

Working With Multiple Measures within an Argos Cube

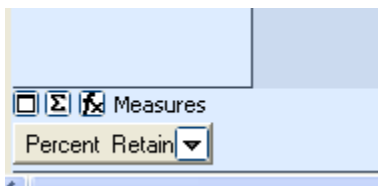
Note: This document is designed to cover advanced navigation tips and techniques. Please refer to the document titled: “Instructions for Navigating OLAP Cubes with Argos” for basic navigation instructions.

The information available in an Argos OLAP cube is arranged into two domains—Dimensions and Measures. This document focuses on the measures domain.

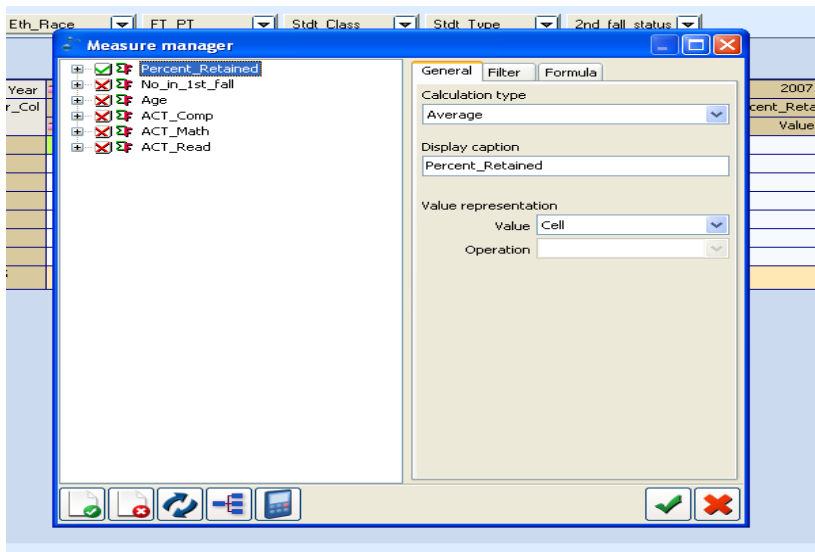
The screenshot shows the Argos OLAP cube interface. At the top, there are dropdown menus for dimensions: Sex, Geo_Org, Eth_Race, FT_PT, Std_Class, Std_Type, and 2nd_fall_status. Below these is a 'Columns' section with a 'Year' dropdown. The main area displays a table with columns for years (2003-2007) and a 'Total by ROWS' column. The rows are categorized by 'Mjr_Dept' (AL, BU, ED, HH, HP, NA, UC) and a 'Total by COLUMNS' row. The 'Mjr_Dept' dropdown is set to 'DMD1'. At the bottom, the 'Measures' section shows 'Percent Retain' as the active measure.

Year	2003	2004	2005	2006	2007	Total by ROWS
Mjr_Dept	Percent_Retained	Percent_Retained	Percent_Retained	Percent_Retained	Percent_Retained	Percent_Retained
	Value	Value	Value	Value	Value	Value
AL	76.52	78.65	77.87	73.67	76.12	76.59
BU	74.00	76.18	73.47	79.09	71.76	74.91
ED	75.91	76.51	69.49	77.86	80.80	76.23
HH	72.43	72.95	68.14	70.89	74.44	71.76
HP	75.51	74.77	76.03	79.55	69.72	75.00
NA	71.34	72.33	74.46	72.26	73.36	72.75
UC	72.77	68.77	75.22	72.81	71.49	72.17
Total by COLUMNS	73.57	72.98	74.10	74.22	73.12	73.60

The bottom edge of an Argos cube holds information about the cube’s measures. A measure can be active or inactive. If it is active it will be displayed along the bottom of the panel—in the example above the “percent retained” measure is active.

