



The Benefits of Integrating Enterprise Content Management and Team Workspaces

A White Paper by Ferris Research

February 2006. Report #604

Ferris Research, Inc.
408 Columbus Ave., Suite 1
San Francisco, Calif. 94133, USA
Phone: +1 (415) 986-1414
Fax: +1 (415) 986-5994
www.ferris.com

Recent Reports From Ferris Research

Enterprise Mobile Messaging Survey
The Email Archiving Market, 2006-2010
Exchange 12 Assessment
Anti-Spam Technology in the Asia-Pacific Region
Why Exchange 12 Will Be 64-Bit Only
Top 10 Messaging & Collaboration Issues: 2006
The SyncML Standard and Its Impact on Mobile Messaging
Boundary Email Security: The First Line of Defense
Oracle Content Services: An Alternative to SharePoint Services for Enterprise Content Management
The Plan for AOL Instant Messaging
The Email Security Market, 2005-2010
Techniques for Zero-Hour Virus Protection
New Features and TCO Benefits of IBM Lotus Notes/Domino 7
Implementing the Sender ID Framework in DNS
Anti-Spam Technology in the Asia-Pacific Region
Introduction to Presence Models and Standards
Proofpoint's Content Security and Regulatory Compliance Offering
Using Content Security to Achieve Regulatory Compliance
Microsoft Operations Manager (MOM) 2005 and Exchange Server 2003 Management Pack for MOM
The Total Cost of Ownership of IBM Notes/Domino 6
Zero-Hour Anti-Virus Defense
New Features of IBM Lotus Notes/Domino 6
New Developments in Virus Control
Wikis
The Global Economic Impact of Spam, 2005
Calculating Spam Costs for Your Organization
Adomo Voice Messaging for Exchange: A Messaging-Centric Approach to Voicemail
Key Trends in Messaging and Collaboration, 2005-2010
Email Archiving: In-House, Outsourced, or Hybrid?
Bulletin: Mail Anti-Abuse Working Group First General Meeting
Zero-Hour Anti-Virus Defense
Phishing: What to Tell End Users
Bulletin: Microsoft IT Forum, Copenhagen, Denmark
Microsoft's Lookout Search Tool
Bulletin: Exchange Best Practices Analyzer Tool

Table of Contents

The Benefits of Integrating Enterprise Content Management and Team Workspaces	4
Executive Summary	4
Key Benefits of Integrating ECM and Team Workspaces	4
ECM and Its Benefits	5
Core ECM Functions	5
ECM Benefits	6
Team Workspaces and Their Uses	6
Comparing ECM and Team Workspaces	7
Team Workspaces Capture Interactions	8
ECM Focuses on Documents, Not Collaboration	8
Team Workspaces Designed to Promote Sharing	8
Centralized Control a Key Principle of ECM	8
Benefits of Team Workspace Integration With ECM	9
Elimination of User Confusion	9
A Unified View of Information	9
Easier Business Process Automation	9
Larger, More Consistent Storage of Corporate Knowledge	9
Simpler, More Reliable IT Infrastructure	9
Lower Costs	10
Requirements for Team Workspace Integration With ECM	10
Shared Data Repository	10
Email and Desktop Client Integration	10
Mature Collaboration Features	10
Self-Service Provisioning and Configuration	10
Snapshot of Customer Benefits	11
Major Pharmaceutical Manufacturer	11
Dell Inc.	12
EMC Documentum Collaboration Edition	13
How We Did the Research	14

The Benefits of Integrating Enterprise Content Management and Team Workspaces

Executive Summary

Organizations are under increasing pressure to manage information better and to collaborate effectively. Two types of systems that organizations are implementing to meet these demands are enterprise content management (ECM) and team workspaces.

This white paper defines ECM and team workspaces and discusses their respective benefits, as well as their differences and similarities. The paper also:

- Presents the benefits of an integrated approach to ECM and team workspaces.
- Proposes a set of requirements that a well-integrated ECM and team workspace solution should meet.
- Presents two cases studies using EMC's Documentum Collaboration Edition.
- Briefly describes EMC's Documentum Collaboration Edition, an integrated ECM and team workspace solution.

