IBM FileNet Content Manager Product Introduction

Information Management software

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Agenda

- Overview
- Document Management Capabilities
- Enterprise Capabilities
- Storage Options
- Content Federation Services
- Additional Resources

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FileNet Content Manager – Platform For Content

- **Managing diverse content for ECM solutions**

- **Imaging/Archiving**
  - Scanned, PDF, eMail, …
  - Ingest, Index, Store, Manage
- **Document Management**
  - Office docs
  - Electronic authoring, Versioning, Lifecycle, Review/approval, Publish
- **Advanced Document Management**
  - DITA, Eng Drawing
  - Complex publications and projects, Componentized reuse, Specialized authoring tools, Multi channel publishing

Transactional content
"Processes consume content"

Business Content
"Arms information workers"

Persuasive Content
"Influences behavior"

At the core of ECM is the Content Repository: FileNet Content Manager

IBM FileNet Content Manager (What's in the box)

Clients

- **Workplace XT**
- **Desktop Applications Office Integration**
- **FileNet Services for Lotus Quickr**

Services

- Application Services
- Content & Process Services (Limited)
- Content Federation Services (connectors to IBM repositories)

Enterprise Tools

Infrastructure

- IBM DB2
- IBM FileNet Engines
- IBM WebSshere

P8 CM for Enterprise Document Management

Capabilities:

- Document versioning
- Document approval
- Active content
- Hierarchical Folders
- Compound documents
- Lifecycle management
- Searching
- Publishing
- Auditing
- Familiar user experience (desktop and web clients)

Benefits:

- ✓ Single platform for end to end document life cycle management
  - ✓ Authoring (Structured & Unstructured)
  - ✓ Life Cycle Management
  - ✓ Automatic document publishing
- ✓ Content reusability can save authoring and translation costs
- ✓ Minimal training to participate in ECM

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Document Management – Simple to advanced

- Lifecycle management
- Structured and collaborative authoring
- Flexible permissions
- Automatic Publishing

- Manage large publications
- Diverse authors and SMEs
- Specialized authoring tools (Quark, XMetal and ArborText)
- Independent review and approval
- Multiple languages

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Extensible Data Model

Capabilities:

- Single and Multi-valued properties
- Document Classes
- Multi-level document versioning
- Hierarchical Folders
- Compound documents
- Associations
- Relationships
- Custom objects
- Sub typing by Inheritance

Benefits:

✓ Rich and flexible data model to meet both document management and developed application requirements

FileNet Content Manager – Active Content

- Unique ability to respond to events
- Enabled by FileNet CM event-driven architecture
- Active Content enable all content including federated content
- Delivers consistency of business action as documents change

Compound Document Framework

Capabilities:

- Platform for component content management.
- Hierarchical and peer-peer relationships
- Flexible document relationships between components (static, dynamic, URI)
- Referential integrity enforcement

Benefits:

- ✓ Delivers support for simple to complex compound document solutions
- ✓ Enforces consistency and accuracy of publications
- ✓ Drives reduction in content creation and maintenance costs
- ✓ Reduced publication and translation costs

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Workplace XT: View Compound Document - Mozilla Firefox

http://cm-hamptonvm5xt:8080/WorkplaceXT/properties/ViewCompoundDocument.jsf?objectStoreName=QA1.__.FS.__.SQL&objectType=document&label=Focus.__.Corp.__.Financial.__.Packet&id={FFD89F

Help

Name: Focus Corp Financial Packet
Class: Document
Version: 1.0 (Released)

Actions

- Focus Corp Financial Packet
  - focus valuation worksheet.xls

	Name	Modified By	Modified On	Major Version	Link Name	Link To
	Aust Corporation.docx	suser	2/1/10 3:25 PM	1		Current Version
	EBD NETWORKS FRANCHISE AGREEMENT.pdf	suser	2/1/10 3:27 PM	1		Current Version
	EBO Networks Long Term Contract.docx	suser	2/1/10 3:24 PM	1		Current Version
	focus valuation worksheet.xls	suser	2/1/10 3:31 PM	1		Current Version

Close

Done

Example : Document Publishing solution

Visual Information Modeler to visually design ditamaps.

