



# 3Nexus Enterprise Content Management Case Study

Your Results.  
Our Commitment.



Fusion is a framework for delivering successful Enterprise Content Management (ECM) solutions for regulated industries:

- ◆ Pharmaceutical
- ◆ Oil and Gas
- ◆ Telecom
- ◆ Nuclear

The application suite enables organizations to automate everyday document control operations and document-centric business processes using a standard web browser.

|                         |                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Industry</b>         | Software Providers                                                                                                                                      |
| <b>Solution</b>         | Enterprise Content Management System                                                                                                                    |
| <b>Services Used</b>    | Consulting/ Custom Software Development                                                                                                                 |
| <b>Technologies</b>     | Net Technologies: ASP.NET, Web Services, Java Applets<br>Programming Languages: C#, Java<br>Database Server: MS SQL 2000<br>Application Server: IIS 6.0 |
| <b>Engagement Model</b> | Fixed Time                                                                                                                                              |
| <b>Efforts</b>          | 150 man-months                                                                                                                                          |

### Key Features:

- ◆ Content Management
- ◆ Drawing and Document Control
- ◆ Correspondence Management
- ◆ Records Management
- ◆ Transmittal Management
- ◆ Workflow
- ◆ Google™ Search Engine
- ◆ Integration with Microsoft SharePoint
- ◆ Fully Configurable Web User Interface

### Solutions:

The key factors that allowed us to provide a low-risk, cost-effective solution in close cooperation with the client were:

- ◆ Strong business requirements analysis
- ◆ Workspace-oriented architecture
- ◆ Iterative development
- ◆ Consistent quality assurance services

A comprehensive business requirement analysis at the very beginning and a wide use of best practices for Fusion framework design allowed the teams to deliver a high-quality solution within the time constraint.

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Having started with gathering product requirements and architecture analysis, the development team proceeded with the prototype release of Fusion Reference Library Standard in just one month and a full release in four months. A component-based approach in Fusion framework with Personalization and Easy Configuration provided low-cost adoption and tailoring to the client's needs as well as a variety of “ready-to-use” products offered to the client.

#### **Customer Benefits:**

- ◆ **Convenient and easy-to-use system.** The Fusion combines Document Management, Content Management, Workflow, Collaboration, Knowledge Management and Records Management into a single integrated web framework
- ◆ **Comprehensive GUI.** A comprehensive Web Service interface supports web based integration with popular web application servers and portal environments
- ◆ **ROI optimization and cost reduction.** Fusion enables organizations to reduce costs, to increase operational efficiency and productivity, ensure regulatory compliance and improve overall return on investment by managing the entire content lifecycle from initial creation to archival and disposal

#### **Key Advantages:**

- ◆ **Easy to configure:** The operation, look and feel, and a variety of other settings can be configured without any programming effort
- ◆ **Simple to use:** It is easy for all users across the organization to add, change and find information with minimal training. Immediate benefits are realized due to the decreased reliance on a centralized document control function
- ◆ **Query By Example search:** Powerful search capabilities are presented via an intuitive interface
- ◆ **Personalization:** Users can add information to their 'Favorites' folder for immediate access. The user's private work area contains all current activities.
- ◆ **Collaboration:** Users from any location are able to contribute and share the content. Access can be provided to business partners
- ◆ **Powerful workflow management:** Users can design, run and administrate hundreds of business workflows
- ◆ **Document viewing:** Powerful features to display and manipulate hundreds of document formats

Screenshots:

The screenshot displays a web-based document management interface. On the left is a 'Library' sidebar with a tree view of folders including 'Design Documents', 'OIL FIELD 1', 'CENTRAL PLATFORM', and various audit tables. The main area shows search results for the path 'Image server >> Design Documents >> OIL FIELD 1 >> CENTRAL PLATFORM >> OF1-CP-DC-DC1-MECH-017'. A table lists 30 documents with columns for 'Doc. No.', 'Rev. No.', and 'Title'. The titles include 'LIFT JACK ANCHOR CHAIN', 'LIFT JACK GUSSET', 'LIFT JACK ANTI EXTRUSION RING', and 'LIFT JACK CYLINDER ASSEMBLY WELDMENT'. On the right, a 'Tools' panel shows user information for 'DOCCONT/SYSADMIN' and 'Quick info' for document 'OF1-CP-DC-DC1-MECH-017', listing the originator as 'SIMON COOK' and 'Rec. No.' as '1'.

