

Enrollment Dashboard using Argos

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Enrollment Reports

To open the Enrollment Dashboards web page, click on the Argos icon in the Banner Portal Page. http://banner.smccd.edu/



The Enrollment Reports Web page will be maintained with the archived Hyperion reports that were created through the Spring 2013 term.

Argos Dashboards

In information technology, a dashboard is a user interface that, somewhat resembling an automobile's dashboard, organizes and presents information in a way that is easy to read. In this context, the Dynamic Enrollment Statistics Report (DESR) Dashboard attempts to provide decision makers with timely, consistent information in a single, graphical interface.

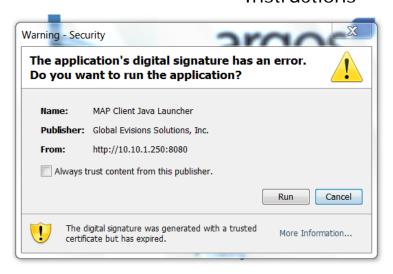
Please submit an ITS support request to ask for your account to be granted permission to access the Dashboards.

Logging into Argos



Note: Argos runs on a Java platform on the same version that Banner uses (Java 6).

The first time that you log into Argos you may see the following screen:



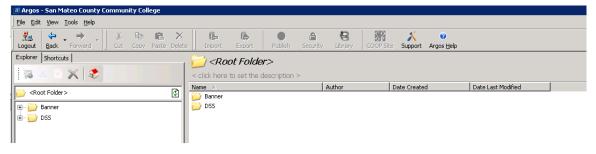
Click the "Always trust" box and click Run.

The following Login menu should display:



Use your network username and password (this is your email account <u>without</u> the @smccd.edu).

Depending on your security, you may see more or less folders but you should definitely see the DSS (Decision Support System) folder.



Click on the "+" to expand the folder and see the objects within. You should see the following objects.



You may expand each of the objects to see the Dashboard and Reports contained within each Datablock (Argos terminology for the object that extracts the data).

Argos Overview

Navigation Area

This area contains the objects that you can perform actions on. There are three different views you can use for the Navigation area by clicking the desired tab (Explorer or Shortcuts). Each of these views is described below.

Explorer view

The Explorer is the default view for the Navigation area, in which a simple menu of available folders and objects is displayed. Argos objects that can be found in the Explorer include:

Folders – Contains objects, including other folders

DataBlocks - The "parent" object for one or more reports

Dashboards - Display-only reports for quick reference.

CSV Report - A comma-separated values report

Banded Report - A fully-formatted report

Extract Report - A text report that meets pre-defined specifications

Schedule – Reports may be scheduled to run automatically

Some objects can be flagged as private. Private objects will not show up in the Explorer for users other than the creator and the administrator. These objects will have the "private eye" icon like the sample private Banded report icon on the list to the right.

Within the Explorer tree, reports always reside beneath a DataBlock parent. A DataBlock can have many "child" reports. Any object that has child objects will have a "+" next to it. Simply click the "+" to expand the object to view its children.

Icon	Explorer Objects
	Folder
*	DataBlock
Tr.	CSV Report
	Banded Report
Del Fix xml	Extract Reports (Delimited, Fixed Width, XML)
•	Private Report (Banded)
<u> </u>	System created Dashboard
P	User created Dashboard
බ්	Schedule

Shortcuts View

This view can be very convenient as it shows only your available shortcuts. You can even rename a shortcut to something other than the original name. To find the original object in the Explorer view, right-click a shortcut and choose "Locate" (see figure on the right). Deleting or renaming a shortcut has no effect on the original object.

Shortcut

A Shortcut is a reference to a DataBlock or Report, it can be shared (so all users can see it) or private (My Shortcuts) so only the creator can see it. Click the Shortcuts tab to switch to the Shortcuts view.



Options for Shortcuts

DataBlocks

Although Report Viewers do not create DataBlocks, an understanding of the components of the DataBlock aids the Report Viewer in understanding the relationship between DataBlocks and the various report types.

The DataBlock is the foundation from which all reports are created and contains Forms and Queries. Only users with DataBlock Designer privileges can create DataBlocks. At this point only ITS will have the ability to create DataBlocks.

