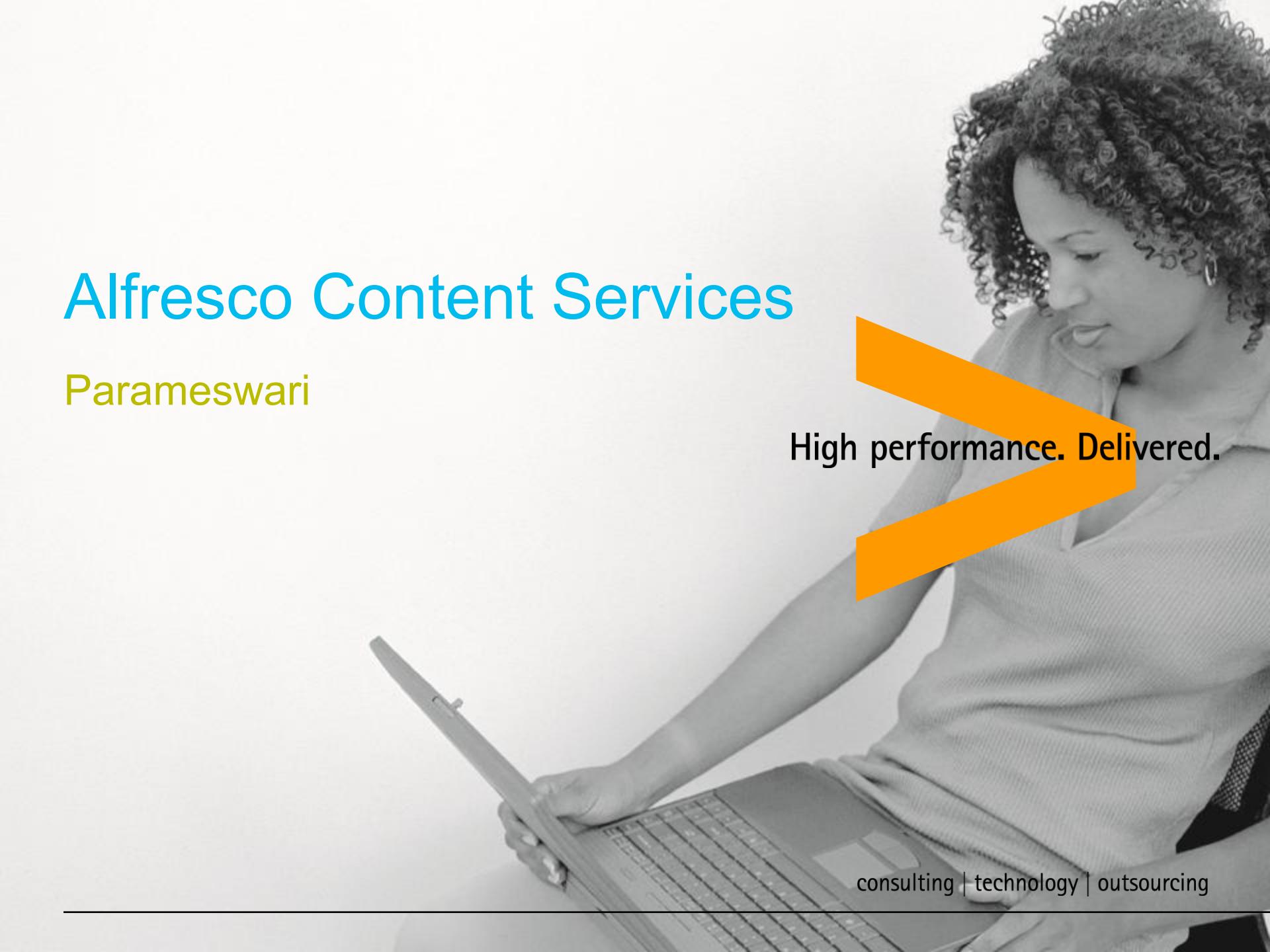


Alfresco Content Services

Parameswari



High performance. Delivered.

consulting | technology | outsourcing



Goals

- Alfresco Architecture
- Installation
- Content Model
- Configuration and Layouts
- Alfresco Share Components Customization
- Working with the new Aikau framework in Alfresco Share
- Workflows

1990s — The Web Revolution and the Birth of the CMS



-  **The Web Changes Everything**
- In the **early 1990s**, the invention of the **World Wide Web (1991)** and **HTML (Tim Berners-Lee)** turned content publishing from desktop typesetting into online delivery.
- Companies needed ways to **manage and publish digital content** (HTML pages, documents, images) to their websites — leading to the **first generation of CMS**.
- The first CMS-like systems were **custom-built**, often tied to specific websites (e.g., newsrooms, universities).

1990s — The Web Revolution and the Birth of the CMS



-  **The Web Changes Everything**
- In the **early 1990s**, the invention of the **World Wide Web (1991)** and **HTML (Tim Berners-Lee)** turned content publishing from desktop typesetting into online delivery.
- Companies needed ways to **manage and publish digital content** (HTML pages, documents, images) to their websites — leading to the **first generation of CMS**.
- The first CMS-like systems were **custom-built**, often tied to specific websites (e.g., newsrooms, universities).

1990s — The Web Revolution and the Birth of the CMS



-  **Key Early Systems**
- **Vignette StoryServer (1995)**: One of the first commercial web CMS platforms — introduced the concept of “templates,” “workflow,” and “content reuse.”
- **Interwoven TeamSite (1996)**: Added version control, workflow, and template-based publishing — heavily used by enterprises.
- **Documentum (1990, commercialized mid-1990s)**: Pioneered enterprise document management, later evolving toward full **enterprise content management (ECM)**.
- **FileNet (acquired later by IBM)**: Early leader in document and workflow management.

1990s — The Web Revolution and the Birth of the CMS



-  **Trends**

- From “print” → “publish to web.”
- HTML pages became modular: content stored separately from presentation.
- Enterprises realized **content reuse** and **workflow** improved consistency.
- Static sites → template-driven dynamic pages → early CMS logic.
- Focus on **intranets**, **knowledge bases**, and **corporate websites**.



2000s — Enterprise Content Management (ECM) and Open Source CMS



-  **Rise of ECM**
- As content exploded across email, file servers, and web portals, organizations wanted **a single platform** to manage **documents, records, web content, and collaboration**.
- This decade saw the birth of the term **“Enterprise Content Management (ECM)”** — integrating document management, web content, records, imaging, and workflow.



2000s — Enterprise Content Management (ECM) and Open Source CMS



-
- Major ECM Players
 - Documentum (EMC)
 - FileNet (IBM)
 - OpenText
 - Alfresco (founded 2005, open-source ECM alternative)
 - SharePoint (Microsoft, launched 2001)



2000s — Enterprise Content Management (ECM) and Open Source CMS



-
- Each offered:
 - Versioning, metadata, retention, workflows.
 - Integration with Office tools and intranet portals.
 - Secure document repositories with search and access control.



2000s — Enterprise Content Management (ECM) and Open Source CMS



-  **Open Source CMS Explosion**
- While ECM focused on enterprise, open-source CMS platforms revolutionized **web content publishing**:
- **WordPress (2003)**: Blogging → full-featured web CMS.
- **Joomla! (2005)** and **Drupal (2001)**: Enabled community sites, intranets, and corporate portals.
- These democratized content publishing — anyone could set up a CMS.



2000s — Enterprise Content Management (ECM) and Open Source CMS



-
-  **Concepts Introduced**
 - Separation of content from presentation.
 - Template engines and themes.
 - WYSIWYG editors.
 - User roles, workflows, and versioning.
 - Plugin ecosystems.



- **Cloud CMS & SaaS**
- The 2010s saw migration to **cloud-based content platforms** — eliminating the need for on-premise servers.
- Examples:
 - **Adobe Experience Manager (AEM)**
 - **Sitecore**
 - **Contentful (2013)**
 - **Kentico Cloud, Prismic, Storyblok**
- Enterprises moved to “**Content-as-a-Service (CaaS)**”: content delivered via APIs to any device.



- **Headless CMS Architecture**
- Traditional CMS tightly coupled content + front-end.
- **Headless CMS** decouples content storage (back end) from delivery (front end), accessed via REST or GraphQL APIs.
- Ideal for multi-channel publishing — web, mobile, IoT, digital signage.



- 🧠 **Digital Experience Platforms (DXPs)**
- Companies started managing not just content, but **personalized digital experiences**:
 - Integration of CMS + analytics + marketing automation.
 - Examples: **Adobe Experience Cloud, Sitecore XP, Liferay DXP**.



- **Governance, AI, and Collaboration**
 - Rise of **records management, compliance (GDPR),** and secure collaboration.
 - Platforms like **Alfresco Content Services** evolved to support **hybrid deployments, automation, APIs, and AI-based search.**



2020s — Intelligent and Composable Content Management



-  **Key Trends**
- **Composable architectures** — use of microservices, APIs, and cloud-native components (e.g., CMS + DAM + analytics + AI).
- **AI-driven content management:**
 - Auto-tagging, semantic search, and summarization.
 - Predictive personalization.
 - Intelligent workflows.
- **Integration-first systems** like **Alfresco**, **Contentful**, **Strapi**, **Sanity**, and **Hyland** focus on extensibility and cloud orchestration.
- **Zero-trust security** and **hybrid cloud deployments** for governance-heavy industries.



ECM Solutions in 2021



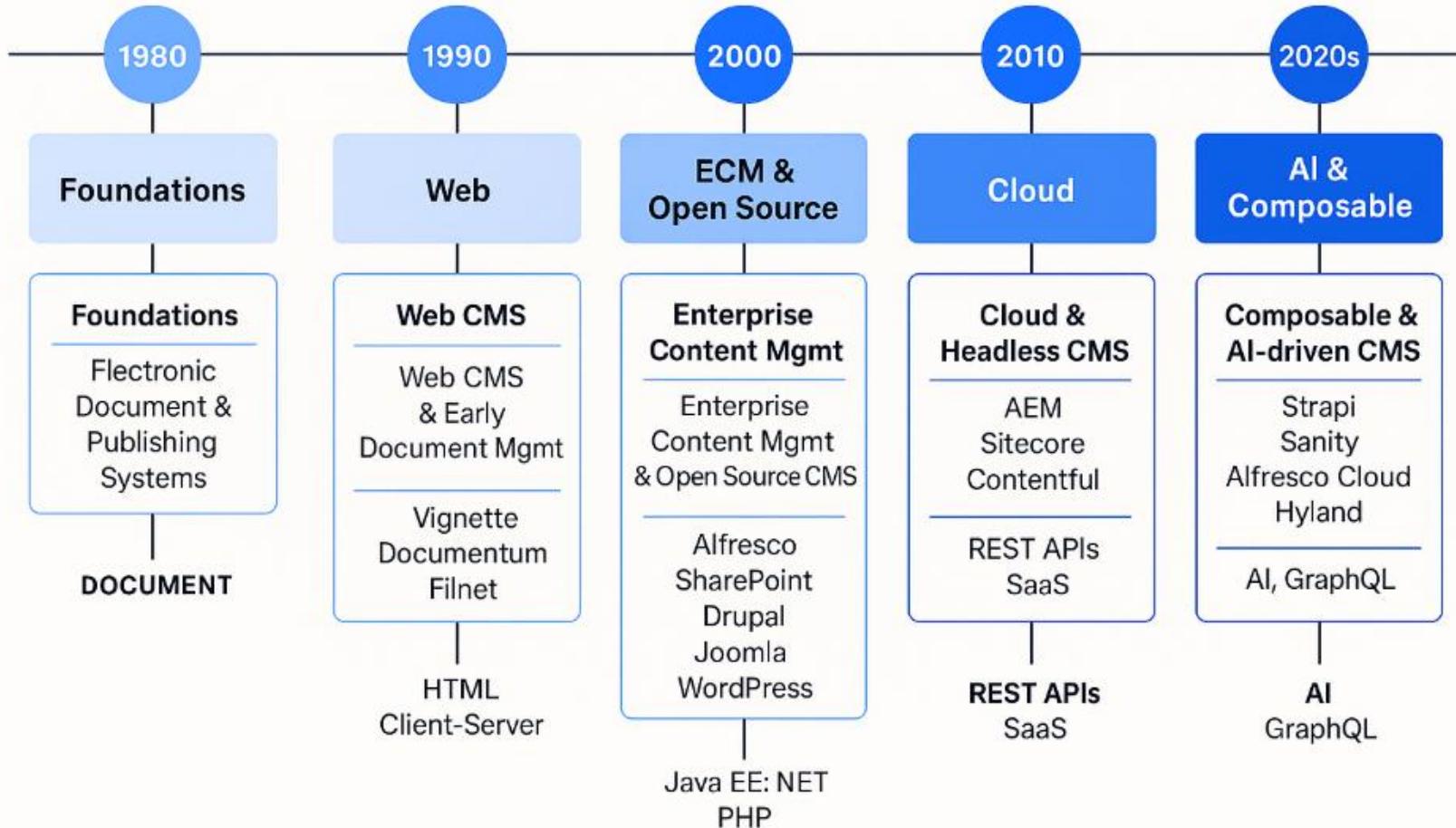


Summary Timeline



Era	Focus	Key Technologies	Representative Systems
1980s	Electronic Document & Publishing Systems	Mainframes, Local Networks	Atex, IBM SCRIPT, DEC Text, Interleaf
1990s	Web CMS & Early Document Mgmt	HTML, Client–Server, Relational DBs	Vignette, Documentum, FileNet
2000s	Enterprise Content Mgmt & Open Source CMS	Java EE, .NET, PHP	Alfresco, SharePoint, Drupal, Joomla, WordPress
2010s	Cloud & Headless CMS	REST APIs, SaaS, Microservices	AEM, Sitecore, Contentful
2020s	Composable & AI-driven CMS	AI, GraphQL, Kubernetes, API-first	Strapi, Sanity, Alfresco Cloud, Hyland

The Content Management Story So Far (1980s–2020s)



Content Management Types -

1. By Purpose / Use Case



Type	Description	Examples
Document Management System (DMS)	Focuses on storing, organizing, and versioning electronic documents and files. Supports check-in/out, metadata, audit trails.	Alfresco, SharePoint, OpenText, M-Files
Web Content Management System (WCMS)	Manages website content (text, media, pages). Provides authoring, templating, publishing, and site management.	WordPress, Joomla, Drupal, Sitecore
Enterprise Content Management (ECM)	Unifies document management, records, web, imaging, and workflow under one enterprise platform.	Alfresco, Documentum, IBM FileNet, OpenText, SharePoint
Digital Asset Management (DAM)	Manages rich media (images, videos, audio, design files) for brand and marketing teams. Includes tagging, rights, and versioning.	Bynder, Adobe Experience Manager (AEM) Assets, Canto
Records Management System (RMS)	Ensures secure storage, retention, and legal compliance for records. Integrated with DMS or ECM.	OpenText RM, Alfresco RM, Laserfiche

Content Management Types --

1. By Purpose / Use Case



Component Content Management System (CCMS)	Manages small “content components” (paragraphs, sections, modules) — ideal for technical documentation and reuse.	Adobe Experience Manager Guides, SDL Tridion Docs, Paligo, MadCap Flare
Learning Content Management System (LCMS)	Manages learning/training materials (courses, quizzes, multimedia) integrated with LMS platforms.	Xyleme, Adobe Captivate Prime, Docebo, Moodle
Headless / API-First CMS	Stores content separately from presentation; delivers content via APIs (REST/GraphQL) to any channel (web, mobile, IoT).	Contentful, Strapi, Sanity, Prismic, Hygraph
Digital Experience Platform (DXP)	Combines CMS with analytics, personalization, CRM, and marketing automation for omnichannel experiences.	Adobe Experience Cloud, Sitecore XP, Liferay DXP, Acquia

Content Management Types --

2. By Architecture



Architecture Type	Description	Example Platforms
Traditional (Coupled)	Content, front-end, and templates are tightly integrated. Easier for editors but less flexible.	WordPress, Joomla, Drupal (classic mode)
Decoupled CMS	Content and presentation layers are separated, but CMS still controls both via APIs.	Magnolia CMS, Adobe Experience Manager
Headless CMS	Only the content backend; front-end (React, Angular, Flutter, etc.) consumes content through APIs.	Contentful, Strapi, Sanity, Hygraph
Hybrid CMS	Offers both traditional templating and headless delivery.	Drupal (Decoupled mode), Kentico, dotCMS, Sitecore XM Cloud

Content Management Types --

3. By Deployment Model



Deployment Model	Description	Examples
On-Premises CMS	Installed and managed on the organization's own servers. Gives full control but needs IT resources.	Alfresco, Documentum, OpenText, Liferay
Cloud-Based CMS (SaaS)	Hosted and maintained by the vendor; users access via browser. Scalable and maintenance-free.	Contentful, HubSpot CMS, Wix, Squarespace
Hybrid / Managed Cloud	Combines on-prem control with cloud scalability (often containerized deployments).	Alfresco Cloud, Sitecore XM Cloud, Adobe AEM as a Cloud Service

Content Management Types --

4. By Industry Focus



Industry	CMS Focus	Example
Publishing / Media	Multi-channel editorial workflows, digital publishing	Atex, WoodWing, Brightspot
Education / E-learning	Course content, assessments, and interactive learning	Moodle, Xyleme, Canvas
Government / Legal	Records retention, compliance, citizen service portals	OpenText, Alfresco, Liferay DXP
E-commerce	Product content, catalogs, personalization	Magento (Adobe Commerce), Shopify CMS, Contentstack

Content Management Types --

5. Modern CMS Convergence



- Today, many platforms blend categories — for example:
- **Alfresco** = DMS + ECM + RM + API-first CMS
- **AEM** = CMS + DAM + DXP
- **Drupal + Acquia** = Open Source CMS + Cloud + DXP
- **Contentful / Strapi** = Headless + Composable architecture



Content Management Types

1. By Purpose/Use Case

DMS

WCMS

ECM

DAM

RMS

CCMS

Headless / API-First

2. By Architecture

Traditional
(Coupled)

Decoupled CMS

Headless CMS

3. By Deployment

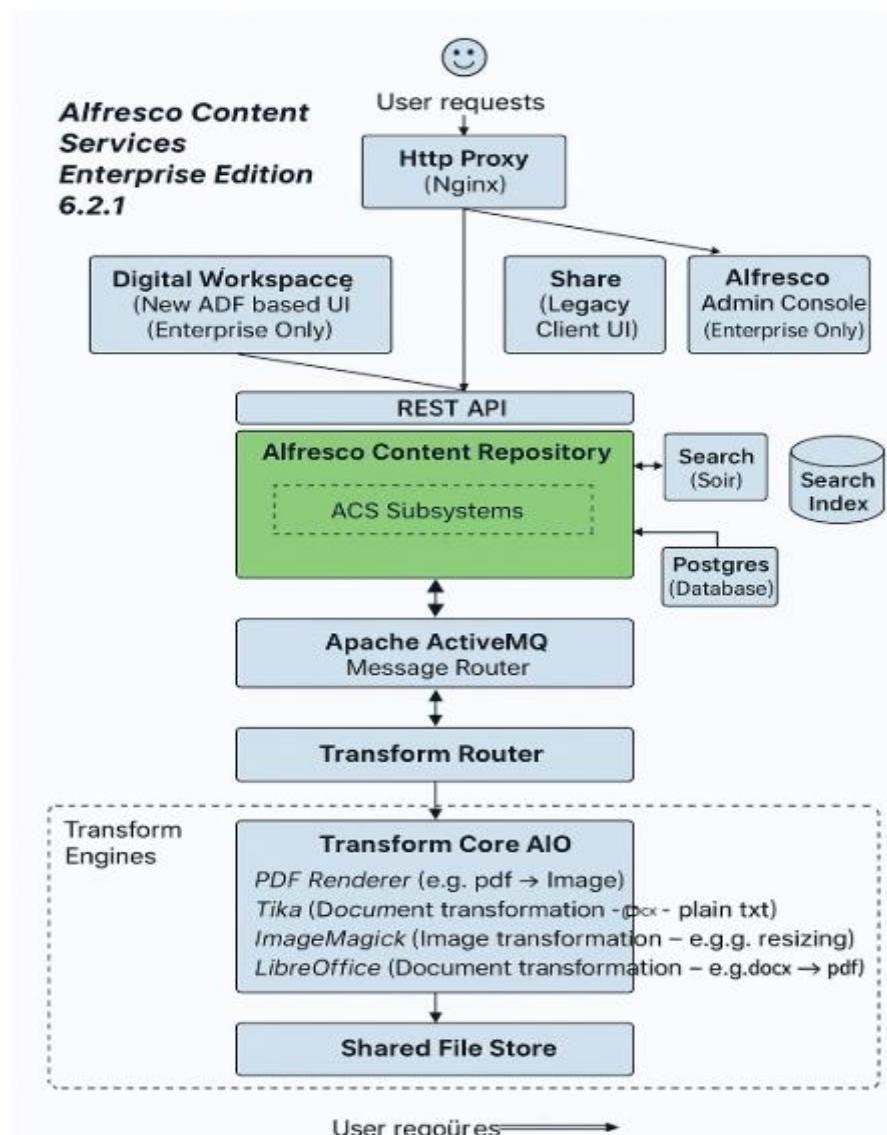
On-Premises CMS

Cloud-Based CMS
(SaaS)

Hybrid / Managed Cloud



Alfresco Content Services (ACS)





Alfresco Content Services (ACS)

-  **1. User and Interface Layer**
- **Components:**
- **Digital Workspace** (ADF-based modern UI)
- **Share** (legacy web client)
- **Admin Console** (enterprise-only management interface)
- These provide **end-user interaction**, allowing document upload, search, and workflow management.



Alfresco Content Services (ACS)

- **🌐 2. Proxy and API Layer**
- **Component:**
- **Http Proxy (Nginx)**
Handles routing, SSL termination, and load balancing between the user interface and backend.
- **ReST API:**
Exposes RESTful endpoints to integrate with external apps or automation workflows.



Alfresco Content Services (ACS)

-  **3. Core Repository Layer**
- **Component:**
- **Alfresco Content Repository (ACS)**
The heart of the system — manages documents, metadata, versioning, access control, and business rules.
- **ACS Subsystems include:**
- Authentication and authorization
- File storage management
- Rules engine
- Content model services



Alfresco Content Services (ACS)

- 🔎 **4. Search & Database Layer**
- **Components:**
- **Search (Apache Solr)** — Indexes metadata and full-text content for rapid search and retrieval.
- **PostgreSQL Database** — Stores metadata, content associations, users, and permissions.
- **Search Index** — Persistent index store for Solr queries.



Alfresco Content Services (ACS)

-  **5. Messaging & Workflow Layer**
- **Components:**
- **Apache ActiveMQ** — Message router enabling asynchronous communication between components (e.g., document transformations).
- **Transform Router** — Directs file conversions (e.g., Word → PDF, PDF → image).



Alfresco Content Services (ACS)

- 🧠 **6. Transformation Services Layer**
- **Transform Core AIO** – Converts files into viewable/searchable formats using:
- **PDF Renderer** — Renders PDF pages as images.
- **Tika** — Extracts text from documents.
- **ImageMagick** — Handles image resizing/format conversion.
- **LibreOffice** — Converts office documents (e.g., DOCX → PDF).



Alfresco Content Services (ACS)

-  **7. Storage Layer**
- **Component:**
- **Shared File Store** — Stores binary content (BLOBs).
Can be local, NAS, or cloud-based (e.g., AWS S3, Azure Blob).



Alfresco Content Services (ACS)

-  **8. Data Flow Summary**
- User → UI → REST API → Repository
- Repository communicates with Solr (search) and PostgreSQL (metadata)
- Transform requests routed via ActiveMQ → Transform services
- Final content stored in **Shared File Store** and indexed for search.



Alfresco ECM Customers





Enterprise content management system (ECM)

- Enterprise Content Management (ECM) is a **strategic framework and software suite** that allows organizations to **capture, manage, store, preserve, and deliver** all forms of content (structured & unstructured) across the enterprise.
- It provides a **centralized digital repository** that controls the content lifecycle — from creation to archival — ensuring compliance, accessibility, and collaboration.
- 📖 Definition (AIIM-AIIM stands for **Association for Intelligent Information Management**.):
“ECM is the strategies, methods, and tools used to capture, manage, store, preserve, and deliver content and documents related to organizational processes.”

