

Fuji Film e-Systems utilizes InfoLibrarian™ for driving their Corporate Information Portal initiatives and in providing a centralized comprehensive metadata and documentation solution. When the leading, and one of the most cutting edge, digital imaging technology companies needed a centralized documentation and knowledge management solution, it selected InfoLibrarian™ to provide a comprehensive enterprise knowledge portal and metadata management solution for its technology organization.

Fujifilm e-Systems

E-Systems was acquired from Advanced Graphic Technologies (AGT) in 2000. This Fujifilm subsidiary provides software systems development, photo imaging web site development, hosting and other electronic imaging applications. Their software supports Fujifilm's Frontier Digital Lab Systems and online imaging services such as Fujifilm.Net, as well as the Web-based photo services sites of Wal*Mart, Sam's Club, Ritz and Cord Camera.

Driving Factors

The initial application for the InfoLibrarian product was intended to provide metadata and documentation targeted to support their databases. Fujifilm's database infrastructure consists of about 30 VLDB implementations on clustered servers and EMC Storage and supports millions of transactions. The databases support their online transaction processing systems and web-based photo services. The databases have evolved to be extremely complex, difficult to maintain and were essentially undocumented.

The Motivating Factors

Being a leading provider of cutting-edge products and solutions and being faced with an increasingly complex infrastructure, Fuji Film e-Systems recognized they needed to create a central repository for knowledge and metadata.

Some of the initial goals they had:

- Creation of a shared understanding of the complex systems in place.
- Documentation to support and design a more centralized and scalable architecture.
- Database Version Control.
- Improved Database Architectures.
- Configuration Management.
- Content Management.
- Source code versioning.
- Change control.
- Centralized accessible documentation.
- Ability to quickly diagnose problems.
- Reduce cost of maintenance.
- Establish history of changes made to the systems.
- Choosing a scalable solution for future growth in deployment.

They investigated several options including 3rd party products and home grown solutions, but soon found that in most cases none of the products they looked at provided any way to address the current systems they had in place and that most were cost prohibitive and overly complex. They also determined that building their own repository would take more than a year and held increased risk of failure due to their lack of experience with a repository project.

Fuji Film e-Systems made the decision to purchase the InfoLibrarian™ product specifically based on ease of use, cost value and functionality.



“It’s Like Automatic Documentation”

Georgia McCabe

Senior Vice President and General Manager

Fuji Film e-Systems Inc.

“Within days of implementing the InfoLibrarian™ solution, we began reaping the benefits of the application. As a development company with systems and resources encompassing many platforms and disciplines we needed a solution that would allow us to see our inter-related components and how they impact each other. The InfoLibrarian tool is a straight-forward tool that accomplished this with minimal training of our users and with minimal time and resources required for its implementation.”

Ryan Mills

Project Manager (Knowledge Management Initiatives)

Fuji Film e-Systems

Results

InfoLibrarian™ produced comprehensive documentation and impact analysis for the databases and stored procedures across all their environments.

The following benefits were realized:

- Provided a way to diagnose the impact of making a system change. Members of the technology organization were immediately able to see what might break when changes were proposed.
- Resulted in a 95% reduction of change related problems over a three month period.
- Enabled quick intervention to resolve performance related issues – in one week they were able to effect over 30 performance tuning optimizations and virtually eliminated a variety of nagging and persistent daily problems.
- Built instant documentation for Linked Servers, DTS Packages and SQL Server jobs.
- Showed the inter-relationships between the servers by identifying stored procedures that used linked servers to call other procedures on additional servers.
- Gathered useful metadata providing Network operations with some valuable server configuration metadata that is automatically updated. InfoLibrarian™ detailed information showing changes that were made to the system on a daily basis.
- Enabled the Database Architecture team to strategically design a more robust data model from a new understanding of their existing databases. The new architecture became reality in three months.