The Queries obtain data from a database. When results of a query are displayed on a form, this is called a Dashboard. In the case of CSV, Banded, and Extract Reports, the results of the query are input to the report design with the results displayed or stored elsewhere. Within the Argos Explorer tree, reports exist as "child" objects of a DataBlock.

The Form, created by the DataBlock Designer using the Argos DataBlock Designer, is used for two purposes:

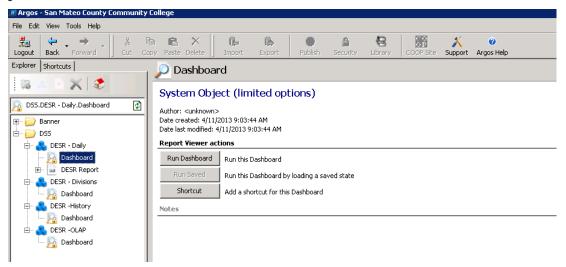
- To obtain input selections from the user executing the report. The input selections can be passed to the queries to limit the results.
- To display the results of the report. Dashboards can display results on the form.

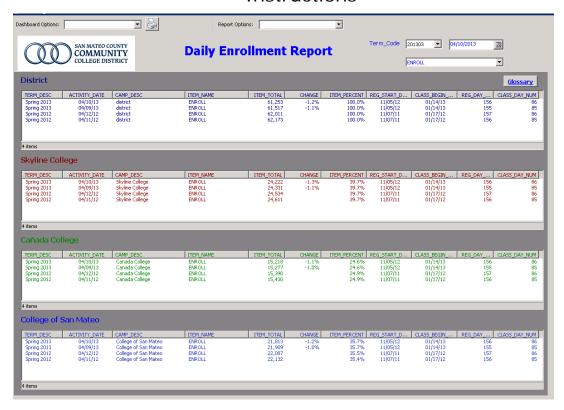
Whenever a user executes a report, the form designed as part of a DataBlock will be displayed. The input selections made by the user become query parameters.

Any report type (Dashboard, CSV, Banded, and Extract) can use the data obtained from the queries. The tree structure shown on the right denotes that all report types underneath the DataBlock will obtain the same results from the queries, but of course each report type will print the data using methods available to the given report type.

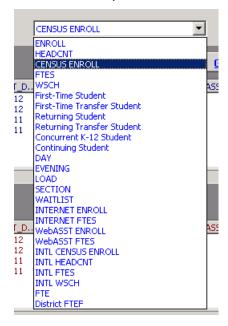
Running a Dashboard

To run a Dashboard click on the Dashboard icon associated with the DataBlock that you want to run and click on the Run Dashboard icon on the main area.

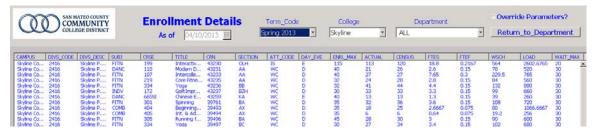




The Dashboards have been designed with certain parameters to be defaulted (such as Term_Code), provide the ability for users to enter their own parameters (such as the menu item).



The following navigation instructions may be useful when viewing large amounts of data such as with the data source of the Division Enrollment Dashboard.

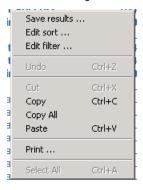


Navigation within a Dashboard Block

When the number of fields and rows are larger than what can be seen within the block, slide bars are available on the right side and bottom of the block to navigate to additional information.

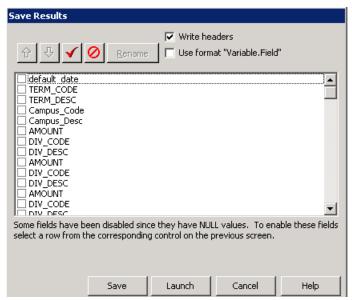
You can sort by any single field by clicking on the field header. You can also move the order of a field by clicking, holding and dragging the field.

