



ACCELERATE

April 2005

An Introduction to IBM FileNet Content Manager for IBM FileNet Content Services Customers

Abstract: IBM FileNet Content Manager is designed to provide significant business and technical advantages for IBM FileNet Content Services customers, without requiring a wholesale migration of content or disruption of current business solutions.

White Paper

Executive Summary

At first glance, FileNet Content Manager and FileNet Content Services might seem to provide similar document and fixed content management capabilities. Upon further examination, FileNet Content Manager offers significant advantages over FileNet Content Services.

FileNet Content Manager, as part of the FileNet P8 architecture, allows you to evolve your FileNet Content Services investment into an enterprise-wide Enterprise Content Management (ECM) platform.

Content Manager can extend your existing Content Services deployments into new solution areas to solve pressing business issues such as compliance and risk management.

Your existing Content Services deployment is protected and can be used in conjunction with Content Manager's capabilities. Content Manager can be utilized for net-new deployments, for extending and active-content enabling existing Content Services content, or for phased and gradual migration of Content Services content.

Beyond Document and Fixed Content Management

Since Content Services was first delivered, your business environment has seen increasingly rapid change and increased pressure on streamlining your IT environments and investments. These evolving business needs, combined with advancing technology standards, will require enhanced solution capabilities extending beyond traditional document and fixed content management capabilities. Business and compliance needs require that content management capabilities expand to include XML text snippets, rich media, Web content, forms data, and even XML data while still requiring advanced document and fixed content capabilities. Content Manager provides a functional expansion to manage any type of digital content, and provides greater process control and consistency across the enterprise. Content Manager, as part of IBM FileNet P8, provides a gateway towards a unified platform for managing content, processes, and integration to existing applications, creating real process efficiencies and providing a scalable architecture for expansion.

IBM FileNet Content Manager and IBM FileNet Content Services Similarities

Both FileNet Content Manager and FileNet

Content Services provide broad support for the most common content and document management capabilities. They both provide:

- Robust library services
- Security management
- Audit trails
- Document review and approval lifecycles
- Search capabilities

Where FileNet Content Manager and FileNet Content Services Differ

Content Manager's fundamental content and document management capabilities, in general, offer expanded capabilities and options when compared to Content Services. Content Manager's capabilities in the areas of workflow and process management are far more extensive than Content Services. The following are key advantages over Content Services that Content Manager provides:

- FileNet Content Manager is inherently event enabled, leading to:
- Full lifecycle management capabilities
 - Business event driven content creation, updating, and workflow solutions
 - Content Federation Services (CFS)
 - Support for content stored in multiple FileNet and non-FileNet repositories to be managed by FileNet Content Manager

→ No conversion required for Content Services or Image Services customers to take advantage of Content Manager and FileNet P8.

Enhanced search capabilities including:

- Cross repository search via CFS
- Relevancy rankings
- Searching by multiple object types
- Expanded bulk load and modification capabilities, including the ability to import XML.
- The ability for APIs to return XML
- No intrinsic limitations on the number of properties, classes or choice lists supported
- Subclass and versioning support for Custom Objects, Folders, and Annotations
- FileNet intends to continue to advance Content Manager's already industry leading capabilities giving you more leverage in the future.

FileNet Content Manager Provides Leverage To A Broad Set of ECM Solutions

FileNet Content Manager comes with out-of-the-box Application (Suite) Integration with FileNet's:

- IBM FileNet Business Process Manager
- IBM FileNet Email Manager
- IBM FileNet Forms Manager
- IBM FileNet Image Manager Active Edition
- IBM FileNet Records Manager
- IBM FileNet Team Collaboration Manager
- IBM FileNet Web Content Manager

All core FileNet Content Manager functionalities are available for use by, and seamlessly interoperate with, other IBM FileNet Application Suites. All functionalities and Application Suites are inherently integrated, utilizing these services and the same repository infrastructure. Because they are built on FileNet P8 and utilize a common set of services, IBM's ECM products can lower

the Total Cost of Ownership (TCO) for customers and support new application development with a minimum of integration services.

