonstrate how to utilize aliases, subsets, and TM1 Cube Views to display TM1 content in a different language. The following is a step by step guide on how to implement this technique.

**Steps required to create a TM1 Cube View in a desired language**

The steps required to create a TM1 Cube View in a desired language can be divided into four sections:

- Adding aliases to cube dimensions
- Adding aliases to dimension elements
- Creating new dimension subsets
- Creating a new cube view

This chapter describes the steps of each section in detail.

**Section 1 - Add aliases to cube dimensions**

This section describes how to add aliases to the dimensions in a cube.

1. In **TM1 Architect/Perspective Server Explorer**, expand the cube you wish to add a new language to, right click on **Dimensions**, and then click **Edit Attributes**. In this example, we will work with the **Product** cube.

   **Figure 1: Dimensions right-click menu with Edit Attributes option highlighted**

   The **Attributes Editor** window opens.
2. Inside the Attributes Editor window, right-click any of the column headers, click Add New Attribute, select Alias, and then in the Name box, type the name you would like for the alias. In this case, we will use French.

3. Click OK, and then click OK again to the warning dialog. The Attributes Editor now displays the new alias column to the right containing default values for each dimension. If necessary, resize the window or scroll to the right to see the new column.

   **Figure 2: Attributes Editor showing new French (Alias) column just created**

   ![](image)

The new attribute values will need to be translated for each dimension in the cube you wish to display in another language. For this example, we will simply translate the three dimensions found in the Product cube. In this case we will translate Products, Budget Version, and Price and Cost to Produits, Version du budget, and Prix et coûts respectively.

4. Click OK.

**Section 2 - Add aliases to dimension elements**

This section describes how to add aliases to the elements inside each cube dimension.

1. In **TM1 Architect/Perspective Server Explorer**, expand the cube you are interested in, and then expand Dimensions.
2. Right-click on a dimension, in this case Products, and then click Edit Element Attributes...
3. In the Attributes Editor window, right-click any of the column headers, click **Add New Attribute**, select **Alias**, and then in the **Name** box, type the name you would like for the alias. In this case, we will use **French**.

4. Click **OK**, and then click **OK** again to the warning dialog. The Attributes Editor now displays the new alias column to the right containing default values for each dimension. If necessary, resize the window or scroll to the right to see the new column.
The new attribute values will need to be translated for each element in the dimension.

5. Click **OK**.

6. Repeat the process for each dimension in the cube.

**Section 3 - Create new dimension subsets**

This section describes how to create new dimension subsets to display dimension elements in a particular alias.

For each cube dimension, perform the following steps to create a new dimension subset:

1. Under the desired cube, right-click the dimension, in this case **Products**, and then click **Insert New Subset...**
2. In the Subset Editor window, turn on alias by clicking the Use Aliases button, and then select French (the new alias just created) from the drop down list.

Figure 6 – Subset Editor Window showing Use Alias feature currently on and new French alias selected from drop down list

3. From the Subset menu, save the subset with the name Produits. If you would like this subset to be public, deselect the Private check box.

Figure 7 – TM1 Save Subset dialog with Produit subset entered as the new subset name
4. Click OK.
5. Repeat these steps for the **Budget Version** and **Price and Cost** dimensions in the cube naming them **Version du budget** and **Prix et coûts** respectively.

**Section 4 - Create a new TM1 Cube View**

This section describes how to create a new TM1 Cube View based on the dimension subsets created in **Section 3 - Create new dimension subsets**.

1. Right-click on the cube and click **Browse**. In this example, we are using the **Product** cube. The **Cube Viewer** window opens.
2. For each dimension in the cube view, double-click on the context dimensions and single-click the crosstab dimensions to bring up their **Subset Editor**. Change the subset currently in use to the respective subsets created in **Section 3 - Create new dimension subsets**. For example, for Products, select the **Produits** subset as shown in Figure 8.

   **Figure 8 – Subset Editor window with the Produits subset selected in the dropdown list**

3. Click OK, and then click the **Recalculate** button or the **Automatically Recalculate** button (if you want the view automatically recalculated when the view changes) on the toolbar if you wish to see values in the crosstab.
4. From the File menu, click **Save** and save the view as **Produit** and deselect the **Private** check box if you wish the view to be public.
5. Click OK. A TM1 Cube View of the Product cube with everything displayed in the French alias is now created as shown in Figure 9.

   **Figure 9 - TM1 Cube View displayed in the French aliases created earlier**
6. Close the Cube Viewer.

Show only the translated TM1 Cube View (Optional)

If you only wanted to show users the cube views that have everything displayed in the right alias (French aliases in our example), you could allow users to connect to the TM1 data server only through TM1 Web and publish only the translated cube views into the Application folder(s). In the TM1 Web configuration you can hide all TM1 Cube Views and show only the Application folder(s).

This optional section describes how to implement this technique.

1. In the TM1 Web configuration file, make the following change to hide the Views node in the navigation pane. In versions prior to 10.2, this change is done in the `Web.config` file located in the TM1 Web installation directory. For the 10.2 release, edit the `tm1web_config.xml` file located under `<TM1 install directory>\webapps\tm1web\WEB-INF\configuration`.

   ```
   <!--NavTreeDisplayServerView: Y/N - Whether to display "Server View" node in navigation tree -->
   <add key="NavTreeDisplayServerView" value="N" /> 
   ```

2. Recycle the TM1 Admin service to pick up the change. The IBM Cognos TM1 Web user interface will no longer display the `Views` node.

   **Figure 10 - IBM Cognos TM1 Web UI only showing the Applications node**

3. In **TM1 Architect/Perspective Server Explorer**, right-click on `Applications`, and then click `Create New Application`.

   **Figure 11 – Applications right-click menu showing Create New Application highlighted**

4. Name the new application folder **Français** (so that users know all the views in this folder will be in French), and then drag and drop the cube view created in **Section 4 - Create a new TM1 Cube View**, in this case **Produit**, into the application folder.
Now in TM1 Web, users will only see the cube view with everything displayed in French as shown in Figure 13.

Figure 13 – TM1 Web showing the Produit cube view with all data in French
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