

Paper FF-013

Navigating the SAS® Business Intelligence Client Tools

Angela Hall, Zencos Consulting, Cary, NC

ABSTRACT

The SAS® Business Intelligence Suite offers a huge set of client tools to access reports, create data, and manage interfaces. Which group of users should utilize which client tool? How do you choose which application to implement first for your end user community? When should a particular tool be used over another? Included within this paper is a framework for describing the SAS BI toolset to your business community.

ANALOGIES

The easiest way to relate the SAS Business Intelligence tools to the majority of United States users is to create an analogy to one of the most common product offerings – television. Half of all homes have more than 3 televisions (at least in 2006 according to Nielsen)!¹

PBS Kids is SAS Web Report Studio



Easy to understand and view, simple calculations, SAS Web Report Studio is the PBS Kids version of SAS Business Intelligence. This is the easiest product to use, even the executives can sink their teeth into this capability.

ABC/NBC/CBS is SAS Add-in to MS Office



It's prime time baby! Everyone knows how to operate the Microsoft Office Applications Word, Powerpoint and Excel. Now these users can open, analyze and report on SAS data, SAS enabled libraries (with Oracle, Teradata, SQL, etc data) and OLAP cubes. Everything is offered in a point and click environment so no SAS coding is required.

TIVO® or DVR is SAS Information Delivery Portal



SAS Information Delivery Portal allows users to organize their SAS content into a central location, including SAS Stored Processes, SAS Web Report Studio reports, links to external resources, lists of batch reports, etc. Similar to how TIVO records shows that you might like, users within SAS Information Delivery Portal can subscribe to reporting 'channels' and have immediate access to updated information without searching for it manually or being alerted to the new content by an analyst or report creator.

MSNBC, CNN is SAS Enterprise Guide and SAS OLAP Viewer



With detailed financial terminology or world news, kids do not understand the complexities and language in these television shows. Training and experience are required to fully grasp the information, very similar to the available functionality in SAS Enterprise Guide and SAS OLAP Viewer. Successful deployment of these products requires user training in SAS

coding, data design and structures, as well as tool functionality.

¹ *More TV Sets Than People in U.S. Homes*, Retrieved September 19, 2008 from <http://www.cbsnews.com/stories/2006/09/21/entertainment/main2032136.shtml>.

SYSTEM MANAGEMENT

To continue this analogy, there are a few additional client tools available to manage the SAS content.

Web Administrators use 'sasguest' and 'saswbadm' Information Delivery Portal Accounts

There are two SAS system accounts for Web Administrators to use in managing the Information Delivery Portal application. 'sasguest' creates the Public Kiosk page, this is the initial view for non-authenticated users. 'saswbadm' shares pages and portlets between user communities. (Note: These accounts are not utilized in SAS 9.2. The SAS Management Console User Roles takes over to assign individuals with these capabilities.)

Producers use SAS OLAP Cube Studio and SAS Information Map Studio

Creating content for these 'television products' is the responsibility of 'producers'. So in the SAS world, not everyone will have SAS OLAP Cube Studio and SAS Information Map Studio at their fingertips. These individuals understand user needs (requirements) and desire to produce reusable content to reduce management time.

Network Executives use SAS Management Console

There is only one CEO of the network, and for SAS Server environments, there should only be one responsible for managing the infrastructure using SAS Management Console. Of course, having a backup keeps the process flowing even during vacations and meetings. This individual is required to have a deep understanding of the organization of the services, data, and shared content folders as well as how to manage metadata security.

USER COMMUNITIES

With this analogy of the SAS Business Intelligence products you can probably quickly determine the match up between users and tools. Included is a recommendation for defining the various groups to help smooth deployment.

Data Geeks

Not quite SAS coders, but these people know the data. They are probably the ones addicted to Microsoft Excel and the pivot table wizards. Give them access to SAS Add-in to MS Office. Showcase the OLAP cube in pivot mode, highlight the ability to view more than the MS Excel limitation of data records (63K+), and introduce the 'Refresh' capabilities of MS PowerPoint to automatically update the routine weekly/monthly presentations to management.

SAS Gurus

Releasing any other product will only frustrate these users, so keep them happy with the advanced tools SAS Enterprise Guide and SAS OLAP Viewer. Of course, the really experienced BASE SAS user could also initially despise the SAS Enterprise Guide product for its GUI interface. Selling the benefits to these users will help smooth the transition. A 2008 NESUG paper gives the 10 reasons why SAS Enterprise Guide is so wonderful. Use this as the framework for training these gurus. <http://www.nesug.org/Proceedings/nesug08/ff/ff13.pdf>

Reporters

SAS Web Report Studio is the easiest tool to train users on. Initially limit user access to write reports to only their own user folders. This keeps the shared folders clean for full deployment. Provide free lunch and learn sessions to departments and show how easy it is to create a report off of one of the department's datasets.

