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Realizing Value Quickly from a Newly Installed SAS EBI Platform

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ABSTRACT

Getting a new SAS Enterprise Business Intelligence (EBI) Platform up and running is an exciting time for a company. The promises heard during the sales cycle and project demonstrations need to become actionable processes by the administrators, power users and information consumers once the installation is complete. The reality is that this can only happen with careful planning and preparation before, during and after the SAS platform installation process.

This paper will address how to plan and prepare for each phase of a SAS EBI implementation, such that, when the installation and configuration is complete; the platform can be leveraged in an organized manner. We assume that SAS software has already been chosen as the BI platform of choice and the hardware and operating systems have been decided up.

INTRODUCTION

We have all been there. Our organization purchases a new software tool, we go through knowledge transfer or training and then, **poof**, we need to utilize this tool to perform our everyday work. If the new tools are too cumbersome, users will gravitate to use the old methods to get their reporting and analytics done.

Some situations that will lead to an inefficient SAS EBI environment are:

- not mapping current needs to the BI software features and functionality
- not taking into account IT support and processing power requirements
- not setting expectations on the configuration with the installation person
- SAS EBI user groups have not been designed
- naming conventions and storage for project artifacts such as Information Maps, Web Reports, EG projects, stored processes and data have not been documented
- data has not been organized effectively and modeled to support reporting and analytics
- migration of programs or applications to work in SAS EBI environment have not been thought out
- knowledge transfer or training is not mapped to actual user's tasks
- SAS EBI users do not understand when to use what tool for which task
- SAS EBI administrators and users do not understand how to effectively use SAS support resources
- proper training has not been scheduled for SAS EBI administrators and users

CONCEPTS

As with any business intelligence platform purchase, planning is a never ending activity. Users, processes, data and existing programs and applications need to be evaluated and mapped to the new environment. The following paragraphs discuss these issues organized as a typical lifecycle for a SAS EBI implementation.

Process and Tool Mapping

In the process of deciding that a new reporting and analytics tool should be purchased, improvements over the current environment should have been highlighted. In order to realize these improvements with the new BI tool, the current tools and processes should be mapped to leverage the new environment. This may mean significant changes to processes that have been performed for years. A good way to approach this is by addressing all of your current standard operating procedures on how reporting and analysis are handled at your site. If you do not have standard operating procedures for each of your business processes, it is a good time to create them.

Following are processes that may need SOPs or Best Practices defined for your site:

- Data access
- Report specification communication
- Data analysis
- Coding standards

- Report development
 - Dev/Test/Prod required?
- Report QC/validation
- Report distribution/subscription
- Results organization

In documenting the best practices listed above, the BI tool(s) of choice should be referenced as appropriate so the users can have a guide on what tools to use for which processes.

Following are some tools that may be referenced within the process best practices:

- SAS Add-in for MS Office
- Information Map Studio
- OLAP Cube Studio
- SAS Web Report Studio
- SAS Information Delivery Portal
- Stored Processes
- Enterprise Guide

At the time of knowledge transfer or training immediately after the installation and configuration, a couple of simple standard reports should be identified to be implemented within the SAS BI platform as an example. Users will see how easy it is and that the numbers match and some initial excitement and momentum will be achieved.

Hardware and Software

SAS EBI software has been chosen and now it is time to define the hardware on which it will run. The user client machines that will be connecting to the SAS EBI platform should be evaluated although they typically do not have to be replaced; the server environment will need careful consideration and usually will require some hardware investment. It is important to realize the server architecture needed as it will be a significant factor on the price for the licensing of the platform.

- Number of concurrent users by type of user
- Amount of data used in reports and analysis
- Type of processing in reports and analysis
- Sensitivity of downtime for environment
- Number of environments (dev/test/prod)
- Future growth of users, data or functionality
- Background of support staff / approved hardware vendors
- Non-SAS software or databases running on the same server

Based on the answers to the above questions, the following attributes of the BI platform can be planned:

- Number of servers in the architecture
- Memory, disk space and CPU attributes of each server
- Type of operating systems to run on each server
- Type of web applications server(s) to run
 - Tomcat, Weblogic, Websphere
- Scalability need for architecture

Installation and Configuration

There are many details and decisions to be made during a SAS EBI installation. These are decisions that need to be monitored and documented. An expectation should be set that the technical details of the SAS EBI platform are documented and presented by the installer at the end of the installation and configuration process. The person that is slated to be the SAS Administrator needs to be a part of this knowledge transfer. Another important issue is setting the scope of the installation and configuration. The expectations on what is included or excluded may be very different between the installer and the customer.