FileNet provides end-to-end workflow and content management with native DITA support

Multilingual Web outputs

Authoring: Choose from a variety of authoring tools such as Quark, Epic, XMetal

Multilingual Build process

Translation Services: Linkage to localization service providers to transform and build output multilingual deliverables

Multilingual print/PDF

IBM Information Development – Product Documentation

Challenge

- Documentation across IBM - 1,500 full time authors, 1 billion words annually, translated to 40 lang, across multiple publishing formats
- Acquisitions and organic growth - Each authoring team with individual tool sets
- A strategic solution required to unify content creation, approval, change management & publishing across the enterprise
- Needed flexibility to scale and expand to meet IBM's future business needs

Solution

- Arbortext Editor for DITA XML authoring
- IBM FileNet Content Manager/ DITA - Content mgmt, automate processes for : review/ approval, translation preparation, project launch and content publishing
- DITA Open Toolkit from OASIS - multi-format output generation
- XyVision Parlance Publisher for print and PDF publishing

Business Benefits

- Avoid cost to build tools providing end-to-end authoring and publishing process.
- Productivity improvements – Automate time consuming manual processes and tasks
- Authors have necessary tools for end-to-end authoring process connected to one user-friendly interface.
- Enables content reuse & separates content from format
- Over $35M in productivity improvements and cost avoidance over four years – Initial rollout July '09
- Scalable to meet IBM future business needs

IBM FileNet Content Manager - User Experience

Workplace XT

- Intuitive web based user experience
- Explorer look and feel
- Roles, multi select drag/drop, templates etc

Office Integration

- Rich integration for heads-down users
- Task panes and ribbon bar for ECM interaction

Content Engine - Search

Capabilities:

- Combine property and content Search
- Scope to folder (and sub-folders)
- Search across multiple object stores
- Search for federated documents
- Search templates and stored searches
- Exposed though through P8 API and standard database interfaces

Benefits:

- ✓ Locate documents easily using structured and unstructured criteria
- ✓ Constrain searches just to where you want to search
- ✓ Save commonly used searches for individual or group use
- ✓ Find documents wherever they are stored

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Content Engine – Advanced Search

- Simple Keyword Search
- Advanced Search
  - Search Options expandable
  - More criteria options

Automatic Document Classification

Capabilities:

- Automatic extraction of meta-data from content
- Automatic selection of document class
- Out of box – XML classifier, DITA classifier
- Create custom classifiers and customize out of box classifiers

Benefits:

- ✓ Improved User Productivity
- ✓ End user does not have to wait for the request to be completed.

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Integrated Document Renditioning /Publishing

Capabilities:

- One click publishing
- Automatic linkage between source and published documents
- Converts from variety of formats to HTML and PDF
- Out of box integrations to FileNet Rendition Engine and DITA Open Toolkit

Benefits:

- ✓ Plug and Play document renditions.
- ✓ Manage end-end document life cycle ex: authoring to publishing
- ✓ Shields the complexity of document conversions.

Lifecycle & Document Publishing

- Document Life Cycle States : Draft, Review, Approve, Publish
- Life Cycle Actions – Promote, Demote, reset, exception

= business process

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FileNet Content Manager for the Enterprise

Capabilities:

- Broad platform support
- Flexible authentication and authorization framework
- Multi repository federation
- Flexible storage options
- Enterprise site topology
- Rich APIs and sophisticated application deployment

Benefits:

- ✓ Fits with your infrastructure strategy both today and tomorrow
- ✓ Easily integrates to existing security infrastructure
- ✓ Manages your Enterprise Content wherever it resides
- ✓ Deploy responsive services to all geographies
- ✓ Rapid delivery of solutions

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Broad Platform Support

- **Operating Systems**
  - Windows
  - AIX
  - Solaris
  - HP-UX
  - Linux
  - zLinux
- **Application Servers**
  - IBM Websphere
  - BEA WebLogic
  - JBoss
- **Databases**
  - IBM DB2, DB2/z
  - Oracle
  - Microsoft SQL Server
- **Directory services**
  - IBM Directory
  - Sun One Directory
  - Active Directory + Multi-Forest
  - Novell eDirectory
  - Oracle Internet Directory

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Content Engine - Security

Capabilities:

- Java Authentication and Authorization Service (JAAS)
- WS-Security Framework
- Support for popular directory services
- Flexible (direct and proxy) access control model

Benefits:

- ✓ Interoperates with existing proprietary and standards based security infrastructures
- ✓ Controlled access to documents based on sensitivity of information

