

- *Software Architect specializing in Documentum since 1994 with finance, pharmaceutical, and computer industry experience.*

## Document Management Expertise

- Enterprise Integration
- Collaboration
- Transactional Content Management
- Records Management
- Legacy Migration
- Web Content Management
- Business Process Management
- Document Capture
- Compliance
- Regulatory Publishing

## Documentum Expertise (2.0 to 6.0)

### Design

- Object Type Modeling
- Security & Authentication
- Virtual Documents
- Relations
- Lifecycles
- Workflows
- Distributed Content
- XML Applications
- DBOF
- Aspects (6.0)

### Programming

- Perl + DMCL
- IDQL & IAPI
- Java + DFC
- Gawk + DMCL
- Jython + DFC
- Visual Basic + DFC
- DocBASIC
- DFS (6.0)
- WDK
- SQL

### Applications

- Application Builder
- Webtop/DA
- Desktop Client
- Workflow Manager
- Web Publisher
- Composer
- Captiva
- Workspace
- Rightsite
- DocLoader

## Software Development Expertise

### Design

- UNIX
- UML
- MVC
- SOA
- OO Patterns
- Web Services
- J2EE

### Programming

- Perl
- Java
- shell
- Python
- C
- JavaScript
- Visual Basic

### Markup

- XML
- HTML
- CSS
- DTD
- XML Schema
- SOAP
- XSLT

### Tools

- UNIX
- Eclipse
- CVS
- make
- Enterprise Architect
- ant

## EXPERIENCE

---

### **FINRA (2008-Present)**

Designed a series of solutions for this NGO securities regulatory agency, many around a year-old merger gearing up to meet end-of-year deadlines. Evaluated and refined client's SOA wrapper over DFS (6.0) created to address first-release shortcoming in the new API. Introduced security patterns and type hierarchy modifications to facilitate client's desire to store all content in a single repository. Specific design projects included the following:

- Simple docbase application to archive former-NYSE information request system.
- More complex application to port legacy app's functionality to a vastly different, highly componentized architecture.
- Unified case management model to replace the original department-specific Documentum solution after merger-related projects taper off.
- Modifications to extend the department-specific case management solution to meet aggressive deadlines for migrating other groups' legacy content.
- A business-specific facade using the DOA wrappers to grant the case management portal limited docbase access for daily activities not requiring Webtop.

### **Morgan Stanley (2004-2007)**

Returned to Morgan Stanley to work for a variety of business units and IT departments, functioned as an enterprise-wide liaison as well as an architect, developer, and infrastructure historian. Projects included:

#### **Alternative Investment Application**

- Analyzed existing system and designed process improvements to optimize document capture, reconciliation, and search functions. Enhanced transactional records management system. Redesigned docbase organization (folder structure, custom types, security model, etc.) to facilitate easy migration and siloing of new/legacy investment vehicle types/departments.
- Developed the repository and technology-agnostic services to manage transactional document generation and record capture for cutting edge electronic hedge fund/private equity client in take system. Mentored developer teams to unify multiple workflow systems across the take-on process using a Webtop/Savvion web service integration.
- Architected a common web services approach for integrating a series of stand-alone web applications covering client and investment processes for private equity and hedge funds. Evangelized this approach to improve user acceptance and to reduce development times for all future document management endeavors.

## **Credit Risk IT**

- Developed software and process improvements to the Senior Loans record management system including a new security model, new custom types, organization/metadata redesign, and lifecycles for the capture, quality assurance, and auditing. Addressed special auditing concerns for MS Bank who, as a bank, is subject to yearly external audits by a variety of federal and state regulatory agencies.
- Improved the cross-system integration of docbases into firmwide databases and web portals. Provided a strategy for reintegrating these docbases (they originally been linked via object replication) and the regional user communities in New York, London, Hong Kong, and Tokyo, whose business processes had drifted after after disabling object replication.
- Architected new integrations between the senior loans record management system. Designed an XML feed-based system for harvesting syndication documents that the vendor implemented and now provides to other businesses. For LoanIQ, designed a services-based interface to integrate the planning/tracking features of the product with the actual documents stored in the docbase thereby replacing a time-consuming and personnel-intensive manual process.

