

Y-12

**Oak Ridge
Y-12
Plant**

Computer Based Tools for Rightsizing Business
Processes: A Second Report on the Electronic Information
Content Management System (EICMS)

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Introduction

Downsizing, rightsizing, re-engineering - whatever you call the process, is a corporate movement that focuses on doing more with less, better. Corporate business processes must change dramatically to meet the challenge of doing-more-with-less-better. Computer based tools are essential to these process changes. The business process of information and records management is in a transition from traditional, paper based systems to automated, computerized ones which feature life cycle management, decentralized responsibility, and outsourcing. An enterprise wide computerized records management system supports doing more with less, better.

The Electronic Information Content Management System (EICMS) is a computer application for integrating records and information management. Its operation and development in the client/server environment using Oracle tables, a WWW interface, and radio frequency bar coding was presented at Inforum '97. (1) This paper will report on the latest developments in EICMS, including document control, change request management, and its role in the Configuration Management (CM) Program at Lockheed Martin Energy Systems (LMES).

EICMS Review

EICMS is a tool that documents the tasks, actions, and information of the LMES Records Management Program. Following the NARA records management model for federal agencies, EICMS contains the applicable DOERS, GRS, and Lockheed Martin records schedules, LMES series and inventories, and metadata on 30,000 boxes of inactive records. The database is integrated with radio-frequency bar coding equipment used in LMES inactive record centers. A client-server application is used by records management staff to maintain and update the records inventory, while a web application, RAILS (Records and Information Locator System), is used by general staff. EICMS manages the processing of records eligible for destruction.

Configuration Management

The most recent development in EICMS is in Configuration Management documentation in Enriched Uranium Operations (EUO) at Y-12. [DOE-](#)

[STD-1073-93-Pt.1](#) defines Configuration Management as "an integrated management program that establishes consistency among design requirements, physical configuration, and facility documentation, and maintains this consistency throughout the life of the facility as changes occur. The CM program consists of CM requirements, document control, change control, and assessments." (2) EICMS has been selected to pilot a compliant CM program at Y-12. EICMS provides a system to track change control and ensure document control, two major components of the CM program.

The EICMS Client's Role in CM

The EICMS client is primarily a maintenance tool for the change request and document data. Only the change control and document management staffs have access authority.

Change control encompasses identifying changes, performing technical review of changes, performing management review of changes, implementing changes, and documenting changes. (2) EICMS change request information that is tracked includes the responsible engineers, maintenance and engineering work orders, actions, dates through to closure, and the scope and location of the change. Documents that are affected by this change are associated to the request through EICMS.

Document control identifies the types of documents and specific documents to be included in the CM program, stores and controls access to documents, tracks the status (especially during revisions), and retrieves them in a timely manner. (2) EICMS provides the ability to identify types of documents, to identify specific documents and each revision and its status, to maintain distribution lists, to generate transmittal logs for documents, to acknowledge receipt of distributed documents, to send subsequent notifications of overdue acknowledgements and to de-control copies of documents. EICMS sends notification of revisions via email as well as hardcopy. Much of this activity is automatic, based on established business rules.

Role of the WWW

Several web applications run on the internal LMES server to provide access to EICMS information to all employees with valid user identifications. All information provided by the web pages is real-time data from EICMS Oracle database. Engineers and managers obtain change request statuses. Operations staff verifies and registers their working copies against the latest effective documents in EICMS using the web. Current indexes of the controlled manuals are available immediately. The revision history of any document can be reviewed on the web.

Reports from the Oracle Tables

Reporting from the EICMS data is provided by an off the shelf software package (COTS), Crystal Reports (CR) (3). Pre-designed reports in the client produce hardcopy printouts at local workstation printers. CR is also used to do ad hoc cross cutting querying from the database and to generate frequently used reports as runtime versions distributed to the desktop (i.e. QA reports.). CR is used to format data returned from ORACLE to the web pages.

EICMS Advantages

The EICMS application provides many efficient advantages through its use of current technology. Being networked and server based utilizes the installed base of workstations and their inherent computing power. Web access minimizes the purchase of costly workstation software licenses, while providing maximum flexibility in granting access to data. Use of COTS for output formatting harnesses the expertise and development budget of an entire company and puts it to work for us at a fraction of the cost in dollars and time it would take for internal developers. The resulting data is integrated with other corporate databases. And, records management is almost automatic.

Future Development

Future plans for EICMS include enhancements to RAILS to provide transfer of inactive records from the field to the record center using the web

including online, searchable indexes to the box contents. More challenging organizationally is the addition of electronic full text, a classified implementation, and integration with SAP.

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