Shared Web Services: The New Frontier in Government

TASSCC Technology Education Conference
Austin, Texas
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Bill Chambers – VP, Government Consulting Services
Objectives

The primary objective of this session is to discuss the use of content management solutions deployed as a shared services platform; collaboration solutions such as SharePoint; the integration required between content and collaboration solutions; and the “virtualization” of the government workforce through the use of collaboration and related technologies.

Specifically Doculabs will:
- Provide an overview of Doculabs
- Discuss trend in offering content and collaboration services as shared services
- Provide State, Agency-Cluster, and Agency Case Studies
- Discuss best and worst practices
- Answer any and all questions
About Doculabs
Introduction to Doculabs

Doculabs is a small business consulting firm providing services related to digitization and process optimization/automation of documents and records. We offer consulting services particularly to support paperless, electronic health record and process optimization initiatives as well as compliance and records management programs.

Our services help the government lower costs, increase transparency while improving inter-agency and inter-departmental communications in the government sector.

Our engagements help clients leverage their existing ECM investments on a broader enterprise basis through objective analysis and in-depth market knowledge. This approach is based on our fundamental belief that in order to protect a client’s long-term interest, technology advisors should not be implementers.

Quick Facts

• Founded in 1993
• Headquartered in Chicago
• Privately held
• Delivered more than 800 ECM engagements
Doculabs’ State and Local Government Clients

- Bay Area Air Quality Management
- Bexar County, Texas
- California Administrative Office of the Courts
- California Board of Equalization
- California State Teachers Retirement Systems
- Central Arizona Project
- Collier County, Florida
- City of Amarillo
- District of Columbia
- Georgia Department of Revenue
- Gwinnett County, Georgia
- Lake County, Illinois
- Los Angeles County
- Los Angeles County, Information Systems Advisory Board (Criminal Justice Agencies)

- Miami-Dade County
- Michigan Department of Transportation
- Minnesota Department of Transportation
- NYC Campaign Finance Board
- NJ TRANSIT
- Oneida Nation, Wisconsin
- Orange County, California
- Oregon Department of Transportation
- Oregon Public Employees Retirement System (OPERS)
- San Antonio City Public Service
- San Diego County
- State of Florida
- State of Michigan
- Wisconsin Department of Transportation
Doculabs’ Federal Government Clients

- Department of Energy
- Federal Reserve System
- International Monetary Fund
- NASA
- National Association of Record Archives
- Nuclear Regulatory Commission
- Small Business Administration
- Social Security Administration
- United States Army Corps of Engineers
- United States Sentencing Commission
- Westinghouse Savannah River Project
Content and Collaboration as Shared Services
The Content and Collaboration Shared Services Concept

• Content Management and Collaboration Infrastructure Hosted by Central IT

• Agency Clusters, Agencies, and departments use hosted content management and collaboration services as needed
  – Case Management Applications
  – SharePoint Intranet and Collaboration
  – Email and Record Management
  – Document Capture and Storage
What’s Required?

- Demand analysis and business case from state, agencies and departments
- Centralized IT organization focused on shared services
- Enterprise Shared Services Architecture Model
- Vendor solutions standards
- Enterprise and agency-level taxonomy
- Effective and fair chargeback model
- And most importantly – *Executive Management Support!*
Shared Services Case Studies
State Shared Services – District of Columbia

**Keys to Success:**
- Mayor’s Office support
- ECM Strategy Across Twenty Key Agencies
- ECM Shared Services staffing and infrastructure
- Document standards, regulations, and policies Reviewed
- Chargeback and financing Model
- ECM Shared Services Reference Architecture
- Deployment planning (by cluster and replicable application)
- Enterprise and Agency-Level Taxonomy

**Current Challenges:**
- Resources and funding
- Focus on agencies with funding
State Shared Services Case Study

Shared Services Target Application Architecture
Sample County Government ECM Deployment Strategy