## **Center of Excellence for Content Management (IM CoECM)**

- Mentored the startup of the fledgling CoECM including transitioning existing docbases from company-wide management to CoECM, setting up the first multi-app webtop plant within Morgan Stanley, and guiding onshore team and offshore partners through the highly custom Documentum infrastructure at Morgan Stanley.
- Architected a web content management system with Web Publisher for the IM marketing website including template-generated content, internationalization, and integration with custom Morgan Stanley systems on both ends (portal software and web content delivery).

## **Documentum Engineering Group (dctmeng)**

- Engineered new Documentum features to work with a highly custom Documentum infrastructure, nicknamed Morganization. In the case of distributed content, worked with Documentum to fold improvements to the content replication process into subsequent releases of the server, fixing a long-standing database locking problem suffered by all non-Oracle installations.
- Supported the 5.2.5 server upgrade of 100+ docbases by developing software and procedures to diagnose and repair issues impacting upgrade readiness. Provided emergency room services during the more difficult upgrades over the eighteen month effort.

## **Fidelity Investments (2003-2004)**

- Designed and developed the Plan Sponsor Workstation (PSW) Collaboration application which enabled collaboration between Fidelity personnel and clients on documents.

- Created a multi-tier architecture to allow maximum flexibility by supporting multiple interfaces into the back end and providing an abstract layer so Documentum could be switched out for another solution with minimal impact to the web application.
- Overcame unique challenges created by client's custom environment: Custom authentication and authorization services, single sign-on, content-addressable storage, virus scanning, WAN and SAN charge backs.

## **GlaxoSmithKline (2002-2003)**

The client's post-merger restructuring required reshuffling over ten million documents between legacy docbases, standardizing business procedures, and improving end-user access.

Accomplishments included:

- Designed a docbase schema to merge legacy docbases, support new business rules, and handle a diverse set of electronic documents and physical items stored in the archive.
- Implemented a cross-platform global system architecture that allows work to continue during docbase down times and frequent site-to-site network outages.
- Designed and prototyped a web services interface to allow universal access and allow concurrent application development—client, web, and migration.
- Mentored application teams, most of whom were new to Documentum and building document management systems.
- Performed business analysis to not only develop software requirements but also improve processes.

LDAP Authentication System: A corporate alliance between GSK and Bayer required sharing marketing documents via a pair of replicated docbases, one in each company's network. Security concerns on both sides created complex networking issues and the need for a new authentication scheme. (This was a featured topic at the Documentum user conference in 2002.) Specific tasks included:

- Wrote custom LDAP schema and configured openldap.
- Wrote synchronization script to migrate existing Documentum users into LDAP.
- Wrote cgi web application to handle routine administrative tasks and allow users to change their own passwords.
- Helped docbase and network administrators configure object replication and federations while untangling some sticky extranetworking issues.

## **Morgan Stanley (2001)**

The Investment Banking Division (IBD) creates documents and presentations for clients, often collaborating globally and making use of OLE linking in Office documents. The existing FileNet system using FileNet was little more than a shared area that caused data redundancy and couldn't interface with other systems within Morgan Stanley.

- Developed a new process for handling linked documents after extensive business and technical analysis. Educated senior management and provided a risk/benefit analysis for the project.
- Wrote VB libraries so client developers had a simpler, more consistent interface to linked document management.
- Modified Desktop Client components to fulfill requirements.
- Worked with Documentum to resolve bugs and improve linked document management in the Desktop Client environment.

Compliance Inquiries System: With its paper-based system overloaded, Compliance needed an electronic system quickly. The department already had experience using other departments' docbases but had problems with maintaining these applications on their desktop configurations.

- Designed a system using out-of-the-box virtual documents to manage collecting supporting materials and generating responses, leveraging the client's investment in Documentum Desktop Client training.
- Minimized customizations to mitigate department's problems with desktop computer equipment and configuration.

Docbroker Switcher Application: The client created a series of docbrokers based on business unit and geographical location to make it easier for users to find their docbases. As more users needed to access docbases across business units, they needed a tool to change docbrokers at will.

- Designed an XML description of docbroker-docbase-department relationships. The client's custom administration tool was then customized to create the xml and make it available via http.
- Wrote an application to read the XML description and provide a search interface for users to choose a new docbroker based on their search criteria.

