STAR Dimensions and Their Members

Technical Background

Dimensions are actually tables that exist in each Application of the STAR data system (cubes). Some dimensions are shared among the applications (i.e. Entity, Category, Measures, and Time are the shared tables among the Financial, Salary, Planning, and Transfers Applications. There are also some dimensions that exist only in a particular application (i.e. Object_financial only is in the Financial application, Object_Salary is only in the Salary application, etc.).

Within all the Dimensions are Dimension Members -- the individual rows within the dimension tables. There is also a final table called a Fact Table.

Each dimension member contributes to a data intersection known as a fact and which is stored in the Fact Table. This fact (generally a dollar amount) resides at the intersection that the user dials in via STAR’s Current View. Thus, all of the dimensions (tables) are already all linked together and selecting a dimension member is akin to setting a query filter (i.e. setting the Category Dimension to show “Original_Budget” is the same as making a SQL statement of “Category = ‘Original_budget’” or showing only records that equal “original_budget” in a MyReports filter on the Category ID of the fact table).

Knowing the technical aspects in order to link tables together isn’t necessary to the end-user in STAR because they’re already all in the Current View. What the end-user does need to understand is the meaning of the different dimension members so that they can dial in the right settings to get the data that they want.

STAR Users can get a good feel for the different hierachal organization schema by browsing the various member selector dialog boxes (the member lists brought up by clicking on the Dimension name). Remember to select to view members by “ID And Description” within the member selector dialog box.

Frequently Used Dimensions

Some of the most frequently used dimensions (and their members) in every-day reporting are:

1. Category – This Dimension refers to the Budget Category. Each member determines what type of budget you’re requesting data for. All of STAR’s Dimension members are not cap-specific in their characters, but the letters and underscores must be entered as shown in the Member ID STAR (i.e. Original_budget = original_budget = ORIGINAL_BUDGET; these are all the same to STAR).

Some common Category dimension members are:

   a. Working_Budget: This is a mutable budget category that is only active part of the year. It is the category to which all of the budget input is sent during budget season. After budget input is closed, and budgets are approved, this category is copied to original_budget and then cleared.
b. Original_Budget: This is what was entered and approved at budget season, copied from Working_budget, and sent to Advantage. Original_budget cannot be changed.

c. Current_budget: This is the adjusted budget updated daily from Advantage. It does not include cash accounts and the data resides only at the appropriation unit revenue/expense level (Letter only: A, T, S, etc. and no objects or sub-objects such as 7310, 731010).

d. All_Actuals: This Category is a hierarchal rollup that consists of three base level members:
   i. Actual_Rev_Exp: This member denotes the actuals information updated daily from Advantage.
   ii. Pre_Encumb: This member denotes any pre-encumbrance information updated daily from Advantage.
   iii. Encumb: This member denotes any encumbrance information updated daily from Advantage.

e. Yr_End_Forecast: This is the Category that shows end-user budget forecast adjustments.

2. Entity – This Dimension refers to the Advantage agency/org account ID. It contains both roll-ups (those members starting with ‘1RP,’ such as 1RPPR01, 1RP35CA, etc.) and what STAR calls base-level members (i.e. KV51001). STAR data exists only at the base level for all of the dimensions, but reporting can be done at any roll-up level and STAR automatically does the math to add together all of a roll-up’s accounts.

There are multiple Entity master hierarchies that contain many of the same accounts as each other, just grouped differently for convenience of reporting. For instance, Hierarchy 1RPPR00 is the natural Advantage hierarchy and is organized exactly like Advantage. Hierarchy All_Budget_Units is a hierarchy that the Office of Budget and Planning uses frequently because it’s broken up by budget reporting area, rather than by accounting area. Both hierarchies contain the same accounts, they’re simply organized differently.

3. Fund – This Dimension refers to the type of funding source. Like Entity, it is organized into two different master hierarchies containing the same information but organized differently. Users can select whether or not Fund makes a difference in the data they’d like to see by selecting any fund listed. If they don’t have a particular fund in mind, then simply selecting one of the All_Funds... master hierarchies will ensure that all that unit’s types of funds are being included in the data that the user is requesting.

End users can select funds from any of the master hierarchies, but they should browse the hierarchies to become familiar with the organizational structure to ensure proper choice. Funds are organized both in the format of the All_Funds_by_Number hierarchy (which then lists out all of the funds numerically: 0XXX, 11XX, 13XX, 2XXX, 3XXX, 4XXX, 5XXX, etc.), and in the format of All_Funds_by_Type, which contains the same numerical fund numbers, but they have been
further placed into categories of Operating_Funds, Non_Operating_Funds, No_Fund and subdivided further into additional areas (i.e. State_Operating_Fnds, Local_Operating_Fnds).

4. Object_financial – This Dimension refers to Revenue and Expense object codes. Like Entity, there are multiple master hierarchies that contain much of the same data in different organizational patterns. They are often the same order at lower levels only differing in organization at the higher levels of the hierarchy. Browsing the Object_Financial dimension member selector dialog box shows the various master hierarchies of the Object_Financial dimension.

For instance, the RevenueAndExpense Hierarchy is divided into Revenues and Expenses which are further subdivided into Letter appropriation unit codes and then within those codes 4 digit object codes and within those 6 digit subobjects. Conversely, the EndingBalance Hierarchy is divided into BeginningBalance, RevenueExclBeginningBalance, Expenditures, and NetTransfersOut, and then further subdivided below those hierarchal levels into their appropriation units, 4 digit objects and 6 digit subobject codes.

5. Time and Measures – These two dimensions work together to determine what type of span of time you’d like your data to come from.

   a. The Time Dimension is organized into Fiscal years as the master hierarchies (2012 = the 2011-2012 fiscal year), then subdivided into quarters then further divided into months.

   b. The Measures Dimension has only three members: Periodic, QTD and YTD. In general, the measures dimension can always be kept at its default of “Periodic.” This ensures the most straightforward data pull.

How Time and Measures work together: First, you’ll need to think of what time period you’d like to see data for. If you’d like to see data for only a specific month, then you’d specify the month in Time and keep the Measures at Periodic. If, however, you’d like to see all of the year to date data up to a specific month, then you’ll specify the month in Time and set Measures to YTD.

The best way to see the current fiscal year’s data in general, is to select the current fiscal year in Time and keep Measures at Periodic. This will show all of the fiscal year data for whatever other dimension data you’ve requested for the entire fiscal year, such as Category of actual_rev_exp, Fund of 11XX, Object_Financial of Expenses, etc."

As is often the way with computers, there are, of course, two ways to get this same data. Alternately, following the example’s setting of Category = Actual_rev_exp, you could set the current month in Time and set Measures to YTD – this would yield the same result.

In closing, if possible, it’s informative to take 5 minutes a day to explore the different dimensions, their members and how they interact with each other through the various settings in Current View. A very good way to get the hang of this is to create a simple Any-by-Any dynamic template report and try out various dimensions in both the column and row selector boxes in the report.