| Doc. No.                | Rev. No. | Title                                          |
|-------------------------|----------|------------------------------------------------|
| OF1-CP-DC-DC1-MECH-017  | 1        | LIFT JACK ANCHOR CHAIN                         |
| OF1-CP-DC-DC1-MECH-018  | 1        | LIFT JACK GUSSET                               |
| OF1-CP-DC-DC1-MECH-019  | 1        | LIFT JACK ANTI EXTRUSION RING                  |
| OF1-CP-DC-DC1-MECH-020  | 1        | LIFT JACK ANCHOR CHAIN ASSEMBLY WELDMENT       |
| OF1-CP-DC-DC1-MECH-021  | 1        | LIFT JACK INLET PLUG END                       |
| OF1-CP-DC-DC1-MECH-022  | 1        | LIFT JACK BUSH NECK                            |
| OF1-CP-DC-DC1-MECH-023  | 1        | LIFT JACK END PLUG                             |
| OF1-CP-DC-DC1-MECH-024  | 1        | LIFT JACK INLET END                            |
| OF1-CP-DC-DC1-MECH-026  | 1        | LIFT JACK RAM CYLINDER MAIN ASSEMBLY           |
| OF1-CP-DC-DC1-MECH-027  | 1        | LIFT JACK CYLINDER ASSEMBLY WELD               |
| OF1-CP-DC-DC1-MECH-028  | 1        | LIFT JACK CYLINDER ASSEMBLY INTERFACE WELDMENT |
| OF1-CP-DC-DC1-MECH-029  | 1        | LIFT JACK CYLINDER                             |
| OF1-CP-DC-DC1-MECH-030  | 1        | LIFT JACK CYLINDER ASSEMBLY WELDMENT           |
| OF1-CP-DC-DC1-MECH-031  | 1        | LIFT JACK SHAFT                                |
| OF1-CP-1IU-S1C-INST-011 | 1        | WATER INJECTION WELL HEAD SLOT 1C              |
| OF1-CP-1IU-S1C-INST-011 | 1        | WATER INJECTION WELL HEAD SLOT 1C              |
| OF1-CP-1IU-S1C-INST-012 | 1        | INSTRUMENT PROCESS HOOKUP                      |
| OF1-CP-1IU-S1C-INST-012 | 1        | INSTRUMENT PROCESS HOOKUP                      |
| OF1-CP-1IU-S1C-INST-013 | 1        | INSTRUMENT LOOP DIAGRAM                        |
| OF1-CP-1IU-S1C-INST-013 | 1        | INSTRUMENT LOOP DIAGRAM                        |

The screenshot shows the 'Details' view of a document. The breadcrumb path is 'W2K\_server >> Design Documents >> OIL FIELD 1 >> CENTRAL PLATFORM >> OF1-CP-GEN-PIPE-ARCH-502'. The document title is 'Design Documents'. A 'Show Workflow Details' button is visible. Below it, a table shows document metadata: Region (OF1), Location (CP), System (GEN), Sub-System (PIPE), Discipline (ARCH), and Sequence (502). The 'Document Number' is 'OF1-CP-GEN-PIPE-ARCH-502'. Other fields include Revision No. (1), Sheet No. (1), Rendition (EDIT), Outstanding DCRs (0), Pending DCRs (0), Alt. Doc. No., Effective From, Effectivity Status (AB), Originator, Doc. Type, Doc. Status (ISS), Media Code (ELEC), and Doc. Format (CA). The right-hand 'Tools' panel shows user information for 'DOCCONT/SYSADMIN' and 'Quick info' for document 'OF1-CP-GEN-PIPE-ARCH-502', listing the originator as '774' and 'Checked out' as 'False'.

| Region | Location | System | Sub-System | Discipline | Sequence |
|--------|----------|--------|------------|------------|----------|
| OF1    | CP       | GEN    | PIPE       | ARCH       | 502      |

## Technical Overview:

Fusion web framework is based on ASP.NET technology extensively using the Model View Controller (MVC) concept, allowing flexible customization of the user's interface.

A comprehensive web service interface was designed to provide scalability and efficient integration with any other third-party system. The Web Service tier enables the products of the Fusion family to be delivered on different platforms with minimal additional efforts.

Proven open architecture supports a web based integration with other popular portal environments. For example, Fusion Reference Library Standard can be offered as a Microsoft SharePoint™ site.

Java Applets were used to provide advanced upload/download features and an integration with a third-party product, providing web enabled high quality native viewing, printing, measurement and markup capabilities in a real-time mode.

## Technologies:

Net Technologies: ASP.NET, Web Services, Java Applets

Programming Languages: C#, Java

Database Server: MS SQL 2000

Application Server: IIS 6.0

Project Management Tools and Methodology: MS Project 2003, Agile methodologies

## Efforts:

80 man-months



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