IT Performance Reporting - Breaking Free of the Glass House

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ABSTRACT

The concept of a performance management data repository still has a place in the era of Enterprise Computing. However, if it is to be accepted and thrive it must not remain captive of the glass house.

This paper addresses issues encountered in gaining acceptance of SAS/CPE® from an increasing diverse audience of data users. Also visited are the difficulties of remote reporting of performance data across platforms, and across the network.

INTRODUCTION

SAS/CPE is rapidly becoming the premier database for analyzing IT performance, service and capacity. As it grows to support more environments, data sources and disciplines, the suite of tools we use to access and analyze the data must also grow. The number of people needing access to this data has increased until it has become impossible for the database administrator to meet their reporting needs. At the same time, the skills of these prospective SAS/CPE users are more diverse. The distribution of SAS/CPE databases onto multiple platforms, and multiple locations further complicates the task.

Back in the [good | bad] old days of the glass house SAS® was the unquestioned language of choice for Performance Management, Capacity Planning, and IS Chargeback. One or two people acted to 'administer' the performance repository, and provide report development. Today's users expect to access the data directly using tools and a platform with which they are already familiar.

The focus of the database administrator must change. Instead of being a developer, we must be facilitators providing customers with the training and tools necessary to directly access the database.

An effective strategy for supporting end-user reporting should include the following:

- A suite of proven data access tools tailored to your customers
- A usage guide to your CPE environment
- A dictionary of available data

TOOLS

Even if you only run SAS/CPE on one platform its wise to select tools which support remote access. No matter what platform you're on, at least one of your customers will insist on using their own. Also, the day will probably come when new platforms, or network loads will inspire your management to distributed your database.

When selecting reporting tools consider the three steps involved in distributed data analysis:

- Extraction / Summarization
- Transport
- Presentation / Analysis

You should select tools for each phase which are appropriate to the skill-set and working environment of your customers. Fortunately SAS offers us many choices.

EXAMPLES - TOD

Tod is a mainframe network analyst. He's used SAS for years. His platform of choice is TSO. It used to be he could get all of his data from SMF using SAS. But with the demise of the corporate SNA backbone Tod can't see any further than the gateways to the IP network. He needs access to LAN and WAN response data to fill in the missing piece of end to end response.

Fortunately the data Tod needs is available on a SAS/CPE Open Systems PDB. He signs-on to the AIX system using SAS/CONNECT®. He extracts just the traffic originating at his gateways, summarizes it to the hour, and downloads it back to MVS to be included in his SAS/GRAPH® report.

EXAMPLE - AMID

Amid is a Unix administrator. He's been tasked with analyzing performance measures from a couple of hundred mission critical servers scattered around the company. Unfortunately, his favorite measurement tool doesn't support all of the platforms in use. Anyway, collecting and managing the raw data from 200 servers would be a nightmare.

The good news is the data Amid needs is available in SAS/CPE courtesy of platform specific SNMP agents. Amid doesn't have the time to learn SAS. But, with a simple front end Amid is able to submit his own queries in

SQL against SAS. His output is delivered in the form of a tab delimited file ready for analysis with a custom Perl script.

EXAMPLE - JULIE

Julie is a contract specialist for a service bureau. When a customer inquires about the availability of their applications, she must respond with more than soothing words. Julie is a wiz with Word and Excel, but is lost in Unix.

The information Julie needs is being collected in SAS/CPE on a Unix server. But, by using SAS/SHARE*NET®, Windows ODBC, and Microsoft Query Julie is able to extract the information she needs into a spreadsheet. Minutes later she has a splashy graph ready to go into a letter to the irate customer.

OTHER TOOLS

Here are some tool combinations to consider:

Extraction / Summarization	Transport	Presentation / Analysis
SAS/Connect - RSUBMIT	SAS/Connect	Native SAS
SAS/Connect - RSUBMIT	SAS/Connect	SAS/ASSIST®
SAS/Share*Net and SQL	Windows ODBC	Any ODBC application
PROC SQL output to a CSV or other common file format	FTP	Any compatible application
Custom CGI to SAS query output to a CSV file	Internet or corporate intranet	Any compatible application

Which ever tools you select for your customers be sure to carefully test them, and document any issues.

USER DOCUMENTATION

Complete and up to date usage documentation is critical. Anticipate user questions and have all the answers in a convenient document. If your company has an intranet consider publishing there. Its a convenient way to make the information available, and to advertise your services.

Here are the basics to cover:

1. Standard reports available
2. A map of the available SAS/CPE sites and PDBs
   - 2.1. Data sources
   - 2.2. Contents
   - 2.3. Update schedules
3. Reporting tools and techniques
   - 3.1. Available training
   - 3.2. Software and hardware requirements
   - 3.3. Detailed usage instructions for each tool. Also, include a step by step usage example.
   - 3.4. Who to call for assistance
   - 3.5. Availability of sample code and utilities

Don't take short cuts. If your customers get frustrated trying to access your database you and the your company are the ones who lose.

DATA DICTIONARY

Your database is of no value if no one knows what's in it. SAS/CPE includes a data dictionary facility. However, at the time this was written there existed no mechanism to view the dictionary on a remotely installed copy of the product. In its present form the dictionary consists of tables in each PDB DATADICT library. At the least this information can be formatted and added to your user documentation. Unfortunately, the information provided with standard collectors is limited to a short description of the tables and variables.

The expertise in these data sources typically is scattered among your performance staff. Let them educate each other and you about the value of the data. This can be accomplished several ways:

- Presentations to an internal performance user group
- Articles in a newsletter
- An online bulletin board

At Hudson Williams we are considering a proposal to host a Performance Metabase. This dictionary would contain information about the data sources our consultants have encountered and usage notes on the metrics we found of most value. Something similar might prove valuable in your organization.

As our metabase matures we have considered opening it to the public. Its presence on the Internet could be of value to those searching for measurement solutions. We would also invite vendor and user participation by accepting articles and usage notes for inclusion. I would be interested in any suggestions or comments you might have.

CONCLUSION

A performance data repository is a critical component of any enterprise management suite. But to be accepted it must support the customer on his own terms.

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