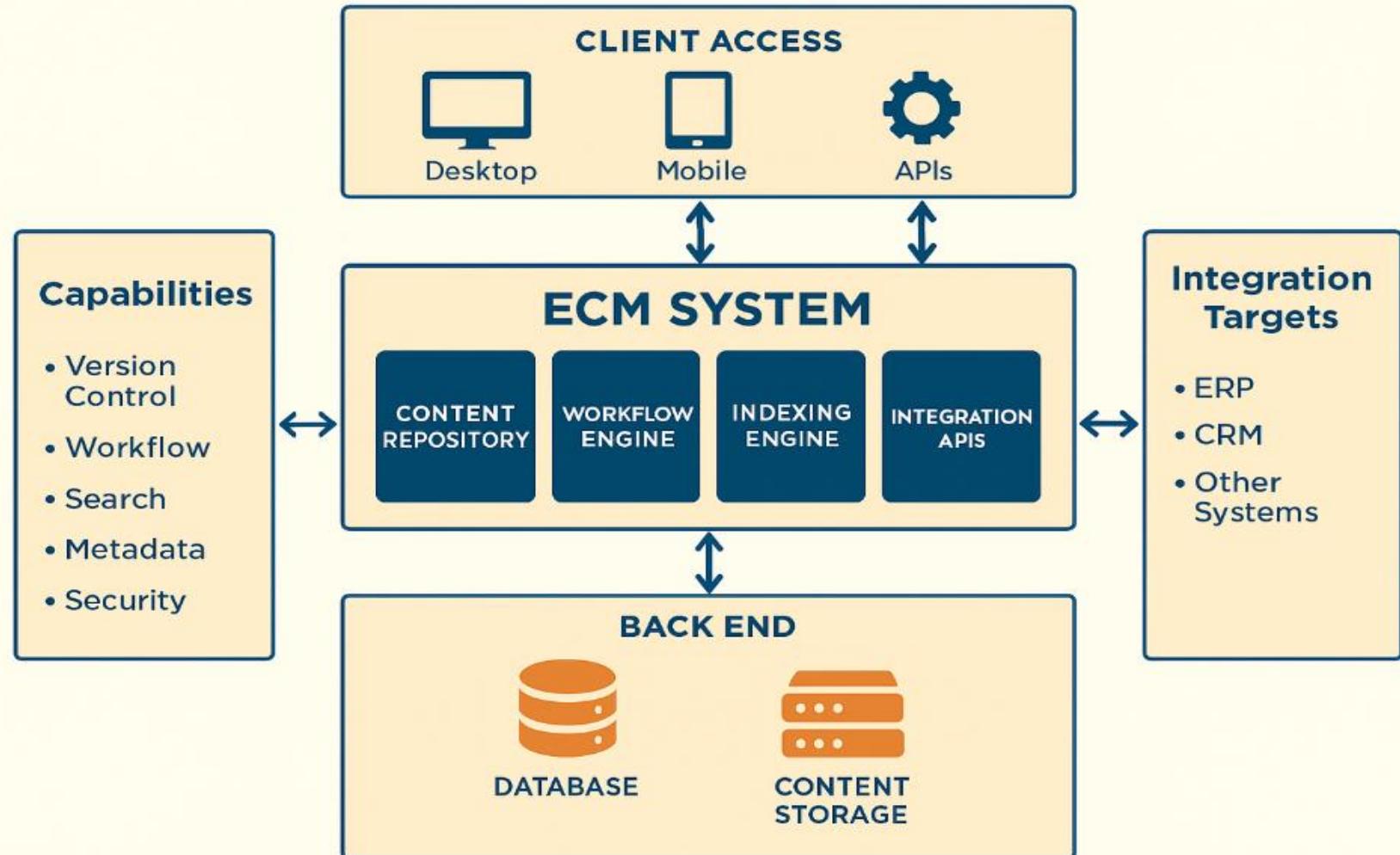


Core Components of ECM

Component	Purpose	Examples
Capture	Digitizes physical documents and imports digital files. Includes OCR, scanning, and email ingestion.	Kofax, ABBYY, Nuxeo, OpenText Capture
Manage	Organizes and categorizes documents using metadata, taxonomies, workflows, and access rules.	Alfresco, SharePoint, FileNet
Store	Central repository for current content (documents, records, images, multimedia).	SQL/NoSQL DBs, File stores, Cloud storage
Preserve (Archive)	Long-term retention for compliance and historical records. Supports retention policies and audit trails.	WORM storage, AWS Glacier, OpenText Archive Center
Deliver	Makes content accessible through portals, APIs, and mobile apps. Enables search, collaboration, and sharing.	REST APIs, SharePoint Online, Alfresco ADF



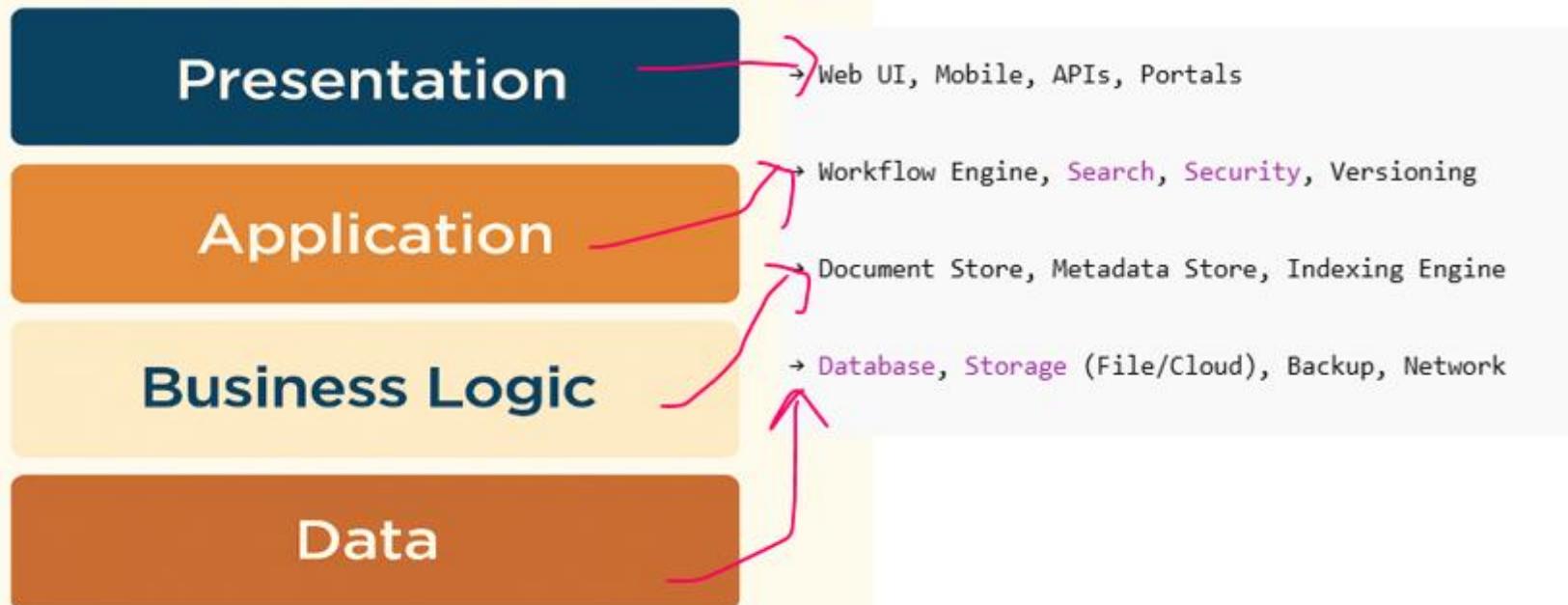
ECM System Architecture





ECM System Architecture

Logical Layers





ECM System Architecture

- **B. Main Modules**
 - **Content Repository** – Stores both documents and metadata.
 - **Workflow Engine** – Automates business processes (approvals, reviews, etc.).
 - **Records Management** – Ensures compliance (retention, audit, legal hold).
 - **Search & Indexing** – Uses Solr/Elasticsearch for metadata + full-text search.
 - **Security & Access Control** – Role-based permissions, encryption, SSO.
 - **Integration APIs** – REST, SOAP, CMIS for ERP/CRM integration (SAP, Salesforce).



Key ECM Functionalities

Functionality	Description
Version Control	Tracks changes and maintains revision history.
Metadata & Tagging	Classifies documents for fast retrieval.
Workflow Automation	Automates document routing, approvals, and escalations.
Access Control	Manages permissions based on user roles/groups.
Audit Trails	Logs all user and system activities for compliance.
Collaboration Tools	Supports real-time editing, comments, and sharing.
Search & Retrieval	Full-text and faceted search using indexes and filters.
Retention Policies	Automatically archives or deletes documents based on rules.



Security & Compliance

- ECM systems are designed with **governance and legal compliance** in mind:
 - **Role-based Access Control (RBAC)**
 - **Data Encryption (in-transit & at-rest)**
 - **Digital Signatures / e-Signature Integration**
 - **Retention Schedules & Legal Holds**
 - **Audit Trails & ISO/DoD 5015.2 Compliance**
 - **GDPR / HIPAA / SOX alignment for regulated industries**



Deployment Models

Type	Description	Example
On-Premises ECM	Installed on enterprise infrastructure; full control.	Alfresco Enterprise, OpenText Content Suite
Cloud ECM (SaaS)	Hosted and managed by vendor; subscription-based.	Hyland Cloud, M-Files Cloud, SharePoint Online
Hybrid ECM	Combines local storage + cloud scalability.	Alfresco Cloud Hybrid, IBM FileNet P8 Hybrid



ECM Content Lifecycle

Phase	Activity	Purpose
Capture	Scanning, importing, OCR	Digitize and centralize content
Manage	Classify, index, secure, automate	Organize and control access
Store	Persist content with metadata	Ensure integrity and retrievability
Preserve	Archive, backup, retain	Meet legal and compliance rules
Deliver	Share, search, publish, integrate	Enable collaboration and decision-making



ECM Integration Capabilities

- ECM systems typically integrate with:
 - **ERP systems** – SAP, Oracle E-Business Suite
 - **CRM platforms** – Salesforce, Dynamics 365
 - **Collaboration tools** – Microsoft Teams, Slack, Outlook
 - **Email & Scanning Tools** – Outlook plugins, Kofax, ABBYY
 - **APIs & Standards** – CMIS (Content Management Interoperability Services)



Modern ECM Trends

Trend	Description
Cloud-Native ECM	Containerized and scalable systems (Kubernetes, Docker).
AI & Machine Learning	Auto-classification, OCR text extraction, intelligent search.
Low-Code/No-Code Workflows	Non-technical users can automate approvals easily.
Mobile ECM	Access and approvals via smartphones securely.
Composable ECM	Microservice-based architecture allowing flexible integration.
Zero-Trust Security	Continuous authentication and least-privilege principles.



Leading ECM Platforms

Vendor	Highlights
Alfresco (Hyland)	Open-source core, API-first, strong workflow engine (Activiti/Flowable).
OpenText Content Suite	Enterprise-grade scalability, compliance, extensive integrations.
IBM FileNet	Proven for large enterprises with AI-infused automation.
Microsoft SharePoint	Seamless with Office 365; strong collaboration features.
M-Files	Metadata-driven, AI-powered document classification.
Nuxeo (Hyland)	Cloud-native ECM with flexible APIs and DAM features.



- **Efficiency:** Eliminates paper, speeds up document retrieval.
- **Compliance:** Meets regulatory standards automatically.
- **Cost Reduction:** Reduces storage, printing, and manual processes.
- **Security:** Centralized control prevents unauthorized access.
- **Collaboration:** Improves productivity through shared workspaces.
- **Business Continuity:** Cloud backup ensures disaster recovery.



Example: Alfresco ECM Architecture



- **Core Components:**
- **Repository (Java + Spring)**
- **Database (PostgreSQL/MySQL/Oracle)**
- **Content Store (File system or S3)**
- **Search (Apache Solr / OpenSearch)**
- **Workflow Engine (Activiti / Flowable)**
- **Authentication (LDAP / SSO / Keycloak)**
- **UI Layer (Alfresco Share / ADF / REST APIs)**



ECM Product Capabilities



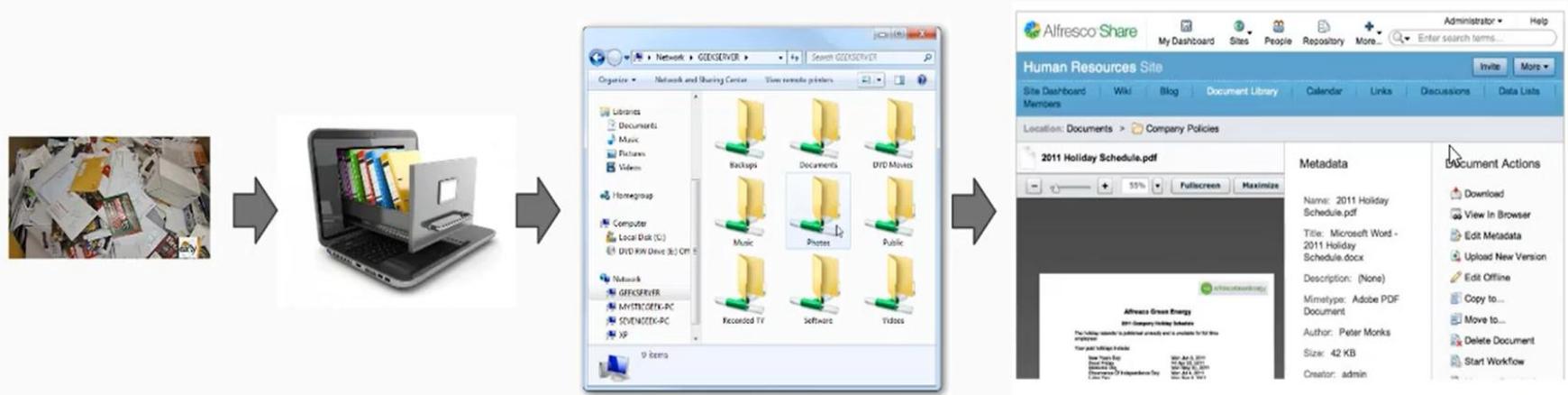


Surrounding Functional Modules

Function	Description
Document Management	Manages creation, versioning, and access of business documents (Word, Excel, PDF, etc.).
Web Content Management	Publishes and manages web pages and digital assets across web channels.
Email Archive	Archives emails and attachments, integrates with Outlook/Thunderbird.
Image Management	Manages scanned images and photos with metadata and OCR support.
Content Repository	Centralized storage for all document types and media with secure access.
Workflow	Automates document-centric business processes like approvals and reviews.
Electronic Records Management	Ensures retention, compliance, and legal governance of documents.
Collaboration	Supports team-based content sharing, version control, and discussions.



Document Management

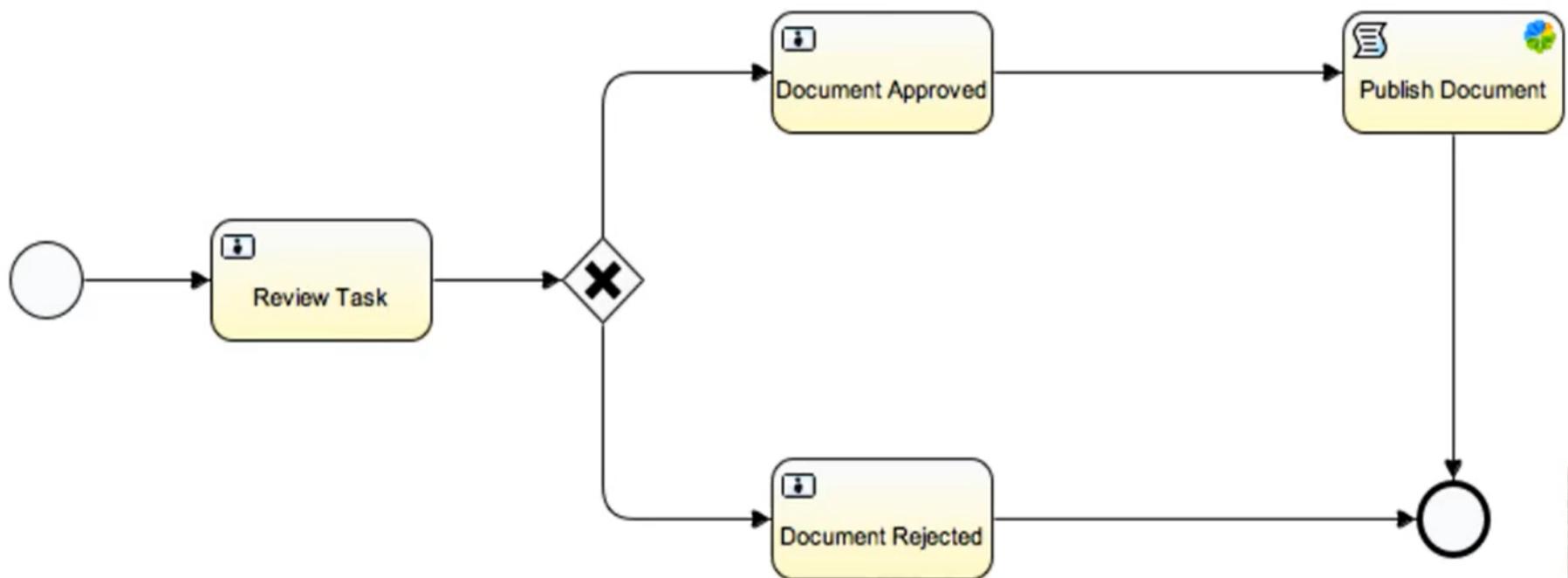


Can store and track all type of documents.



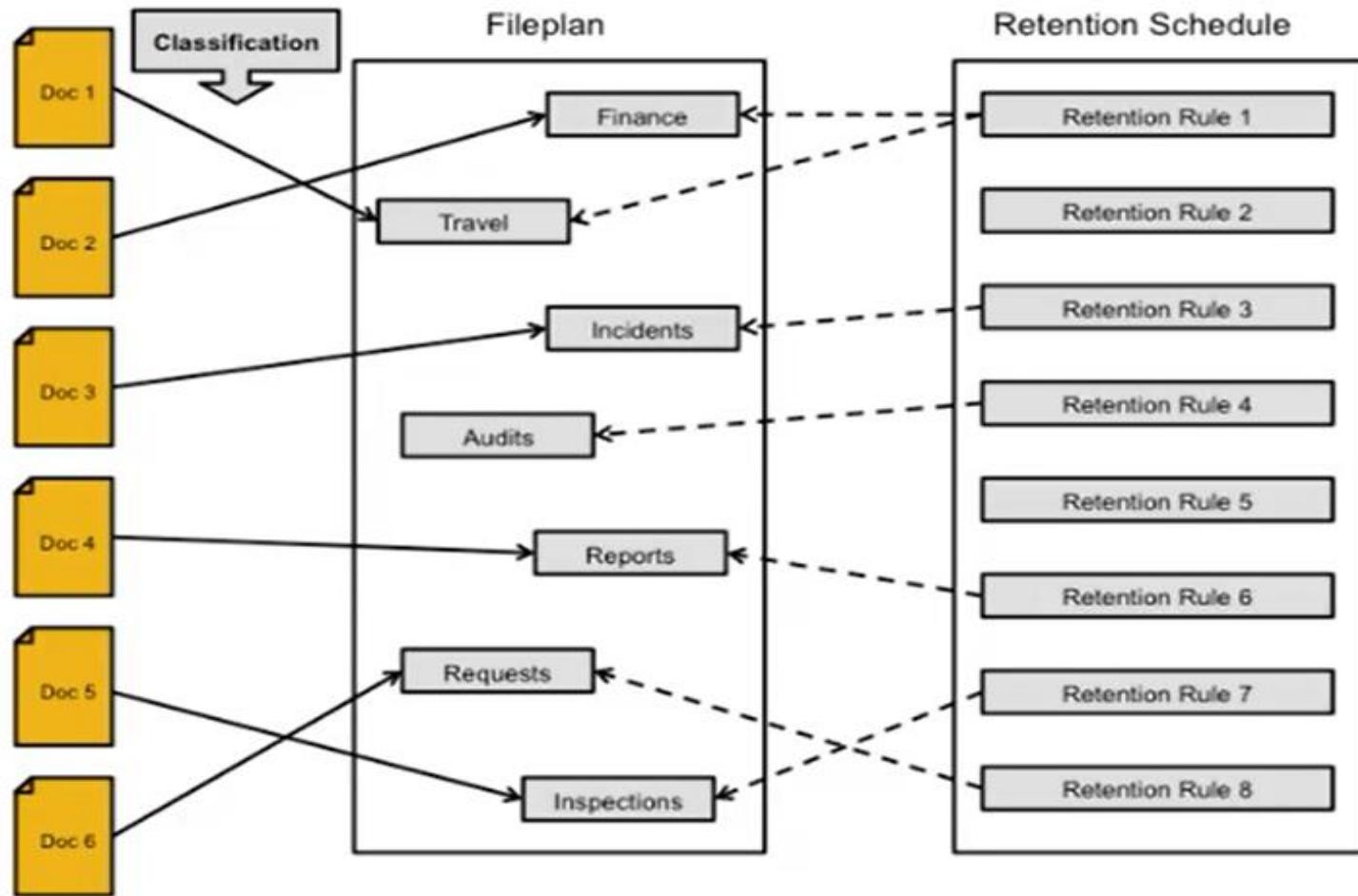
Workflow Management

- In Alfresco a workflow is a sequence of connected tasks applied to a document or other item of content.
- Each task can be performed by a person, a group, or automatically.
- There are number of tools you get to design, execute, and monitor your workflows.





Electronics Record Management





Electronics Record Management

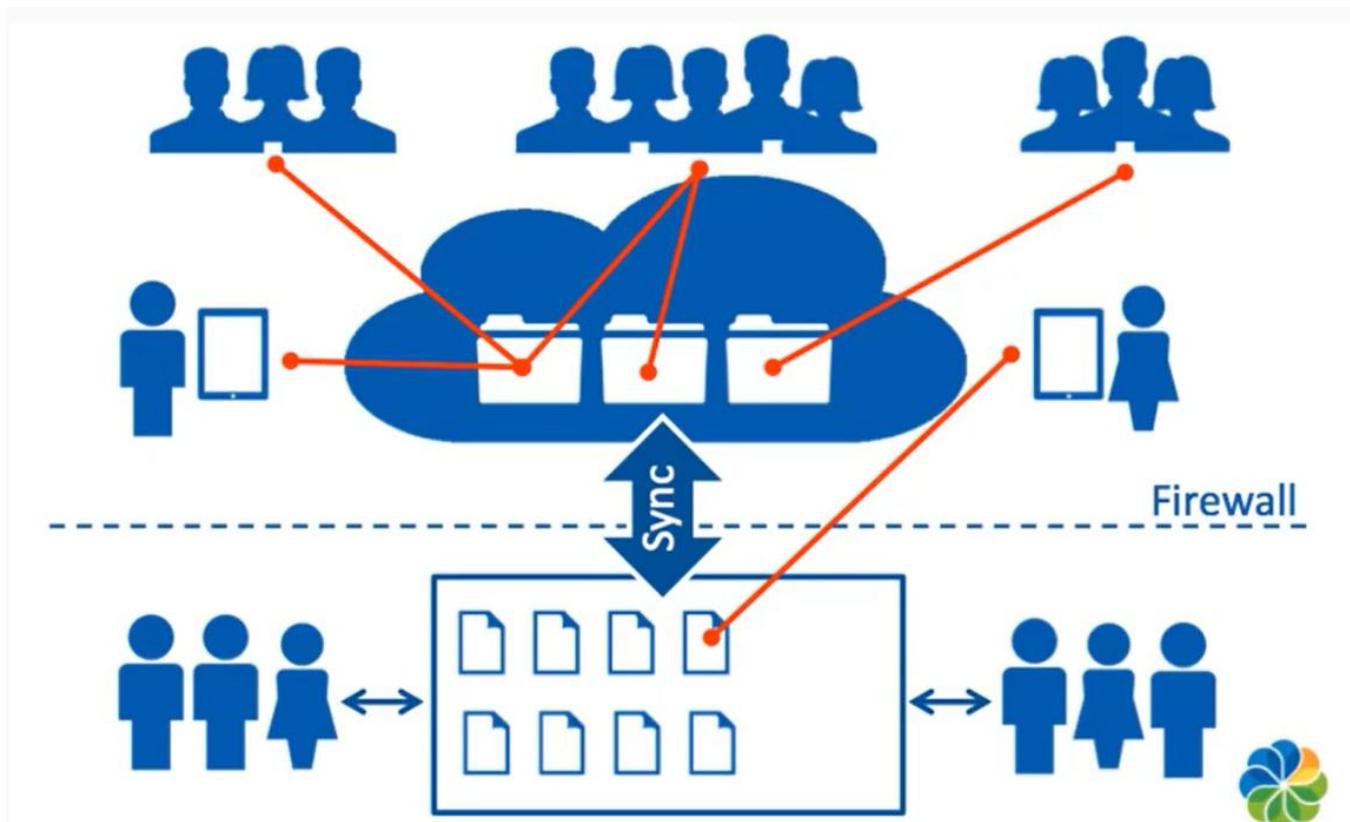
- Can manage records which can be either tangible objects, such as paper documents like birth certificates, driver's licenses, and physical medical x-rays, or digital information, such as electronic office documents, data in application databases, web site content, and electronic mail (email).





Enterprise Collaboration

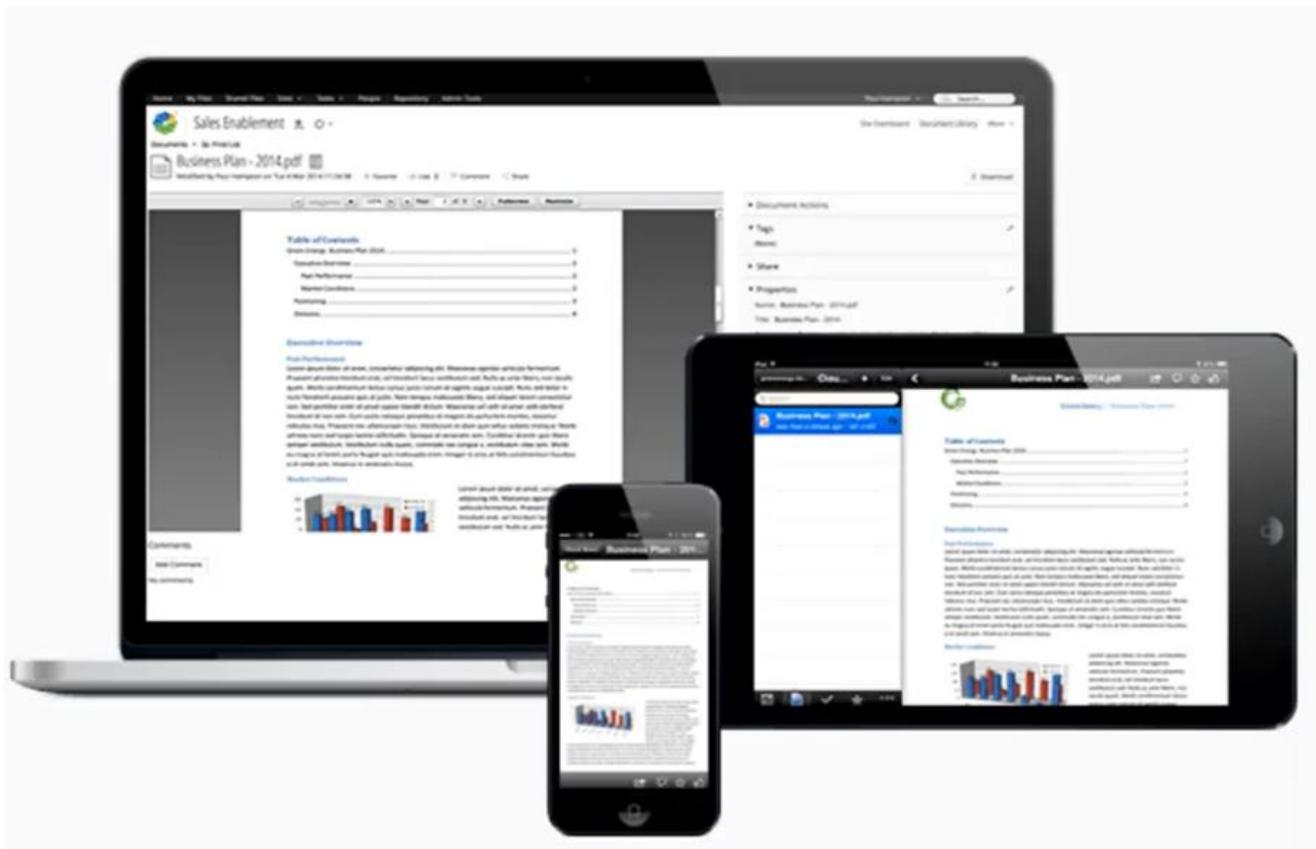
- For effective Collaboration Alfresco provides tools to facilitate communication, share information, and run projects within your team as well as to include partners, consultants, external agencies, and customers.