FileNet Content Manager Provides Active Content Capabilities

Unlike FileNet Content Services, FileNet Content Manager is built on an event-driven architecture. This event-driven architecture allows for action to be taken on content metadata updates thereby driving the entire content lifecycle – from creation to retention--with a much higher degree of automation. IBM refers to the capability as Active Content. Active Content allows enterprises to respond immediately to changing business conditions and transaction events. Business events can automatically put critical processes in motion and drive them quickly to completion, thereby increasing the overall responsiveness and agility of business operations.

FileNet Content Manager allows for both manual and automatic invocation of workflow. Active Content allows you to activate, or process enable, content so that it works for you rather than requiring you to work on it. An example of Active Content would be that a particular class of documents is automatically routed for approval but more sensitive documents require the author to initiate the approval workflow. Another example would be that a particular class of author/ editor would automatically trigger an approval workflow but an author in, for example, the legal department would require manual invocation of the approval process.

FileNet Content Manager Offers a Better Development and Integration Platform

FileNet Content Manager provides extensive support for Content Federation across an enterprise as well as providing integration

capabilities to content enable third-party systems such as CRM solutions. FileNet Content Manager's integration capabilities are segmented as follows:

- IBM to IBM Integration
- Non-IBM Repository Integration
- Third-party / Custom Connectors

Content Manager offers Content Federation Services (CFS) that allows for content in Content Services and Image Services to be managed by Content Manager in-place. Content Services and Image Services content can now be a full participant in FileNet P8 process management initiatives without requiring a conversion or migration.

FileNet Content Manager provides extensive content management support and integration capabilities for content stored in non-IBM repositories. IBM understands that most organizations will have a heterogeneous content storage history and that it is often cost prohibitive or disruptive to migrate all content to direct IBM control. Reflecting this understanding, IBM provides a mix and match approach to content integration that provides maximum flexibility and the ability to pick the right method for any given specific needs. All of the content integration capability explained below provides a single integrated capability for Content Manager to place your content under active control. Once content has been placed under Content Manager's control, it is also available for use and interact with all other FileNet P8-based applications and solutions.

FileNet Content Manager, working as part of the FileNet P8 architecture, also provides multiple development options that provide a tiered approach to integration. For business needs beyond the extensive standards based integration and pre-built connector that IBM offers, developers can create and implement multiple

concurrent methods of content enabled integration with third-party or legacy systems. Integration option range web services based integration, to API-to-API calls, to dedicated custom interfaces.

FileNet Content Manager Delivers XML Web Services and Service Oriented Architecture Advantages

FileNet Content Manager, as part of FileNet P8, is based on a Service-Oriented Architecture (SOA) that utilizes XML Web Services throughout. Not only can the platform consume XML Web Services, but it also exposes functionality as XML Web Services, enabling a much more flexible foundation for application development. This architecture enables IBM to apply the 20+ years of FileNet enterprise-class process technology development experience to the entire set of ECM functionality, uniquely differentiating its platform from all other providers. The FileNet P8 platform also uses IBM FileNet Web Services internally as a communication mechanism for sharing functionality. The service-oriented architecture allows connectivity to a wide variety of applications from the mainframe to new generation architectures.

IBM Intends to Continue to Advance FileNet Content Manager's already industry leading capabilities

Moving forward, plans are in place to continue evolving FileNet Content Manager and remain focused on extending SOA enabled content management capabilities to meet your new and changing business needs. IBM intends to continue extending its already best in class scalability and integration capabilities, and will also see improved Enterprise-class administration support for Content Manager. Plans are also in place for broadening platform support with the goal of platform independence in the near future.