Some tips for a successful installation/configuration:

- Leave sufficient time to acquire and configure the hardware and operating systems for the servers
- Create the SAS Software depot ahead of time
- Have the SAS SID and plan files available and reviewed by the installer ahead of time

- Read over the pre-installation checklist and make sure that the sufficient user IDs are created ahead of time
- Schedule a server administration resource to be available during the installation and configuration
- Decide how involved you want to be during the installation and configuration
- Set platform testing / validation expectations
- Set knowledge transfer / training expectations
- Select at least one simple report to have up and running on the platform. This can be part of the knowledge transfer and build momentum quickly for your BI platform.

Business Intelligence User Groups

A user's background, experience and role in the organization will usually determine the SAS EBI client applications that he/she will need to use. The SAS EBI platform has some users and groups that are there from the beginning. It is important to understand these standard users and groups before embarking on creating user groups specific for your needs.

There are some Initial SAS BI groups to understand and take into consideration during this planning stage. These are based on the SAS BI tool perspective and not necessarily on your business needs.

Initial user groups in the Management Console:

SASUSERS
PUBLIC
SAS System Services
SAS General Servers
Portal Admin
Portal Demo
WRS Administrator
WRS Report Author
WRS Advanced User
WRS Report Consumer

Depending on your processes, organization structure and security needs, you will want to design your own groups. You may already have user groups defined on your operating system that it makes sense to leverage. I would encourage you to construct groups that are easy to maintain and understand and possess minimal redundancy.

Artifact Storage

A frame work for storing project artifacts is needed as soon as possible so everything stays organized and documented. Hopefully, there is already a strategy in place for your current environment that can be used or adapted. If there are artifacts stored on client workstations, they need to be moved to a centralized network drive or server.

Data Architecture and Storage

A BI platform should run off of data optimized for the reporting and analysis. Transactional data needs to be modeled into data marts that will:

- Be centralized on the server
- minimize redundancy
- contain calculations to ease reporting
- has a purpose (do not try to build one huge data mart to serve all needs)

As with the artifacts, the data marts should not be on client work stations. A central location on the server or network drive is best. This will ensure consistency since everyone is using the same data sources.

Current Environment Migration

All systems and applications should be evaluated as far as how it fits with the new environment. It may very well be that it makes sense to keep it separate.

Ongoing Support

Just like sufficient training is necessary for an efficient SAS environment, the users must also have a good support network that is easy for them to access and use.

Leveraging SAS Technical Support

Having a good support system can really make trouble shooting system and user problems much easier. SAS has free user support that is really easy to use and responsive. If it is after hours and it involves a production system

being impacted, SAS will route you to an emergency technical support process. The following list contains just some of the ways to take advantage of SAS Technical Support.

Online Support and Documentation: www.support.sas.com
E-mail Support: support@sas.com
Phone Support: (919) 677-8008 (United States)
Tracking Issue Status: www.support.sas.com

Developing Internal Support Processes

Creating a network of resources inside of your company is typically a very beneficial scenario. Frequently asked questions and the corresponding answers for your site can be documented and pushed out to users specific for their role.

Utilizing a 3rd Party

Setting up a relationship with a SAS consulting partner, such as COMSYS, is also beneficial. Access to independent assessments, ideas, code reviews, troubleshooting, ..., etc. can create a much more robust SAS environment and users.

Ongoing Training

When users approach a problem there are often multiple ways to solve it. Understanding the advantages and disadvantages of each SAS EBI tool given the task at hand will be very advantageous for the success of each project. The best case scenario is to turn examples of their daily tasks into workshops so they can practice implementing in their own SAS EBI environment. These can be implemented as custom onsite training by a partner or internally as your team gains more experience. Regularly scheduled "classes" or lunch and learns for your team will help build knowledge and cross-training. Following is a list of some of the different types of training that SAS offers:

Public Training
On-Site Training
Self Paced E-Learning
Live Web Classes

For more information, see www.support.sas.com/training.

Another source for building knowledge is leveraging SAS books. For more information, see www.support.sas.com/publishing.

CONCLUSION

The lack of proper planning and knowledge transfer during a SAS Enterprise Business Intelligence installation project can impede the momentum of users leveraging the platform for their day to day work. With proper planning and organization for user groups, security, data, knowledge transfer and training early on, value will be recognized much earlier from the SAS EBI environment.

Communication is another important tool to keep momentum going. Everyone on your team can work more effectively if they understand each others processes and needs.

REFERENCES

SAS Knowledge Base / Install Center: <http://support.sas.com/documentation/configuration/index.html>

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CONTACT INFORMATION

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