Mobile Content Management

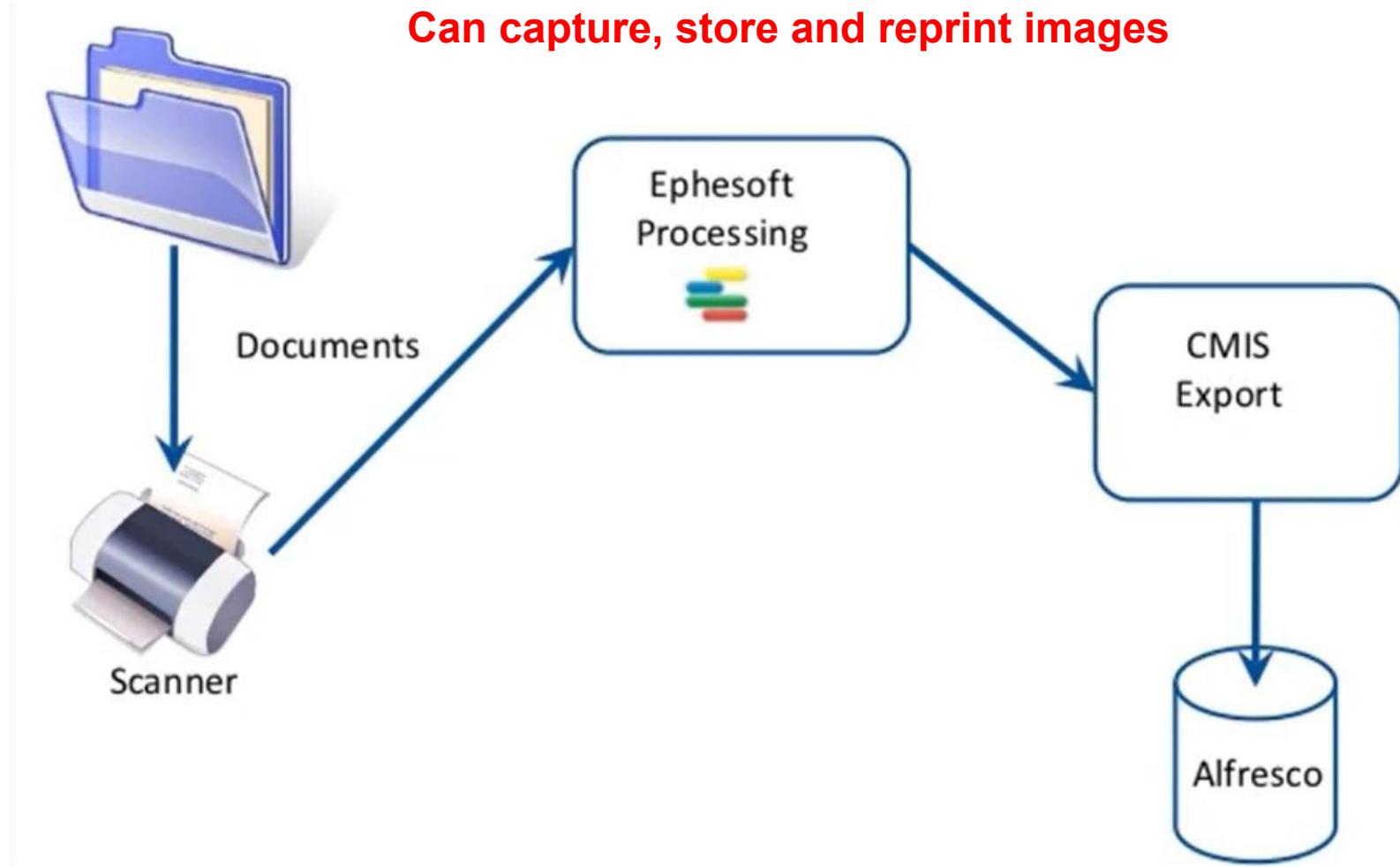
- Allow users with little knowledge of web / Mobile programming languages or markup languages to create and manage website content with relative ease





Scanning

Can capture, store and reprint images





Content Management

- Allow users with little knowledge of web programming languages or markup languages to create and manage website content with relative ease





Case Study

- Requirements
 - End user should be able to upload different types of documents on website in support of the application.
 - The document is further validated by Admin.
 - All users of the portal have secure inbox access wherein they are notified about account activities/admin change actions/application statuses.
 - These emails should be saved as PDF documents.
 - Authorized persons should be able to view/edit the static web content of the application as and when required.



Case Study

- Challenges
 - We needed one solution to fit all above requirements.
 - We knew the content size would grow with time.
- The key points which we considered:
 - A system with strong security.
 - A scalable solution to meet future requirements.
 - A system which can be easily integrated with existing Java application.



Case Study

- Solution:
 - After analyzing available ECMs we figured out Alfresco was able to cater to all these requirements and was a cost-effective solution.
 - With following features, Alfresco stood as a solution encompassing all our requirements.
 - Alfresco guarantees content safety through its security model which is comprised of authentication and authorization.
 - Alfresco One-Enterprise edition is highly modular and scalable.
 - We could easily integrate Java application with Alfresco using its OpenCMIS extension which depends on Apache Chemistry OpenCMIS libraries.

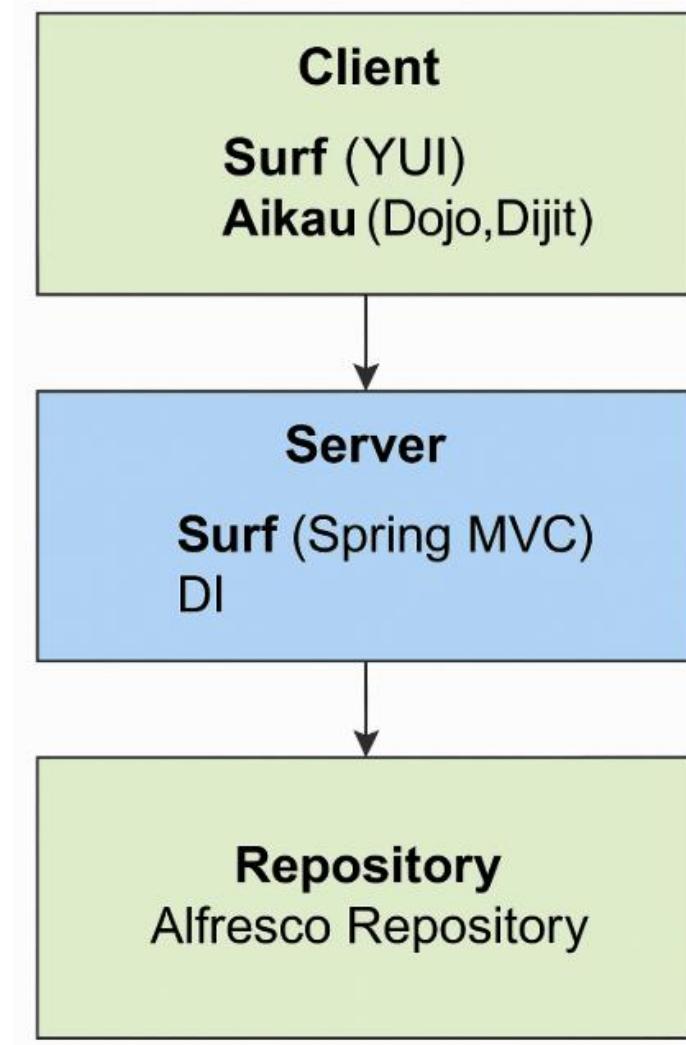


Alfresco Limitations:

- Though alfresco meets most of the requirements there are few limitations of this ECM as per different users.
 - The system lacks backup capabilities.
 - Its support system needs improvement in Live chat and FAQ sections.
 - Few of the UI features can be automated and provide better user experience.
 - Enrichment of current content is not so easy, have to reload the content.
 - No support for XQuery.
 - Content transformation is absent.

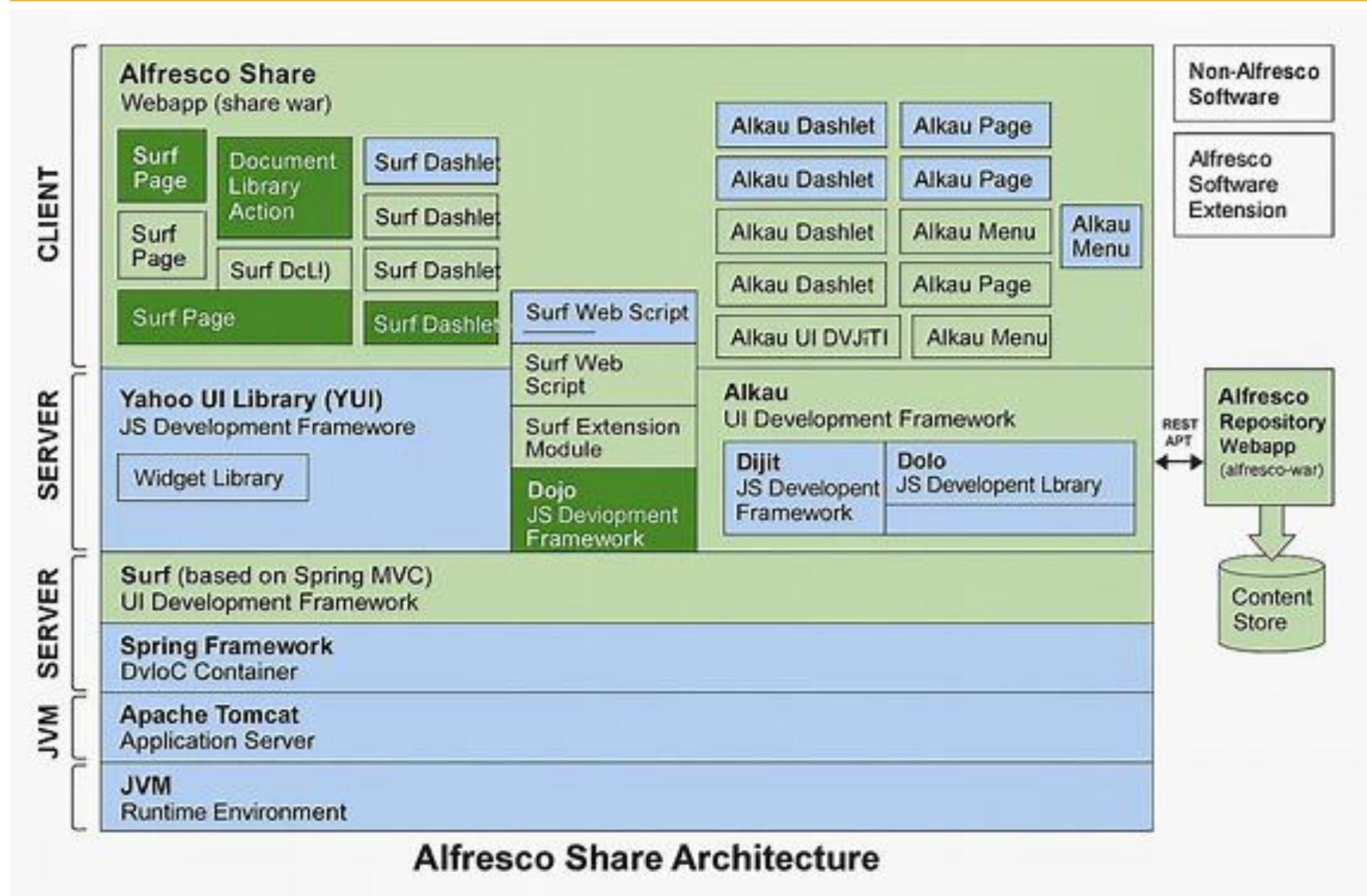


The Alfresco Share architecture





The Alfresco Share architecture





CLIENT Layer – User Interface Components

-  Client Side (Browser)
- This layer handles the **presentation and interaction logic.**
- **1. Alfresco Share Webapp (share.war)**
- This is the main front-end application containing:
- **Surf Pages** – Define page layouts and navigation.
- **Dashlets** – Mini widgets displayed in user dashboards.
- **Web Scripts** – REST endpoints returning HTML, XML, or JSON.
- **Document Library Actions** – UI components for managing files and folders.



CLIENT Layer – User Interface Components

- **2. Frameworks Used**
- **YUI (Yahoo UI Library):**
 - Legacy JavaScript framework for early UI components.
 - Provides widget libraries and client-side interactivity.
- **Aikau:**
 - Modern replacement for YUI.
 - Built on **Dojo** and **Dijit**, offering modular, AMD-based JavaScript widgets.
 - Components include:
 - *Aikau Page* (full view)
 - *Aikau Dashlet* (dashboard widgets)
 - *Aikau Menu* (navigation menus)



Server Side (Backend)

-  Handles the **application logic, web scripts, and integration**.
- **1. Surf Framework (Spring MVC-based)**
- Provides the **UI Development Framework**.
- Supports the concept of “web scripts” (controller + template pairs).
- Integrates with Spring for dependency injection and configuration.
- **2. Spring Framework**
- Acts as a **Dependency Injection (DI) and Inversion of Control (IoC)** container.
- Manages lifecycle of Surf components and configuration.



Server Side (Backend)

- **3. Apache Tomcat**
- The **application server** hosting share.war and alfresco.war.
- **4. JVM**
- The **Java Virtual Machine** executes all Alfresco server-side logic.



Repository Layer

- **Alfresco Repository Webapp (`alfresco.war`):**
- Provides REST APIs for Share to access content, metadata, and workflows.
- Connects to the **Content Store** (file storage system).



Integration and Extension

- **Alfresco OOTB (Out-Of-The-Box) components –** Standard modules like document library and site dashboard.
- **Extension Points –** For custom UI pages, dashlets, and backend web scripts.
- **Non-Alfresco Software –** Third-party tools integrated via APIs or extensions.



Summary

Layer	Component	Responsibility
Client (Browser)	Surf, Aikau, YUI, Dojo/Dijit	Rendering UI, user interaction
Server (App)	Surf MVC, Spring Framework	Processing UI requests, serving content
Repository	alfresco.war	Data access and storage
Platform	Tomcat + JVM	Execution environment



Minimum Configuration Requirements

Component	Minimum Requirement
Operating System	Windows Server 2019+, RHEL/CentOS 8+, Ubuntu 20.04+
Java Runtime Environment (JVM)	Java 11 or 17 (OpenJDK or Oracle JDK)
Application Server	Apache Tomcat 9.0+
RAM	Minimum 8 GB (Recommended: 12–16 GB)
CPU	Minimum 4 cores (Recommended: 8 cores for production)
Disk Space	Minimum 20 GB (Recommended: 100 GB+)
Database	PostgreSQL 13+, MySQL 8.0+, or MariaDB 10.5+
Browser Support	Chrome (latest), Firefox (latest), Edge (latest), Safari (latest)



Repository & Content Storage



Component	Requirement
Repository WAR (alfresco.war)	Must be deployed in the same Tomcat instance as Share or a separate one if scaling
Content Store	Local or mounted network storage with at least 10 GB free space (expandable)
Search Index (Solr/Elasticsearch)	At least 2 GB RAM dedicated
Ports	Default: 8080 (Tomcat), 8443 (HTTPS), 8983 (Solr)



Network and Connectivity

Requirement	Details
REST API Access	Must be open between Share and Repository
SMTP	Required for email notifications
LDAP / SSO (optional)	For authentication integration with AD or Keycloak
HTTPS (SSL)	Recommended for production security

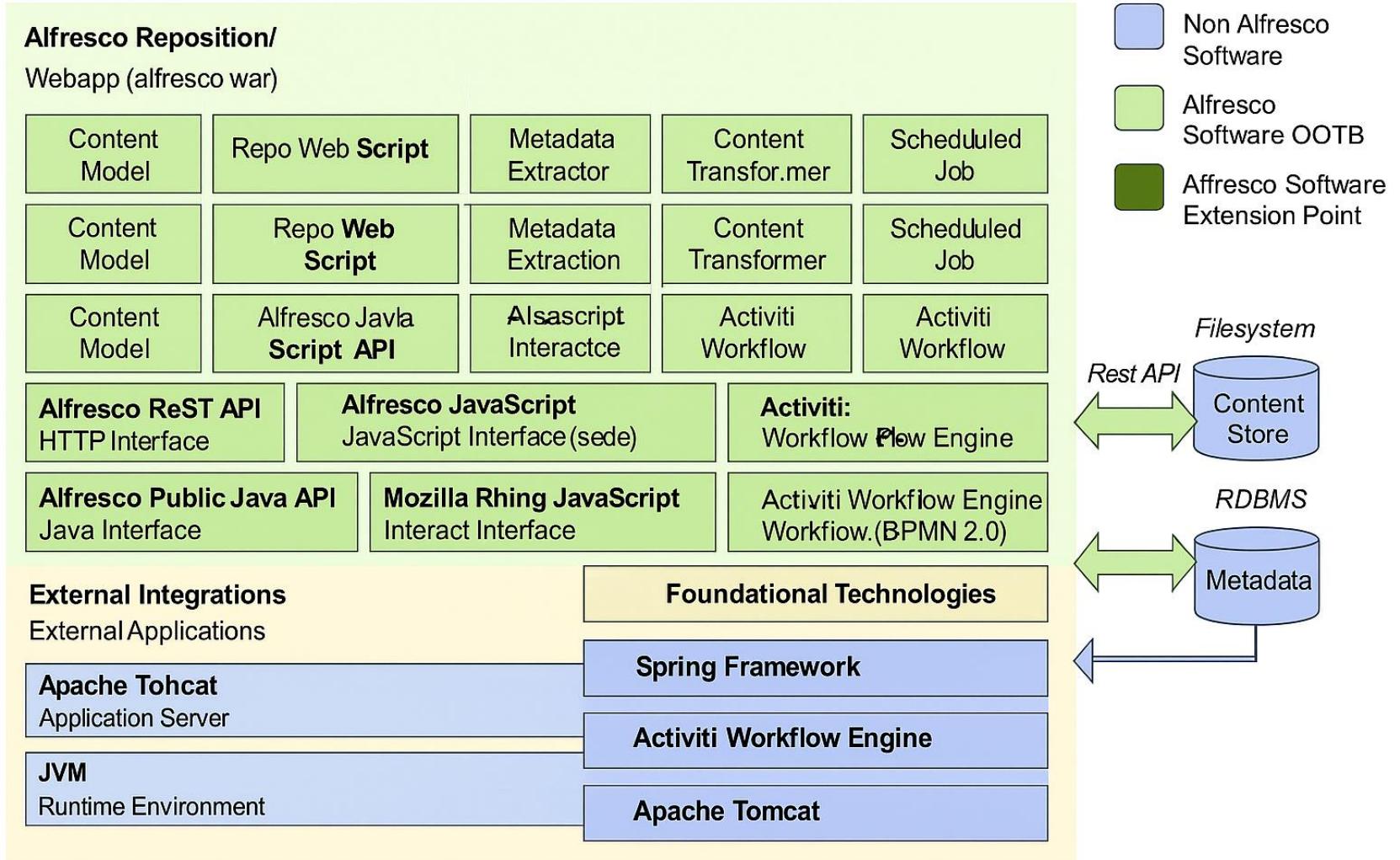


Software Dependencies

Dependency	Minimum Version
Spring Framework	5.3.x or later
Surf Framework	Included with Alfresco Share
Aikau (UI Framework)	Bundled version (usually latest Dojo/Dijit supported)
Dojo/Dijit	As provided with the bundled Aikau release

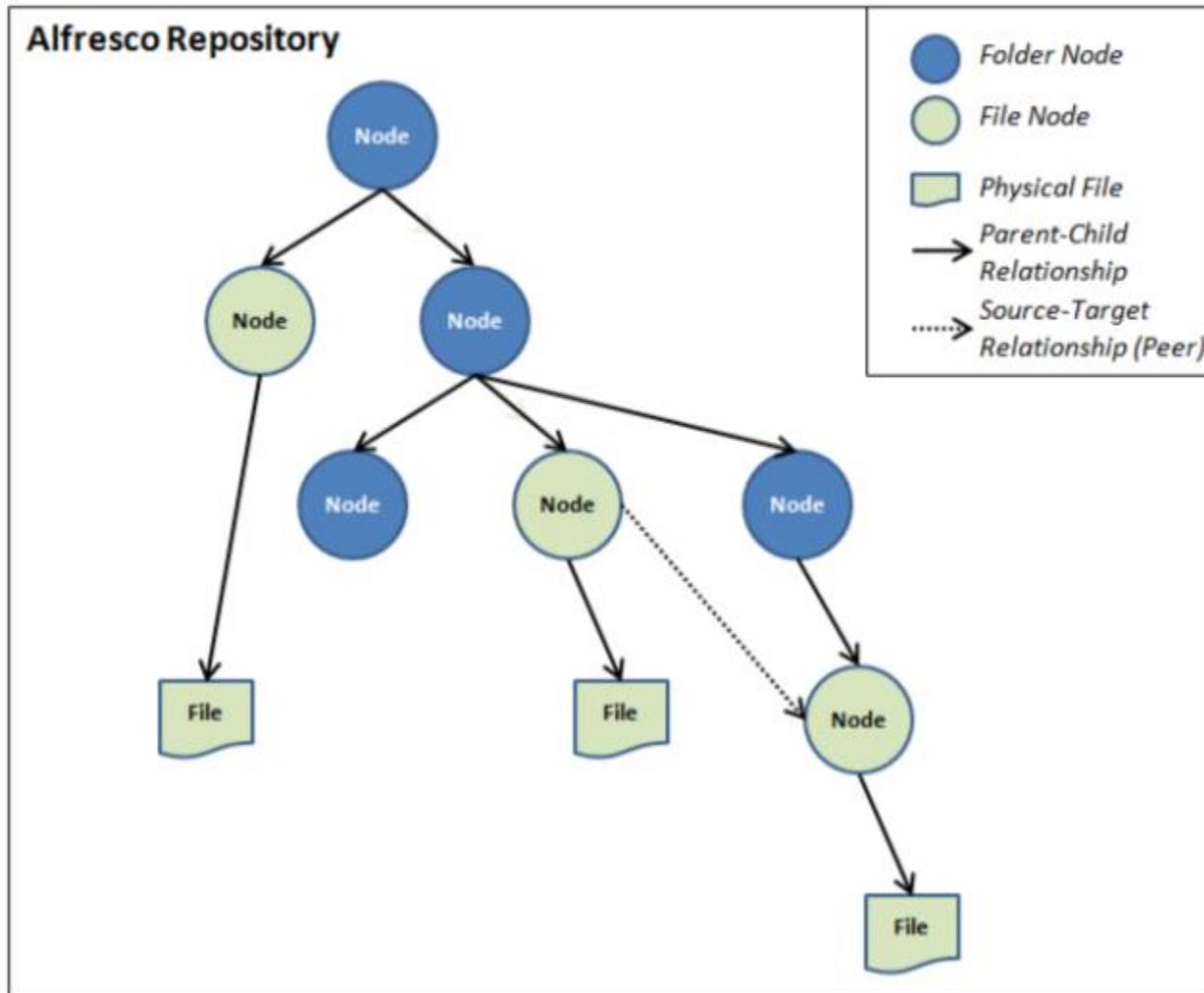


Alfresco Repository Architecture





Alfresco Repository Concepts





Key Repository Components

Component	Description
Content Model	Defines document types, aspects, and metadata structure.
Policies	Business rules triggered by repository events (e.g., onCreate, onUpdate).
Repo Web Scripts	REST endpoints implemented as JavaScript/FreeMarker scripts.
Repo Actions	Predefined operations like move, copy, transform, or delete.
Metadata Extractor	Extracts metadata (e.g., author, title) from uploaded documents.
Content Transformer	Converts files between formats (e.g., DOCX → PDF).
Scheduled Jobs	Background tasks for indexing, cleanup, or workflow automation.
Activiti Workflow	Manages BPMN 2.0-based workflows for business processes.



APIs and Interfaces

API / Engine	Role
Alfresco REST API	Standard HTTP interface for CRUD operations on nodes, metadata, and sites.
Alfresco CMIS API	Industry-standard interface for content management interoperability.
Alfresco JavaScript API	Server-side scripting API, using Mozilla Rhino JS Engine for logic execution.
Alfresco Public Java API	Java-based interface for custom extensions and integrations.



Framework and Infrastructure



Layer	Function
Spring Framework	Dependency Injection and configuration container for all repository services.
Activiti Workflow Engine	Executes workflow definitions (BPMN 2.0 compliant).
Apache Tomcat	Hosts the repository web application.
JVM	Executes Java-based components.



External Integrations



Integration	Description
Alfresco Share (share.war)	Front-end user interface connecting via REST API.
Apache Solr (solr4.war)	Search service for indexing and querying repository data.
Content Store	File system location where actual binary content is stored.
RDBMS	Database (PostgreSQL/MySQL) that stores metadata, user info, and audit logs.



Alfresco Repository Overview

- The **Alfresco Repository** (packaged as alfresco.war) is the **core backend** of the Alfresco platform.
It manages:
 - **Content** (files and folders)
 - **Metadata**
 - **Security (permissions, roles)**
 - **Versioning**
 - **Workflows**
 - **APIs (REST, CMIS, Java.)**
- It provides a **central content store** that can be accessed via the **Alfresco Share UI, custom applications, or integrations.**



2. Core Concepts



- **a. Node**
- A **node** is the fundamental data structure in Alfresco.
- Everything — documents, folders, users, rules — is represented as a node.
- Each node has:
 - A **unique NodeRef** (Node Reference)
 - **Properties** (metadata)
 - **Aspects** (extra behavior)
 - **Associations** (links to other nodes)



2. Core Concepts



- **b. Content Store**
- The **file system storage** where actual binary content (files, images, etc.) is saved.
- Alfresco stores:
 - Metadata in the **RDBMS**
 - Binary files in the **Content Store** (on disk)
- File contents are stored as **content URLs (content://...)** with deduplication and versioning.



2. Core Concepts



- **d. Content Model**
- Defines the **structure and behavior** of content in the repository.

Concept	Description
Type	Defines a base entity, e.g., cm:content, cm:folder.
Aspect	Adds extra properties or behavior dynamically (e.g., versionable, auditable).
Property	Metadata fields (e.g., title, author, createdDate).
Association	Links between nodes (e.g., document linked to author).



3. Services in the Repository



Service	Description
Node Service	Creates, updates, and deletes nodes.
Content Service	Manages binary streams in the content store.
Search Service	Interfaces with Solr for full-text and metadata searches.
Version Service	Handles document versioning.
Lock Service	Prevents concurrent modifications.
Permission Service	Manages ACLs and user roles.
Action Service	Executes automatic actions (e.g., transformations).
Workflow Service	Executes business processes (Activiti/BPMN 2.0).



4. Workflows

- Managed by the **Activiti Workflow Engine**.
- Define business processes like document approval or review.
- Written in **BPMN 2.0 XML** format.
- Can trigger policies, scripts, or actions.



5. APIs and Interfaces

API	Description
REST API	For CRUD operations on nodes, sites, and content.
CMIS API	Standardized API for enterprise content systems.
JavaScript API	Server-side scripting via Mozilla Rhino.
Java API	Programmatic integration for custom extensions.



6. Policies and Behaviors

- Define **rules** triggered by repository events.
- Example: When a document is added → run metadata extraction or move to a folder.
- Implemented using:
 - **Policies** – define the “when” (onCreate, onDelete).
 - **Behaviors** – define the “what” (custom logic to execute).



7. Transformers and Extractors

Component	Purpose
Content Transformer	Converts files (e.g., DOCX → PDF).
Metadata Extractor	Reads metadata from file headers (e.g., EXIF, Office properties).