Key Benefits of Integrating ECM and Team Workspaces

- The ability to consolidate document content and the collaboration about that content in one place. This provides a more efficient and less confusing user experience by providing a unified view of information and preserving the context of interactions.
- The ability to have structured and unstructured information in the same system. This makes it possible to automate more business processes and workflows.
- A more positive user experience and overall acceptance of the system. This raises the value of the solution to the organization.
- Simplification of the IT infrastructure and reduction in support costs.

ECM and Its Benefits

The majority of content that employees create on their PCs is unmanaged. Documents are disseminated and accessed in an ad hoc manner through network file shares and email attachments.

Enterprise content management (ECM) is a much more structured approach to managing content. Documents are centralized in a repository where they may be formally checked in and out. Revisions are controlled and tracked. The centralized nature of an ECM system enables security, archiving, and auditing to be applied consistently.

In addition, ECM promotes the use of metadata. Users are often required to describe and categorize each document by choosing attributes from a list. This descriptive metadata helps to speed searching and sorting.

Core ECM Functions

- *Consistent, centralized storage.* ECM provides one or more managed electronic repositories or “containers” for storage of content. Such content is usually a document, such as a word processing file, spreadsheet, or presentation. But it might also include images as well as audio or video files. Information management tasks such as backup, restoration, archiving, retention, and disposal are performed on the repositories according to an organization’s policies.
- *Classification and categorization.* ECM systems also store descriptive metadata with the content. Examples of metadata are the author’s name, the date the content was created, and the project or department with which it is associated. Most ECM systems allow categories of metadata to be custom-defined. Metadata can be used to organize content for browsing or searching, or to support workflow processes.
- *Search and retrieval.* ECM offers the ability to browse content in views according to specific categories of metadata, or to conduct full-text searches based on specific terms found in the content.
- *Secure information sharing.* ECM systems facilitate orderly sharing of information by tracking changes and revisions and preserving data integrity. These systems also restrict access to content based on access privileges, and provide an audit trail.
- *Business process automation.* More sophisticated ECM systems also provide tools for modeling and automating content-driven business processes. Examples of such processes are insurance claims processing, engineering change requests, and new product development.

The leading ECM software vendors include EMC, FileNet, Hummingbird, and Open Text.

ECM systems help organizations gain control over the electronic documents and content that their PC users create and share. Without such systems in place, valuable information becomes randomly distributed throughout the enterprise—on hundreds or even thousands of local hard drives and email inboxes. Not only does an organization risk having inconsistent content, but it also wastes the productivity of employees who must locate and reconcile various versions of the same file.

Distributed systems also create a greater risk of security breaches or information loss due to hardware failure or data corruption.

ECM Benefits

- *Capture of organizational knowledge.* The central repository of an ECM system is a safer place to store valuable information than are local hard disks or personal email folders.
- *Control over document lifecycle.* ECM systems can consistently manage the documents stored within them. Security, backup, retention, archiving, and other functions can be managed centrally.
- *Lower operating costs.* Broad adoption of ECM systems can reduce the total cost of maintaining email and distributed infrastructure by eliminating redundant storage on servers and clients.
- *Increased information security.* ECM systems provide greater control over who has access to information and how it is stored and handled. Security policies can be centrally created and applied, as well as consistently enforced and managed.
- *Facilitation of regulatory compliance and legal discovery.* ECM systems help organizations comply with regulations regarding the handling of electronic content. ECM systems also provide a single point of access for the handling of information discovery requests to support litigation.

Team Workspaces and Their Uses

Team workspaces provide a structure for group collaboration. Common features of team workspaces are file sharing, online discussions, and easy-to-use polling or survey capabilities. Collaboration in team workspaces is typically focused on specific projects, issues, or subject matter that the team members all share involvement, interest, or a stake in. For example:

- An organization's sales team might use a team workspace to jointly develop its response to a client's request for a proposal.
- A research and development department could use a team workspace to work jointly with an external partner to share test results, ideas, and information for solving a particular challenge.

