



Overview of EDMS Platform with IBM FileNet Content Manager and Data Extraction Platform with IBM Datacap

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BOOKMARK NOT DEFINED.

Revision History

Date	Version	Description
27 May 2020	1	

1. Functional Overview of IBM FileNet ECM

The FileNet P8 platform offers enterprise-level scalability and flexibility to handle the most demanding content challenges, the most complex business processes, and integration to all your existing systems. FileNet P8 is a reliable, scalable, and highly available enterprise platform that enables you to capture, store, manage, secure, and process information to increase operational efficiency and lower total cost of ownership. FileNet P8 enables you to streamline and automate business processes, access and manage all forms of content, and automate records management to help meet compliance needs.

For more information on FileNet, please visit online knowledge center

https://www.ibm.com/support/knowledgecenter/SSNW2F_5.5.0/com.ibm.p8.sysoverview.doc/p8sov000.htm

1.1. Functional description of FileNet

FileNet Content Manager (FileNet CM) can manage all types of electronic documents in different formats. It handles documents according to their life cycle, from creation to their eventual publication. Documents can be "frozen" (for instance, scanned images) or "living" (memo to validate before release, Word document response to a client). FileNet Content Manager can also manage folders and business objects (i.e. a customer record). These key features enable content anywhere, so that corporations can access that same content from within customized and industry-standard applications.

FileNet Content Manager includes the following features:

- **Document classes:** FileNet Content Manager allows defining various categories of documents, or document classes. Each class has its specific characteristic like properties (document metadata for indexing and retrieval), access rights and traceability. Properties are customized according to your specific needs. Information for properties can be entered when documents are created; they can be modified or completed after the creation of the document, during its life cycle.
- **Version management:** The solution manages both major and minor version for documents (for instance major version 1, minor version 1.1 and 1.2, major version 2)
- **Document lifecycle:** A document can be associated to a life cycle that represents the different steps of its life in the enterprise (draft, validated, published, superseded).
- **Document Inheritance:** Documents in FileNet CM can inherit metadata, classification, security, workflow and other properties based upon where they are stored or created. This reduces complexity for the document user while enforcing company standards and best practices.
- **Search:** search can be performed both on document properties and document content. Full text search can be done on content as well as properties.
- **Search templates:** Templates are predefined queries that are stored in the repository, and can be accessed by users according to their security rights.
- **Entry templates:** Users can easily add documents, folders, and custom objects to an object store by using entry templates. The entry templates predefine the document class with document property values. When the entry template is used to add a document to the object store, a user interacts with a wizard, which decreases the chance of invalid data entry by limiting the number of steps required and providing a more controlled entry process. Entry templates can help automate the classification process by filing the document into prespecified folders and by predefining the class and property values of the object. Entry templates also make it easy to define approval workflows for these objects.

- **Document viewing:** an integrated document viewer in IBM Content Navigator(ICN) unified web client gives additional function to users like zooming, thumbnails, annotations and role-based redaction. The integrated viewer can handle a wide variety of document formats without the need to install native viewer application. You can also Merge and split pages in the viewer without requiring native applications.
- **Security:** A granular system of role-based access rights is implemented in FileNet Content Manager. Each object is protected by an access control list, that defined which users and/or groups of users have the right to view, modify and delete a document and/or its properties.
- **Audits:** various actions performed on all objects kept in the repository are auditable (i.e. creation, modification, deletion). Then, it is possible to see for each object the actions that have been performed, when and by whom.
- **Validation workflow:** it is possible to define document validation workflows (either sequential or parallel) to support review / validation of documents. It also integrates with optional IBM Business Automation Workflow to automate process-centric and/or case-centric process flow which requires both human and system activities for review and approval processes.
- **Multiple repositories:** it is possible to define multiple libraries to organize the classification of information according to organizational constraints. Users can be allowed access to any or all of these libraries.
- **Integration with Multiple Storage Vendors :** Support for mix and match storage support to meet your compliance needs while maintaining enterprise choice.
- **Bulk Operations :** Configure Bulk operations to cancel checkout of documents if document owners have left the company or Configure a sweep job to do a bulk move of document content from one storage to another storage to comply with your storage archival & retention policy.
- **Bulk Import :** The tool imports documents in bulk into an object store. The documents are usually in the form of TIFF images and are generated by an external process. The documents are imported as a batch process. Tool is multi-threaded, so you can run multiple batches in which each thread processes batches simultaneously.
- **Support rich & modern API :** Besides CMIS, Web Services, Java & .NET, it also supports GraphQL to simplify application development. GraphQL is a rich, modern API which is ideal for web and mobile application development. A query language for APIs that is Intuitive, easy to use API, optimized for rapidly changing data at scale & Retrieve and update just the information you need, resulting in improved performance. For more info on GraphQL, please refer to Open source - Linux Foundation Project at <https://gql.foundation>. For details on FileNet APIs, please refer to https://www.ibm.com/support/knowledgecenter/SSNW2F_5.5.0/com.ibm.p8.common.dev.doc/dev_roadmap/tools.htm
- **Governance :** You can implement data protection and long-term retention by setting retention policies and holds on documents. Retention policies and holds are important components of an overall information lifecycle governance program. A hold is a means of preventing deletion of an object. Holds are typically used in litigation scenarios where a set of documents is identified as being relevant to a legal matter. The documents are then placed on hold so that they cannot be deleted until the matter is resolved. Holds can be applied by using IBM® Enterprise Records(optional component) and are processed by FileNet P8. Storage level holds add security by pushing the hold down to the device level.
- **External share :** Securely share documents and folders with people outside of your organization. Only authorized users can share. There is Granular control for documents and folders. External users can login using cloud-based identity providers, like Google and IBM ID. There is optional share expiration, Entry templates to automate adding new documents, Share subject and message provides context that is always available & Visibility to everything you have shared