*Everyone *Else**

Combine all of the created SAS content into a central location for everyone to access within the SAS Information Delivery Portal. This relieves the confusion of finding stuff by reorganizing into SAS Portal Pages; such as by organization, area, or topic.

DECISION STREAMS

Now that you have a better understanding of what tools relate to and which product different users can sink their teeth into, you then need to figure out which tool to implement new reports or migrate old reports to within the new SAS server environment.

Simple Reports

A single summary data set with no additional manipulation, generating tabular, cross-tabular, or graphical (line, bar, pie) displays can be created in SAS Web Report Studio. Report authors can enable prompts to allow report users to filter the results quickly, without creating duplicate report layouts for the same data tables.

Huge Data Sets

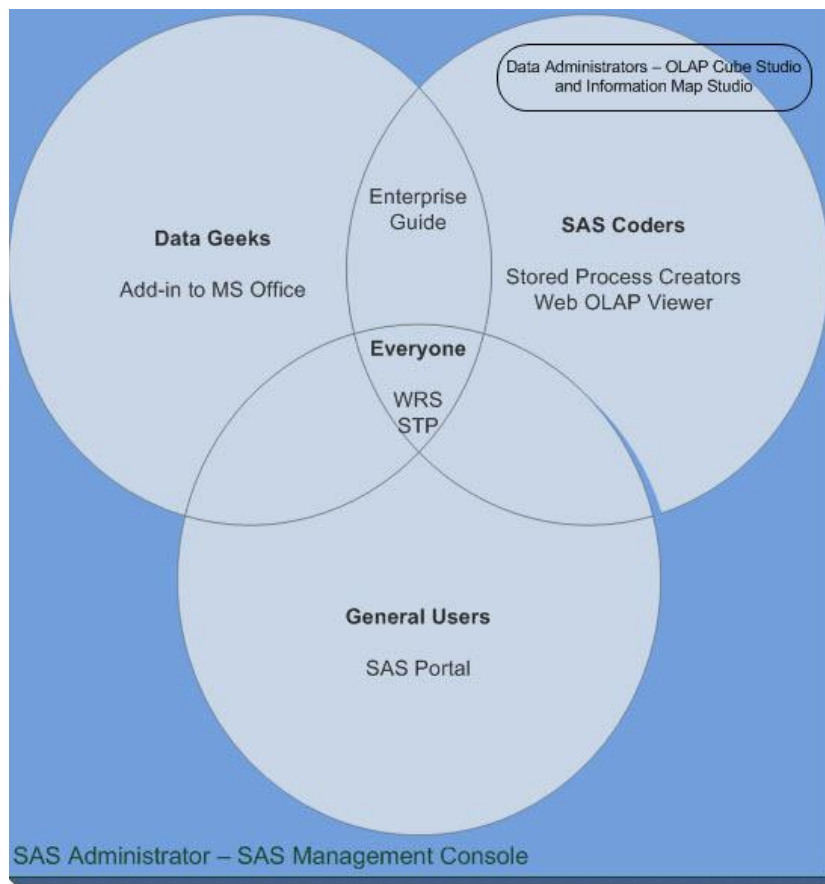
Opening an extra large dataset within SAS Enterprise Guide can take awhile. In Add-in to MS Office, users can view sections of the data at a time. Each query can take server performance time away from other activities, so is OLAP the way to go? OLAP Cubes pre-summarize data to reduce the response time for queries. SAS Enterprise Guide and SAS OLAP Viewer users or MS Excel Pivot table people can open OLAP cubes to quickly slice and dice the data to retrieve summary statistics.

Legacy SAS Code and Custom Reports

Is the report run by the SAS coder when requested by management? Is it run in a scheduled fashion and creates a huge number of individual reports for later retrieval? Or, does the report have very specific layout requirements? SAS Stored Processes could be the way to go. SAS Stored Processes enables the program to be run by users in other locations, whether from the web or within SAS Add-in to MS Office.

COMBINING EVERYTHING

In an attempt to justify how layered this is, an image is included below to designate the User Communities, Managers, and Users along with the tools that they could use.



But in all actuality, these examples and the associated image only provide a possible frame for how to structure and utilize all of the wonderful client tools within your BI environment. It is really up to you how best the organization can utilize the Power to Know.

REFERENCE

Refer to the SASCommunity.org page for the SESUG09 Presentation and additional discoveries or insights into "Navigating the SAS BI Client Tools".

http://www.sascommunity.org/wiki/Navigating_the_SAS_Business_Intelligence_Client_Tools

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Angela Hall
Zencos Consulting LLC
100 Regency Forest Dr, Suite 130
Cary, NC 27518
Work Phone: 919-459-4600
Angela.Hall@Zencos.com
<http://www.zencos.com>

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration. Other brand and product names are trademarks of their respective companies.