Fuji Film e-Systems expands the application of InfoLibrarian™

Quickly realizing the benefits of InfoLibrarian™, the application of the product was expanded to include their technical support and web development organizations. In addition to databases, these organizations support their infrastructure workhorse –an image processing farm of hundreds of servers. These Fuji Film e-Systems organizations wanted to include deployed web code, UDL files, custom scripts and registry settings in the repository and to perform impact analysis against these sources including the databases already scanned. The scanning took two days.

Scanning Process

Over a period of two days, Fuji Film e-Systems had scanned over 30,000 files across 100+ servers in three distinct environments:

Development Testing Production

The InfoLibrarian™ Auto-Rescanning process was configured to occur daily at 5 AM with a scanned history retention period of seven days. This daily scan is accomplished as a low priority system task in 35 minutes.

Immediately Realized Benefits:

"It Finds the Needle"

Christopher Kovac

Director of Digital Transport

Fuji Film e-Systems Inc.

- Performed a complete impact analysis as follows:
 - Web Code UDL Files Databases Stored Procedures
 - Custom Scripts Registry settings UDL Files Databases Stored Procedures
- Immediately identified redundancies and differences in footprints across all their servers enabling them to fix obvious problems and perform a major cleanup.
- Code Comparison feature utilized by web developers across the development, testing and production environments. This feature empowered the developers to create more efficient processes.
- Provided the ability to perform historical comparisons helping to diagnose problems, especially in cases where the occurrence of the problem was not reported or noticed for a few days.

Some example problems that were now addressable:

- Changes made that caused other new problems.
- Changes made that masked other necessary changes.
- Changes made that were not documented.

- The support organization became enabled to determine the interrelationships between the different parts of the systems they support saving them hours of labor - in some cases problems that took hours now are resolved within minutes.
- In addition to re-engineering their data model, the metadata provided by InfoLibrarian™ facilitated an effort to create a consistent deployment footprint across all servers and reduced the maintenance effort by an order of magnitude.
- Knowledge that was once known by a few persons is now available to all members of the organization eliminating considerable lost time from single points of failure.
- Time to train new employees to support current technical systems has been significantly reduced by an estimated 60%.
- The development organization has been successful in deploying a substantially improved deployment life cycle process as a direct benefit of the metadata provided through InfoLibrarian™.
- Version control and consistency was attained within the development, testing and production environments. This provided a tremendous improvement in time utilization as a fundamental achievement.
- Three sub organizations within Fuji Film e-Systems now have the same picture of the infrastructure and as a result are now actively working more closely together, designing better architectures, providing faster support response and achieving significantly more uptime across the board.



Future Plans for Leveraging InfoLibrarian™

With the building blocks in place and having reaped some of the benefits, Fuji Film e-Systems is committed to leveraging InfoLibrarian™ moving forward.

- New efforts to acquire and maintain documentation now have the assurance of a process and a solid software tool for attaining those goals.
- Efforts are underway by the technical support team to integrate server configuration management within the InfoLibrarian Portal and Repository.
- Quality Assurance is expanding their use of InfoLibrarian™ to help them identify changes made to systems and to better understand the systems they are testing.

Summary

The strongest benefit has been to help Fuji Film e-Systems break through the paradigms that were preventing them from moving forward with more strategic projects such as improved architectures, data warehousing, knowledge management and business intelligence. Today these initiatives are under way and headed for success.

InfoLibrarian™ provided this by:

- Creating Documentation for the systems they had in place.
- Automating the metadata collection and maintenance.
- Keeping historical scans.
- Enabling the establishment of Version Control.
- Providing a portal that the users found easy to use.
- Providing Information and metadata to support architectural work.
- Providing Centralized Document management and document searching technologies.

As Fuji Film e-Systems moves forward with future projects, InfoLibrarian™ will continue to empower the users of their enterprise in attaining both daily tasks and strategic initiatives. InfoLibrarian™, both today and in the future, is vital in maintaining their ability to be competitive in their marketplace by supporting their enterprise initiatives and by providing them with a centralized comprehensive metadata and documentation solution and Corporate Information Portal.