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Content De-Duplication

Capabilities:

- De-duplication of content ingested into P8 regardless of the source (Workplace, ICC, SharePoint, Capture, custom facilities, etc)
- Configurable per storage area

Benefits:

✓ Reduction of storage capacity requirements

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Manage Your Enterprise System Topology

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IBM FileNet P8 Enterprise Scalability

Performance Study

- 8 hour day =
- 32M docs ingested
- 50M docs retrieved

Optimizing Geographical Deployments

- **Requirement**:
  - Maintain datacenter control of databases and filestores
- **Requirement**:
  - Service high volume sites without compromising response times or overloading the WAN
- **Solution:** P8 Geographical Optimization
  - Request forwarding: Optimizes database interaction
  - Content Caching: Optimizes document retrievals

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Geographical Optimization – Request Forwarding

- Requests forwarded to CE local to DB
- Minimize impact of WAN latency
- User Response time improvement
- Combine with Content Caching

Geographical Optimization - Content Caching

- Caches content only
- Optimizes document retrievals
- Read and write-thru population
- FileStores can opt out
- CM site topology aware

P8 Application Deployment

Capabilities:

- Define Reusable environments and pairs
- Automatically converts assets from source for import to destination
- XML based, automatable and scriptable.
- Comprehensive reporting with impact analysis

Benefits:

- ✓ Minimizes risk on mission critical deployments
- ✓ Reduced maintenance costs
- ✓ Time to Value

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Rich Developer Landscape - Content Engine API's

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IBM FileNet Content Manager - User Experience

FileNet CM Environment Management

- Define and reuse environments
- Define and reuse environment pairs

Analysis & Reporting

- Identify common problems before making changes to destination system
- Reporting of objects to be deployed

Change Impact Analysis Report

Table of Contents

Summary
- Statistics by Class
- Estimated Size Information by Class
- Estimated Size Information by Data Type

Details
- Objects That Passed Analysis
- Estimated Size Information by Object

Summary

Report Generated On:	2009-07-30 16:14:13 PDT
Deployment Tree Used:	B:\deploy\P8DeploymentDataForPxt2
Deploy Dataset Used:	B:\deploy\P8DeploymentDataForPxt2\Environments\edp8host12\Assets\Deploy Dataset1.converted
Pair Name Analyzed:	edp8host08 to edp8host12
Import Update Option Used:	Only update an object if the instance in the import dataset is newer than the one at the destination.
Overall Analysis Status:	Passed
Total # of Objects Analyzed:	106
Total # of Failures:	0
Total # of Objects that would be created during import:	77
Total # of Objects that would be updated during import:	0
Total # of Objects that would be skipped during import:	29
Total Estimated Size:	1,518.29 KB

Auditing

Capabilities:

- Auditing is implicit in all aspects of Content Manager
- User activity and administrative activity can be audited
- Auditing can be selectively enabled at any level
- What is audited
  - event, user info, date & time, actual query, permissions modified, …
- Accessible through APIs or exportable

Benefits:

- ✓ Compliance to regulations
- ✓ Identifies problems and corrects deficiencies
- ✓ Increases management awareness.

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Storage Connectors – Protect Content and Expand

- Software for P8 to store content on external storage devices
- Special integration to support storage-based content protection
- Extend storage beyond FileNet platform capabilities
- Access provided over the IP network
- Content owned and controlled by FileNet
- Storage platforms independently managed
- (Note: standard DAS, SAN and NAS devices do NOT need a connector)

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Storage Connectors - Benefits

- They enable:

Protection

Provisioning

Scalability

Integration

High Availability

Disaster Recovery

Lower Storage Cost

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Storage Connectors - Architecture

Storage Connectors – Devices and Capabilities

Vendor/Model	Interface	Server Software	Capabilities
IBM Tivoli Storage Manager ***IBM System Storage DR550*** ***IBM Information Archive (IIA)***	TSM Archive Client API	TSM SSAM	- Up to 304TB of magnetic storage (IIA) and PB on tape - Policy-based retention managed on the TSM side; FileNet doc class maps to retention policies - Provides tiered storage for archival on low-cost tape media - All TSM magnetic and tape devices supported - Disaster Recovery through replication and/or tape
NetApp/IBM N-Series SnapLock	NFS or CIFS	Data OnTap SnapLock	- Up to 1,176TB of magnetic storage - Object-level retention - Block-level de-duplication supported - Retention period applied through file system settings - All NetApp and IBM N-Series SnapLock-enabled device models supported - Disaster Recovery through replication
EMC Centera	Centera SDK	CentraStar	- Up to 128TB of magnetic storage per cabinet - Object-level retention - Content object de-duplication supported - All Centera editions supported - Disaster Recovery through replication