Standards based support continues to be a priority, including specific support for JSR 170 and WSRP. Specific areas of functional enhancements include:

- Greatly expanded Content Analytics capabilities
- Expanded Content Federation capabilities
- IBM/TSM support
- IBM Fixed Store support
- Hitachi Fixed Store support
- SnapLock Fixed Store and capability integration
- Sharepoint Portal integration
- Expanded XML Authoring integration
- Storage Policy to Lifecycle State Transition
- Categorization/ Classification enhancements
- XML Publishing/Output management enhancements
- XML Ingestion/Parsing enhancements

Summary:

IBM recognizes that you have a substantial investment in your existing technology and business solutions. Your existing FileNet Content Services deployments are protected and can be used in conjunction with FileNet Content Manager’s capabilities. The substantial advantages that FileNet Content Manager and FileNet P8 provide can be extended to your existing deployments.

Appendix One: Key Architecture Differences

FileNet Content Manager	FileNet Content Services
J2EE environment	Panagon is primarily Microsoft based
Tiered – presentation, logic, and data	Panagon is client/server
Event driven and request / response	Panagon is only request / response
LDAP enabled	Panagon has a proprietary security model
Single repository	Panagon has several repositories

Appendix Two: FileNet Content Manager Feature/Benefit Overview

Features	Benefits	Impact
Comprehensive Content Management & Library Services	FileNet Content Management provides all the content management capabilities that an enterprise is ever likely to need. FileNet Content Manager allows for fine-grained content management with complete control over lifecycle management including highly flexible content storage management. FileNet Content Manager provides proven and robust full lifecycle management to create, edit, publish, search enable, and record manage all of your content. FileNet Content Manager also provides seamless and completely integrated interoperability with FileNet P8, bringing you best of breed, expansion capabilities that are second to none.	Allows you to confidently address ECM and business problems, today and tomorrow, knowing that FileNet Content Manager will be capable of meeting your most complex and demanding needs.
Content Agnostic	FileNet Content Manager can ingest, classify, and process enable any digital content type. FileNet Content Manager provides a single place to manage any type of content necessary.	FileNet Content Manager is the only solution needed to handle every kind of digital content in your Enterprise. Regardless of the type of content, workflow needs, and security requirements, FileNet Content Manager is the only solution you need.
Single, Unified Repository	Reduced complexity, improved content storage and retrieval.	Radically simplifies meta data management
Document Review & Approval Workflow	Allows for exact control over how, why, and when content is involved in the business	Saves you time and cost and removes risk
Event-Driven Architecture	Makes Active Content possible; allows both fixed and dynamic content to be active participants in your business rather than passive overhead	Allows for dramatic reduction in cost, time, and risk; drives results to business conditions with fixed and dynamic content
Classification Framework	Allows content to be understood automatically and managed pro-actively; enables enforcement of ECM standards and strategy, while simultaneously enabling risk and information latency reduction	Enables content retrieval and reduces cost and risk

Appendix Two, continued: FileNet Content Manager Feature/Benefit Overview

Features	Benefits	Impact
Full Lifecycle Management	Manages any type of content from cradle to grave with the desired degree of process-management approval and expiration flows	Enables you to implement optional business practices for your needs with complete flexibility across differing lines of business and content management needs.
Publishing Management	Automates how, when, and in what formats content is published while maintaining strict security and access rights	Automatically prepares and presents content in a wide range of publishing mechanisms
Mix & Match Storage	Gives complete storage flexibility at every lifecycle stage	Reduces TCO and allows you to store content on the optimal system for the desired retrieval time and storage cost
Flexible Content Ingestion	Provides the ability to add new content under management in a flexible and evolving manner	Enables you to focus on what you want to do instead of wondering if it is possible
Seamless Interoperability with Existing FileNet Imaging solutions	Allows for integrated ECM strategies and unique solution possibility by combining existing and new ECM capabilities	Enables you to focus on what you want to do instead of on technical hurdles or custom development; reduces the time it takes to find a solution
Virtual Content Management	Provides federated content management; allows you to manage all of your content regardless of where it lives	Leverages existing content repositories and existing content; reduces TCO; provides a fast time to solution; allows a phased migration of content or a long-term interoperability; dramatically reduces integration costs and risks
Open & Standards Based Architecture	Preserves your choice and flexibility; helps assure that your future needs can be accommodated	Reduces cost; helps drive down TCO; reduces management complexity; preserves your choice
Massively scalable	Meets the needs of highly demanding environments and provides room for future growth	Allows you to confidently deploy FileNet Content Manager for your most critical and demanding applications and solutions. Provides the peace of mind of knowing that FileNet will grow with your future needs.
Highly manageable	Allows your technology support teams to proactively manage our solutions so they are available and performant for your business users. FileNet Content Manager offers the tools and monitoring capabilities needed to reduce or eliminate downtime.	Insures that your business users can get their work done, now and into the future. Greatly reduces the time and expense of managing our technology in production environments.