Additional options are available by clicking the right button on your mouse while the cursor is anywhere on the dashboard block. The following options are available:

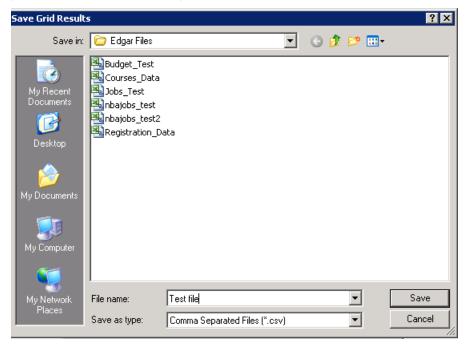


Save Results

The Save Results option gives you the ability to export data to either a .csv or .txt file. You can also click the Launch button to have it automatically open. This window also allows you to default the fields to extract.

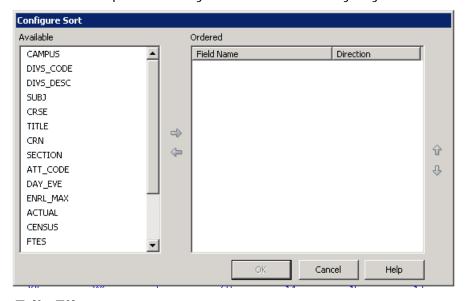


Regardless of the selected option, the Save Grid Results window will open up to allow you to select the directory and to enter file name and format.



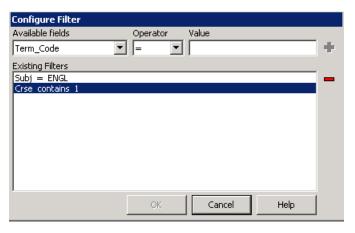
Edit Sort

The Edit Sort option allows you to sort the data by any combination of fields.



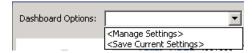
Edit Filter

This is a very powerful Dashboard feature. It allows you to create filters using any combination of fields and operators.

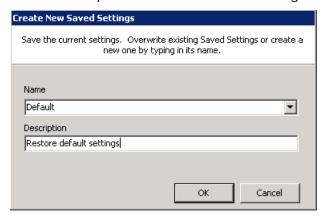


Dashboard Options

Dashboard options provide the ability to save settings that you may want to reuse periodically such as Center or Dashboard filters.



I usually like to create a default setting in order to restore this setting without having to rerun the Dashboard. To create a New Saved Setting set the parameters and filters that you want to save. In the case of the Default Settings do not change anything when first opening the Dashboard. Click on Save Current Settings from the Dashboard Options Menu and the following window should display.



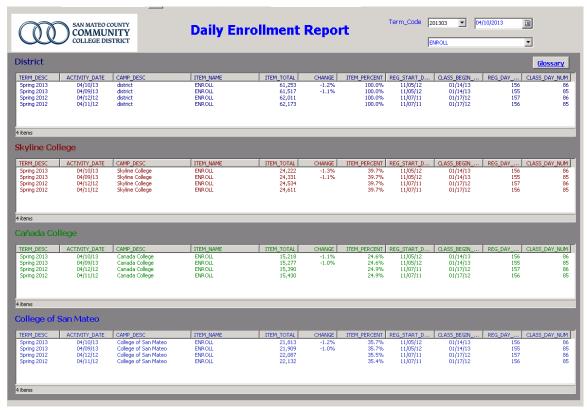
Data Source

The data used throughout the system is a snapshot of the production system taken each night at approximately 2:00 am. It should match the data from the two following reports:

- SWBSTYP Student Type Distribution Analysis
- SWBXENR Enrollment Report for Division

Daily Report

Dashboard

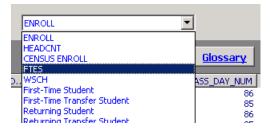


The main report is designed to present, in a single page, key enrollment information for each of the colleges and the combined district. The information available in the main report is:

- Current Enrollment and Headcount
- Census Enrollment
- FTES
- WSCH
- Headcount by Student Type and by Day and Evening classes
- FTEF Allocation (Canada only)
- Waitlist count
- International Student counts
- Distance Education Counts

The report presents data for the two previous days of enrollment, and it compares it against the same days of enrollment of the same term of the previous year. Before classes begin the comparison is of the number of days until the first the first day of class. Once classes start the comparison is of the number of days since the first day of class.

A drop down menu is provided at the upper right hand corner of the report to move from one page to the next.



Notice also the "Glossary" link on the header of the report. Click on it to get additional information and detail definitions on the various terms used throughout the report (If the glossary does not open, try it again while holding the Ctrl key to bypass your pop-up blocker).