- **Design Low code application** : you may use an optional component called IBM Cloud Pak for Automation's Application Designer and the new Content Services Toolkit to add content to your low code applications where you can List view – search results or folder contents, menus to download, view, version, etc, Document Viewer & Properties view
- **Microsoft Office Integration** : FileNet P8 integrates with Microsoft Office applications so that users can manage documents, email, and attachments that are within a FileNet P8 object store directly from the associated office application. Outlook integration broadens search capabilities by automatically capturing email properties such as the To and From fields. With Office integration, a user can add a document or email message and its attachments to the FileNet P8 object store by selecting tasks from familiar menus,
- **Integration with Lotus** : IBM® FileNet Collaboration Services enables you to directly store and access content in FileNet P8 by using client applications such as IBM Connections and IBM Lotus® Quickr. For detailed information, please refer to https://www.ibm.com/support/knowledgecenter/SSNW2F_5.5.0/com.ibm.p8.sysoverview.doc/p8sov066.htm
- **Monitoring system health** : IBM Enterprise Content Management System Monitor automates the monitoring of the entire IBM enterprise content management environment including FileNet P8 software components, application servers, databases, log files, network communication and devices, and the full range of FileNet P8 storage repositories. While IBM System Dashboard for Enterprise Content Management is a performance monitoring tool that tracks information such as application-specific events, ECM System Monitor continually monitors the health of IBM enterprise content management components and alerts administrators to critical errors.
- **Business Operational Insights**: FileNet integrates with optional Business Automation Insights component of IBM Cloud Pak for automation for Kibana dashboarding that can be configured by business users without IT involvement. This dashboard offers insights into the state and evolution over time of document event instances that are generated through the IBM FileNet® Content Manager. The dashboard displays widgets that show content related statistics. An example is the number of documents in an object store with particular document class/type, creator, and lastModifier within a time range. Using IBM Business Automation Insights, you can benefit from powerful analysis capabilities, such as viewing your business data in dashboards and using HDFS data lakes for data science applications where you apply Machine Learning models for AI-infused digital business operations.

In addition, FileNet Content Manager allows managing « Active Content » that is capturing events that occur on documents and reacting to these events.

Event management ensures optimal reactivity of users in response to requests from customers, partners and internal processes. The principle is to "capture" the occurring events on an object stored in the repository to trigger associated actions. For instance, it is possible to send a message to a manager when a note on the operation of its service reaches the validation step in a life cycle, to initiate a validation process on receipt of an invoice, to update document properties or to classify a document in a folder. Events that may be covered are:

- ▶ Adding a document
- ▶ Modifying a document
- ▶ Check-out of a document
- ▶ Deletion of a document
- ▶ Move to the next step in the life cycle
- ▶ Adding a document in a folder
- ▶ Removing a document from a folder

FileNet can also act on content events with webhooks which deliver content data to other services in real-time, based upon a triggering event. Webhook is built on the comprehensive FileNet event model that reacts to events on documents, metadata, folders.

1.2. Functional description of Unified Web Client using IBM Content Navigator(ICN)

The FileNet P8 platform includes an application environment to provide users with enterprise content management (ECM) functionality. IBM® Content Navigator is a web client that provides users with a console for working with content from multiple content servers, including content that is stored on FileNet Content Platform Engine object stores.

With IBM Content Navigator, users can:

- Search for content that is stored on the repository
- Browse for content that is stored on the repository
- Create favorites to easily find documents, folders, and other content that they frequently access
- Create teamspaces to provide a focused view of the relevant documents, folders, and searches that they need to complete their tasks
- Use workflows to review and approve documents and assign work to users

You can create multiple instances of the web client from a single deployment of IBM Content Navigator by creating desktops. Desktops enable you to tailor the web client to a particular set of users. For example, when you create a desktop, you can specify which features are available and which repositories users can access. You can direct different users to the different desktops that are configured for a single deployment. You can also change the logo and color scheme of the desktop.