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IBM FileNet Content Federation Services

80% of Enterprise Data is Unstructured Data and often exists in <u>many disparate repositories</u>
- ecm customer service poll

Business Challenges:

- Sub-optimal customer service
  - Content inaccessible from disparate repositories
- Lack of business agility
  - Custom content integrations or consolidations are slow, can be very expensive to build and maintain
- Regulatory Compliance
  - Compliance policies must span all applicable repositories

CFS Delivers:

- Consistent interaction with content across disparate sources
- Maximum leverage of content with minimum ongoing effort
- Protecting the investment of existing applications
- Enables content to be 'managed in place' with consistent, enterprise wide policies and controls

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IBM FileNet Content Federation Services

- Normalizes content into the FileNet P8 Master Catalog
- Extends the benefits of integrated ECM to disparate content systems
- Access to rich FileNet solution portfolio from IBM and partners
  - Rich ECM + Search
  - Records Management
  - Business Process Management
  - Partner solutions
  - …

Provides a foundation for standardization on IBM FileNet P8 for content across disparate content repositories

*** Native P8 storage. Non federated*

CFS – Conceptual Overview

** CFS-IS support only

CFS - IBM Content Integrator

- ICI provides integration access to IBM and third party repositories
- CFS for ICI federates the content into the P8 content engine, so that appears to P8 as native P8 content
- Content federated into the P8 Master Catalog is enabled to support
  - Search and Retrieval
  - Records Management
  - BPM (Read-only, unidirectional)

Central metadata management provides a foundation for standardization on IBM FileNet P8

CFS for Image Services

- Provides direct integration with IS
- CFS for IS federates the content into the P8 content engine, so that IS content appears to P8 as native P8 content
- Content federated into the P8 Master Catalog is enabled to support
  - Search and Retrieval
  - Records Management
  - BPM (read-only, unidirectional)
- Three architectures for 3 use cases
  - Customers new to P8 and IS
  - Existing IS customers staying with IS
  - Existing IS customers intending to migrate to P8 over time

FileNet Image Services

Eases and promotes federation of IS content into P8 to facilitate option for eventual migration

CMOD Integration with IBM P8

- P8 supports OnDemand through P8 CFS-CMOD
  - OD document metadata is federated into P8 database
    - Unidirectional
    - OD physical data remains in place
  - Content federated into the P8 Master Catalog is enabled to support
    - Unified search
    - Business Process Management (BPM)
    - Records Management
- P8 Workplace XT supports OnDemand
  - Searching/viewing documents
    - AFP ActiveX/PlugIn
    - Linedata Applet
  - Not intended to replace OnDemand clients for production use

Content Federation Services Summary

- IBM Content Federation Service offerings provide the most complete and robust solutions in the market
- Acts as a foundation for strategic initiatives
  - Compliance and risk management
  - Business process management
  - Mergers & acquisitions
  - Standardization and Consolidation
- Once federated, searches execute natively in P8
  - No additional loading on source repositories
  - Coherent index across all content sources
- Federated objects participate in full richness of P8 platform
  - Active Content
  - BPM
  - Records Management

CFS enables you to consistently ***manage in place*** *all your content…*

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Product Help/Documentation/Resources

- IBM FileNet P8 4.5.1 information center on ibm.com
  - http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp
- IBM FileNet P8 documentation available for download
  - http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27010422
- Customized installation documentation (PDF)
  - http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27016206
- IBM FileNet P8 System Requirements information
  - Hardware and Software Guide: http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27013654
  - Compatibility matrix: http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27014734

- **FileNet CM links**
  - **FileNet Content Manager**
  - **FileNet Content Manager Features & Benefits**
  - **Agile ECM for FileNet Content Manager**
  - **FileNet Content Manager Starter Pack**
  - **ECM Starter Packs**

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多謝

ありがとうございました

多谢

감사합니다

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