Report

A new report has been developed which provides the exact same information as the Dashboard but it allows for it to be emailed as a .pdf on a predetermined scheduled.



Enrollment Report

Term: 201303 Date: 4/10/2013

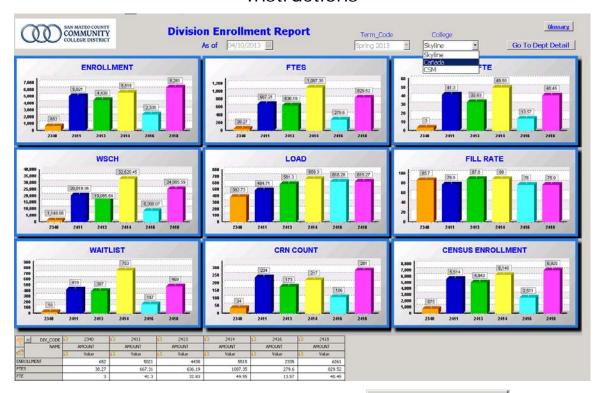
TERM	DATE	TOTAL	CHANGE	%DIST	REGSTART DATE	CLASS BEGIN DATE	REG NUM	CLASS DAY
ENROLL								
District								
Spring 2013	04/10/13	61,253	-1.22	100.0	11/05/12	01/14/13	156	86
Spring 2013	04/09/13	61,517	-1.06	100.0	11/05/12	01/14/13	155	85
Spring 2012	04/12/12	62,011		100.0	11/07/11	01/17/12	157	86
Spring 2012	04/11/12	62,173		100.0	11/07/11	01/17/12	156	85

Division Summary

The division and department summaries are not contained on a separate Datablock of their own.



A couple of additional enrollment indicators were added (CRN Count and Census Enrollment) and you are able to see charts and a matrix in the same page. Use the menu on the right to switch between colleges.

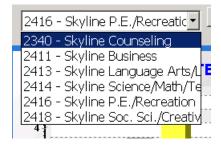


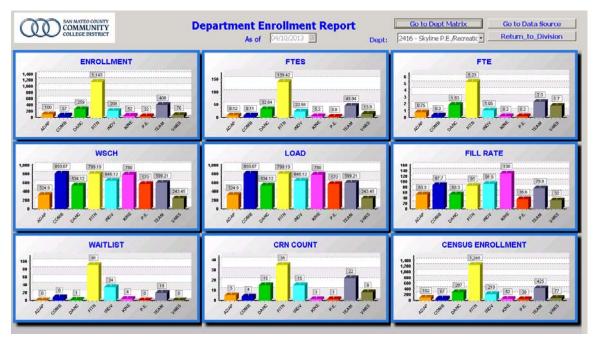
To access additional department details click on the Go To Dept Detail button

Department Summary

The department summary provides the exact same indicators as the division but it groups items by Subject course.

Use the department drop down menu to switch between divisions within the college.



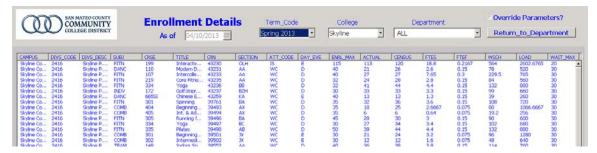


For ease of navigation, only the charts are presented in this page, however, click on the Go to Dept Matrix button to see the same data in a matrix format.

You may click on Return_to_Division to return to the main division screen or Go to Data Source to drill down into the data details.

Data Drill Down

The enrollment details page is designed to provide the data used in the charts and matrixes presented previously. It will automatically filter the data for the division selected in the department page, however, you may override those parameters and used the ones presented in this page by clicking Override Parameters?



To exit any of the Dashboard click on the lacksquare on the upper right hand corner.

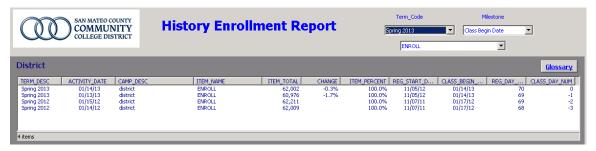
DESR - History

The History Dashboard is a dashboard created to provide historical information at several key points in time during the term. The points in time are:

- 1. First day of class
- 2. Census date
- 3. End of term

The key to selecting this data is that the snapshots are not taken immediately following these dates but rather "as of these dates" several weeks later after adjustments have been processed.