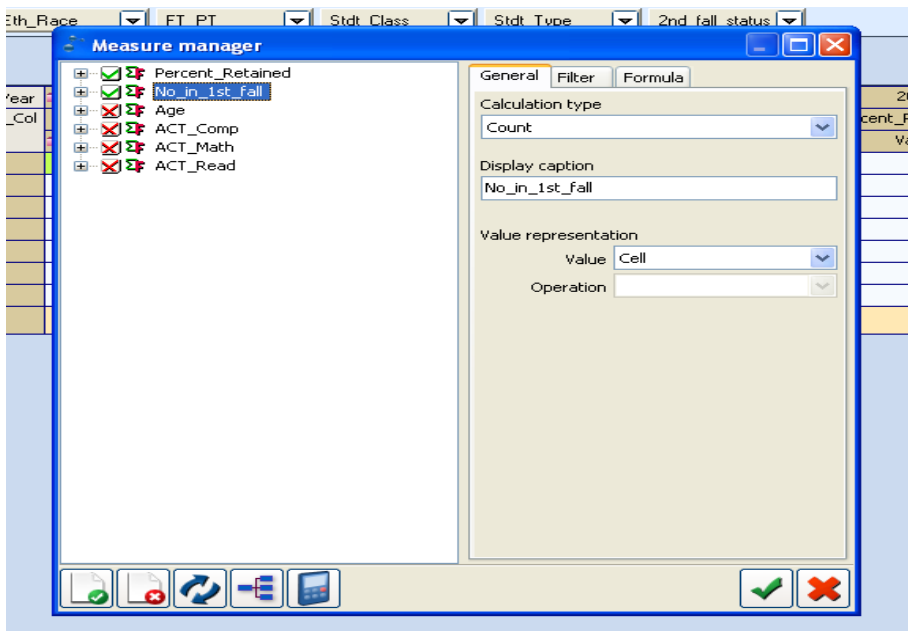


To view any other available measures click on the sigma icon (Σ). All the available measure will be displayed in a new pop-up window.



Measure can be activated or inactivated within this environment. In the example above, only the percent retained is active—note the green check mark next to this measure. All the rest are inactive (red X next to each measure).

To activate a new measure, click on the box next to it. This example has both percent retained and number in first fall activated. Click on the big green check mark in the lower right-hand corner to update the output display.



The resulting output will incorporate the new measure.

Available Dimensions: Sex, Geo_Org, Eth_Race, FT_PT, Stdt_Class, Stdt_Type, 2nd_fall_status

Columns: Year

Mjr_Col	Mjr_Dept	2003		2004		2005		2006	
		Percent_Retained	No_in_1st_fall	Percent_Retained	No_in_1st_fall	Percent_Retained	No_in_1st_fall	Percent_Retained	No_in_1st_fall
		Value	Value	Value	Value	Value	Value	Value	Value
DMD1	AL	76.52	396	78.65	384	77.87	366	73.67	
	BU	74.00	450	76.18	487	73.47	505	79.09	
	ED	75.91	137	76.51	149	69.49	118	77.86	
	HH	72.43	301	72.95	281	68.14	317	70.89	
	HP	75.51	98	74.77	111	76.03	121	79.55	
	NA	71.34	321	72.33	318	74.46	325	72.26	
	UC	72.77	1021	68.77	1012	75.22	920	72.81	
Total by COLUMN5		73.57	2724	72.98	2742	74.10	2672	74.22	

Measures: Percent Retain, No in 1st fall

Notice there are now two measures along the bottom band.

The drop-down arrow for each measure allows the user to perform a number of functions. Appropriate functions will depend on the nature of the data displayed. In this example we will display the rank order of the percent retained value. Click on the drop-down arrow on the percent retained button—a new pop-up window will appear.

The screenshot shows the 'Measure manager : Percent_Retained' dialog box. On the left, a list of functions is shown with checkboxes: Value (checked), Percents by COLUMN, Percents by ROW, Rank[Column], Rank[Row], Difference with previous Column, Difference with previous Row, Sum with previous Column, Sum with previous Row, Running Total by Column, Running Total by Row, % by c group, and % by r group. On the right, the 'General' tab is active, showing 'Calculation type' set to 'Average', 'Display caption' as 'Percent_Retained', 'Value representation' set to 'Cell', and 'Operation' set to a blank dropdown. There are 'OK' and 'Cancel' buttons at the bottom right.

Select "Rank[Column]" by clicking on the red X (changes it to a green check mark). Click on the big green check mark in the lower right-hand corner.

Columns		2003				2004	
Year	Mjr_Col	Percent_Retained	No_in_1st_fall	Percent_Retained	No.		
	Mjr_Dept	Value	Rank[Column]	Value	Rank[Column]		
+	AL	76.52	1	396	1		
+	BU	74.00	4	450	3		
+	ED	75.91	2	137	2		
+	HH	72.43	6	301	5		
+	HP	75.51	3	98	4		
+	NA	71.34	7	321	6		
+	UC	72.77	5	1021	7		
Total by COLUMNS		73.57	7	2724	7		

The display now has a new column that contains the ranking information. The highest value has a rank of one (1), the next highest a two (2), and so on. The column total will always have the highest rank number.