Appendix Two, continued: FileNet Content Manager Feature/Benefit Overview

Features	Benefits	Impact
Compelling SOA capabilities	FileNet FileNet Content Manager is fully SOA enabled, both as a participant in a SOA architecture as well as being able to serve as Hub for Enterprises just embarking on a SOA strategy. FileNet Content Manager, working in concert with FileNet P8, is extremely well equipped to be the Enterprise clearing house for both content and process management activities throughout the Enterprise.	For Enterprises just starting or developing a SOA approach, FileNet Content Manager as part of P8 is an excellent way to get started. For Enterprises already advancing a SOA strategy, FileNet Content Manager can rapidly and easily extend and take part any existing implementation.
Desktop productivity tool integration	Allows users to continue to work in tools that are familiar to them; reduces training and support costs	Streamlines time to ROI and reduces user complexity; reduces support costs and time to positive user impact
Highly extensible	Allows you to extend command & control in the future; preserves your choice in other solutions to use and how interoperability is provided	Dramatically lowers the cost of integration with existing and future solutions, and creates new cost effective ways of driving cost and time from business operations.
Dynamic content, fixed content, and data enabled	Allows you to implement a highly flexible ECM strategy regardless of the content type	Provides a 360-degree view of information, needed actions, and decision making
Storage agnostic	Allows you to choose the storage strategy that works best for you, not for the storage vendor	Preserves enterprise choice, allows for best of breed storage selection, assures future flexibility
Deep and seamless integration with the entire FileNet product line	FileNet Content Manager comes with deep and seamless integration with the rest of FileNet's P8 platform and applications. Best of breed process, collaboration, web publishing, imaging, records management and other capabilities will work out-of-the-box.	Dramatically lowers TCO and reduces risk of solution deployment
Advanced J2EE architecture	Provides a proven, standards based architecture that allows both highly scalable and manageable deployments.	Allows scalability to meet any business need; improved manageability provides peace of mind that you are not being trapped in proprietary technology.

Appendix Two, continued: FileNet Content Manager Feature/Benefit Overview

Features	Benefits	Impact
Directory Server Integration	FileNet Content Manager works, out-of-the-box, with the most widely deployed Directory Services already running in your environment.	FileNet Content Manager eliminates having to administer security twice, and inherits all the user management you have already done. Solves issues quickly, significantly reduces TCO since security can be managed once at a directory-server layer.
Robust XML capabilities	Provides highly flexible capabilities for authoring, ingesting, publishing, and storing structured content. Combines the benefits of managing structure content with robust full Enterprise class content management lifecycle management capabilities.	Offers highly flexible integration options and a future-proof ability to ingest any type of content including unstructured content, highly structured technical needing to be managed as discrete elements, and even transactional data from ERP and other systems of record.

To find out how your organization can benefit from IBM FileNet P8, contact us at 1-800-FileNet (345-3638) or outside the U.S. at 714-327-4800.

Or visit us at filenet.com/accelerate



IBM
3565 Harbor Boulevard
Costa Mesa, CA, USA 92626-1420

www.ibm.com

Phone: 714.327.3400
Outside the U.S. call 714.327.4800