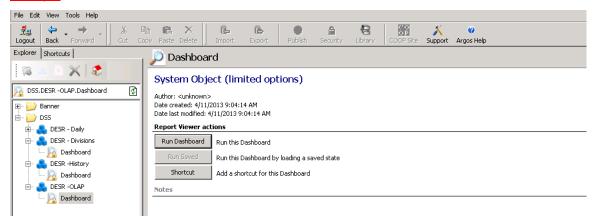
The format and navigation of the report is similar to the regular dashboard, except that a new menu window is provided to select term and the milestone.



DESR - OLAP

A new feature is the ability to present all data that has been accumulated over the years in this new format.

The OLAP tool will allow you to view summarized and detailed level information for ANY day going back to when we first started taking snapshots of the data (Fall 2005)!!

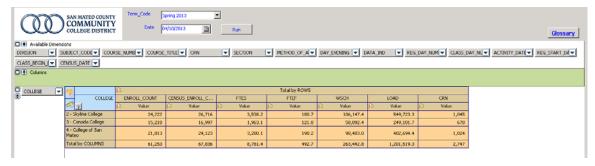


When you run the Dashboard it will default to the current term and the prior-day's enrollment date, however, you may select any term from within the Term_Code menu.



After selecting the Term_Code the system will run for a few seconds while is calculating the last day of registration for which we have stored data for the selected term.

When the date comes back select the data you wish to run for and click the button.



Following are more detailed instructions on OLAP and general navigation.

OLAP - On-Line Analytical Processing

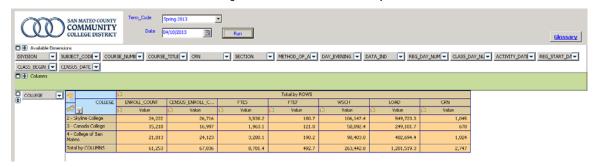
Dashboards can be designed to include OLAP cubes. OLAP cubes are data structures which can be manipulated by the report viewer to produce a wide variety of views of data. The following describes OLAP and how the report viewer can work with OLAP cubes.

Overview

OLAP is a specific way to represent statistical data for administrators, managers and analysts. It is designed to aid in decision-making and better information understanding. The main idea is to answer the user's questions, arising at the work time, on-the-fly, quickly. A popular definition is "A million spreadsheets in a box." The key to OLAP is its ability to allow the end user to configure different views of the same data.

An OLAP system allows user to get into details and generalize, filter, sort and regroup data at the time of analysis. Intermediate and final totals are recalculated instantly.

The user is presented data in an electronic spreadsheet format. By moving rows and columns or clicking them, the user makes the system perform calculations and show data in different aspects. Thus, the user can produce many reports out of a single dataset on their own, without any assistance from IT-specialists.



OLAP breaks data into two groups: facts (numbers, also called measures) and dimensions (descriptions). Facts (Measures) are aggregated in a given slice by some

algorithm while the user defines grouping and aggregation depth by using Dimensions.

Measures

Measures are the numbers in the OLAP spreadsheet or cube. They can also be referred to as Facts. The Measures are displayed in the cells of the cube. Measures are stored in what are called Fact Tables.

Fact tables typically contain the following types of fields:

- Key fields to join the Fact table to Dimension tables.
- Measure fields containing numeric values.

Dimensions

Fields by which data records are grouped are called Dimensions. Dimensions can contain values of various types: strings, dates, numbers, and so on. A dimension lists members, all of which are perceived by the user to be similar types of data. A dimension is the answer to "How do you want to see your data." For example, a Time dimension might include members for years, quarters, months, and weeks. A Sales dimension could include product names, sales territories, and names of salespersons. When running the cube, the end user can select to group the data by any or all the defined dimensions.

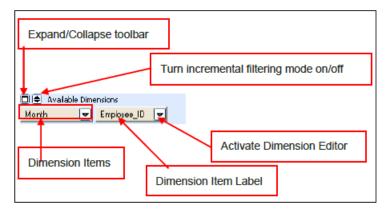
Dimensions have levels that allow for drilling down. For example, if looking at enrollment by center, you could drill down to get more information as to the makeup of the enrollment (such as by subject, method of attendance, etc).