- A customer support group might benefit from a team workspace to exchange thoughts about how to resolve issues more quickly and improve service.

Team workspace systems are designed to electronically capture, organize, and store the information that a group must share among its members to pursue a common goal. Frequently the groups that use team workspaces are dispersed across a range of physical locations, departments, organizations, working hours, or roles.

The types of shared information that team workspace systems typically include are:

- *Discussions.* Often called “threaded discussions” or “bulletin boards,” this is a central feature of almost all team workspaces. Rather than the team members carrying on conversations via email distribution lists, users post and reply to topics for discussion in the workspace. This reduces email volume and captures interactions in a central repository.
- *Documents.* Teams frequently need to share electronic documents in order to collaborate. Most team workspaces provide a means to create and publish documents within the workspace.
- *Calendar.* Collaboration on group projects or other time-sensitive activities creates a need for a shared calendar. Team workspaces typically offer the ability for teams to create and share calendar entries such as meetings or deadlines.
- *Contacts.* Team workspaces usually provide a method to easily publish and share contact information with other group members. This is valuable because workspace use often crosses functional or organizational boundaries. Team members don’t otherwise have easy access to data such as telephone numbers or physical addresses.

The leading team workspace software vendors include EMC, IBM, Microsoft, and Open Text.

Comparing ECM and Team Workspaces

When comparing the descriptions of enterprise content management and team workspace systems, some overlap is apparent. Both types of systems facilitate the sharing of electronic documents among groups of users.

However, ECM and team workspaces are different types of solutions that serve different needs in specific steps of a process or document lifecycle. While team workspaces are used to manage the creation of content, ECM systems are the place where that content is stored and managed.

Team Workspaces Capture Interactions

Most organizations implement team workspaces to capture human interactions. They want to reduce email volume, preserve organizational knowledge, and make it easier to share informal information that might otherwise be lost.

When work and projects are managed via email it's impossible to enforce consistency. Email is generally very inefficient for collaboration; security, search capabilities, regulatory compliance, backup, and knowledge capture are all quite limited. Team workspaces are, therefore, a much better solution than email for capturing team interactions and ensuring security and compliance.

Team workspaces can also be used to store and share electronic documents. But it is usually done in the context of posting the document so that team members can provide their comments *in a discussion*. The document check-in/check-out and version control features of most team workspaces are, therefore, generally weak. Few, if any, team workspace products have the ability to define document lifecycles or develop custom document workflows.

ECM Focuses on Documents, Not Collaboration

Enterprise content management systems have very robust document features. Their check-in/check-out and version control features support a wide variety of usage scenarios. They also have built-in support for workflow and lifecycle management. But ECM products are less capable of facilitating collaboration. They may have no, or very limited, support for the discussion of content.

Team Workspaces Designed to Promote Sharing

The design of team workspace systems tends to prioritize accessibility over control. This is important to their acceptance by users, since team workspaces must often compete with email, a well-known communication tool that is second nature to almost everyone. To appeal to users, team workspaces incorporate self-service provisioning, enabling users to create new workspaces without IT involvement; email client integration; and other features specifically designed to reduce barriers to adoption.

Centralized Control a Key Principle of ECM

ECM, by its very nature, emphasizes a more centralized approach. These systems typically place the control of creating new organizational elements, such as repositories or categories, in the hands of IT administrators. When organizations implement ECM systems, they define a file plan that will ensure consistent classification of all content. This gives little flexibility to end users to address new requirements on their own.

Benefits of Team Workspace Integration With ECM

Since both team workspaces and ECM address documents at different phases of their lifecycles, it's natural for organizations to integrate the two functions. The benefits of doing so are substantial. These benefits are:

Elimination of User Confusion

Organizations that implement different systems for team workspaces and enterprise content management create a lot of complexity for their users. Separate systems force users to decide which documents should go into which system, and when. Documents may need to be moved from one to the other. An integrated team workspace and ECM system provides a seamless user environment that helps to eliminate confusion and increase acceptance and usage, thus improving ROI.