You can also extend the functionality of the IBM Content Navigator web client by configuring plug-ins. Plug-ins enable you to add new features to the web client, integrate IBM Content Navigator with other applications, or access data that is stored outside of the repository. You can create your own plug-ins, or you can use plug-ins from other IBM products, IBM business partners, or third-party vendors.

Browse view

Browsing is used to find and work with the documents, folders, and stored searches that are available on a site. The top-level container for items accessed in Content Navigator is by default the repository or object store. The object store can contain documents, folders, stored searches, and search templates. A folder contains the items filed within it, such as subfolders or documents. A stored search displays the document or folder objects that match search criteria.

Content Navigator also provides an option to store user favourites. Favourites are used to create references to the documents, folders, or predefined searches most frequently accessed by the user, similar to the use of Bookmarks or Favourites defined in a browser.

Search view

Documents or folders can be located in Content Navigator based on either keywords or their properties. Searching based on properties allows objects to be located based on the values contained in their metadata properties. The system provides the ability to perform predefined searches that are defined through the Search Designer, as well as the ability to perform ad-hoc searches through various approaches: simple search, Keyword search, and Advanced search. Ad-hoc searches through the Advanced Search page can also be saved on a per-user basis.

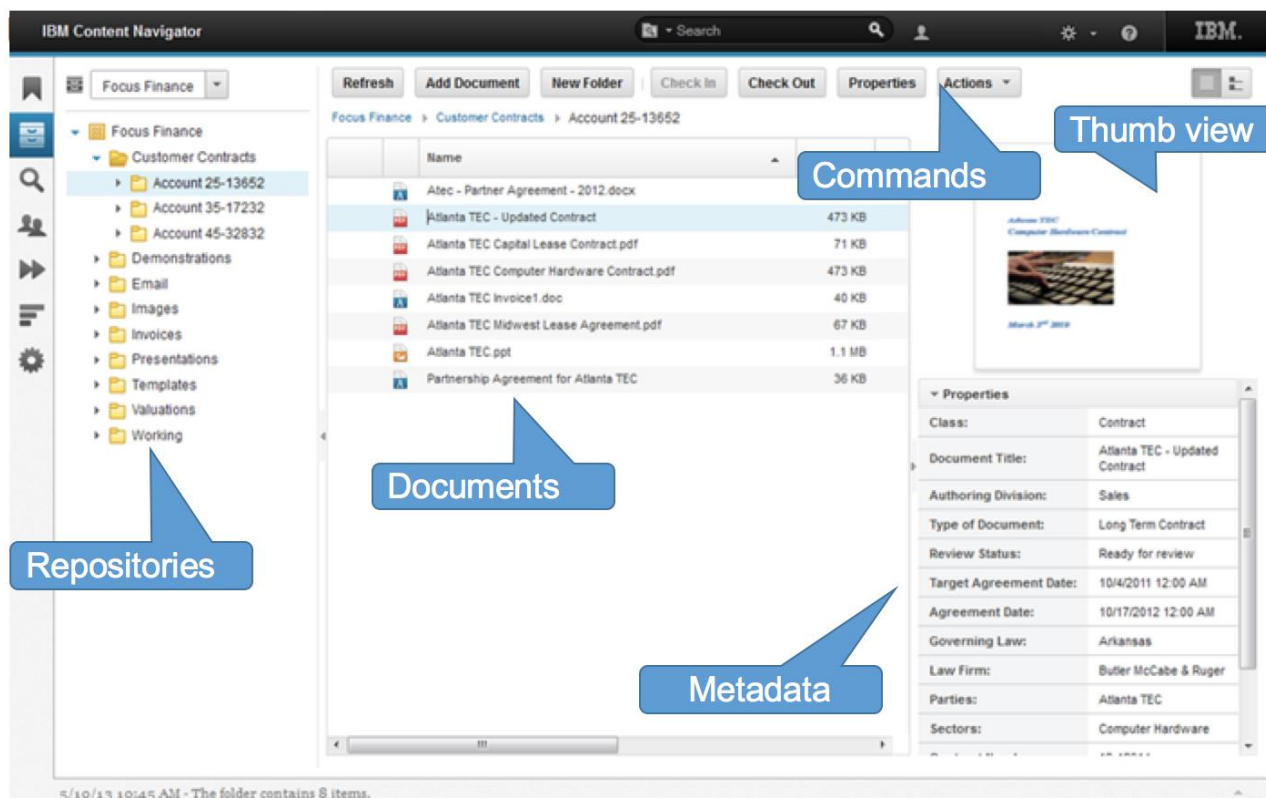
Tasks view

The Tasks mode in Content Navigator provides quick access to workflows and work items that users have permission to view or process. As workflows are started (either manually or automatically), work items are routed to queues for processing by authorized users. Users can be presented with queue and work item information within the various Tasks views, which include My Inbox view, Public Inboxes, My Active Workflows, and Task Tracker.