### Deployment Schedule

<table>
<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
<th>3Q 2005</th>
<th>4Q 2005</th>
<th>1Q 2006</th>
<th>2Q 2006</th>
<th>3Q 2006 and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case File Management Pilot</td>
<td>The need for case file management has been identified for several departments including pilot for Department of Human Services and a similar application for OGC. The Department of Human Services jobs will help on the County standard for case file management.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Contract File Management Pilot</td>
<td>Office of Contracting and Procurement has identified an effort to move with a new, multi-functional file management solution. The implementation will establish standards for other contract file management applications identified in the County.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Direct 115 Law, and Regulation Management Pilot</td>
<td>Multiple departments of the County have the need for this application, with County Sheriff Department being the leading candidate in terms of volume and need. This pilot will also develop a cross-departmental case file management application.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>E-Forensics Implementation Pilot</td>
<td>This pilot involves implementing a forensic solution within Department of Consumer and Regulatory Affairs to support improved customer interaction. This project will serve as the first implementation of a case file management system as a standard across all other departments.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Workforce Implementation Pilot</td>
<td>The project involves implementing a workforce solution within Department of Human Resources to support improved customer interaction. This project will serve as the first implementation of a case file management system as a standard across all other departments.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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</tr>
<tr>
<td>Workflow Implementation Pilot</td>
<td>This project involves implementing a workflow solution within Department of Human Resources to support improved customer interaction. This project will serve as the first implementation of a case file management system as a standard across all other departments.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>E-Forensics Implementation Pilot</td>
<td>A federated repository that integrates ECM technologies with operational systems is important for improved efficiencies. Department of Insurance and Securities will incorporate these concepts in such a way as to provide best practices for other departments to follow.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Taxonomy Development</td>
<td>A multi-taxonomy is key to implementing Documentum enterprise technologies such as ECM. Developing consistency, focusing on document lifecycle definition, and defining requirements for the pilot, and ensuring that a common taxonomy and content organization approach is being delineated as part of the ECM application is critical to other departments.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Reference Architecture (RA) Development</td>
<td>The project involves developing an initial high-level ECM RA. Governance and process technology decisions moving forward, the County should develop a comprehensive ECM RA, including policies, roles, responsibilities, and key areas.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Center for Shared Services</td>
<td>To support the complex set of ECM technologies, the County will develop the Center as a central point of knowledge, consulting services, application support, and best practices that can be leveraged across all departments.</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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</tbody>
</table>

**Phase II**

- **Horizontal Application Deployment**
  - **Enterprise Deployment Planning**
    - Evaluate the pilot and enhance the project, and determine how to proceed with further pilots across the County, shift the overall pilot to the next level, and make recommendations for the next pilot.
  - **File Storage and Retrieval**
    - This phase is focused on document management, including the file storage and retrieval aspect. This phase aims to leverage knowledge gained from previous pilots and enhance file management applications.
  - **Case File Management**
    - System 1 is the initial candidate for Case File Management in the County. System 1 is determined by the County to be the initial system for the development. System 1 is designed to manage and support the ongoing management needs of the ECM solution.
  - **Case File Management**
    - This phase involves developing a solution that can easily scale to meet the needs of the County. This phase focuses on developing an efficient solution that can be implemented across all County departments.

**Vertical Application Deployment**

- **E-Forensics Implementation Pilot (Additional to Other Applications)**
  - For applications that require additional integration, each phase will focus on developing a solution that can be easily scaled to meet the needs of the County. This phase focuses on developing an efficient solution that can be implemented across all County departments.
- **Reference Architecture (RA) Development**
  - The project involves developing an initial high-level ECM RA. Governance and process technology decisions moving forward, the County should develop a comprehensive ECM RA, including policies, roles, responsibilities, and key areas.

**Legend**

- **Project Scope and Charter**
  - Develop the project scope and charter, including creating a roadmap for small and medium-sized departments. Develop the application roadmap, and outline the scope.
- **Requirements / Business Analysis**
  - Develop detailed requirements for the application. When applicable, perform market analysis of existing systems in paper, electronic forms, or document management systems.
- **Solution Evaluation / Selection**
  - As applicable to the solution, determine appropriate solutions or purchase options to apply to the specific problems, using County standards.
- **Hardware / Software Implementation**
  - Implement the solution using appropriate software selected in the solution evaluation. Utilize existing hardware, or replace and deploy new hardware in increments.