## **SmithKline Beecham/GlaxoSmithKline (2000-2001)**

While creating reports and data had been standardized and centralized, Regulatory Affairs groups in different companies still used various home-grown publishing solutions. Network shortcomings prevented every group from leveraging a completely centralized system, and the enterprise was considering standardizing on CoreDossier.

- Proposed changes to the system architecture to support local publishing nodes while still leveraging the centralized R&D document repository.
- Acted as liaison between R&D and Regulatory Affairs technical teams, breaking down a long-standing wall between the groups.

Financial Data Warehouse The Java/xml prototype was developed under Windows. The developers needed help to migrate their software and development processes to the production environment, Solaris.

- Assisted with Java porting issues.
- Implemented UNIX-based source control and build processes.

- Provided UNIX expertise and helped developers come up to speed on UNIX.

Merger Impact Analysis: Complicated legal prohibitions around knowledge exchange presented a unique twist to an already complex problem: Create a strategy to merge the document management systems of two companies with radically different system designs, network infrastructures, and business practices.

- Reverse engineered the design of foreign document management systems.
- Provided contingencies for meeting day one, day one hundred, and year one compatibility targets.
- Gave former-Glaxo engineers a crash course in former-SB's document management system and how to interface their applications with it.

### **AllBusiness.com (2000)**

A growing Internet startup outgrew using shared folders for managing site content and chose Documentum for their new content management system. Heavy reliance on server-side includes and reusing code/page fragments complicated their otherwise vanilla content management requirements.

- Customized desktop client component and managed the infrastructure/roll-out of the desktop client to the content specialists.
- Created a simple cgi web app to simplify the build manager's job.
- Hand-holding during the site redesigns.

### **DuPont DeNemours/Andersen Consulting (1999)**

Reorganization and outsourcing left duPont's document management practice backlogged and understaffed. Capable but inexperienced with Documentum, they required more than another set of hands for long-term success.

- Mentored the six-person document management practice (a mix of dba's, project managers, and developers) on a variety of other projects.
- Designed workflow and wrote workspace customizations for the review and approval cycle of manufacturing SOPs
- Implemented a system for offlining content to an optical disc jukebox.

### **Altro Solutions (1998-99)**

This West Coast Documentum signature partner had recently opened an East Coast office and was growing an international Documentum practice.

- Performed technical analysis of Documentum's internal knowledge management system to upgrade and enhance it.
- Provided a custom C interface for Excalibur Technologies to interface their search engine product with Documentum.

- Assisted in the design of a rightsite-based SOP management system for AT&T.

### **SmithKline Beecham (1994-98)**

This major pharmaceutical company was an early adopter of Documentum and they embarked on an ambitious project: Managing the collection of data, authoring of reports, and assembly of dossiers using leading edge technologies like Documentum and SGML. The resulting system is perhaps one of the largest working docbases with 20 million objects and terabytes of content.

- Designed and implemented the server programming infrastructure: source control, build management, core libraries, and a process/status management system.
- Led a team of developers in the creation of a cgi-based web interface allowing access by all of R&D without the expense of putting Workspace on every desktop. This success led to the creating a series of websites customized to focus on particular business units' unique needs.
- Designed and build a batch data collection system allowing both legacy and new systems to automatically load huge volumes of statistical data and graphs.
- Designed and implemented a system for authoring regulatory reports in Microsoft Word, converting them to sgml, and repurposing them for archiving, publishing, and web delivery.

### **Commodore Business Machines (1990-94)**

One of the first personal computer manufacturers, Commodore was a hot bed of new and exciting technologies like multimedia, desktop video, gui, and true multitasking.

- Created test plans, wrote test scripts and performed quality assurance on the Amiga operating system, AREXX, and AmigaVision, an icon-based programming language.
- Supervised and supported third party software developers working on titles for CDTV, a hybrid computer/television appliance.

### **EDUCATION**

---

Bachelor of Science in Computer Science, Ursinus College (1998).

### **AREAS OF RECENT INTEREST**

---

- New models for publishing and collaborating: Blogs, wikis, Google Docs.
- Alternative Operating Systems: Mac OS/X, UNIX, cloud computing, iPhone 2.0.

---

Copyright © 2008 John Kominetz. All Rights Reserved. Modification of this document and distribution of derived works without the knowledge, review, and express consent of the copyright owner is strictly prohibited.

---