8. Scheduled Jobs

- Automate periodic tasks like:
 - Index maintenance
 - Temporary file cleanup
 - Audit data processing



🔍 9. Indexing and Search

- Uses **Apache Solr** (via REST API).
- Indexed data includes:
 - Node properties
 - Content text (full-text search)
 - Access control information

10. External Integrations

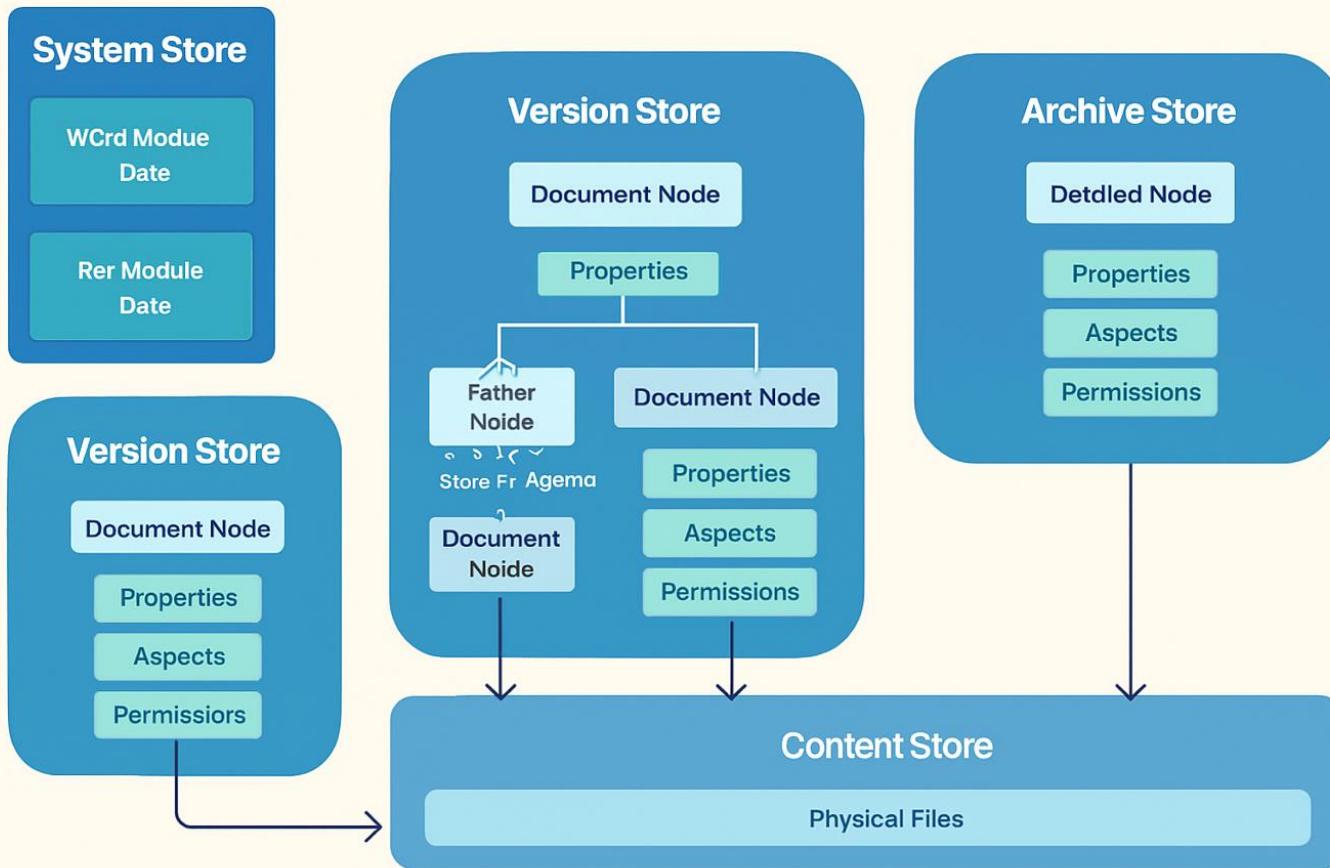


-
- Alfresco Share – UI that communicates with the repository.
 - **Solr** – Search and indexing engine.
 - **RDBMS** – Stores metadata.
 - **File System** – Stores binary content.
 - **LDAP / SSO / Keycloak** – Authentication integration.



Alfresco Repository Store View

Alfresco Repository





2. Key Repository Stores



- 🧠 **System Store**
- Holds **internal configuration data** and module-specific information.
- Examples:
 - **WCM Module Data** → for Web Content Management
 - **RM Module Data** → for Records Management
- Not visible to end users and not used for document storage.



2. Key Repository Stores



- **Version Store**
- Stores **previous versions** of documents when versioning is enabled.
- Each version creates a **Document Node** with its own:
 - **Properties** (metadata values)
 - **Aspects** (extra features like versionable/auditable)
 - **Permissions** (security access control)
- Maintains **version lineage** (e.g., 1.0 → 1.1 → 2.0).
- Each document node references a **physical file** in the **Content Store**.



2. Key Repository Stores



- **Working Store (Not explicitly shown in this version)**
- The **active workspace** where live documents reside during use.
- Links to the **Content Store** for actual binary files.
- When versioning is turned on, copies metadata to the **Version Store**.



2. Key Repository Stores



- 🗑️ **Archive Store**
- Stores **deleted nodes** for recovery or audit purposes.
- Metadata (properties, aspects, permissions) is retained until permanent deletion.
- Enables “**undelete**” or administrative restoration.



2. Key Repository Stores



- **Content Store**
- The **file system** where actual document binaries are stored.
- Each file is referenced by a **content URL** (e.g., `content://store/yyyy/mm/dd/...`).
- Versioned and deleted files remain stored here until cleanup jobs remove orphaned binaries.

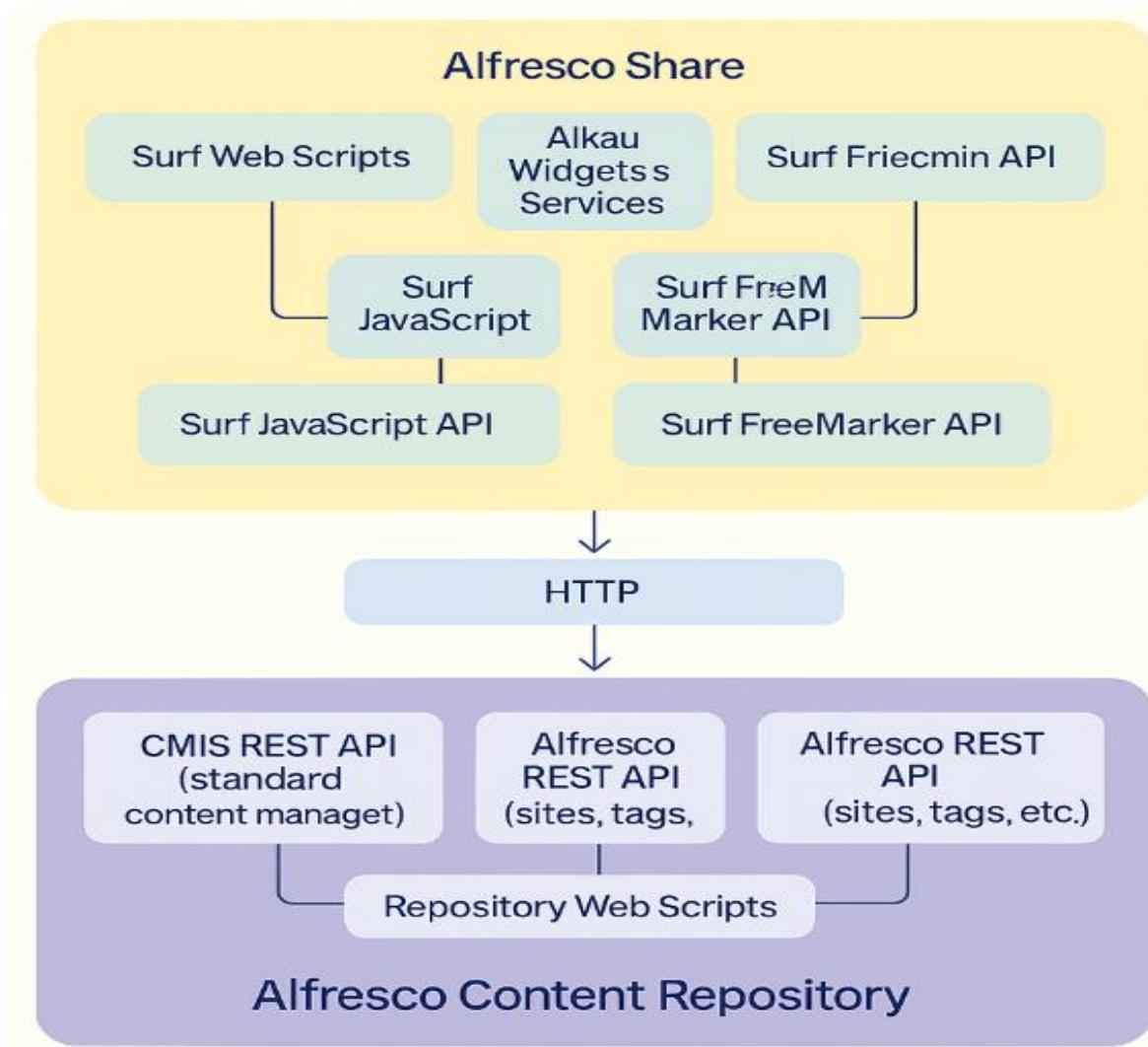


3. Data Flow Summary

Action	Movement
Document Created	Metadata → Working Store; File → Content Store
Version Created	Metadata copy → Version Store; New binary → Content Store
Document Deleted	Metadata → Archive Store; Binary reference stays in Content Store
System Data	Stored separately in System Store



Alfresco API Architecture





◆ 1. Core API Layers

• A. Public REST APIs

- These are modern **HTTP/JSON-based** endpoints, often prefixed with:
- /alfresco/api/-default-/public/alfresco/versions/1
-  **Features:**
 - CRUD operations on content and metadata
 - Folder and file management
 - Permissions and access control
 - Search, tags, ratings, comments
 - Workflow initiation and status tracking



◆ 1. Core API Layers

-  **Example:**
 - GET /alfresco/api/-default-/public/alfresco/versions/1/nodes/{nodeId}
- → Returns metadata and content info for a document.
-  **Components:**
 - Built on **Spring Web MVC** (Java)
 - Backed by the **Alfresco Repository Services**
 - Follows **REST resource principles**
 - Includes **OpenAPI/Swagger** documentation

B. CMIS (Content Management Interoperability Services) API



- A **standard protocol** defined by **OASIS**, allowing interoperability between different CMS systems.

Type	Description
AtomPub Binding	XML-based HTTP interface
Browser Binding	JSON-over-HTTP interface
Web Services Binding	SOAP-based (legacy support)

CMIS Features:

- Repository-independent API for content
- Supports folder navigation, document CRUD, versioning
- Works with clients like Apache Chemistry OpenCMIS

Example:

GET /alfresco/api/-default-/public/cmis/versions/1.1/browser/root



C. Web Scripts Framework

- The **backbone of Alfresco extensibility**.
-  **Definition:**
- A **Web Script** is a lightweight HTTP endpoint defined by:
 - A **controller script (*.js)**
 - An **optional FreeMarker template (*.ftl)**
 - A **descriptor XML** defining method, URL, and format.

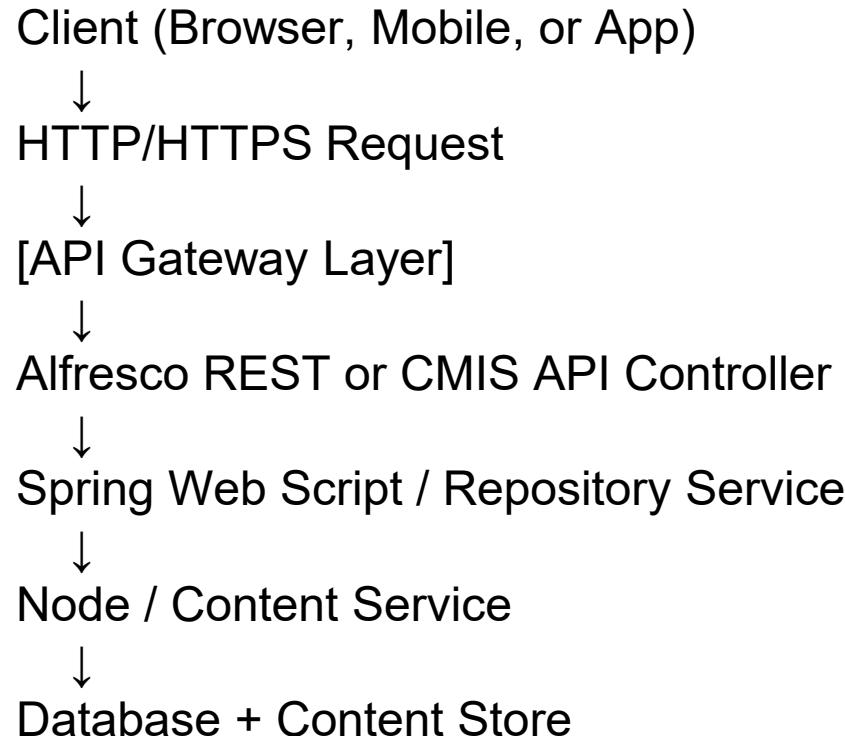


C. Web Scripts Framework

- <webscript>
- <shortname>List Nodes</shortname>
- <url>/sample/list</url>
- <format default="json" />
- <authentication>user</authentication>
- </webscript>
-  **Benefits:**
 - Quick to develop & deploy
 - Can return **HTML, JSON, XML, or binary**
 - Perfect for **custom APIs and integrations**



2. API Processing Flow





3. Repository Service Layer



Service	Purpose
NodeService	Handles creation/deletion of nodes.
ContentService	Manages binary streams.
SearchService	Integrates with Solr for queries.
VersionService	Manages document versioning.
PermissionService	Controls user access.
ActionService	Executes rules or automated actions.
WorkflowService	Integrates with Activiti for BPM.



4. Authentication and Security



Mechanism	Description
Basic Auth	For legacy systems (username/password).
OAuth2 / Keycloak	For secure, token-based authentication.
CSRF Protection	Enabled for Share and REST APIs.
SSL/TLS	Recommended for all API calls.



5. Extension Points



- Developers can extend Alfresco APIs in multiple ways:
- Add new **Web Scripts**
- Extend existing **Java Services**
- Create **custom REST controllers** under /api/
- Register **behaviors and policies** that trigger on content events



6. Integration Options

Integration	Description
Alfresco Share	Uses Surf and Aikau layers that internally consume REST and Web Scripts.
Mobile SDKs	Android/iOS SDKs wrap the Public REST APIs.
3rd-Party Tools	Power BI, BPM tools, and ECM integrations via CMIS.
Custom Apps	Can directly consume Alfresco REST endpoints or custom Web Scripts.



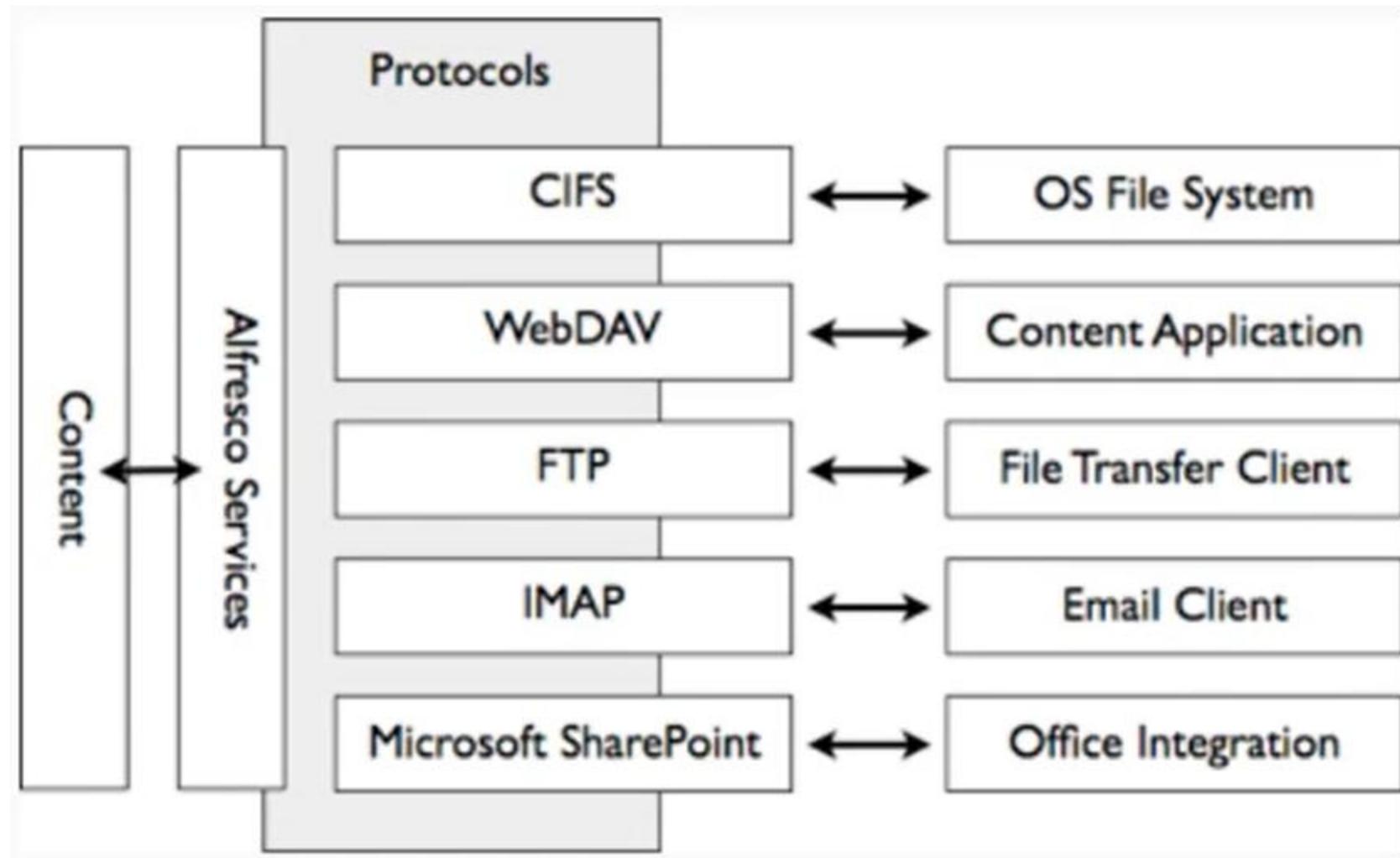
7. API Layer Stack Summary



Layer	Technology	Description
UI Layer	Surf, Aikau, Dojo	Front-end (Share)
REST Layer	Spring MVC	Exposes content operations
CMIS Layer	OASIS Standard	Interoperability interface
Web Script Layer	JavaScript + FreeMarker	Custom endpoint framework
Repository Service Layer	Spring Beans	Node, Content, Workflow, Versioning
Persistence Layer	DB + File Store	Stores metadata and content



Alfresco Protocols (Addition to HTTP)





Protocols and Their Integrations

Protocol	Purpose	Typical Client / Integration	Description
CIFS (Common Internet File System)	File system access	OS File System (Windows/Mac/Linux)	Allows Alfresco to appear as a shared network drive. Users can drag and drop files as if they were working with a local folder.
WebDAV (Web Distributed Authoring and Versioning)	Web-based content editing	Content Applications (e.g., Adobe, Dreamweaver)	Enables remote users to manage files over HTTP using standard WebDAV clients; useful for collaborative editing.
FTP (File Transfer Protocol)	File transfer	File Transfer Clients (e.g., FileZilla, WinSCP)	Provides traditional FTP access for uploading and downloading content from Alfresco repositories.



Protocols and Their Integrations

Protocol	Purpose	Typical Client / Integration	Description
IMAP (Internet Message Access Protocol)	Email access	Email Clients (e.g., Outlook, Thunderbird)	Let's users access Alfresco content as if it were an email folder, making it easier to save and retrieve attachments.
Microsoft SharePoint Protocol	Office integration	Microsoft Office Suite	Allows seamless integration with MS Office applications (Word, Excel, PowerPoint) — check-in/check-out, version control, etc.



3. Installation Options



- **<https://www.hyland.com/en/resources/alfresco-trial#content>**

Try Alfresco Content Services



**Download Alfresco Content Services
30-day free trial**

Get your free trial of our Docker-based,
open-source solution.

[Download now](#)



**Activate Alfresco Content Services 14-day
free online trial**

Receive your activation email in five
minutes and get started on any device.

[Launch](#)



**Try Alfresco Content Services
Community now**

Deploy the free and open source
edition of ACS.

[Download now](#)



3. Installation Options



- **<https://www.hyland.com/en/resources/alfresco-trial#content>**

Try Alfresco Content Services

Start your 30-day trial of Alfresco Content Services, a flexible, highly scalable enterprise content management system.

[Share](#)

If you are a developer and want to install and configure Alfresco Content Services locally, this trial gives you the flexibility to:

- Try the advanced features of Alfresco Content Services Enterprise
- Develop and test additional components
- Try integration extensions, Alfresco platform customizations and

Alfresco Content Services 30-day free trial

First Name: *

Last Name: *

Email Address (must be work address): *



3. Installation Options

The screenshot shows a Microsoft Teams interface. On the left, there's a sidebar with a search bar and various icons. Below it is a list of messages:

- Today**:
 - The Alfresco Team: Start Your Alfresco Tria... 7:37 PM
- P parameswaribala@gmail.co...**: Requirement for techni... 6:58 PM
PFA On Thu, Oct 23, 2025 at 2:59 ...
Node JS Trainin... +1
- Yesterday**:
 - G Google Cloud Fundamentals: Co... Hello...? Google C... Wed 2:09 AM
Hi Parameswari Bala, just a quick ...
- This week**:
 - O Opsgenie

On the right, a promotional message for Alfresco is displayed:

Start Your Alfresco Trial Now [Summarize](#)

Alfresco 30 Day Trial

You are only a few steps away from trying Alfresco Content Services using Docker:

- [Install](#) Docker and start it
- Download the Alfresco [docker-compose](#) file
- Follow the detailed instructions below

[Download Docker Compose yml file](#)

Installation Instructions

Open a command prompt or terminal window.



3. Installation Options

Installation Instructions

- Open a command prompt or terminal window
- Navigate to the folder where you saved the docker-compose.yml file
- Issue the following three commands:

```
docker login quay.io -u="alfresco+acs_v6_trial"
```

Enter the following password when prompted (Copy and Paste):

XVQWI167IGBPDNJU3ANO6J1V5BP01YQO41KQN4Z890AERGF7WW6VVQVI3DQ1U1X0

```
docker-compose up
```

- Your default username/password is: **admin/admin**

Docker-compose up -d



3. Installation Options

```
c:\ Administrator: Command Prompt - docker-compose up -d

E:\alfresco\23102025>docker login quay.io -u="alfresco+acs_v6_trial"
Password:

Login Succeeded

E:\alfresco\23102025>docker-compose up -d
[+] Running 0/16
 - digital-workspace Pulling
 - shared-file-store Pulling
 - sync-service Pulling
 - activemq Pulling
 - postgres Pulling
 - audit-storage Pulling
 - transform-core-aio Pulling
 - proxy Pulling
 - share Pulling
 - alfresco Pulling
 - elasticsearch Pulling
 - search-reindexing Pulling
 - kibana Pulling
 - transform-router Pulling
 - control-center Pulling
 - search Pulling
```



3. Installation Options

```
c:\ Administrator: Command Prompt
r-compose-sync-service-1
2efcaa2034ce quay.io/alfresco/alfresco-share:25.2.0           "/usr/local/tomcat/s..."  5 minutes ago Up 2 minutes (healthy)      8000/tcp, 8080/tcp
docke
r-compose-share-1
a499d3697404 quay.io/alfresco/alfresco-elasticsearch-reindexing:5.1.1   "/bin/sh -c 'exec ja..."  5 minutes ago Exited (0) About a minute ago
docke
r-compose-search-reindexing-1
3e4394033f65 quay.io/alfresco/alfresco-transform-core-aio:5.2.0
, [:]:8090->8090/tcp
"/docker-entrypoint..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:8090->8090/tcp
docke
r-compose-transform-core-aio-1
ad28b1ab95d6 quay.io/alfresco/alfresco-transform-router:4.2.0
, [:]:8095->8095/tcp
"/bin/sh -c 'java ${..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:8095->8095/tcp
docke
r-compose-transform-router-1
55a3e15b1741 kibana:7.17.26
, [:]:5601->5601/tcp
"/bin/tini -- /usr/l..."  5 minutes ago Up 3 minutes (healthy)      0.0.0.0:5601->5601/tcp
docke
r-compose-kibana-1
5c9931f30ae1 quay.io/alfresco/alfresco-audit-storage:1.1.0
"/bin/sh -c 'java ${..."  5 minutes ago Up 3 minutes (healthy)      8080/tcp, 8443/tcp
docke
r-compose-audit-storage-1
15a4d6a63d0c quay.io/alfresco/alfresco-content-repository:25.2.0
001/tcp
"catalina.sh run -se..."  5 minutes ago Up 4 minutes (healthy)      8000/tcp, 8080/tcp, 10
docke
r-compose-alfresco-1
f4d77c678b5 quay.io/alfresco/alfresco-shared-file-store:4.2.0
, [:]:8099->8099/tcp
"/bin/sh -c 'java $J..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:8099->8099/tcp
docke
r-compose-shared-file-store-1
0683da7f9a8b postgres:16.5
, [:]:5432->5432/tcp
"docker-entrypoint.s..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:5432->5432/tcp
docke
r-compose-postgres-1
5b1f816ae7ac quay.io/alfresco/alfresco-control-center:10.0.1
"/docker-entrypoint..."  5 minutes ago Up 4 minutes (healthy)      8080/tcp
docke
r-compose-control-center-1
a44b052a43df quay.io/alfresco/alfresco-activemq:5.18-jre17-rockylinux8
, [:]:5672->5672/tcp, 0.0.0.0:8161->8161/tcp, [:]:8161->8161/tcp, 0.0.0.0:61613->61613/tcp, [:]:61613->61613/tcp, 0.0.0.0:61616->61616/tcp, [:]:61616->61616/tcp
"/bin/sh -c './init....'"  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:5672->5672/tcp
docke
r-compose-activemq-1
45bb76aa1138 traefik:3.1
, [:]:8080->8080/tcp, 0.0.0.0:8888->8888/tcp, [:]:8888->8888/tcp
"/entrypoint.sh --ap..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:8080->8080/tcp
docke
r-compose-proxy-1
56e4c5622b30 quay.io/alfresco/alfresco-digital-workspace:7.0.1
"/docker-entrypoint..."  5 minutes ago Up 4 minutes (healthy)      8080/tcp
docke
r-compose-digital-workspace-1
df27b77ba8f3 elasticsearch:8.17.3
, [:]:9200->9200/tcp, 0.0.0.0:9300->9300/tcp, [:]:9300->9300/tcp
"/bin/tini -- /usr/l..."  5 minutes ago Up 4 minutes (healthy)      0.0.0.0:9200->9200/tcp
docke
r-compose-elasticsearch-1

E:\alfresco\23102025>
```



19:54
ENG IN
23-10-2025



3. Installation Options

- **Verify startup:**
 - Repository: <http://localhost:8080/alfresco>
 - Share: <http://localhost:8080/share>
 - ES: <http://localhost:9200>
 - DB: PostgreSQL running on port 5432
- **Default login:**
- Username: admin
- Password: admin



3. Installation Options

-  Containers created:
 - alfresco (repository)
 - share (web client)
 - postgres (database)
 - Elastic Search(replaced by solr)
 - transform-core-aio (transform service)
 - activemq (message broker)



3. Installation Options

Component	Purpose	Replaces
alfresco-elasticsearch-live-indexing	Real-time indexing of repository content	ES indexer
elasticsearch	Search & analytics engine	ES search core
alfresco-elasticsearch-reindexing	One-off or scheduled reindexing jobs	ES reindex core
kibana	Search diagnostics UI	ES Admin console



3. Installation Options

ⓘ localhost:8080/alfresco/



Enterprise - 25.2.0 (r5e3fd217-blocal)

[Online Documentation](#)

[Alfresco Share](#)

[Alfresco WebDav](#)

[Alfresco WebScripts Home \(admin only - INTERNAL\)](#)

[Alfresco API Explorer](#)

[Alfresco Administration Console \(admin only\)](#)

[Alfresco Support](#)

[CMIS 1.0 AtomPub Service Document](#)

[CMIS 1.0 Web Services WSDL Document](#)

[CMIS 1.1 AtomPub Service Document](#)

[CMIS 1.1 Browser Binding URL](#)



Alfresco Subsystems

- A **Subsystem** in Alfresco is a self-contained component that provides a specific service (like authentication, email, file servers, etc.).
- It can be independently configured, started, or stopped.
Subsystems make it easier to customize and maintain different parts of Alfresco without changing global configurations.