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State Shared Services – State of Minnesota

- Content Management and Collaboration Infrastructure Hosted by Central IT
- ECM Shared Services Staffing and Infrastructure
- Started in 2006
- Commerce and MNPERS are participants
- Still multiple agencies with multiple ECM systems
- Deployment Issues:
  - Lack of agency business case and marketing
  - No shared services chargeback model
ECM Shared Services – Los Angeles County

**Keys to Success:**
- Developed an ECM Strategy and application demand across twenty-two key departments
- Identified specific ECM components that can be deployed as shared services in multiple applications for multiple departments
- Completed an ECM shared services architecture model and conceptual design using Microsoft SharePoint as a front end and another ECM solution (as selected by department cluster) as the back-end

**Current Challenges:**
- Completing Board of Supervisors approval
- Acquiring funding for centralized IT shared services organization
- Developing centralized SharePoint expertise
Shared Services Conceptual Design

Example Application 1—e.g. Access Privilege
Components of the DRP solution set may still reside outside of business applications or ECM solutions. Services such as user access privilege is a common example.

Example Application 2—e.g. GIS
When most of the business logic and value of the application comes from non-ECM functions is likely the solution will just call ECM client services, exposing contents or perhaps some additional metadata or some specific ECM functionality (appropriate metadata for a document type is required of a collaboration template etc.). Some applications such as the GIS applications, will rely only on the ECM system to manage linked content, such as digital images. The GIS applications would preferably manage everything else.

Example Application 3—e.g. Case Mgt
Prior to PALMS, DRP may need to rely on a more self-contained application "in" the new ECM tool, instead of a combination of collaboration and ECM solutions. Anticipate utilizing the user interface, case management business functionality, limited workflow and the repository for a steams store for documents and images until it makes sense to archive to the most robust platform from the collaboration solution.

Example Application 4—e.g. Specialized Search
It will still be possible to create specialized applications which have little internal functionality and rely on the major solution platform (collaboration and ECM) to deliver the major functionality. This example provides a self-contained search user interface, integrating through available document folders.

Example Application 5—e.g. ECM-centric solution
Some applications will leverage as much of the native ECM suite of functionality as possible, from user interaction to workflow to perhaps learning the core business data as the standard database engine. These sorts of applications are more common when the application requires the complete suite of ECM services and is often offered only by the power-users of a given application. This might include a customized interface that seamlessly integrates with the core services, where they need a number of specialized functions that other users do not.

These applications would use the full stack of ECM services.

Legend
- Leverage this approach
- Proxy or secondary approach
- On/off or retiring interface

This is the preferred approach if this component is needed.

This approach acts as the proxy, calling the functionality that exists somewhere else in the environment. Or could define a solution that, for some purposes, maybe this is the best option over the preferred solution, for some reason.

Only use this approach if alternatives are not yet possible.
Agency Cluster Shared Services – LA County ISAB

- Information Systems Advisory Board (ISAB) provides technology strategy and shared services applications for all criminal justice departments (including Superior Court, Sheriff, District Attorney, Public Defender, Probation, Coroner)
- Implemented a case file scanning center as an outsourced service
- Developing common ECM applications on the shared services infrastructure
- ECM shared services architecture model
Agency Cluster Shared Services Case Study

Criminal Justice Shared Services Framework

This diagram represents the target applications in the justice agencies. Each application is presented with a modified Enterprise Reference Architecture (ERA) visual summary of the core components in play in the application.

The ECM components include:
- Imaging (I)
- Document Management (DM)
- Electronic Forms (F)
- Digital Asset Management (DAM)

The BPM components include:
- Workflow (W)
- Process Automation (PA)

Integration Services is noted as a separate area.

For each application, these ERA components are shaded when these components are enabled in specific applications, or left clear (white) for areas not used in the application. This provides a view of technology coverage across.

The Blue and Green color scheme is used to represent Existing or Active development vs. Future planned development.