My Workplace view

The My Workplace page provides a way to compose various aspects of the Content Navigator application into composite views focusing on information that is relevant to a user's daily tasks. It can also include portlets for external Web sites, such as a corporate or industry site, for reference. For example, with My Workplace, users can view items in an inbox, view multiple folders and their content, see search results, review the list of active launched workflows, review the list of work items in a specific public inbox, and see the Author tools in a single view. Composed pages are shared among multiple users by role.

The following capture shows a screenshot of Content Navigator in Browse view.

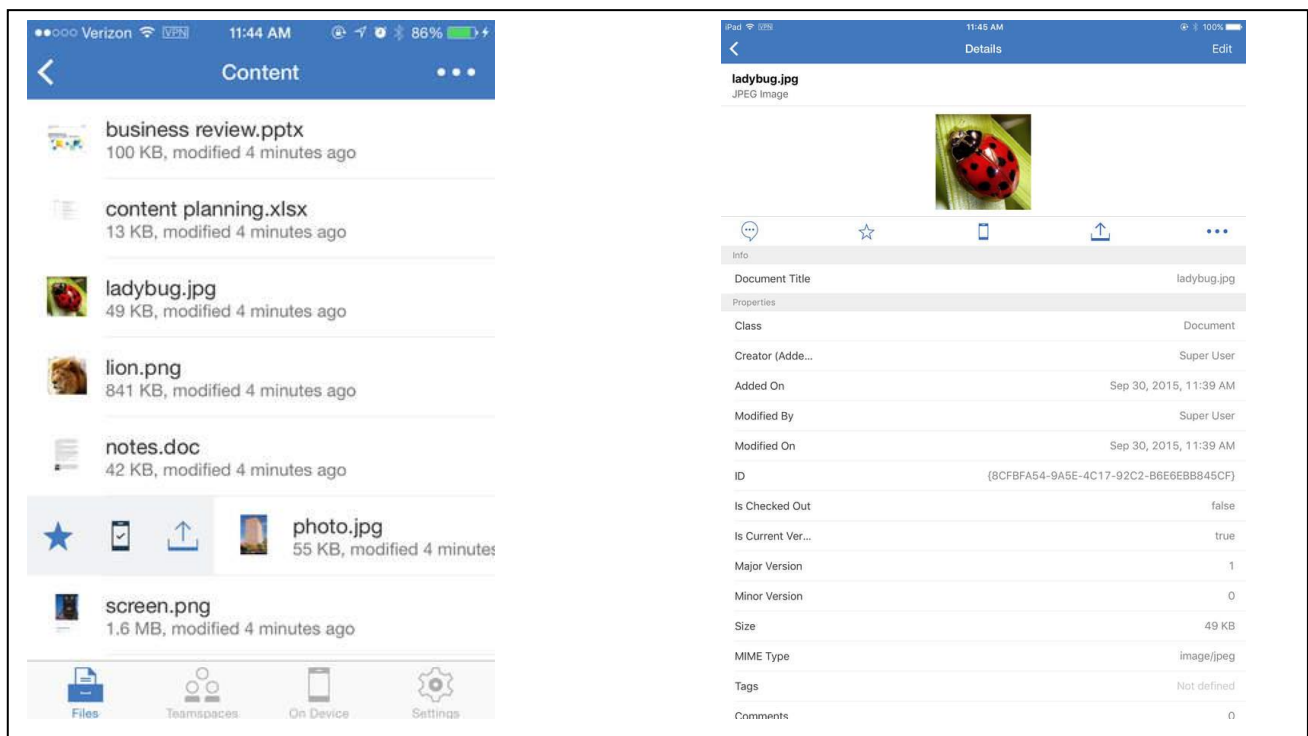


1.2.1.1. IBM Navigator Mobile

IBM Navigator Mobile brings mobility capability to users with seamless interface for consistent look and feel. IBM provides mobile application that are ready for iOS and Android download. User can also modify pre-built mobile application to fit with their demands.

Please refer to our online knowledge center for detailed description of this capability.

https://www.ibm.com/support/knowledgecenter/SSEUEX_3.0.7/com.ibm.installingeuc.doc/eucco049.htm



1.2.1.2. Integration with Microsoft Office

With Integration for MS Office Integration, it is possible to manage documents directly from within a Microsoft Office application, such as Microsoft Word or Excel.

Integrating your Microsoft Office applications means you can use special commands and menu options to quickly complete document management tasks, such as adding documents and emails to an object store, checking documents in and out of an object store, and saving copies of your work from inside an application.

The following picture shows a screenshot of MS Office Integration: add document functionality.