Dimensions can be pulled from the Fact Table but typically are stored in Dimension Tables. Dimension tables have the following types of fields:

- Key fields, used to join the dimension tables to the fact table (star schema).
- Level name fields, used to store the member names for the levels. For example, the Time dimension table could have a field called Month, which would have values such as January, February, March, etc.
- Level Order Key fields, used to store integer values used to order the members of the levels (if necessary). For example, the Time dimension table could have a field called Month Order Key, which could have a value of 1 for January, 2 for February, 3 for March, etc.
- Member Property fields, used to store the member property information. A Time dimension could have a field called Day Count, which would store the number of days for each month.

Dimension Toolbar

The dimension toolbar is used to manipulate the dimensions on the cube.



Expand/Collapse Toolbar

You can collapse the dimension toolbar in order to have a bigger display area for the Cube Grid. The button acts as a toggle.

Dimension Items

The dimensions that are displayed are obtained from the list of available dimensions the designer added to the cube. All dimensions are displayed, except for those already added to the dimension rows or column toolbars. If any of the dimensions were added by the designer to be columns or rows, they will not be listed here.

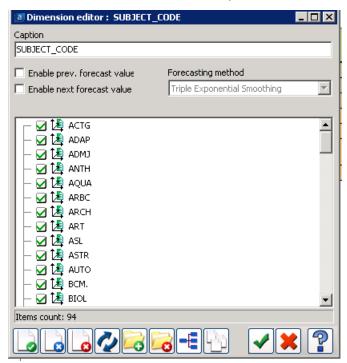
The order of the items on the dimension toolbar has no significance. The order is determined by the order they were added by the designer. The user can also rearrange by dragging them to the dimension rows or dimension columns.

Dimension Item Labels

The dimension labels are obtained from the Display Name property of the defined dimension.

Activate Dimension Editor

To Activate the Dimension editor, click the down arrow on one of the dimensions.



The dimension editor allows the user running the report to 'override' or change some of the default settings defined by the creator of the DataBlock.

The Dimension editor allows the user to 'filter' the data or resort the data.

To filter the data to display only the items selected, change the green check mark to a blue or red check mark by clicking on the current value.

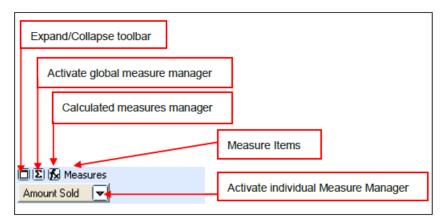
In addition you can change the sort order by clicking on the 'Sort Dimension' icon on the bottom tool bar. You can select to sort by Name, Key value, or not sort at all.

You can also group within the Dimension editor. Click on the folder with a plus sign - Add Hierarchy group. Name it, then drag and drop choices onto it to create a folder of choices. Any dimensions you want to group (i.e. states into west and east regions) you can.

You can also quickly get totals on the fly. Hold shift and click on a column in the OLAP cube, the totals will be highlighted in yellow.

Measures Toolbar

The measure toolbar allows the end user to modify the default settings for the added measures.

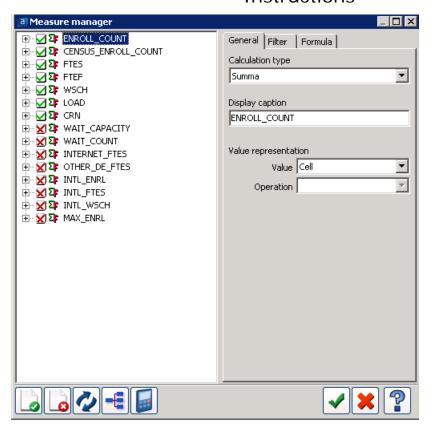


Expand/Collapse Toolbar

You can collapse the measure toolbar in order to have a bigger display area. The button acts as a toggle.

Activate Global Measure Manager

To activate the global measure manager click the global message manager icon shown in the above figure.