Applications being actively developed at the beginning of this strategic planning cycle are framed in blue, while applications to be actively developed during a later stage of this strategic planning cycle are framed in tan. The same scheme applies for interfaces.
Agency Cluster Shared Services – LA County ISAB

**Keys to Success:**
- All criminal justice departments contributed money to creating ISAB
- ISAB is its own entity with full time staff of management, programmers, consultants, and support
- Success in finding supplemental outside funding
- Created their own long range systems plan

**Current Challenges**
- *Cooperation from the CA court system*
- *County Funding cuts*
Agency Shared Services – Oregon DOT

- State of Oregon has standardized on a single ECM vendor and is building out the state-level infrastructure
- ODOT Concept of Operations developed for their shared services organization
- Developed an ECM shared services architecture model
- Deployment planning (replicated applications)
- Enterprise and department-level taxonomy underway
- Implementing a Right-of-Way shared services application for retrieval of all property documents which will be incorporated into project collaboration applications
## Program Plan Roadmap: Project List

### ECM Strategic Roadmap

The chart below identifies nine projects that ODOT recommends prioritizing. Six of these projects are foundational projects to ensure success of the future state, and three projects are ECM services or application implementations. The chart describes each project and highlights its strategic benefits, and relative cost. The project numbers in red are foundational projects, while those in green are ECM services or application implementations.

<table>
<thead>
<tr>
<th>ECM Project</th>
<th>Description</th>
<th>Benefit</th>
<th>Cost</th>
<th>12 months</th>
<th>24 months</th>
<th>36 months</th>
<th>48 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Development of Document Policies and Procedures</td>
<td>* Develop policies, procedures, and guidelines for the use of content across ODOT</td>
<td>* Support taxonomy and “mid-in-field” content</td>
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</tr>
<tr>
<td>2 Taxonomy Development</td>
<td>* Develop an agency and department-level taxonomy, focusing on those departments with new ECM application add-ons</td>
<td>* Support ease of use</td>
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</tr>
<tr>
<td>3 Governance/Structure Development</td>
<td>* Develop an ECM Program governance structure</td>
<td>* Consistent maintenance environment</td>
<td>$</td>
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</tr>
<tr>
<td>4 ECM Reference Architecture Development</td>
<td>* Create ECM reference architecture models to support the ECM Program</td>
<td>* Technology roadmap for all subsequent services and applications</td>
<td>$</td>
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</tr>
<tr>
<td>5 ECM Technology Infrastructure Upgrade</td>
<td>* Implement enhancements to the core FileNet P8 platform (e.g. Email Manager, Event Manager, Records Manager, Records Manager)</td>
<td>* Base infrastructure and development platform for all ECM services and applications</td>
<td>$</td>
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<td></td>
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</tr>
<tr>
<td>6 Portal and Intranet Services Deployment</td>
<td>* Leverage experience from BORE project</td>
<td>* Support self-service</td>
<td>$</td>
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<td></td>
</tr>
<tr>
<td>7 E-Forms and Workflows Deployment</td>
<td>* Implement e-forms and workflows for high-priority departments</td>
<td>* Automate additional processes at ODOT</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 continued Taxonomy Development</td>
<td>* Develop the taxonomy for the remaining departments</td>
<td>* Support ease of use</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Records Management/Governance Deployment</td>
<td>* Implement the records management solution for the agency (excluding integration with Event Manager and Content Manager already implemented)</td>
<td>* Provide comprehensive records management functionality for the agency</td>
<td>$</td>
<td></td>
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</tr>
</tbody>
</table>
Agency Shared Services – Oregon DOT

Keys to Success:
- Rapid standardizing on an ECM vendor
- Focused shared services group with years of experience and working together
- State funding has been generous
- Focus on completing technical architecture and taxonomy work before deploying agency-wide applications

Current Challenges:
- Competition in resources from other projects
- Identifying shovel-ready projects for Recovery Act funds
Summary

- Content and Collaborative Shared Services is an increasing trend in the government sector at all levels
  - Reduces hardware, software, training, and support costs
  - Encourages collaboration within and between agencies
  - Encourages and enhances sharing of information and process optimization between agencies with more efficient delivery of public services
Summary

• Success in implementing shared services is a result of:
  – Demand analysis and business case from state and agencies
  – Centralized IT organization focused on shared services
  – Enterprise Shared Services architecture model
  – Vendor solutions standards
  – Enterprise and agency-level taxonomy
  – Effective and fair chargeback model
  – Stable funding source
Thank You

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