Alfresco Subsystems

- **◆ Key Characteristics**
- Each subsystem has **its own configuration space**.
- You can create multiple **instances** of the same subsystem type (e.g., multiple authentication chains).
- They can be **hot-reloaded** — configuration changes can take effect without restarting the whole repository.
- Configurations can be managed via the **Admin Console (JMX)** or configuration files.



◆ Common Types of Subsystems

Subsystem Type	Description
Authentication	Defines how users authenticate (LDAP, Kerberos, AlfrescoNtlm, passthru, etc.). Supports multiple authentication chains.
File Servers	Provides CIFS/FTP/SMB access to Alfresco repository content.
Email	Handles inbound (IMAP) and outbound (SMTP) email integration.
Synchronization (LDAP Sync)	Syncs user/group data from external directory servers.
Search	Manages search engines (Solr, Lucene). Each Solr core is a subsystem.
Transformers	Handles content transformations (e.g., converting Office → PDF, image resize).
Activities Feed	Manages the activity and feed generation subsystem.
Replication	Controls replication of content between repositories.
Audit	Provides auditing and logging configuration.



Subsystem Configuration Location

- **◆ Subsystem Configuration Location**
- Subsystems are configured under the alfresco/subsystems directory in alfresco-global.properties or classpath configuration.

```
alfresco/
└ subsystems/
    └ Authentication/
        └ ldap/
        └ alfrescoNtLm/
    └ FileServers/
        └ default/
    └ IMAP/
        └ default/
```



Subsystem Configuration Location

Alfresco System Summary

System Summary	
Consoles	Google Docs Console
	Model and Messages Console
	Tenant Console
	Workflow Console
Email Services	Inbound Email
	Outbound Email
General	License
	Repository Information
	System Settings
Repository Services	Activities Feed
	Repository Server Clustering
	Search Service Sharding
	Process Engines
	Query Accelerator
	Replication Service
	Search Service

System Information

Alfresco Content Services Home:	Operating System: Linux
Alfresco Content Services Edition:	Version: 5.15.167.4-microsoft-standard-WSL2
Alfresco Content Services Version:	Architecture: amd64
Java Home: /usr/lib/jvm/java-17-openjdk-17.0.15.0.6-2.e19.x86_64	Free Memory (GB): 0.2
Java Version: 17.0.15	Maximum Memory (GB): 1.48
Java VM Vendor: Red Hat, Inc.	Total Memory (GB): 0.56
	CPUs: 12

File Systems

FTP: (disabled)	Enabled
WebDAV: (enabled)	Enabled

Indexing Subsystem

Solr 6: (disabled)	Disabled
Elasticsearch: (enabled)	Enabled
No Index: (disabled)	Disabled

Repository Clustering

Clustering: (enabled)	Enabled
--	---------

Email

Inbound: (disabled)	Disabled
IMAP: (disabled)	Disabled

Auditing Services

Audit: (enabled)	Enabled
CMIS Change Log: (disabled)	Disabled
Access: (disabled)	Disabled
Tagging: (enabled)	Enabled

Sync: Information is currently unavailable



◆ Subsystem Lifecycle

- Each subsystem supports:
- **Initialization** – Loads configuration.
- **Start** – Activates the component (e.g., starts IMAP server).
- **Stop/Shutdown** – Gracefully stops services.
- **Reload** – Applies new configuration without full server restart.



Alfresco Customization

- Customization means modifying Alfresco to meet your organization's business and technical needs — such as:
 - Adding custom metadata fields and content models
 - Changing workflows or approval processes
 - Integrating with external systems (ERP, CRM, mail servers, etc.)
 - Customizing the Share user interface or repository behavior
 - Extending REST APIs or adding new ones



2. Levels of Customization

Level	Customization Type	Description
Configuration	Simplest form	Modify property files (e.g., alfresco-global.properties) or XML files to configure behavior (ports, authentication, email, indexing, etc.).
Modeling	Metadata & types	Define new content types , aspects , and metadata using content model XML files.
Business Logic	Repository extensions	Add custom Java classes, behaviors, policies, and actions that extend repository logic.
Workflow	Process automation	Use BPMN-based Activiti/Flowable workflows to model document approval, review, or publishing processes.
UI Customization	Share or ADF front-end	Modify the Alfresco Share interface using Surf extensions or build modern UIs using the Alfresco Application Development Framework (ADF) (Angular/React).
Integration & APIs	REST/CMIS/GraphQL	Extend REST APIs or integrate with third-party systems using CMIS, REST, or custom web scripts.
Subsystem Extension	Deep customization	Create or override subsystems (Authentication, Search, Audit, etc.) for advanced needs.



Customize Dashboard

Dashboard	Description
User Dashboard	Appears when a user logs in; customizable per user.
Site Dashboard	Shown for each Share site (Project, Team, etc.).
Custom / Global Dashboard	Created by admins or developers with predefined dashlets and layout.



Alfresco Global Properties

- **What is alfresco-global.properties**
- This is the central properties file where you configure global settings for ACS (repository, indexing, clustering, content stores, etc.).
- It uses standard Java properties format (key = value) and is typically placed under the <classpathRoot> (for example shared/classes/ in a Tomcat installation).
- A sample file alfresco-global.properties.sample is typically included with the installation. You copy/ rename it to remove the .sample extension to activate it.
- When ACS starts up, it uses this file to initialize various subsystem settings. However:
 - Once configured via the Admin Console or via JMX in the database, those settings may override what's in this file.
 - If you edit the file, you'll typically need to restart ACS for changes to take effect (unless a subsystem supports dynamic update)



Configuration Directories

Directory	Purpose / what lives there
shared/classes/ (e.g., <TOMCAT_HOME>/shared/classes/)	Location of the global properties file (alfresco-global.properties / sample). E.g., the docs say: for Tomcat browse to \$TOMCAT_HOME/shared/classes/.
shared/classes/alfresco/extension/	Place custom configuration overrides, modules, keystore dirs etc (for example: keystore under alfresco/extension/keystore).
tomcat/conf/	Standard Tomcat config directory (server.xml, catalina.properties etc). For custom Tomcat setups when ACS is bundled.
alf_data (or whatever dir.root is set to)	Root of content store + indexes + binary content. The dir.root property points here (in alfresco-global.properties).
<store>/contentstore etc (under dir.root)	Sub-directories for the content binaries, e.g., contentstore under dir.root.



Configuration Directories

```
C:\Windows\System32>docker exec -it c22b47626eee /bin/bash
[alfresco@c22b47626eee tomcat]$ ls
BUILDING.txt      LICENSE  README.md      RUNNING.txt  alfresco-mmt  bin    lib    native-jni-lib  temp      work
CONTRIBUTING.md   NOTICE   RELEASE-NOTES  alf_data     amps        conf   logs   shared           webapps
[alfresco@c22b47626eee tomcat]$ cd shared
[alfresco@c22b47626eee shared]$ ls
classes
[alfresco@c22b47626eee shared]$ cd classes
[alfresco@c22b47626eee classes]$ ls
alfresco  alfresco-global.properties
[alfresco@c22b47626eee classes]$ cd alfresco
[alfresco@c22b47626eee alfresco]$ ls
extension
[alfresco@c22b47626eee alfresco]$ cd extension
[alfresco@c22b47626eee extension]$ ls
dev-log4j2.properties  disable-webscript-caching-context.xml  keystore  mimetypes  transform
[alfresco@c22b47626eee extension]$ ■
```



Configuration Directories

```
c:\ @3baa3b4ca64c:/usr/local/tomcat/shared/classes/alfresco/web-extension
C:\Windows\System32>docker exec -it 3baa3b4ca64c bash
[root@3baa3b4ca64c tomcat]# ls
BUILDING.txt      NOTICE          RUNNING.txt    alfresco.log.2024-06-30  alfresco.log.2024-07-04  bin    logs           temp
CONTRIBUTING.md   README.md       alfresco-mmt  alfresco.log.2024-07-02  alfresco.log.2024-07-05  conf   native-jni-lib  webapps
LICENSE          RELEASE-NOTES  alfresco.log  alfresco.log.2024-07-03  amps_share           lib    shared         work
[root@3baa3b4ca64c tomcat]# cd shared
[root@3baa3b4ca64c shared]# ls
classes
[root@3baa3b4ca64c shared]# cd classes
[root@3baa3b4ca64c classes]# ls
alfresco
[root@3baa3b4ca64c classes]# cd alfresco
[root@3baa3b4ca64c alfresco]# ls
substituter.sh  web-extension
[root@3baa3b4ca64c alfresco]# cd web-extension
[root@3baa3b4ca64c web-extension]# ls
custom-slingshot-application-context.xml.sample  share-config-custom.xml  smartfolders-amp-actions-config.xml
[root@3baa3b4ca64c web-extension]# ■
```



Configuration Directories

```
C:\ @c22b47626eee:/usr/local/tomcat/webapps/alfresco/WEB-INF
exit

C:\Windows\System32>docker exec -it c22b47626eee /bin/bash
[alfresco@c22b47626eee tomcat]$ ls
BUILDING.txt      LICENSE  README.md      RUNNING.txt  alfresco-mmt  bin    lib    native-jni-lib  temp      work
CONTRIBUTING.md   NOTICE   RELEASE-NOTES  alf_data     amps        conf   logs   shared           webapps
[alfresco@c22b47626eee tomcat]$ cd webapps
[alfresco@c22b47626eee webapps]$ ls
ROOT _vti_bin alfresco api-explorer
[alfresco@c22b47626eee webapps]$ cd alfresco
[alfresco@c22b47626eee alfresco]$ ls
META-INF WEB-INF admin cmis-browser-app cmisfs css error.jsp favicon.ico images index.jsp scripts
[alfresco@c22b47626eee alfresco]$ cd WEB-INF
[alfresco@c22b47626eee WEB-INF]$ ls
classes cmis10 cmis11 lib licenses web-application-context.xml web.xml
[alfresco@c22b47626eee WEB-INF]$ cd ..
[alfresco@c22b47626eee alfresco]$ cd ..
[alfresco@c22b47626eee webapps]$ cd ..
[alfresco@c22b47626eee tomcat]$ ls
BUILDING.txt      LICENSE  README.md      RUNNING.txt  alfresco-mmt  bin    lib    native-jni-lib  temp      work
CONTRIBUTING.md   NOTICE   RELEASE-NOTES  alf_data     amps        conf   logs   shared           webapps
[alfresco@c22b47626eee tomcat]$ cd webapps
[alfresco@c22b47626eee webapps]$ ls
ROOT _vti_bin alfresco api-explorer
[alfresco@c22b47626eee webapps]$ cd alfresco
bash: cd: alfesco: No such file or directory
[alfresco@c22b47626eee webapps]$ cd alfresco
[alfresco@c22b47626eee alfresco]$ ls
META-INF WEB-INF admin cmis-browser-app cmisfs css error.jsp favicon.ico images index.jsp scripts
[alfresco@c22b47626eee alfresco]$ cd WEB-INF
[alfresco@c22b47626eee WEB-INF]$ ls
classes cmis10 cmis11 lib licenses web-application-context.xml web.xml
[alfresco@c22b47626eee WEB-INF]$ ■
```



Configuration Directories

```
C:\Windows\System32>docker exec -it c22b47626eee /bin/bash
[alfresco@c22b47626eee tomcat]$ ls
BUILDING.txt      LICENSE  README.md      RUNNING.txt  alfresco-mmmt  bin    lib    native-jni-lib  temp    work
CONTRIBUTING.md   NOTICE   RELEASE-NOTES  alf_data     amps        conf   logs   shared       webapps
[alfresco@c22b47626eee tomcat]$ cd webapps
[alfresco@c22b47626eee webapps]$ ls
ROOT _vti_bin alfresco api-explorer
[alfresco@c22b47626eee webapps]$ cd alfresco
[alfresco@c22b47626eee alfresco]$ ls
META-INF WEB-INF admin cmis-browser-app cmisfs css error.jsp favicon.ico images index.jsp scripts
[alfresco@c22b47626eee alfresco]$ cd WEB-INF
[alfresco@c22b47626eee WEB-INF]$ ls
classes cmis10 cmis11 lib licenses web-application-context.xml web.xml
[alfresco@c22b47626eee WEB-INF]$ cd classes
[alfresco@c22b47626eee classes]$ ls
THIRD-PARTY.txt alfresco log4j2.properties logging.properties org
[alfresco@c22b47626eee classes]$ cd alfresco
[alfresco@c22b47626eee alfresco]$ ls .
alfresco-jmxrmi.access extension subsystems version.properties           web-client-security-config.xml
alfresco-jmxrmi.password module   templates web-client-application-context.xml
[alfresco@c22b47626eee alfresco]$
```



Configuration Directories

```
C:\Windows\System32>docker exec -it 3baa3b4ca64c bash
[root@3baa3b4ca64c tomcat]# ls
BUILDING.txt      NOTICE      RUNNING.txt    alfresco.log.2024-06-30  alfresco.log.2024-07-04  bin    logs      temp
CONTRIBUTING.md   README.md   alfresco-mmt   alfresco.log.2024-07-02  alfresco.log.2024-07-05  conf   native-jni-lib  webapps
LICENSE          RELEASE-NOTES alfresco.log   alfresco.log.2024-07-03  amps_share           lib    shared    work
[root@3baa3b4ca64c tomcat]# cd webapps
[root@3baa3b4ca64c webapps]# ls
share
[root@3baa3b4ca64c webapps]# ls
share
[root@3baa3b4ca64c webapps]# cd share
[root@3baa3b4ca64c share]# ls
META-INF  cmm      css      error500.jsp  index.jsp  js        site-index.jsp  themes
WEB-INF   components  ctools  favicon.ico  jquery     modules   templates     yui
[root@3baa3b4ca64c share]# cd META-INF
[root@3baa3b4ca64c META-INF]# ls
MANIFEST.MF  maven
[root@3baa3b4ca64c META-INF]# cd WEB-INF
bash: cd: WEB-INF: No such file or directory
[root@3baa3b4ca64c META-INF]# cd ..
[root@3baa3b4ca64c share]# cd WEB-INF
[root@3baa3b4ca64c WEB-INF]# ls
classes  lib  surf.xml  urlrewrite.xml  web.xml
[root@3baa3b4ca64c WEB-INF]# cd classes
[root@3baa3b4ca64c classes]# ls
THIRD-PARTY.txt  hotswap-agent.properties  org                  surf-config.xml
alfresco         log4j2.properties       share-config.properties  web-application-config.xml
[root@3baa3b4ca64c classes]# cd alfresco
[root@3baa3b4ca64c alfresco]# ls
enterprise-config.xml  share-cmm-config.xml      share-security-config.xml      slingshot-documentlibrary-context.xml
form-config.xml       share-config.xml        share-workflow-form-config.xml  team-config.xml
messages            share-datalist-form-config.xml  site-data                 templates
module              share-documentlibrary-config.xml site-webscripts  web-extension
```





Customization using UI

Drag and drop the available dashlets into a column to add them to your dashboard. You can also reorder the dashlets within the columns using drag and drop.

Add Dashlets

Close

My Meeting Workspaces

My Profile

My Sites

My Tasks

My Document Workspaces

My Calendar

My Discussions

Saved Search

Site Search

Web View

▲

▼

When using the keyboard, use the Tab key to select a dashlet. Use the arrow keys to move the selected dashlet. Press Escape to deselect an item. Press Delete to delete an item.

Column 1

My Sites

My Tasks

My Calendar

Web View

Column 2

My Activities

My Documents

Site Search

Saved Search

My Discussions

Column 3

My Meeting Workspaces

My Profile

Content I'm Editing





WebView Dashlet

Wikipedia

Saved Search

No results found.

Configure Web View Dashlet

Link Title:

URL: *

OK Cancel

This screenshot shows a configuration dialog for a WebView dashlet. The dialog is titled "Configure Web View Dashlet". It contains two input fields: "Link Title" with the value "Wikipedia" and "URL" with the value "https://wikipedia.org" followed by a mandatory asterisk. At the bottom are "OK" and "Cancel" buttons. In the background, there's a "Saved Search" section showing a message "No results found." and a "Wikipedia" dashlet preview.



User Profile

About

First Name: PARAMESWARI *

Last Name: E

Job Title:

Location:

Summary:

Photo



[Upload](#)

[Use Default](#)

Your image will be resized to 64px by 64px.

Changes to your photo image take effect immediately.

Contact Information

Telephone: 09952032862

Mobile:

Email: parameswaribala@gmail.com *

Skype:

IM:



User Profile

Active Tasks ▾ Start Workflow

Active Tasks | Completed Tasks

Review the tasks assigned to you

Different types of tasks can appear in this task list and you need to address each one. This could involve reviewing a document or simply accepting an invitation to a site.

I've Recently Modified ▾

 profile.jpg
Created a minute ago by PARAMESWARI E

My Calendar

No upcoming events

Site Search

Search 10 ▾

Saved search

No results found.

Content I'm Editing

Documents

No items to display

Blog posts

No items to display

Wiki pages

Milestones

Edited over 14 years ago in Sample: Web Site Design Project

Meetings



WIKIPEDIA
The Free Encyclopedia



Admin Tools

Admin Tools

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

New User

Info

First Name: *

Last Name:

Email: *

About User



Admin Tools

localhost:8080/share/page/

The screenshot shows a web browser window with the URL 'localhost:8080/share/page/' in the address bar. The main content is a login form for 'Alfresco Share'.

The Alfresco logo (a stylized four-petaled flower) and the tagline 'make business flow' are displayed at the top of the form.

The form fields are labeled:

- Username: eswaribala
- Password: (represented by a series of dots)

A large blue 'Sign In' button is located at the bottom of the form.

At the very bottom of the page, there is a small copyright notice: '© 2005-2025 Alfresco Software Inc. All rights reserved.'



Admin Tools

Home My Files Shared Files Sites ▾ Tasks ▾ People Repository eswari bala ▾

 eswari bala Dashboard

 **GET STARTED**
Take a quick tour of Alfresco Share or learn about advanced features.

My Sites
All ▾  Create Site
 Quickly access your sites
A site is a project area where you can share and discuss content with other site members.

My Activities
Everyone's activities ▾ all items ▾ in the last 7 days ▾
 Follow what's going on in your sites
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as who is joining and leaving your sites.

My Tasks ?
Active Tasks ▾  Start Workflow
Active Tasks | Completed Tasks
 Review the tasks assigned to you

My Documents
I've Recently Modified ▾
 Keep track of your own content
This dashlet lists all of the content that's important to you, no matter which site it is in. Use the fil



My Files

Document Details

My Files

AlfrescoInstallation 1.0

Modified by eswari bala on Sun 26 Oct 2025 09:17:03 | ★ Favorite | Like 0 | Comment | Share

Download

Previous Next 1 / 1 Maximize Download

```
docker login quay.io -u="alfresco+acs_v6_trial"
Enter the following password when prompted (Copy and Paste):
XVQWI167IGBPDNJU3AN06J1V5BP01YQ041KQN4Z890AERGF7WW6VVQVI3DQ1U1X0
```

View In Browser

Edit in Alfresco Share

Edit Offline

Upload New Version

Edit Properties

Move to...

Copy to...

Delete Document

Edit in Google Docs™

Start Workflow

Manage Permissions

Become Owner

Manage Aspects

Change Type

Comments



My Files

My Documents

I've Recently Modified ▾



AlfrescoInstallation

Created just now by eswari bala



File Not Visible For Others

Repository Browser

Select + Create... ▼ Upload ▼ Selected Items... Name ▼ Options ▼

Repository > User Homes > roshvicka

Drag and drop to upload files!

Drag files from your desktop and drop them here to upload.

You can drop files onto folders.

You can also...

Upload files

Create a folder

0 - 0 of 0 << >>

The screenshot shows a file upload interface within a web-based repository browser. On the left, there's a sidebar with navigation links: 'Documents' (I'm Editing, My Favorites), 'Repository' (Repository, Data Dictionary, Guest Home, Imap Attachments, IMAP Home, Shared, Sites, User Homes, selected folder 'roshvicka'), 'Categories' (Category Root), and 'Tags'. The main area has a header with 'Select', '+ Create...', 'Upload', 'Selected Items...', 'Name' sorting, and 'Options'. Below the header, the current path is shown as 'Repository > User Homes > roshvicka'. A large central box contains instructions for file uploads: 'Drag and drop to upload files!', 'Drag files from your desktop and drop them here to upload.', 'You can drop files onto folders.', 'You can also...', 'Upload files', and 'Create a folder'. At the bottom, it shows '0 - 0 of 0 << >>'.



Folders

Repository Browser

Documents

- I'm Editing
- My Favorites

Repository

- Repository
 - Data Dictionary
 - Guest Home
 - Imap Attachments
 - IMAP Home
 - Shared
 - Sites
- Training
- User Homes

Categories

- Category Root

Tags

Select + Create... Upload Selected Items...

Repository > Training

Drag and drop to up

Drag files from upload.

You can also...

- Upload files
- Create a folder

New Folder

New Folder Details

* Required Fields

Name:

Title:

Description:

Save Cancel

0 - 0 of 0 << >>

You can drop files onto folders.



Folders

Home My Files Shared Files Sites Tasks People Repository Admin Tools PARAMESWARI E ▾

Repository Browser

Documents I'm Editing My Favorites

Repository

- Repository
 - Data Dictionary
 - Guest Home
 - Imap Attachments
 - IMAP Home
 - Shared
 - Sites
 - User Homes

Categories

- Category Root

Tags

Select + Create... Upload Selected Items... ▾

Repository

Data Dictionary

Modified User made No Tags ★ Favorite

Guest

Created The guest No Tags ★ Favorite

Imap Attachments

Created Imap Att No Tags ★ Favorite

IMAP Home

Created Imap Att No Tags ★ Favorite

Training

Project Specific

Description:

Create Folder From Template

Update the template folder properties

* Required Fields

Name: *

Title:

Description:

Save Cancel

IMAP Home



Edit Folder Properties

Folder Details

Repository > Training

Training
Modified by PARAMESWARI E on Sun 26 Oct 2025 17:20:03 | ★ Favorite | Like 0 | Comment

Comments

[Add Comment](#)

No comments

Folder Actions

- Download as Zip
- Edit Properties
- Move to...
- Copy to...
- Delete Folder

Manage

- Manage Permissions
- Become Owner
- Manage Aspects
- Change Type
- Manage Rules

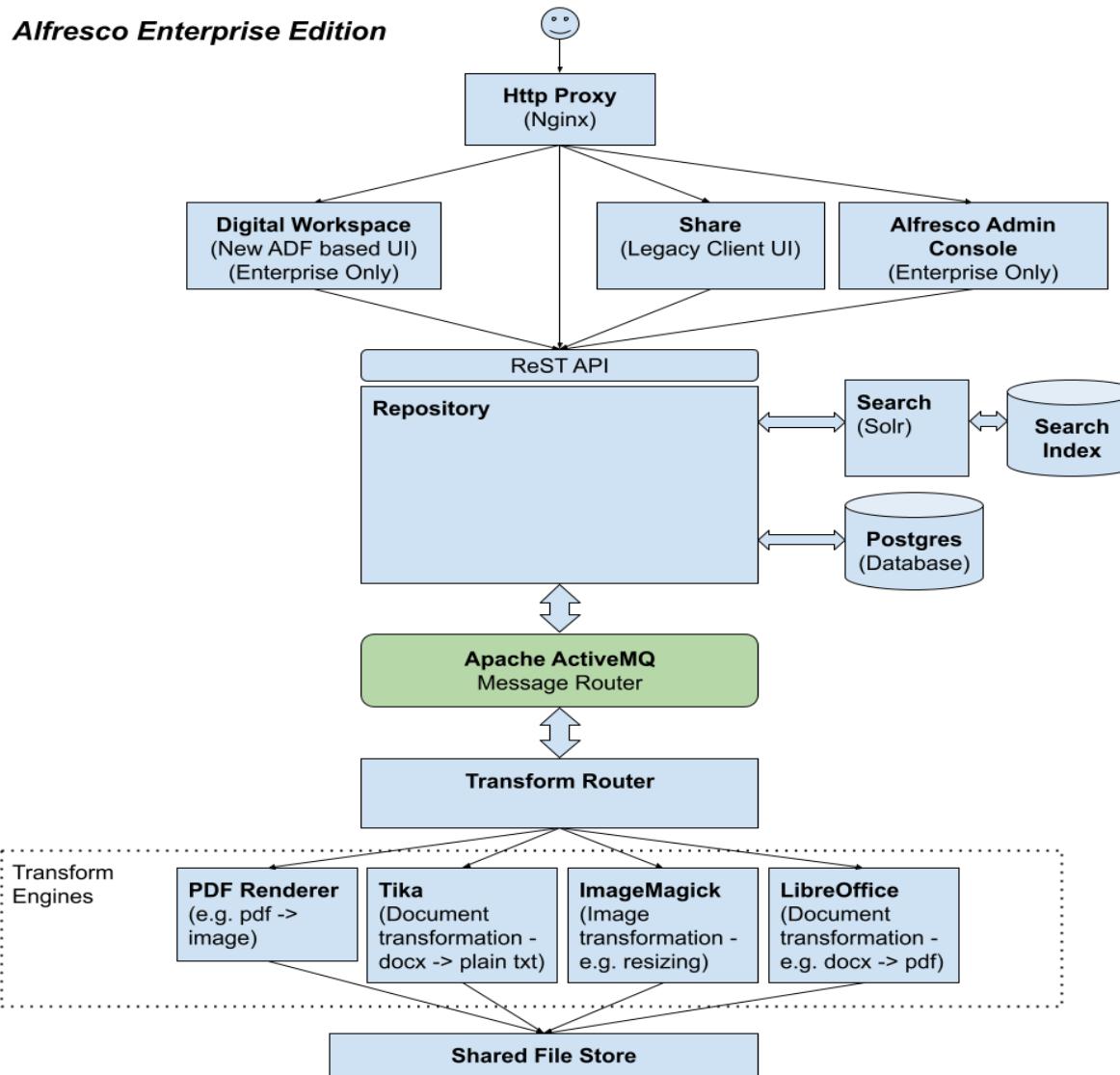
Share

Copy this link to share the current page

```
http://localhost:8080/share/page/folder-details?nodeRef=workspace%3ATraining
```



Software Architecture





Software Architecture

-  **Top Layer – User Interfaces**
- These are the **UI clients** used to interact with the Alfresco Repository:
- **Digital Workspace** – New ADF (Application Development Framework)-based interface for Enterprise Edition.
- **Share** – The **legacy web client** for document management and collaboration.
- **Admin Console** – Used by administrators for configuration and system monitoring (Enterprise only).
All of them communicate through the **ReST API** exposed by the repository.