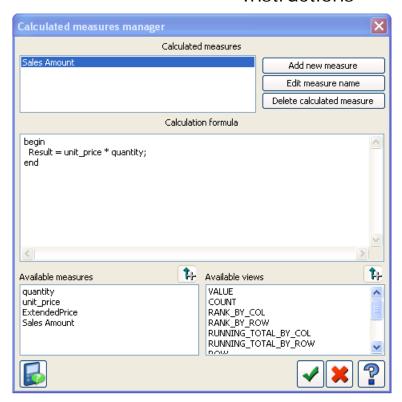


The measure manager is used to easily set the attributes of each measure item. Among the attributes you can set are the visibility of each measure, the displayed measure value and the filtered valued. On the example, to display the unit price measure, click on the red x to change to a green check mark.

When a measure item is not displayed on the measures toolbar, use the global measure manager to set its state to visible again.

You can also add a new calculated measure by using the calculator icon on the bottom toolbar. This will bring up the same form as the 'Activate Calculated Measures Manager' button.

Calculated Measures Manager



In this example a new measure was added that multiplies the quantity sold by the unit price.

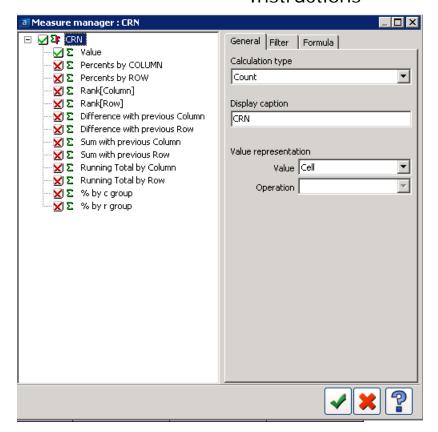
The calculated measures manager dialog box is used to add additional measures. The value of these calculated measures may use the values of the defined measures, much like how calculated fields are used in a database table.

Measure Items

Display the 'visible' or active measures.

Activate Individual Measure Manager

The individual measure manager is used to set the attributes of the selected measure. It is identical to the global measure manager, except that you can only set the attributes of the selected measure. To activate the individual Measure manager, click on the down arrow of the measure of interest. See the sidebar on this page.

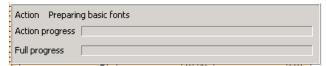


Exporting data to Excel

You are able to export OLAP data into Excel. To enable this functionality right click while your mouse is on the body of the OLAP



Select the Export to Excel option which will enable the following box

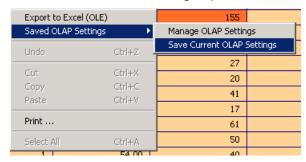


When the export is completed an Excel window similar to the one below will open up. Note that Excel must be installed on the local computer.

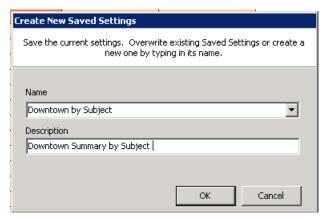
A	В	С	D	Е	F	G
		Total	by RO	WS		
		CRN	Total_cont_hr	Enrl	Total_wsch	Ftes
Center	Subj	Value	Value	Value	Value	Value
Downtown		103	7,387.54	2,492	15,432.00	284.33
	ACCT	5	332.00	155	595.00	16.33
	AMSL	1	56.00	22	66.00	1.80
	ART	1	52.50	31	93.00	2.90
	BSEN	1	52.50	27	81.00	2.50
	BSMA	1	52.50	20	60.00	1.70
	CAHS	2	192.50	41	228.00	6.87
	CHIN	1	88.28	17	85.00	2.67
	CLW	2	108.00	61	183.00	5.10
	CS	2	245.00	50	300.00	9.20

Save OLAP Settings

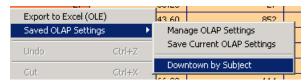
The OLAP also provides a very good feature that allows the user to save settings. To save the settings right click while your mouse is on the body of the OLAP. Choose the Save Current OLAP Settings option.



Enter the name and description for your settings in the Create New Saved Settings box as shown below:



To recall the settings, right click while your mouse is on the body of the OLAP and your saved settings will be available on the menu as shown below:



Printing the OLAP

To enable this functionality, right click while your mouse is on the body of the OLAP.

