Case Study: InfoLibrarian Metadata Integration Framework

Organizational History

The information systems infrastructure at University of Arizona is a complex one; the institution has mainframe applications, and intricate gateways between these legacy applications and our newer client-server applications. We have Payroll, Finance, Personnel and Student data systems in separate data silos, making it impossible for analysts in colleges and functional departments to understand data relationships and integrate this vital information.

The University Information System (UIS) was created in order to allow users in our organization to consume data from a centralized relational database with no need for mainframe skill sets. Several departments and a tremendous effort were required to build the program code that allows UIS to exist and we continue to spend significant effort on its operation. Since UIS is an un-normalized view of the transaction system, the need to define, document and communicate data relationships to users is critical.

Our Need for Metadata

A study was done recommending the need for business Meta data and data relationships to make it easier for end-users to access the UIS data. Quoting from the study…

 "Assuring that all information systems, including current and future transaction systems, provide and publish data dictionaries (to include definitions) and data models (to include entities, relationships, and possibly facts and dimensions)." And *"[to prioritize] the lack of quality Meta Data as one of the major problems with being able to use and understand our data in a consistent manner."*

Problem solved

In 2005 University of Arizona undertook a proof of concept using the InfoLibrarian product. After satisfactory evaluation and budget approval in early 2006, InfoLibrarian Enterprise Framework and Metadata Appliance were purchased and implemented, they are still in production today.

InfoLibrarian helped University of Arizona solve the following problems:

- Addresses the concerns specified in the DAP study regarding the lack of good Meta Data.
- Provides a platform to inventory, describe, and track relations among data sets.
- The online portal ensures user definitions are available and reflect how they should really be used. This avoids laborious reconciliation between reports created by different units on campus.

- The concept of Subject areas makes it easier for analysts to be more productive by showing where the data resides, what the data is, and how elements that exist in multiple systems are related.
- This platform provides an enterprise-wide Meta data service offered by the central IT organization.
- As our data management processes mature we will be able to implement the contribution management features of the framework and have subject matter experts directly edit definitions on the web interface.

Production of InfoLibrarian – Enterprise 2006

The implementation of the InfoLibrarian Appliance in its production environment was a smooth process. The team at the Information Warehouse Office really appreciates the ability to create custom excel templates to integrate the API with the popular spreadsheet given that subject matter experts are already familiar with it.

The scanning process with the customized scanner for our DEC (Oracle RDB) database allows automating the publishing of technical Meta data to the InfoLibrarian portal really easy too.

The latest upgrades of the portal code allowed us to convert our custom full-text search capabilities once and not have to worry about that in future InfoLibrarian upgrades. The skills that our department considers valuable during a InfoLibrarian implementation are advanced excel programming and ASP programming, having those skills in house was key to maximizing the value we reap from the software.

The Details:

InfoLibrarian Product used: InfoLibrarian Enterprise (Metadata Software and Metadata Integration Appliance)

Features used : Portal, Scanning, Administrator, Framework, templates

Services provided: Training and Support

Benefits for organization:

Having InfoLibrarian has significantly improved our data management practices and has been very useful in educating our technical users and raising awareness about the importance of Meta data in our enterprise systems.

Strengths:

- Ability to automate scanning and the collection of metadata.
- Adaptability and ease of the scanner templates to create new custom scanners.
- Flexibility and usefulness of the portal.

- Portal customizations are not affected by upgrades.
- API integration in excel is great when creating Meta data collection templates.
- Documentation.
- Support.

Overall the InfoLibrarian product is a platform for Meta data management that can be easily extended and customized, allowing organizations to quickly ramp up their projects and to educate and serve subject matter experts and non-technical users.

Weaknesses

The ability to do full text search with high levels of performance is key in serving our diverse user base, most of our users would not search based on a specific object name. We extended the portal code with much ease and relied on the Oracle Database's full text indexing capabilities to provide this functionality.

Vendor Support

InfoLibrarian's support is the greatest asset of their company, the Information Warehouse Office staff appreciates the level of product knowledge and quick turnaround. As our implementation has been progressed we have received great insights and attentive service throughout customizations, upgrades and minor issue resolution.

Documentation

The documentation is good. The API documentation is MSDN like and intuitive for us to be able to customize our portals and scanners without a lot of vendor help or consulting services.

Online Web training is very good and usefull. We found this to be quite effective and convenient for us. Info Librarian's staff is very knowledgeable and was able to tailor the training to meet our specific needs.

Please provide a short summary of your overall experience with InfoLibrarian.

"The InfoLibrarian Meta data repository has eased the pain for our users to access and consume the data needed for their daily operations"

-Robert Cooper, Assistant Director, Information Warehouse Office

"InfoLibrarian has been a cost-effective investment and has proven to be a solid data management tool, it has components for every level of skill from spreadsheet templates and the online portal for basic users to advanced API integration for our internal staff."

-Ignacio de la Torre, Data warehouse Analyst, Information Warehouse Office