Software Architecture

-  **Http Proxy (Nginx)**
- Acts as the **front door** for incoming HTTP/HTTPS requests.
- Routes requests to the correct backend service (Share, Repository, Solr, etc.).
- Often used for SSL termination, caching, and reverse proxying.



Software Architecture

-  **Repository Layer (Core of Alfresco)**
- The **heart of Alfresco** — handles content, metadata, permissions, and versioning.
- Implements the **ReST API** and **CMIS** standards.
- Uses:
 - **Postgres** as the **metadata database** (stores node properties, users, ACLs, etc.).
 - **Solr** as the **search engine** to index and search content.



Software Architecture

- 🔎 **Search (Solr) and Search Index**
- **Solr** continuously indexes the repository content.
- Enables full-text and metadata-based search across all content.
- **Search Index** is a separate storage that contains searchable tokens extracted from documents.



Software Architecture

-  **Database (PostgreSQL)**
- Stores all **structured metadata** (content model info, users, audit logs).
- Content binaries are not stored here — only metadata.



Software Architecture

-  **Apache ActiveMQ (Message Router)**
- Used for **asynchronous communication** between Repository and Transformation services.
- Ensures reliable and scalable document transformation pipelines.
- Message flow example: Repository → ActiveMQ → Transform Router → Tika/LibreOffice.



Software Architecture

-  **Transform Router**
- Orchestrates and delegates **document transformations** to different engines.
- Examples:
 - Converts .docx → .pdf
 - Extracts text from .pdf → .txt
 - Converts images or generates thumbnails.



Software Architecture

-  **Transformation Engines**
- Each specialized service handles specific conversion tasks:
- **PDF Renderer** – Converts PDF pages into images.
- **Apache Tika** – Extracts plain text or metadata (used for indexing).
- **ImageMagick** – Resizes and manipulates images.
- **LibreOffice** – Converts Office documents to PDF or other formats.



Software Architecture

-  **Shared File Store**
- The **binary content storage** (actual files).
- Can be on disk, NFS, or an S3-compatible store.
- Repository only stores references (content URLs) pointing to this store.



Software Architecture

-  **End-to-End Flow Summary**
- A user (via Share/Digital Workspace) uploads or views a document.
- The request goes through **Nginx** → **Repository**.
- Metadata is saved in **Postgres**, and content is stored in **Shared File Store**.
- **ActiveMQ** triggers **Transform Router** to generate previews or extract text via Tika/ImageMagick/LibreOffice.
- **Solr** indexes the document for fast retrieval.
- Users can search and retrieve content through the ReST API/UI.



Alfresco SDK Prerequisites

Tool	Recommended Version	Notes
Java JDK	11 or 17	Matches your Alfresco version
Apache Maven	3.8+	Required for SDK build
Git	Latest	Optional, for cloning starter projects
Docker Desktop	Latest	For running the platform & DB quickly
IDE	IntelliJ IDEA / Eclipse	With Maven support

<https://docs.alfresco.com/content-services/6.2/develop/sdk/#gettingstarted>



Alfresco SDK Prerequisites

mvn archetype:generate -Dfilter=org.alfresco:

```
E:\alfresco\23102025\Workspace>mvn archetype:generate -Dfilter=org.alfresco:  
[INFO] Scanning for projects...  
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-metadata.xml  
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/mojo/maven-metadata.xml  
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/mojo/maven-metadata.xml (21 kB at 47 kB/s)  
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-metadata.xml (14 kB at 31 kB/s)  
[INFO]  
[INFO] -----< org.apache.maven:standalone-pom >-----  
[INFO] Building Maven Stub Project (No POM) 1  
[INFO] -----[ pom ]-----  
[INFO]  
[INFO] >>> archetype:3.4.1:generate (default-cli) > generate-sources @ standalone-pom >>>  
[INFO]  
[INFO] <<< archetype:3.4.1:generate (default-cli) < generate-sources @ standalone-pom <<<  
[INFO]  
[INFO]  
[INFO] --- archetype:3.4.1:generate (default-cli) @ standalone-pom ---  
[INFO] Generating project in Interactive mode  
[INFO] No archetype defined. Using maven-archetype-quickstart (org.apache.maven.archetypes:maven-archetype-quickstart:1.0)  
Choose archetype:  
1: remote -> org.alfresco.maven.archetype:activiti-jar-archetype (DEPRECATED - UNSUPPORTED - EXPERIMENTAL)  
2: remote -> org.alfresco.maven.archetype:alfresco-allinone-archetype (Sample multi-module project for All-in-One development on the Alfresco platform. Includes modules for Platform/Repository JAR and Share JAR)  
3: remote -> org.alfresco.maven.archetype:alfresco-amp-archetype (Sample project with full support for lifecycle and rapid development of Repository AMPs (Alfresco Module Packages))  
4: remote -> org.alfresco.maven.archetype:alfresco-platform-jar-archetype (Sample project with full support for lifecycle and rapid development of Platform/Repository JARs and AMPs (Alfresco Module Packages))  
5: remote -> org.alfresco.maven.archetype:alfresco-share-jar-archetype (Share project with full support for lifecycle and rapid development of JARs and AMPs (Alfresco Module Packages))  
6: remote -> org.alfresco.maven.archetype:share-amp-archetype (Share project with full support for lifecycle and rapid development of AMPs (Alfresco Module Packages))  
Choose a number or apply filter (format: [groupId:]artifactId, case sensitive contains): :
```



Alfresco SDK Prerequisites

```
Administrator: Command Prompt - mvn archetype:generate -Dfilter=org.alfresco:  
ackages))  
4: remote -> org.alfresco.maven.archetype:alfresco-platform-jar-archetype (Sample project with full support for lifecycle and rapid development of Platform/Repository JARs  
and AMPs (Alfresco Module Packages))  
5: remote -> org.alfresco.maven.archetype:alfresco-share-jar-archetype (Share project with full support for lifecycle and rapid development of JARs and AMPs (Alfresco Modul  
e  
    Packages))  
6: remote -> org.alfresco.maven.archetype:share-amp-archetype (Share project with full support for lifecycle and rapid development of AMPs (Alfresco Module  
    Packages))  
Choose a number or apply filter (format: [groupId:]artifactId, case sensitive contains): : 2  
Choose org.alfresco.maven.archetype:alfresco-allinone-archetype version:  
1: 2.0.0-beta-1  
2: 2.0.0-beta-2  
3: 2.0.0-beta-3  
4: 2.0.0-beta-4  
5: 2.0.0  
6: 2.1.0  
7: 2.1.1  
8: 2.2.0  
9: 3.0.0  
10: 3.0.1  
11: 3.1.0  
12: 4.0.0-beta-1  
13: 4.0.0  
14: 4.1.0  
15: 4.2.0  
16: 4.3.0  
17: 4.4.0  
18: 4.5.0  
19: 4.6.0  
20: 4.7.0  
21: 4.8.0  
22: 4.9.0  
23: 4.10.0  
24: 4.11.0-A2  
25: 4.11.0  
26: 4.12.0-A1  
27: 4.12.0  
28: 4.13.0-A1  
29: 4.13.0-A2  
30: 4.13.0-A3  
31: 4.13.0-A4  
32: 4.13.0-A5  
33: 4.13.0-A6  
34: 4.13.0-A8  
Choose a number: 34: 34
```





Alfresco SDK Prerequisites

```
Administrator: Command Prompt
Define value for property 'groupId': com.cog
Define value for property 'artifactId': all-in-one
Define value for property 'package' com.cog:
Confirm properties configuration:
version: 1.0-SNAPSHOT
groupId: com.cog
artifactId: all-in-one
package: com.cog
Y:
[INFO] -----
[INFO] Using following parameters for creating project from Archetype: alfresco-allinone-archetype:4.13.0-A8
[INFO] -----
[INFO] Parameter: groupId, Value: com.cog
[INFO] Parameter: artifactId, Value: all-in-one
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] Parameter: package, Value: com.cog
[INFO] Parameter: packageInPathFormat, Value: com/cog
[INFO] Parameter: package, Value: com.cog
[INFO] Parameter: groupId, Value: com.cog
[INFO] Parameter: artifactId, Value: all-in-one
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] Parent element not overwritten in E:\alfresco\23102025\Workspace\all-in-one\all-in-one-platform\pom.xml
[INFO] Parent element not overwritten in E:\alfresco\23102025\Workspace\all-in-one\all-in-one-share\pom.xml
[INFO] Parent element not overwritten in E:\alfresco\23102025\Workspace\all-in-one\all-in-one-integration-tests\pom.xml
[INFO] Parent element not overwritten in E:\alfresco\23102025\Workspace\all-in-one\all-in-one-platform-docker\pom.xml
[INFO] Parent element not overwritten in E:\alfresco\23102025\Workspace\all-in-one\all-in-one-share-docker\pom.xml
[INFO] Executing META-INF/archetype-post-generate.groovy post-generation script
[INFO] Project created from Archetype in dir: E:\alfresco\23102025\Workspace\all-in-one
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 06:45 min
[INFO] Finished at: 2025-10-27T21:57:20+05:30
[INFO] -----
```

E:\alfresco\23102025\Workspace>



Alfresco SDK Prerequisites

```
C:\ Administrator: Command Prompt
Volume Serial Number is 369D-E7A4

Directory of E:\alfresco\23102025\Workspace\all-in-one

27-10-2025  21:57      <DIR>          .
27-10-2025  21:57      <DIR>          ..
27-10-2025  21:57            19,711 pom.xml
27-10-2025  21:57      <DIR>          docker
27-10-2025  21:57            2,511 run.sh
27-10-2025  21:57            2,648 README.md
27-10-2025  21:57            3,017 run.bat
27-10-2025  21:57            519 .gitignore
27-10-2025  21:57      <DIR>          all-in-one-platform
27-10-2025  21:57      <DIR>          all-in-one-share
27-10-2025  21:57      <DIR>          all-in-one-integration-tests
27-10-2025  21:57      <DIR>          all-in-one-platform-docker
27-10-2025  21:57      <DIR>          all-in-one-share-docker
      5 File(s)        28,406 bytes
     8 Dir(s)  688,688,463,872 bytes free

E:\alfresco\23102025\Workspace\all-in-one>
```



Alfresco SDK Prerequisites

run.bat build_start

```
E:\alfresco\23102025\Workspace\all-in-one>run.bat build_start
[INFO] Scanning for projects...
[WARNING] The project com.cog:all-in-one:pom:1.0-SNAPSHOT uses prerequisites which is only intended for maven-plugin projects but not for non maven-plugin projects. For such purposes you should use the maven-enforcer-plugin. See https://maven.apache.org/enforcer/enforcer-rules/requireMavenVersion.html
[INFO] -----
[INFO] Reactor Build Order:
[INFO]
[INFO] AIO - SDK 4.13.0-A7-SNAPSHOT                               [pom]
[INFO] Alfresco Platform/Repository JAR Module                      [jar]
[INFO] Alfresco Share JAR Module                                    [jar]
[INFO] Integration Tests Module                                   [jar]
[INFO] Alfresco Platform/Repository Docker Module                 [jar]
[INFO] Alfresco Share Docker Module                                [jar]
[INFO]
[INFO] -----< com.cog:all-in-one >-----
[INFO] Building AIO - SDK 4.13.0-A7-SNAPSHOT 1.0-SNAPSHOT          [1/6]
[INFO]   from pom.xml
[INFO] -----[ pom ]-----
[INFO]
[INFO] --- clean:3.2.0:clean (default-clean) @ all-in-one ---
[INFO]
[INFO] --- resources:3.1.0:copy-resources (copy-and-filter-docker-resources) @ all-in-one ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 1 resource
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-assembly) @ all-in-one ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-resources) @ all-in-one ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- jrebel:1.1.8:generate (generate-rebel-xml) @ all-in-one ---
```





Alfresco SDK Prerequisites

```
Administrator: Command Prompt - run.bat build_start
//webservices.impl.server.opencmis.chemistry.apache.org/]AclServiceService from class org.apache.chemistry.opencmis.commons.impl.jaxb.ACIServicePort
all-in-one-acs-1 | 27-Oct-2025 16:31:16.973 INFO [main] org.apache.cxf.endpoint.ServerImpl.initDestination Setting the server's publish address to be /ACIService
all-in-one-acs-1 | 27-Oct-2025 16:31:16.974 INFO [main] org.apache.cxf.wsdl.service.factory.ReflectionServiceFactoryBean.buildServiceFromClass Creating Service {http://webservices.impl.server.opencmis.chemistry.apache.org/}PolicyServiceService from class org.apache.chemistry.opencmis.commons.impl.jaxb.PolicyServicePort
all-in-one-acs-1 | 27-Oct-2025 16:31:16.982 INFO [main] org.apache.cxf.endpoint.ServerImpl.initDestination Setting the server's publish address to be /PolicyService
all-in-one-acs-1 | 27-Oct-2025 16:31:16.988 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory [/usr/local/tomcat/webapps/alfresco] has finished in [68,932] ms
all-in-one-acs-1 | 27-Oct-2025 16:31:16.988 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory [/usr/local/tomcat/webapps/api-explorer]
all-in-one-acs-1 | 27-Oct-2025 16:31:17.083 INFO [main] org.apache.jasper.servlet.TldScanner.scanJars At least one JAR was scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning can improve startup time and JSP compilation time.
all-in-one-acs-1 | 27-Oct-2025 16:31:17.829 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory [/usr/local/tomcat/webapps/api-explorer] has finished in [841] ms
all-in-one-acs-1 | 27-Oct-2025 16:31:17.830 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory [/usr/local/tomcat/webapps/ROOT]
all-in-one-acs-1 | 27-Oct-2025 16:31:17.842 WARNING [main] org.apache.tomcat.util.digester.SetPropertiesRule.begin Match [Context] failed to set property [debug] to [100]
all-in-one-acs-1 | 27-Oct-2025 16:31:17.912 INFO [main] org.apache.jasper.servlet.TldScanner.scanJars At least one JAR was scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning can improve startup time and JSP compilation time.
all-in-one-acs-1 | 27-Oct-2025 16:31:17.914 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory [/usr/local/tomcat/webapps/ROOT] has finished in [84] ms
all-in-one-acs-1 | 27-Oct-2025 16:31:17.915 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deploying web application directory [/usr/local/tomcat/webapps/_vti_bin]
all-in-one-acs-1 | 27-Oct-2025 16:31:18.067 INFO [main] org.apache.jasper.servlet.TldScanner.scanJars At least one JAR was scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list of JARs that were scanned but no TLDs were found in them. Skipping unneeded JARs during scanning can improve startup time and JSP compilation time.
all-in-one-acs-1 | 27-Oct-2025 16:31:18.070 INFO [main] org.apache.catalina.startup.HostConfig.deployDirectory Deployment of web application directory [/usr/local/tomcat/webapps/_vti_bin] has finished in [155] ms
all-in-one-acs-1 | 27-Oct-2025 16:31:18.078 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-8080"]
all-in-one-acs-1 | 27-Oct-2025 16:31:18.099 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in [63575] milliseconds
```



Alfresco SDK Prerequisites

Screenshot of the Alfresco Share Administrator Dashboard at localhost:8180/share/page/user/admin/dashboard.

The dashboard features a navigation bar with links to Home, My Files, Shared Files, Sites, Tasks, People, Repository, Admin Tools, and Debug Menu. The user is logged in as Administrator.

Administrator Dashboard

GET STARTED (Icon: lightbulb) Take a quick tour of Alfresco Share or learn about advanced features.

My Sites

- All (Create Site)
- Quickly access your sites:
A site is a project area where you can share and discuss content with other site members.
We've included a sample site for you. Use this to explore the features in Alfresco Content Services.
- Sample: Web Site Design Project
This is a Sample Alfresco Team site.
★ Favorite

My Activities

- Everyone's activities (all items, in the last 7 days)
- Follow what's going on in your sites:
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as content also see who is joining and leaving your sites.

My Tasks

- Active Tasks (Start Workflow)
- Active Tasks | Completed Tasks
- Review the tasks assigned to you:
Different types of tasks can appear in this task list and you need to address each one. This could involve reviewing a document or simply accepting an invitation to a site.

My Documents

- I've Recently Modified
- Keep track of your own content:
This dashlet lists all of the content that's important to you, no matter which site it is in. Use the filters to easily find it.



Alfresco SDK Prerequisites

Task	Description
build_start	Build the whole project, recreate the ACS and Share docker images, start the dockerised environment composed by ACS, Share, ASS and PostgreSQL and tail the logs of all the containers.
build_start_it_supported	Build the whole project including dependencies required for IT execution, recreate the ACS and Share docker images, start the dockerised environment composed by ACS, Share, ASS and PostgreSQL and tail the logs of all the containers.
start	Start the dockerised environment without building the project and tail the logs of all the containers.
stop	Stop the dockerised environment.
purge	Stop the dockerised environment and delete all the persistent data (docker volumes).



Alfresco SDK Prerequisites

purge

Stop the dockerised environment and delete all the persistent data (docker volumes).

tail

Tail the logs of all the containers.

reload_share

Build the Share module, recreate the Share docker image and restart the Share container (not available in the Alfresco Platform JAR archetype).

reload_acs

Build the ACS module, recreate the ACS docker image and restart the ACS container (only available in the All-In-One archetype).

build_test

Build the whole project, recreate the ACS and Share docker images, start the dockerised environment, execute the integration tests from the `integration-tests` module and stop the environment.

test

Execute the integration tests (the environment must be already started).



Alfresco SDK Prerequisites

```
c:\ Administrator: Command Prompt - run.bat build_start
Terminate batch job (Y/N)? y

E:\alfresco\23102025\Workspace\all-in-one>run.bat stop
time="2025-10-27T22:10:42+05:30" level=warning msg="E:\alfresco\23102025\Workspace\all-in-one\target\classes\docker\docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 6/6
✓ Container docker-all-in-one-ass-1      Removed
✓ Container docker-all-in-one-share-1    Removed
✓ Container docker-all-in-one-activemq-1 Removed
✓ Container docker-all-in-one-acs-1      Removed
✓ Container docker-all-in-one-postgres-1 Removed
✓ Network docker_default                Removed

E:\alfresco\23102025\Workspace\all-in-one>dir
Volume in drive E is T7
Volume Serial Number is 369D-E7A4

Directory of E:\alfresco\23102025\Workspace\all-in-one

27-10-2025  21:57    <DIR>          .
27-10-2025  21:57    <DIR>          ..
27-10-2025  21:57            19,711 pom.xml
27-10-2025  21:57    <DIR>          docker
27-10-2025  21:57            2,511 run.sh
27-10-2025  21:57            2,648 README.md
27-10-2025  21:57            3,017 run.bat
27-10-2025  21:57            519 .gitignore
27-10-2025  21:57    <DIR>          all-in-one-platform
27-10-2025  21:57    <DIR>          all-in-one-share
27-10-2025  21:57    <DIR>          all-in-one-integration-tests
27-10-2025  21:57    <DIR>          all-in-one-platform-docker
27-10-2025  21:57    <DIR>          all-in-one-share-docker
27-10-2025  21:59    <DIR>          target
      5 File(s)        28,406 bytes
     9 Dir(s)  688,665,657,344 bytes free
```



Alfresco SDK Prerequisites

```
Administrator: Command Prompt - run.bat build_start - docker-compose up -d
```

```
E:\alfresco\23102025\Workspace\all-in-one\target>docker-compose up -d
[+] Running 12/17
✓ Network docker-compose_default          Created
✓ Container docker-compose-proxy-1         Started
✓ Container docker-compose-digital-workspace-1 Started
- Container docker-compose-activemq-1       Waiting
- Container docker-compose-elasticsearch-1  Waiting
- Container docker-compose-shared-file-store-1 Waiting
- Container docker-compose-postgres-1        Waiting
- Container docker-compose-alfresco-1         Waiting
✓ Container docker-compose-control-center-1 Started
✓ Container docker-compose-kibana-1          Created
✓ Container docker-compose-audit-storage-1   Created
✓ Container docker-compose-transform-router-1 Created
✓ Container docker-compose-transform-core-aio-1 Created
✓ Container docker-compose-sync-service-1    Created
✓ Container docker-compose-search-reindexing-1 Created
✓ Container docker-compose-share-1           Created
✓ Container docker-compose-search-1          Created
```



Updating extension code

- Open up the `my-all-in-one-project/my-all-in-one-project-platform/src/main/resources/alfresco/extension/templates/webscripts/alfresco/tutorials/helloworld.get.html.ftl`
- Change it to
- Message: '`#{fromJS}`' '`#{fromJava}`' UPDATED!
- `my-all-in-one-project mbergljung$./run.sh reload_acs`



Updating extension code

```
MINGW64:/e/alfresco/23102025/Workspace/all-in-one
param@Parameswari MINGW64 /e/alfresco/23102025/Workspace/all-in-one
$ ./run.sh reload_acs
time="2025-10-27T22:29:27+05:30" level=warning msg="E:\\alfresco\\23102025\\Workspace\\all-in-one\\target\\classes\\docker\\docker-compose.yml: the attribute `version` is o
bsolute, it will be ignored, please remove it to avoid potential confusion"
no container to killtime="2025-10-27T22:29:27+05:30" level=warning msg="E:\\alfresco\\23102025\\Workspace\\all-in-one\\target\\classes\\docker\\docker-compose.yml: the attr
ibute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion"
Going to remove docker-all-in-one-acs-1
Container docker-all-in-one-acs-1 Removing
Container docker-all-in-one-acs-1 Removed
[INFO] Scanning for projects...
[INFO] -----
[INFO] Reactor Build Order:
[INFO]
[INFO] Alfresco Platform/Repository JAR Module [jar]
[INFO] Integration Tests Module [jar]
[INFO] Alfresco Platform/Repository Docker Module [jar]
[INFO]
[INFO] -----< com.cog:all-in-one-platform >-----
[INFO] Building Alfresco Platform/Repository JAR Module 1.0-SNAPSHOT [1/3]
[INFO]   from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- clean:3.2.0:clean (default-clean) @ all-in-one-platform ---
[INFO] Deleting E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-assembly) @ all-in-one-platform ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-resources) @ all-in-one-platform ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- resources:3.1.0:resources (default-resources) @ all-in-one-platform ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 16 resources
[INFO]
[INFO] --- jrebel:1.1.8:generate (generate-rebel-xml) @ all-in-one-platform ---
[INFO] Processing com.cog:all-in-one-platform with packaging jar
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ all-in-one-platform ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 3 source files to E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target\\classes
[INFO]
[INFO] --- resources:3.1.0:testResources (default-testResources) @ all-in-one-platform ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\src\\test\\resources
[INFO]
[INFO] --- compiler:3.8.0:testCompile (default-testCompile) @ all-in-one-platform ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target\\test-classes
[INFO]
[INFO] --- surefire:3.2.5:test (default-test) @ all-in-one-platform ---
```

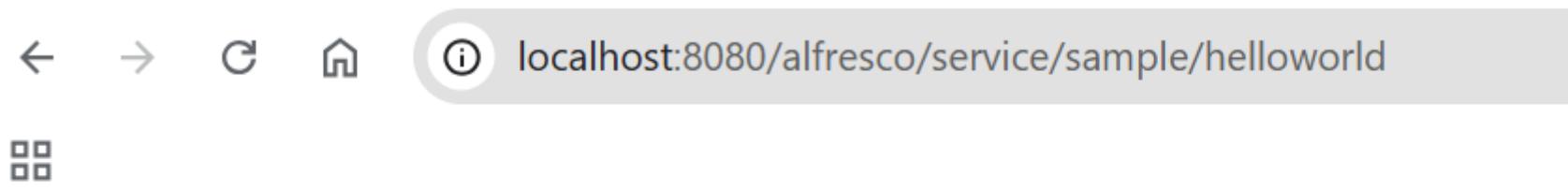


ENG
IN 27-10-2025 22:35



Updating extension code

- <http://localhost:8080/alfresco/service/sample/helloworld>



Message: 'Hello from JS!' 'HelloFromJava' UPDATED!



Updating extension code

The screenshot shows the IntelliJ IDEA interface with the following details:

- Project View:** Shows the project structure under 'all-in-one-platform'. Key components include '.idea', 'src' (containing 'main' and 'java' packages), 'resources' (containing 'alfresco' and 'extension.templates.webscripts.alfresco.tuto'), 'test', 'target', 'pom.xml', 'External Libraries', and 'Scratches and Consoles'.
- Code Editor:** The file 'helloworld.get.html.ftl' is open in the editor. The code contains the following text:

```
<#> helloworld.get.html.ftl
1   Message: '${fromJS}' '${fromJava}' Latest Changes!
```

A yellow lightbulb icon is shown next to the placeholder text.
- Toolbars and Status Bar:** The top bar includes tabs for 'Current File', 'Version control', and other settings. The bottom status bar shows the path 'all-in-one-platform > src > main > resources > alfresco > extension > templates > webscripts > alfresco > tutorials > helloworld.get.htr', the time '1:31', and other system information.
- Bottom Taskbar:** Shows various application icons including Cloud, Windows, Search, and several browser and utility icons.
- Tooltip:** A tooltip in the bottom right corner suggests the 'Jakarta EE: Web Services (JAX-WS)' plugin, with options to 'Configure plugins...' or 'Don't suggest again'.



Updating extension code

- <http://localhost:8080/alfresco/service/sample/helloworld>



Message: 'Hello from JS!' 'HelloFromJava' Latest Changes!