A Unified View of Information

With an integrated approach to ECM and team workspaces, a document's content is stored in the same repository as the collaborative information about it, such as discussion comments. This information can then be viewed, searched, and retrieved from a single location.

Easier Business Process Automation

Many business processes or workflows that involve content are actually a series of informal interactions. For example, a group of engineers may discuss the contents of a product specification document before approving it for release. Automating a business process such as this is much easier with an integrated approach to ECM and team workspaces.

Larger, More Consistent Storage of Corporate Knowledge

Integrated systems for ECM and team workspaces will increase the size and value of the corporate knowledge base. If this environment is simple to use, then users are much more likely to actually use it. A system that makes information like discussions and comments accessible together with document content is also much more helpful to users. The ultimate success of either ECM or team workspaces is heavily dependent upon user acceptance.

Simpler, More Reliable IT Infrastructure

Treating the management of ECM-based content and collaborative content as a single IT challenge will result in a less complex IT infrastructure. Using one system to provide both capabilities will make it easier to maintain, with fewer potential points of failure. This

will provide a single administration model, security model, database, APIs, support contacts, backup, IT training, etc.

Lower Costs

Organizations that successfully implement integrated team workspace and ECM systems can expect lower IT support costs, based on the reduced complexity of the infrastructure. End users will similarly require less support and experience better productivity.

Requirements for Team Workspace Integration With ECM

A system that integrates team workspaces and enterprise content management must meet a number of key requirements. These requirements include:

Shared Data Repository

Integrated team workspace and ECM systems must share a common data repository. This is fundamental to simplifying the IT infrastructure and keeping operating costs low. IT staff should only be required to implement and maintain one common hardware and software infrastructure for both functions.

Email and Desktop Client Integration

As indicated earlier, accessibility and ease of use are key design principles in team workspace software. The process for putting content into the system should be very straightforward. Otherwise, users will fall back to collaborating via email or file shares. The system must integrate with popular email and desktop clients, as well as provide flexible user experiences that can be customized depending on their business function.

Mature Collaboration Features

An integrated solution's collaboration capabilities—discussion, calendar, contacts, etc.—must be comparable to those offered by standalone team workspace products. If the functionality is inadequate to their needs, users will add other products or services to augment it. This will once again create a segregated environment with unmanaged data repositories and decentralized content.

Self-Service Provisioning and Configuration

Team workspaces tend to be very dynamic in nature. If users are to adopt the workspace application, rather than email or file shares, they must have the flexibility to create and/or reconfigure workspaces spontaneously. Any obstacle to this immediacy will discourage usage. An integrated ECM and workspace solution should support both ad hoc and structured storage.

Snapshot of Customer Benefits

This section presents our observations from two customer interviews arranged by the report's sponsor, EMC. Both of the organizations use EMC's Documentum Collaboration Edition (DCE), an integrated ECM and team workspace solution. Following is a description of the two organizations, their use of DCE, and the perceived benefits.

Major Pharmaceutical Manufacturer

A global manufacturer of pharmaceuticals had an enterprise content management system in place for many years. This system was used for formal product documentation, regulatory filings, and so forth. But it did not have a team workspace platform. Information associated with documents in the ECM system was often lost because users shared the documents via email and file shares.

The company identified a requirement for a horizontal solution that everyone in the organization could use for content collaboration. After implementing EMC's Documentum Collaboration Edition, the company perceived the following benefits:

- DCE's integration with Outlook and Windows Explorer has encouraged many end users who had not been using ECM to capture and share information in team workspaces.
- Self-service provisioning of workspaces has reduced the demands placed on IT while increasing the body of organizational knowledge.
- Usage has grown from 60 users in three teams to 10,000 users in 850 teams over 30 months. Adoption did not require any investment in internal marketing or promotion. Instead, it was driven by word of mouth through the user community.
- Personalization features enable users to easily access their documents without having to navigate through a complex ECM hierarchy.