Updating Extension Code

Screenshot of an IDE showing the code editor for `simple-page.get.js`. A pink curly brace highlights the `model.jsonModel` object.

```
model.jsonModel = {
  widgets: [
    {
      id: "SET_PAGE_TITLE",
      name: "alfresco/header/SetTitle",
      config: {
        title: "This is a updated page title"
      }
    },
    {
      id: "MY_HORIZONTAL_WIDGET_LAYOUT",
      name: "alfresco/layout/HorizontalWidgets",
      config: {
        widgetWidth: 50,
        widgets: [
          {
            id: "DEMO_SIMPLE_LOGO",
            name: "alfresco/logo/Logo",
            config: {
              logoClasses: "alfresco-logo-only"
            }
          },
          {
            id: "DEMO_SIMPLE_MSG",
            name: "tutorials/widgets/TemplateWidget"
          }
        ]
      }
    }
]
```

The IDE interface includes a project tree on the left, a toolbar at the top, and a status bar at the bottom. The status bar shows the file path, line count (28), and system information (6:50, LF, UTF-8, 4 spaces).



Updating extension code

```
MINGW64:/e/alfresco/23102025/Workspace/all-in-one
param@Parameswari MINGW64 /e/alfresco/23102025/Workspace/all-in-one
$ ./run.sh reload_acs
time="2025-10-27T22:29:27+05:30" level=warning msg="E:\\alfresco\\23102025\\Workspace\\all-in-one\\target\\classes\\docker\\docker-compose.yml: the attribute `version` is o
bsolute, it will be ignored, please remove it to avoid potential confusion"
no container to killtime="2025-10-27T22:29:27+05:30" level=warning msg="E:\\alfresco\\23102025\\Workspace\\all-in-one\\target\\classes\\docker\\docker-compose.yml: the attr
ibute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion"
Going to remove docker-all-in-one-acs-1
Container docker-all-in-one-acs-1 Removing
Container docker-all-in-one-acs-1 Removed
[INFO] Scanning for projects...
[INFO] -----
[INFO] Reactor Build Order:
[INFO]
[INFO] Alfresco Platform/Repository JAR Module [jar]
[INFO] Integration Tests Module [jar]
[INFO] Alfresco Platform/Repository Docker Module [jar]
[INFO]
[INFO] -----< com.cog:all-in-one-platform >-----
[INFO] Building Alfresco Platform/Repository JAR Module 1.0-SNAPSHOT [1/3]
[INFO]   from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- clean:3.2.0:clean (default-clean) @ all-in-one-platform ---
[INFO] Deleting E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-assembly) @ all-in-one-platform ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- closure-compiler:2.28.0:minify (compress-resources) @ all-in-one-platform ---
[INFO] Starting JavaScript task:
[WARNING] No valid JavaScript source files found to process.
[INFO]
[INFO] --- resources:3.1.0:resources (default-resources) @ all-in-one-platform ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 16 resources
[INFO]
[INFO] --- jrebel:1.1.8:generate (generate-rebel-xml) @ all-in-one-platform ---
[INFO] Processing com.cog:all-in-one-platform with packaging jar
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ all-in-one-platform ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 3 source files to E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target\\classes
[INFO]
[INFO] --- resources:3.1.0:testResources (default-testResources) @ all-in-one-platform ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\src\\test\\resources
[INFO]
[INFO] --- compiler:3.8.0:testCompile (default-testCompile) @ all-in-one-platform ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to E:\\alfresco\\23102025\\Workspace\\all-in-one\\all-in-one-platform\\target\\test-classes
[INFO]
[INFO] --- surefire:3.2.5:test (default-test) @ all-in-one-platform ---
```





Updating Extension Code

localhost:8180/share/page/hdp/ws/simple-page

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu

This is a updated page title

Hello from i18n



Editing a Share theme

- Open Share /usr/tomcat/webapps/share/themes
- Open the presentation.css file.
- Locate the properties at the end of the presentation.css file.
- Edit the following four properties:
 - color
 - background
 - background-color
 - border



Editing a Share theme

Updated Green Theme Presentation.css

Screenshot of the Alfresco Administrator Dashboard showing the updated Green Theme.

The dashboard features a top navigation bar with a search field and a gear icon. Below the header, there's a yellow banner titled "GET STARTED" with a lightbulb icon, encouraging users to take a quick tour of Alfresco Share or learn about advanced features. A "Hide" button is located in the top right corner of this banner.

The main content area is divided into two sections:

- My Sites**: This section shows a list of sites. It includes a "Create Site" button and a "Quickly access your sites" section which describes what a site is and provides a sample site named "Sample: Web Site Design Project". A "Favorite" button is also present.
- My Activities**: This section displays a list of activities. It includes filters for "Everyone's activities", "all items", and "in the last 7 days". A "Follow what's going on in your sites" section describes how users can follow changes in their sites, mentioning content updates, likes, and user activity.



Custom Theme – Red Theme - Steps

- The following steps are usually needed to customize the Share UI using a custom theme:
- Copy one of the existing out-of-the-box themes and use it as a basis for the new theme
- Give the new theme a name
- Update the CSS files with the new theme name
- Create an XML file <new theme name>.xml to let Share know about the new theme
- Replace logos and other images
- Customize the look and feel of YUI components by updating presentation.css and skin.css
- Customize the look and feel of Aikau components by overriding LESS variables in <new theme name>.xml



Custom Theme – Red Theme - Steps

- Create a new themes directory under: aio/aio-share-jar/src/main/resources/META-INF.
- Copy an existing theme, such as the Green Theme, from alfresco/tomcat/webapps/share/themes/greenTheme into the new aio/aio-share-jar/src/main/resources/META-INF/themes directory.
- Rename the theme directory to a custom theme name.
- Change the aio/aio-share-jar/src/main/resources/META-INF/themes/greenTheme directory name to aio/aio-share-jar/src/main/resources/META-INF/themes/redTheme.



Custom Theme – Red Theme - Steps

- Update the theme name in the CSS files.
- In both the aio/aio-share-jar/src/main/resources/META-INF/themes/redTheme/presentation.css file and the aio/aio-share-jar/src/main/resources/META-INF/themes/redTheme/yui/assets/skin.css file, search for the greenTheme name and replace it with redTheme.
- Add a theme's descriptor file called redTheme.xml to the aio/aio-share-jar/src/main/resources/alfresco/web-extension/site-data/themes directory (you would have to create the themes directory too):



Custom Theme – Red Theme - Steps

```
<?xml version='1.0' encoding='UTF-8'?>
<theme>
    <title>Tutorial Theme</title>
    <title-id>theme.tutorialTheme</title-id>
    <css-tokens>
        </css-tokens>
</theme>
```



Custom Theme – Red Theme - Steps

- Optionally add an i18n resource file with the Theme title label.
- Replace logos.
- Customize the YUI components in the Share user interface.
- Customize the Aikau components in the Share user interface.
- This is done by overriding LESS variables in the `aio/aio-share-jar/src/main/resources/alfresco/web-extension/site-data/themes/redTheme.xml` file.



Custom Theme – Red Theme - Steps

- Build and start the application server as follows:
- `/all-in-one$./run.sh build_start`



Custom Theme – Red Theme - Steps

The screenshot shows the Android Studio interface with the project 'all-in-one-share' selected. The left sidebar displays the project structure:

- com.cog
- resources
 - alfresco
 - module.all-in-one-share
 - log4j2.properties
 - module.properties
 - web-extension
 - messages
 - all-in-one-share.properties
 - site-data
 - extensions
 - themes
 - redTheme.xml
 - site-webscripts
 - META-INF
 - resources.all-in-one-share.js.tutorials.widgets
 - themes.redTheme
 - images
 - yui.assets
 - presentation.css
 - test
 - target
 - pom.xml

A red oval highlights the 'redTheme.xml' file. Several pink checkmarks point to the 'images', 'yui.assets', and 'presentation.css' files within the 'themes.redTheme' folder.

On the right side of the interface, there is a context menu with the following options and their keyboard shortcuts:

 - Search Everywhere Double Shift
 - Go to File Ctrl+Shift+N
 - Recent Files Ctrl+E
 - Navigation Bar Alt+Home
 - Drop files here to open them



Custom Theme – Red Theme

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu Administrator Search files, people, sites

RPS GROUP
Building Futuristic Infrastructure

My Files

Documents

- All Documents
- I'm Editing
- Others are Editing
- Recently Modified
- Recently Added
- My Favorites

My Files

- My Files** (selected)
- Data Dictionary
- Guest Home
- Imap Attachments
- IMAP Home
- Shared
- Sites
- User Homes

Categories

- Category Root

Tags

7

My Files

Data Dictionary
Modified 19 hours ago by System User
User managed definitions
No Tags

Guest Home
Created 19 hours ago by System User
The guest root space
No Tags

Imap Attachments
Created 19 hours ago by System User
Imap Attachments
No Tags

IMAP Home
Created 19 hours ago by System User
IMAP Home

Select Create... Upload Selected Items... Name Options

Favorite Like 0 Comment

Favorite Like 0 Comment

Favorite Like 0 Comment

Favorite Like 0 Comment

ENG 17:14



Custom Theme – Red Theme

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu Administrator

RPS GROUP
Building Futuristic Infrastructure

Admin Tools

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Administration and Management Console

Options

Theme: Red Theme

Logo:

Upload Reset

Maximum recommended image height is 48 pixels.

RPS GROUP
Building Futuristic Infrastructure

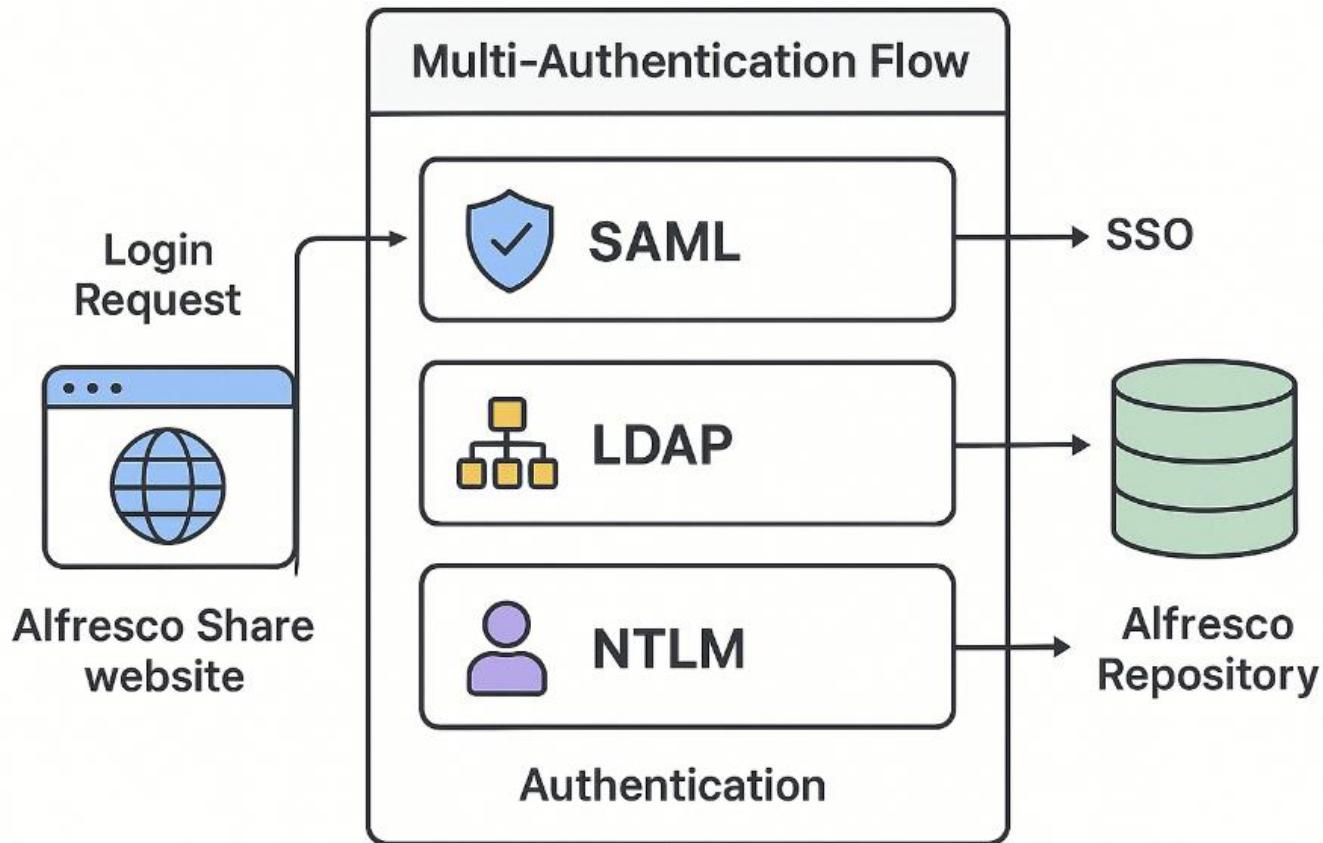
Apply

How does Alfresco allow multiple authentication modes for a website and how it is used?



- Alfresco supports **multiple authentication subsystems** so that organizations can integrate different identity sources and access methods for their users — both internal (employees) and external (partners, customers).

How does Alfresco allow multiple authentication modes for a website and how it is used?





1. Alfresco Authentication Subsystems



Subsystem	Description
alfrescoNtIbm	Alfresco's built-in authentication using the database (default mode).
ldap-ad	Integrates with Microsoft Active Directory (LDAP + Kerberos).
ldap	Generic LDAP authentication for other directory servers (e.g., OpenLDAP).
passthru	Pass-through authentication that delegates to an external domain controller for SSO.
kerberos	Allows Kerberos SSO integration (SPNEGO).
saml	SAML 2.0 SSO integration, typically with an identity provider (Keycloak, Okta, ADFS).
external	Allows web-tier authentication through a proxy or external header (used for reverse proxies or SSO gateways).



2. Enabling Multiple Authentication Modes



- In alfresco-global.properties, you can **chain multiple subsystems** so Alfresco tries them in sequence when a user logs in.
- Example:
 - authentication.chain=alfrescoNtLm1:alfrescoNtLm,ldap1:ldap-ad,saml1:saml
- Here:
 - Alfresco will first check **alfrescoNtLm** (local users).
 - Then check **LDAP/AD** for domain users.
 - Then try **SAML** for single sign-on via an IdP.
 - You can mix any number of subsystems, and each one is configured separately under:
 - alfresco/tomcat/shared/classes/alfresco/extension/subsystems/authentication/



2. Enabling Multiple Authentication Modes



[Containers](#) / docker-all-in-one-acss-1

docker-all-in-one-acss-1

< be52538ff689 ⌂ ↗ [alfresco-content-services-all-in-one:developer](#) STATUS Running (21 minutes ago) ⏪ ⏴ ⏵ ⏳

[8080:8080](#) ⌂ [8888:8888](#) ⌂

Logs Inspect Bind mounts Exec **Files** Stats

[Hide file editor](#)

Name ↑	Note	Size	Last modified	Mode
> transform			4 months ago	drwxr-xr-x
alfresco-global.properties	MODIFIED	3.7 kB	2 days ago	-rw-r--r--
> temp	MODIFIED		2 days ago	drwxrwx---

/usr/local/tomcat/shared/classes/alfresco-global.properties

Properties files ▾

```
79 # Embedded broker without persistence
80 messaging.broker.url=vm://localhost?broker.persistent=false
81
82 # Disable ATS
83 transform.service.enabled=false
84 local.transform.service.enabled=false
85 legacy.transform.service.enabled=false
86 ldap.authentication.active=true
87 authentication.chain=localLDAP:ldap,alfrescoNTLM1:alfrescoNTLM
88 #ldap.authentication.allowGuestLogin=false
89 ldap.authentication.userNameFormat=cn=%s,ou=people,o=sevenseas
90 ldap.authentication.java.naming.provider.url=ldap://host.docker.internal:389
```



3. How It Is Used for a Website

- When you deploy **Alfresco Share** or a **custom web client**, these authentication subsystems apply automatically — the web tier (Tomcat/Share) delegates login requests to Alfresco Repository, which authenticates through the configured chain.
- **Example use case:**
- **Internal employees** log in automatically using SSO (Kerberos or SAML).
- **External partners/customers** use username/password (LDAP or local Alfresco accounts).
- Both user types access the same Alfresco web portal but are authenticated differently.
- This hybrid model is common for **portal-style Alfresco deployments**.



4. Practical Usage Flow

- Example with a combined setup:
- A user visits the Alfresco Share website.
- The request is intercepted by the web-tier authentication filter.
- If a valid SSO token (SAML/Kerberos) is found → user is logged in automatically.
- If not → Alfresco shows a login form.
- The entered credentials are tested sequentially through configured subsystems:
 - First against Alfresco internal users (alfrescoNtIbm).
 - Then against LDAP/AD.
 - Finally against SAML if configured.
- On successful authentication, Alfresco generates a session ticket and grants access.



Apache Directory Studio for LDAP

- Initialize and start gerrit.
- docker run -d -p 389:10389 openfrontier/apacheds
- Open your Apache Directory Studio and create a new ldap connection to ldap://:389 with
- **uid=admin,ou=system as the BindDN**
- **secret as the bind BindPassword.**
- Use a docker named volume as the storage.
- DO NOT mount host volumes in particular directories under the home directory like ~/apacheds as a volume!!! Use named volume instead!!!
- Create a named volume for the ApacheDS.
- docker volume create apacheds_data
- Initialize and start ApacheDS using the volume created above.
- **docker run -d -p 389:10389 -v apacheds_data:/var/lib/apacheds openfrontier/apacheds**



Apache Directory Studio Ldap Conn

LDAP - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

DIT

- Root DSE (5)
 - dc=example,dc=com
 - ou=schema
 - ou=config (1)
 - ads-directoryServiceId=default (5)
 - ads-changeLogId=defaultChangeLog
 - ads-journalId=defaultJournal
 - ou=interceptors
 - ou=partitions
 - ou=servers
 - ou=system (6)
 - ou=consumers
 - ou=users
 - prefNodeName=sysPrefRoot
 - uid=admin
 - ou=configuration
 - ou=groups

Properties for "dockerldap"

Connection

Network Parameter Authentication Browser Options Edit Options

Connection name: dockerldap

Network Parameter

Hostname: localhost

Port: 389

Connection timeout (s): 30

Encryption method: No encryption

Server certificates for LDAP connections can be managed in the '[Certificate Validation](#)' preference page.

Read-Only (prevents any add, delete, modify or rename operation)

Outline

There is no active editor that provides an outline.

Modification Logs Search Logs Error Log

Open Connection (...ished at 6:28pm) Error while openin...d not be resolved.

ENG IN 18:30 26-10-2025



Apache Directory Studio

LDAP - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

- DIT
 - Root DSE (5)
 - dc=example,dc=com
 - ou=schema
 - ou=config (1)
 - ads-directoryServiceId=default
 - ou=system (6)
 - ou=consumers
 - ou=users
 - prefNodeName=sysPrefRoot
 - uid=admin
 - ou=configuration
 - ou=groups
- Searches
- Bookmarks

Connections LDAP Servers ApacheDS 2.0.0

Properties for "ApacheDS 2.0.0"

Connection

Network Parameter Authentication Browser Options Edit Options

Authentication Method: Simple Authentication

Authentication Parameter:
Bind DN or user: uid=admin,ou=system
Bind password: (Red curly bracket highlights this field)

Save password

SASL Settings
Kerberos Settings

Apply and Close Cancel

Workspace Log

The screenshot shows the Apache Directory Studio interface. On the left is the LDAP Browser with a tree view of the directory structure under 'DIT'. The 'Root DSE' node has five children: 'dc=example,dc=com', 'ou=schema', and three 'ou=system' entries. The 'ou=system' entry has six children: 'ou=consumers', 'ou=users', 'prefNodeName=sysPrefRoot', 'uid=admin', 'ou=configuration', and 'ou=groups'. Below the browser are tabs for 'Connections', 'LDAP Servers', and 'ApacheDS 2.0.0'. On the right is a 'Properties' dialog for 'ApacheDS 2.0.0'. It has tabs for 'Connection', 'Network Parameter', 'Authentication', 'Browser Options', and 'Edit Options'. The 'Authentication' tab is selected, showing 'Simple Authentication' as the method. Under 'Authentication Parameter', there is a 'Bind DN or user' field containing 'uid=admin,ou=system' and a 'Bind password' field with five dots ('.....'). A red curly bracket highlights the 'Bind password' field. There are also checkboxes for 'Save password' and 'Check Authentication'. Below the tabs are sections for 'SASL Settings' and 'Kerberos Settings'. At the bottom of the dialog are 'Apply and Close' and 'Cancel' buttons.



Apache Directory Studio

LDAP - Ildapconn - Configuration - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

DIT

- Root DSE (6)
 - New Connection...
 - New Connection Folder...
- Close Connection
- Open Schema Browser
- Reload Schema

Search Bookmarks

- Copy Connection Ctrl+C
- Paste Ctrl+V
- Delete Connection Delete
- Rename Connection... F2
- Import
- Export
- Open Configuration** (highlighted with a red box)
- Extended Operations

Connections

Idapco

Properties Alt+Enter

Overview

LDAP/LDAPS Servers

- Enable LDAP Server
Port: 10389 (Default: 10389)
- Enable LDAPS Server
Port: 10636 (Default: 10636)

Advanced LDAP/LDAPS configuration...

Kerberos Server

- Enable Kerberos Server
Port: 6008E (Default: 60088)
- Enable Kerberos Change Password Server
Port: 60464 (Default: 60464)

Advanced Kerberos configuration...

Partitions

There are 3 partitions defined:

- example (dc=example,dc=com) [JDBM]
- sevenseas (o=sevenseas) [JDBM]

Advanced Partitions configuration...

Options

- Allow Anonymous Access
- Enable Access Control
- Enable Hidden Password

Outline

There is no active editor that provides an outline.

Modification Logs Search Logs Error Log

Workspace Log

type filter text

Message	Plug-in	Date
⚠ Job found still running after platform shutdown. Jobs should be canceled by	org.eclipse.core....	26/10/25, 10:45:44
⚠ Unexpected exception.	org.apache.directory...	26/10/25, 9:45:44
⚠ ERR_13204_NULL_ATTRIBUTE_ID The ID should not be null or empty	org.apache.directory...	26/10/25, 7:45:44
✗ Error while importing LDIF	org.apache.directory...	26/10/25, 7:45:44
✗ org.apache.directory.studio.connection.core.io.StudioLdapException: [LDAP: error code 13204 - null attribute ID]	org.apache.directory...	26/10/25, 7:45:44
✗ Error while importing LDIF	org.apache.directory...	26/10/25, 7:45:44
✗ org.apache.directory.studio.connection.core.io.StudioLdapException: [LDAP: error code 13204 - null attribute ID]	org.apache.directory...	26/10/25, 7:45:44

Progress

No operations to display at this time.

9+ 21:41 ENG IN 04-11-2025



Apache Directory Studio

The screenshot shows the Apache Directory Studio interface. A red circle highlights the 'Connections' tab in the bottom-left corner of the main window. Another red circle highlights the 'Overview' tab in the top-right panel.

LDAP - Idapconn - Configuration - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

DIT

- Root DSE (6)
 - dc=example,dc=com
 - ou=schema
 - o=sevenseas (2)
 - ou=groups
 - ou=people
 - ou=config
 - ou=system

Searches

Bookmarks

Idapconn - Configuration

Overview

LDAP/LDAPS Servers

- Enable LDAP Server
Port: 10385 (Default: 10389)
- Enable LDAPS Server
Port: 10636 (Default: 10636)

[Advanced LDAP/LDAPS configuration...](#)

Partitions

There are 3 partitions defined:

- example (dc=example,dc=com) [JDBM]
- sevenseas (o=sevenseas) [JDBM]

[Advanced Partitions configuration...](#)

Kerberos Server

- Enable Kerberos Server
Port: 6008E (Default: 60088)
- Enable Kerberos Change Password Server
Port: 60464 (Default: 60464)

[Advanced Kerberos configuration...](#)

Options

- Allow Anonymous Access
- Enable Access Control
- Enable Hidden Password

Connections LDAP Servers

Idapconn

Overview LDAP/LDAPS Servers Kerberos Server Partitions Password Policies Replication

Modification Logs Search Logs Error Log

Workspace Log

type filter text

Message	Plug-in	Date
⚠ Job found still running after platform shutdown. Jobs should be canceled by	org.eclipse.core...	26/10/25, 11:48:07
⚠ Unexpected exception.	org.apache.directory...	26/10/25, 9:48:07
✖ ERR_13204_NULL_ATTRIBUTE_ID The ID should not be null or empty	org.apache.directory...	26/10/25, 7:48:07
✖ Error while importing LDIF	org.apache.directory.studio.connection.core.io.StudioLdapException: [LDAP org.apache.directory...	26/10/25, 7:48:07
✖ Error while importing LDIF	org.apache.directory.studio.connection.core.io.StudioLdapException: [LDAP org.apache.directory...	26/10/25, 7:48:07

Outline

There is no active editor that provides an outline.

Progress

No operations to display at this time.



Apache Directory Studio

Initially LDIF details won't be there

The screenshot shows the Apache Directory Studio interface. On the left, the DIT (Directory Information Tree) browser displays a hierarchical structure of objects under 'Root DSE'. The 'Partitions' tab is selected in the top navigation bar. In the main area, the 'All Partitions' list shows several partitions: 'example (dc=example,dc=com) [JDBM]', 'sevenses (o=sevenses) [JDBM]' (which is selected), 'system (ou=system) [JDBM]', and 'vheb (dc=vheb,dc=com) [JDBM]'. To the right of the list is the 'Partition General Details' panel. It contains fields for 'Partition Type' (set to 'JDBM'), 'ID' (set to 'sevenses'), 'Suffix' (set to 'o=sevenses'), and a checked checkbox for 'Synchronization On Write'. Below these are sections for 'Context Entry' (with a checked checkbox for 'Auto-generate context entry from suffix DN') and 'Partition Specific Settings' (with 'Cache Size' set to '100' and 'Enable Optimizer' checked). A red arrow points from the 'Add' button in the 'Partition General Details' panel to the 'ID' field. Another red arrow points from the 'All Partitions' list to the 'Partition General Details' panel.