Dell Inc.

Dell is one of the largest computer manufacturers in the world, with more than \$50 billion in revenues and 60,000 employees. In the past, its product development group of 4,000 employees used five different systems for content management. This included shared network folders, custom systems, and storage on local drives.

As an ISO certified organization and public company subject to Sarbanes-Oxley compliance, Dell has very stringent information auditing requirements.

Dell's management chose to implement DCE to support the organization's product development process. Afterward, the company reported the following benefits:

- A cost savings of \$16 million per year is projected, based on the elimination of redundant systems. Elimination of network file shares alone will result in a savings of over \$3 million.
- There are measurable productivity improvements for engineering staff through decreased search times. The time required to find product development documents is reduced as much as tenfold.
- The time and effort required to conduct internal audits are significantly reduced. Auditors will now be able to perform their work within a single enterprise content management system rather than the five that were used previously.
- There is a single infrastructure to support a wide range of business process requirements. DCE will be used to provide group voting features, preserve email discussion threads, and enforce document retention policies.

EMC Documentum Collaboration Edition

EMC's Documentum Collaboration Edition is an extension to the Documentum enterprise content management platform. It adds team workspace features to any Documentum client. DCE is compatible with all Documentum client types, including the Documentum Client for Outlook. The information created in DCE is stored in a common repository with other Documentum content.

The features Documentum Collaboration Edition adds to Documentum include:

- *Rooms*. Team workspaces that end users can create via a simple wizard interface.
- *Discussions*. Threaded discussion that end users can add to any content object in the Documentum repository, including Cabinets, Folders, Notes, Documents, and Rooms.
- *Notes*. A Web-based, rich-text editor for users to create content directly within a Folder or Room.
- *Contextual Cabinets and Folders*. Ability to add rich-text descriptions and notes to standard Cabinet and Folder containers to add context to their content.

For more information about EMC's Documentum Collaboration Edition, please visit:

www.documentum.com/products/glossary/documentum_collaborative_edition.htm

*Author: David Via
Editor: Sue Hildreth*

EMC Corporation's Sponsorship of This White Paper

EMC Corporation commissioned this white paper with full distribution rights. You may copy or freely reproduce this document provided you disclose authorship and sponsorship and include this notice. Ferris Research independently conducted all research for this document and retained full editorial control.

How We Did the Research

The paper is based largely on our knowledge of the enterprise content management and team workspace markets. We augmented our knowledge with interviews of two organizations arranged by our sponsor. Each had implemented EMC's integrated solution—Documentum Collaboration Edition.

Ferris Research

Ferris Research is a market research firm specializing in messaging and collaborative technologies. We provide business, market, and technical intelligence to vendors and corporate IT managers worldwide with analysts located in North America, Europe, and the Asia-Pacific region.

To help clients track the technology and spot important developments, Ferris publishes reports, white papers, bulletins, and a news wire; organizes conferences and surveys; and provides customized consulting. In business since 1991, we enjoy an international reputation as the leading firm in our field, and have by far the largest and most experienced research team covering messaging and collaboration.

Ferris Research is located at 408 Columbus Ave., Suite 1, San Francisco, Calif. 94133, USA. For more information, visit www.ferris.com or call +1 (415) 986-1414.

Free News Service

Ferris Research publishes a free daily news service. It provides comprehensive coverage of the messaging and collaboration field, and is a great way to keep current. Topics include spam, email, email retention/archiving, mobile messaging devices, consumer messaging services, Web conferencing, email encryption, email migrations and upgrades, regulations compliance, instant messaging, ISP messaging, and team workspaces.

The service is available daily or as a full weekly digest. To register, go to www.ferris.com/forms/newsletter_signup.php. In addition to the daily or weekly news, you will receive one or two emails every month announcing new Ferris reports or conferences. To opt out and suppress further email from Ferris Research, click on the opt-out button at the end of each news mailing.