Apache Directory Studio

[Containers](#) / ecstatic_sanderson

ecstatic_sanderson



7bd33051247e [openfrontier/apacheds:latest](#)
389:10389

Logs Inspect Bind mounts Exec Files Stats

INFO | jvm 1 | 2025/11/04 13:59:24 |
INFO | jvm 1 | 2025/11/04 13:59:36 | [13:59:36] WARN [org.apache.directory.api.ldap.model.entry.DefaultAttribute] -
ERR_13207_VALUE_ALREADY_EXISTS The value '1.3.6.1.4.1.42.2.27.8.5.1' already exists in the attribute (supportedControl)
INFO | jvm 1 | 2025/11/04 13:59:36 | [13:59:36] WARN [org.apache.directory.api.ldap.model.entry.DefaultAttribute] -
ERR_13207_VALUE_ALREADY_EXISTS The value '1.2.840.113556.1.4.841' already exists in the attribute (supportedControl)
INFO | jvm 1 | 2025/11/04 13:59:36 | [13:59:36] WARN [org.apache.directory.api.ldap.model.entry.DefaultAttribute] -
ERR_13207_VALUE_ALREADY_EXISTS The value '1.3.6.1.4.1.4203.1.9.1.2' already exists in the attribute (supportedControl)
INFO | jvm 1 | 2025/11/04 13:59:36 | [13:59:36] WARN [org.apache.directory.api.ldap.model.entry.DefaultAttribute] -
ERR_13207_VALUE_ALREADY_EXISTS The value '1.2.840.113556.1.4.319' already exists in the attribute (supportedControl)
INFO | jvm 1 | 2025/11/04 13:59:36 | [13:59:36] WARN [org.apache.directory.api.ldap.model.entry.DefaultAttribute] -
ERR_13207_VALUE_ALREADY_EXISTS The value '1.2.840.113556.1.4.528' already exists in the attribute (supportedControl)
INFO | jvm 1 | 2025/11/04 13:59:37 | [13:59:37] WARN [org.apache.directory.server.core.DefaultDirectoryService] - You
didn't change the admin password of directory service instance 'default'. Please update the admin password as soon as
possible to prevent a possible security breach.
INFO | jvm 1 | 2025/11/04 13:59:39 |
INFO | jvm 1 | 2025/11/04 13:59:39 |

Restart ldap

STATUS
Running (2 hours ago)



Restart





Apache Directory Studio

Restart LDAP server after creating the partition

LDAP - C:\Users\Dell\ApacheDirectoryStudio\metadata\plugins\org.apache.directory.studio.ldapservers\servers\2759e939-ddcb-41d1-80ab-c767581f82b9\conf\ou=config.ldif - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

No entry selected ou=config.ldif

LDAP/LDAPS Servers

DIT

Root DSE (5)

- dc=example,dc=com
- ou=schema
- ou=config (1)
 - ads-directoryServiceId=default
- ou=system (6)
 - ou=consumers
 - ou=users
 - prefNodeName=sysPrefRoot
 - uid=admin
 - ou=configuration
 - ou=groups

Searches Bookmarks

LDAP/LDAPS Servers

Enable LDAP Server

Port: 10389 (Default: 10389)

Address: 0.0.0.0 (Default: 0.0.0.0)

NbThreads: 8 (Default: 4)

BackLog Size: 50 (Default: 50)

Enable LDAPS Server

Port: 10636 (Default: 10636)

Address: 0.0.0.0 (Default: 0.0.0.0)

NbThreads: 3 (Default: 4)

BackLog Size: 50 (Default: 50)

Supported Authentication Mechanisms

Simple GSSAPI

CRAM-MD5 DIGEST-MD5

NTLM Provider: com.foo.Bar

GSS-SPNEGO Provider: com.foo.Bar

SASL Settings

Advanced



Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

DIT

Root DSE (7)

- dc=example,dc=com
- dc=sevenseas,dc=com
- dc=vheb,dc=com
- ou=schema
- ou=config
- ou=system

Searches

Bookmarks

DN: dc=sevenseas,dc=com

Attribute Description Value

objectclass LDIF Import

objectclass

dc

LDIF Import

Please select a connection and the LDIF to import

LDIF File:

Import into: ApacheDS 2.0.0

Logging

Enable logging

Use default logfile

Use custom logfile

Overwrite existing logfile

Options

Update existing entries

Continue on error

?

Select LDIF File

Organize New folder

Name

course content

presentations

PolicyAPI

alfresco

This PC

Local Disk (C:)

DATA (D:)

New Volume (E:)

New Volume (F:)

Connections LDAP Servers



Apache Directory Studio After LDIF Import

LDAP - o=sevenseas - ApacheDS 2.0.0 - Apache Directory Studio

File Edit Navigate Search LDAP Window Help

LDAP Browser

DN: o=sevenseas

Attribute Description	Value
objectclass	domain (structural)
objectclass	extensibleObject (auxiliary)
objectclass	top (abstract)
dc	sevenseas
o	sevenseas

Connections LDAP Servers

The screenshot shows the Apache Directory Studio interface after importing LDIF data. The left pane displays a tree view of the LDAP directory structure under the base DN 'o=sevenseas'. The tree includes nodes for 'dc=example,dc=com', 'dc=vheb,dc=com', 'ou=schema', and 'o=sevenseas (2)'. The 'o=sevenseas (2)' node is expanded, showing 'ou=groups (2)', 'ou=ranks', 'ou=crews (3)' containing entries for 'cn=HMS Bounty', 'cn=HMS Lydia', and 'cn=HMS Victory', and 'ou=people (11)' containing entries for various historical figures like Cornelius Buckley, Fletcher Christian, Horatio Hornblower, Horatio Nelson, John Fryer, John Hallett, Moultrie Crystal, Thomas Masterman Hardy, Thomas Quist, William Bligh, and William Bush. The right pane shows the details of the 'o=sevenseas' entry with its attributes and values. The 'objectclass' attribute has three values: 'domain (structural)', 'extensibleObject (auxiliary)', and 'top (abstract)'. The 'dc' attribute is set to 'sevenseas'. The 'o' attribute is also set to 'sevenseas'.

Alfresco Platform Configuration – Authentication sync with LDAP server



```
c:\ @89a02a9d5837:/usr/local/tomcat/shared/classes
5acaac19e825 quay.io/alfresco/alfresco-control-center:10.0.1          "/docker-entrypoint..." 11 hours ago Up 2 hours (healthy) 8080/tcp docker-co
mpose-control-center-1
a8297ced0452 elasticsearch:8.17.3           "/bin/tini -- /usr/l..." 11 hours ago Up 2 hours (healthy) 0.0.0.0:9200->9200/tcp, [:] docker-co
[:]:9200->9200/tcp, 0.0.0.0:9300->9300/tcp, [:]:9300->9300/tcp
mpose-elasticsearch-1
e70689132f05 quay.io/alfresco/activemq:5.18-jre17-rockylinux8   "/bin/sh -c './init..." 11 hours ago Up 2 hours (healthy) 0.0.0.0:5672->5672/tcp, [:] docker-co
[:]5672->5672/tcp, 0.0.0.0:8161->8161/tcp, [:]:8161->8161/tcp, 0.0.0.0:61613->61613/tcp, [:]:61613->61613/tcp, 0.0.0.0:61616->61616/tcp, [:]:61616->61616/tcp docker-co
mpose-activemq-1
89a02a9d5837 quay.io/alfresco/alfresco-content-repository:25.2.0 "catalina.sh run -se..." 11 hours ago Up 2 hours (healthy) 8000/tcp, 8080/tcp, 10001/tcp docker-co
tcp
mpose-alfresco-1
3323e46a911a quay.io/alfresco/alfresco-shared-file-store:4.2.0  "/bin/sh -c 'java $J..." 11 hours ago Up 2 hours (healthy) 0.0.0.0:8099->8099/tcp, [:] docker-co
[:]8099->8099/tcp
mpose-shared-file-store-1
76e9f37e6bbff quay.io/alfresco/alfresco-digital-workspace:7.0.1 "/docker-entrypoint..." 11 hours ago Up 2 hours (healthy) 8080/tcp docker-co
mpose-digital-workspace-1
3d167d052cb6 traefik:3.1           "/entrypoint.sh --ap..." 11 hours ago Up 2 hours (healthy) 0.0.0.0:8080->8080/tcp, [:] docker-co
[:]8080->8080/tcp, 0.0.0.0:8888->8888/tcp, [:]:8888->8888/tcp
mpose-proxy-1

C:\Windows\System32>docker cp <all-in-one-id>:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-23.2.0.60.jar c:/alfresco

C:\Windows\System32>cd E:\alfresco\23102025

C:\Windows\System32>docker exec -it cae87f242dd9 /bin/bash
[transform-all-in-one@cae87f242dd9 /]$ ls
'Apache 2.0.txt'      Perl-Artistic-license.txt    dev          home     libreoffice.txt   media      pdfium.txt   run       sys      var
ImageMagick-license.txt  afs            docker-entrypoint.sh  lib       licenses        mnt      proc        sbin      tmp
OFL.txt               bin            etc             lib64     lost+found     opt      root        srv       usr
[transform-all-in-one@cae87f242dd9 /]$ exit
exit

C:\Windows\System32>docker exec -it 89a02a9d5837 /bin/bash
[alfresco@89a02a9d5837 tomcat]$ ls
LICENSE NOTICE alf_data alfresco-mmt amps apr bin conf lib logs native-jni-lib shared temp webapps work
[alfresco@89a02a9d5837 tomcat]$ cd shared
[alfresco@89a02a9d5837 shared]$ cd classes
[alfresco@89a02a9d5837 classes]$ ls
alfresco_alfresco-global.properties ✓
[alfresco@89a02a9d5837 classes]$ -
```



Alfresco Platform Configuration – Authentication sync with LDAP server



```
c:\ Select @89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib  
E:\alfresco\23102025>docker exec -it 89a02a9d5837 /bin/bash  
[alfresco@89a02a9d5837 tomcat]$ ls  
LICENSE NOTICE alf_data alfresco-mmt amps apr bin conf lib logs native-jni-lib shared temp webapps work  
[alfresco@89a02a9d5837 tomcat]$ cd webapps  
[alfresco@89a02a9d5837 webapps]$ cd share  
bash: cd: share: No such file or directory  
[alfresco@89a02a9d5837 webapps]$ ls  
ROOT _vti_bin alfresco api-explorer  
[alfresco@89a02a9d5837 webapps]$ cd alfresco  
[alfresco@89a02a9d5837 alfresco]$ ls  
META-INF WEB-INF admin cmis-browser-app cmisfs css error.jsp favicon.ico images index.jsp scripts  
[alfresco@89a02a9d5837 alfresco]$ cd WEB-INF  
[alfresco@89a02a9d5837 WEB-INF]$ ls  
classes cmis10 cmis11 lib licenses web-application-context.xml web.xml  
[alfresco@89a02a9d5837 WEB-INF]$ cd lib  
[alfresco@89a02a9d5837 lib]$ ls  
FastInfoset-2.1.1.jar jackson-core-2.17.2.jar  
HdrHistogram-2.1.12.jar jackson-databind-2.17.2.jar  
LatencyUtils-2.0.3.jar jackson-dataformat-yaml-2.17.2.jar  
ST4-4.3.1.jar jackson-jakarta-rs-base-2.17.2.jar  
SparseBitSet-1.3.jar jackson-jakarta-rs-json-provider-2.17.2.jar  
accessors-smart-2.5.2.jar jackson-jaxrs-base-2.18.1.jar  
acgi-security-0.8.2_patched.jar jackson-jaxrs-json-provider-2.18.1.jar  
acs-event-model-1.0.2.jar jackson-module-jakarta-xmlbind-annotations-2.17.2.jar  
activemq-client-jakarta-5.18.6.jar jackson-module-jaxb-annotations-2.17.2.jar  
activiti-bpmn-converter-5.23.0.jar jai-imageio-core-1.4.0.jar  
activiti-bpmn-model-5.23.0.jar jakarta.activation-2.0.1.jar  
activiti-engine-5.23.0.jar jakarta.annotation-api-3.0.0.jar  
activiti-image-generator-5.23.0.jar jakarta.inject-api-2.0.1.jar  
activiti-process-validation-5.23.0.jar jakarta.jms-api-3.1.0.jar  
activiti-repo-connector-1.14.jar jakarta.json-api-2.1.3.jar  
activiti-spring-5.23.0.jar jakarta.json.bind-api-2.0.0.jar  
alfresco-aos-module-3.3.0.jar jakarta.jws-api-3.0.0.jar  
alfresco-aos-repo-binding-3.3.0.jar jakarta.mail-2.0.1.jar  
alfresco-authorised-users-8.174.jar jakarta.transaction-api-2.0.1.jar  
alfresco-core-25.2.0.64.jar jakarta.ws.rs-api-3.1.0.jar  
alfresco-data-model-25.2.0.64.jar jakarta.xml.bind-api-4.0.2.jar  
alfresco-device-sync-repo-5.2.0.jar jakarta.xml.soap-api-3.0.2.jar  
alfresco-elasticsearch-shared-5.1.1.jar jakarta.xml.ws-api-3.0.1.jar  
alfresco-enterprise-crypto-7.0.jar jasypt-1.9.3.jar  
alfresco-enterprise-remote-api-25.2.0.59.jar jasypt-spring3-1.9.3.jar  
alfresco-enterprise-repository-25.2.0.59.jar java-libpst-0.9.3.jar  
alfresco-goolgedocs-enterprise-config-1.0.1.jar java-uuid-generator-5.1.0.jar  
alfresco-googledrive-repo-base-4.1.0.jar javassist-3.30.2-GA.jar  
alfresco-googledrive-repo-enterprise-4.1.0.jar jaxb-core-4.0.5.jar
```



ENG
IN



19:29
26-10-2025
2/11

Alfresco Platform Configuration – Authentication sync with LDAP server



```
Open Select @89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
alfresco-enterprise-crypto-7.0.jar
alfresco-enterprise-remote-api-25.2.0.59.jar
alfresco-enterprise-repository-25.2.0.59.jar
alfresco-googledocs-enterprise-config-1.0.1.jar
alfresco-googledrive-repo-base-4.1.0.jar
alfresco-googledrive-repo-enterprise-4.1.0.jar
alfresco-greenmail-7.1.jar
alfresco-heartbeat-data-sender-1.1.1.jar
alfresco-jlan-embed-7.5.jar
alfresco-jmx-logger-0.0.14.jar
alfresco-remote-api-25.2.0.64.jar
alfresco-repository-25.2.0.64.jar
alfresco-share-services-25.2.0.64.jar
alfresco-shared-file-store-data-model-4.2.0.jar
alfresco-sync-events-1.2.14.jar
alfresco-text-gen-1.4.jar
alfresco-transform-model-5.2.0.jar
alfresco-trashcan-cleaner-2.4.2.jar
alfresco-xmlfactory-1.3.jar
angus-activation-2.0.2.jar
antlr-3.5.3.jar
antlr-runtime-3.5.3.jar
aopalliance-repackaged-3.0.6.jar
aoservices-4.0.11-A1.jar
apache-mime4j-core-0.8.11.jar
apache-mime4j-dom-0.8.11.jar
asm-9.7.1.jar
aspectjrt-1.9.22.1.jar
avalon-framework-api-4.3.1.jar
avalon-framework-impl-4.3.1.jar
bcmail-jdk18on-1.79.jar
bcpkix-jdk18on-1.79.jar
bcprov-jdk18on-1.79.jar
bcutil-jdk18on-1.79.jar
bliki-3.0.2.jar
bsf-2.4.0.jar
camel-activemq-4.11.0.jar
camel-amqp-4.11.0.jar
camel-api-4.11.0.jar
camel-base-4.11.0.jar
camel-base-engine-4.11.0.jar
camel-bean-4.11.0.jar
camel-browse-4.11.0.jar
camel-cluster-4.11.0.jar
camel-controlbus-4.11.0.jar
jasypt-1.9.3.jar
jasypt-spring3-1.9.3.jar
java-libpst-0.9.3.jar
java-uuid-generator-5.1.0.jar
javassist-3.30.2-GA.jar
jaxb-core-4.0.5.jar
jaxb-runtime-4.0.5.jar
jaxen-1.2.0.jar
jcip-annotations-1.0-1.jar
jcl-over-slf4j-2.0.10.jar
jdom2-2.0.6.1.jar
jersey-client-3.1.10.jar
jersey-common-3.1.10.jar
jersey-hk2-3.1.10.jar
jersey-media-json-binding-3.1.10.jar
jhightlight-1.1.0.jar
jibx-run-1.4.2.jar
jmatio-1.5.jar
jmxlogger-log4j-0.1.0-AlfrescoPatched.jar
joda-time-2.13.1.jar
json-20240303.jar
json-path-2.9.0.jar
json-simple-1.1.1.jar
json-smart-2.5.2.jar
jsr107cache-1.1.jar
jsr305-3.0.2.jar
juniversalchardet-2.4.0.jar
junnar-7.5.5.jar
jutf7-1.0.0.jar
jwarc-0.29.0.jar
kxml2-2.3.0.jar
lang-tag-1.7.jar
listenablefuture-9999.0-empty-to-avoid-conflict-with-guava.jar
log4j-api-2.24.3.jar
log4j-core-2.24.3.jar
log4j-slf4j2-impl-2.24.3.jar
lucene-analysis-common-9.7.0.jar
lucene-core-9.7.0.jar
lucene-queries-9.7.0.jar
lucene-queryparser-9.7.0.jar
lucene-sandbox-9.7.0.jar
maven-artifact-3.8.6.jar
metadata-extractor-2.19.0.jar
micrometer-commons-1.14.3.jar
micrometer-core-1.11.2.jar
```

The screenshot shows a terminal window displaying a list of jar files in the Alfresco lib directory. A red box highlights the first two entries: 'alfresco-remote-api-25.2.0.64.jar' and 'alfresco-repository-25.2.0.64.jar'. The terminal window has a dark theme with white text. The bottom of the screen shows a Windows taskbar with various icons and system status indicators.

Alfresco Platform Configuration – Authentication sync with LDAP server



- docker cp
89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-25.2.0.64.jar .

Name	Date modified	Type	Size
branding	25-10-2025 19:54	File folder	
community	25-10-2025 20:29	File folder	
copy-from-template.js	26-10-2025 17:36	JS File	3 KB
docker-compose.yml	25-10-2025 20:25	YML File	20 KB
instructions.txt	24-10-2025 12:42	Text Document	1 KB
rps-logo.png	24-10-2025 16:48	PNG File	8 KB
sevenseas.ldif	26-10-2025 18:43	LDIF File	6 KB
sevenseas.ldif.log	26-10-2025 19:08	Text Document	8 KB
alfresco-repository-25.2.0.64.jar	15-07-2025 15:41	Executable Jar File	11,079 KB

Alfresco Platform Configuration – Authentication sync with LDAP server



- Rename jar file to zip
- Extract all

<input checked="" type="checkbox"/>	alfresco-repository-25.2.0.64	26-10-2025 20:03	File folder	
	branding	25-10-2025 19:54	File folder	
	community	25-10-2025 20:29	File folder	
	alfresco-repository-25.2.0.64 - Copy.jar	15-07-2025 15:41	Executable Jar File	11,079 KB
	alfresco-repository-25.2.0.64.zip	15-07-2025 15:41	Compressed (zipped)...	11,079 KB
	copy-from-template.js	26-10-2025 17:36	JS File	3 KB
	docker-compose.yml	25-10-2025 20:25	YML File	20 KB
	instructions.txt	24-10-2025 12:42	Text Document	1 KB
	rps-logo.png	24-10-2025 16:48	PNG File	8 KB
	sevenseas.ldif	26-10-2025 18:43	LDIF File	6 KB
	sevenseas.ldif.log	26-10-2025 19:08	Text Document	8 KB

Alfresco Platform Configuration – Authentication sync with LDAP server



- docker cp alfresco-repository-25.2.0.64-Copy 89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib

Repository

```
Administrator: Command Prompt
docker cp [OPTIONS] SRC_PATH|- CONTAINER:DEST_PATH
Run 'docker cp --help' for more information
E:\alfresco\23102025>docker cp alfresco-repository-25.2.0.64-Copy 89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
Successfully copied 34.4MB to 89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
E:\alfresco\23102025>
```

Alfresco Platform Configuration – Authentication sync with LDAP server



```
c:\ @89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
C:\Windows\System32>docker exec -it 89a02a9d5837 /bin/bash
[alfresco@89a02a9d5837 tomcat]$ ls
LICENSE NOTICE alf_data alfresco-mmt amps apr bin conf lib logs native-jni-lib shared temp webapps work
[alfresco@89a02a9d5837 tomcat]$ cd webapps
[alfresco@89a02a9d5837 webapps]$ ls
ROOT _vti_bin alfresco api-explorer
[alfresco@89a02a9d5837 webapps]$ cd alfresco
[alfresco@89a02a9d5837 alfresco]$ ls
META-INF WEB-INF admin cmis-browser-app cmisfs css error.jsp favicon.ico images index.jsp scripts
[alfresco@89a02a9d5837 alfresco]$ cd WEB-INF
[alfresco@89a02a9d5837 WEB-INF]$ ls
classes cmis10 cmis11 lib licenses web-application-context.xml web.xml
[alfresco@89a02a9d5837 WEB-INF]$ cd lib
[alfresco@89a02a9d5837 lib]$ pwd
/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
[alfresco@89a02a9d5837 lib]$ ls
FastInfoSet-2.1.1.jar
HdrHistogram-2.1.12.jar
LatencyUtils-2.0.3.jar
ST4-4.3.1.jar
SparseBitSet-1.3.jar
accessors-smart-2.5.2.jar
acegi-security-0.8.2_patched.jar
acs-event-model-1.0.2.jar
activemq-client-jakarta-5.18.6.jar
activiti-bpmn-converter-5.23.0.jar
activiti-bpmn-model-5.23.0.jar
activiti-engine-5.23.0.jar
activiti-image-generator-5.23.0.jar
activiti-process-validation-5.23.0.jar
activiti-repo-connector-1.14.jar
activiti-spring-5.23.0.jar
alfresco-aos-module-3.3.0.jar
alfresco-aos-repo-binding-3.3.0.jar
alfresco-authorised-users-8.174.jar
alfresco-core-25.2.0.64.jar
alfresco-data-model-25.2.0.64.jar
alfresco-device-sync-repo-5.2.0.jar
alfresco-elasticsearch-shared-5.1.1.jar
alfresco-enterprise-crypto-7.0.jar
alfresco-enterprise-remote-api-25.2.0.59.jar
alfresco-enterprise-repository-25.2.0.59.jar
alfresco-googledocs-enterprise-config-1.0.1.jar
alfresco-googledrive-repo-base-4.1.0.jar
alfresco-googledrive-repo-enterprise-4.1.0.jar
jackson-annotations-2.17.2.jar
jackson-core-2.17.2.jar
jackson-databind-2.17.2.jar
jackson-dataformat-yaml-2.17.2.jar
jackson-jakarta-rs-base-2.17.2.jar
jackson-jakarta-rs-json-provider-2.17.2.jar
jackson-jaxrs-base-2.18.1.jar
jackson-jaxrs-json-provider-2.18.1.jar
jackson-module-jakarta-xmlbind-annotations-2.17.2.jar
jackson-module-jaxb-annotations-2.17.2.jar
jai-imageio-core-1.4.0.jar
jakarta.activation-2.0.1.jar
jakarta.annotation-api-3.0.0.jar
jakarta.inject-api-2.0.1.jar
jakarta.jms-api-3.1.0.jar
jakarta.json-api-2.1.3.jar
jakarta.json.bind-api-2.0.0.jar
jakarta.jws-api-3.0.0.jar
jakarta.mail-2.0.1.jar
jakarta.transaction-api-2.0.1.jar
jakarta.ws.rs-api-3.1.0.jar
jakarta.xml.bind-api-4.0.2.jar
jakarta.xml.soap-api-3.0.2.jar
jakarta.xml.ws-api-3.0.1.jar
jaspyt-1.9.3.jar
jaspyt-spring3-1.9.3.jar
java-libpst-0.9.3.jar
java-uuid-generator-5.1.0.jar
javassist-3.30.2-GA.jar
```



Alfresco Platform Configuration – Authentication sync with LDAP server



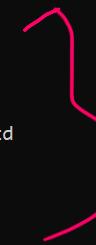
```
cmd @89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib
alfresco-aos-repo-binding-3.3.0.jar
alfresco-authorised-users-8.174.jar
alfresco-core-25.2.0.64.jar
alfresco-data-model-25.2.0.64.jar
alfresco-device-sync-repo-5.2.0.jar
alfresco-elasticsearch-shared-5.1.1.jar
alfresco-enterprise-crypto-7.0.jar
alfresco-enterprise-remote-api-25.2.0.59.jar
alfresco-enterprise-repository-25.2.0.59.jar
alfresco-goolgedocs-enterprise-config-1.0.1.jar
alfresco-goolgedrive-repo-base-4.1.0.jar
alfresco-goolgedrive-repo-enterprise-4.1.0.jar
alfresco-greenmail-7.1.jar
alfresco-heartbeat-data-sender-1.1.1.jar
alfresco-jlan-embed-7.5.jar
alfresco-jmx-logger-0.0.14.jar
alfresco-remote-api-25.2.0.64.jar
alfresco-repository-25.2.0.64-Copy
alfresco-repository-25.2.0.64.jar
alfresco-share-services-25.2.0.64.jar
alfresco-shared-file-store-data-model-4.2.0.jar
alfresco-sync-events-1.2.14.jar
alfresco-text-gen-1.4.jar
alfresco-transform-model-5.2.0.jar
alfresco-trashcan-cleaner-2.4.2.jar
alfresco-xmlfactory-1.3.jar
angus-activation-2.0.2.jar
antlr-3.5.3.jar
antlr-runtime-3.5.3.jar
aopalliance-repackaged-3.0.6.jar
aoservices-4.0.11-A1.jar
apache-mime4j-core-0.8.11.jar
apache-mime4j-dom-0.8.11.jar
asm-9.7.1.jar
aspectjrt-1.9.22.1.jar
avalon-framework-api-4.3.1.jar
avalon-framework-impl-4.3.1.jar
bcmail-jdk18on-1.79.jar
bcpkix-jdk18on-1.79.jar
bcprov-jdk18on-1.79.jar
bcutil-jdk18on-1.79.jar
bliki-3.0.2.jar
bsf-2.4.0.jar
camel-activemq-4.11.0.jar
camel-amqp-4.11.0.jar
jakarta.jws-api-3.0.0.jar
jakarta.mail-2.0.1.jar
jakarta.transaction-api-2.0.1.jar
jakarta.ws.rs-api-3.1.0.jar
jakarta.xml.bind-api-4.0.2.jar
jakarta.xml.soap-api-3.0.2.jar
jakarta.xml.ws-api-3.0.1.jar
jaspyt-1.9.3.jar
jaspyt-spring3-1.9.3.jar
java-libpst-0.9.3.jar
java-uuid-generator-5.1.0.jar
javassist-3.30.2-GA.jar
jaxb-core-4.0.5.jar
jaxb-runtime-4.0.5.jar
jaxen-1.2.0.jar
jcip-annotations-1.0-1.jar
jcl-over-slf4j-2.0.10.jar
jdom2-2.0.6.1.jar
jersey-client-3.1.10.jar
jersey-common-3.1.10.jar
jersey-hk2-3.1.10.jar
jersey-media-json-binding-3.1.10.jar
jhightlight-1.1.0.jar
jibx-run-1.4.2.jar
jmatio-1.5.jar
jmxlogger-log4j-0.1.0-AlfrescoPatched.jar
joda-time-2.13.1.jar
json-20240303.jar
json-path-2.9.0.jar
json-simple-1.1.1.jar
json-smart-2.5.2.jar
jsr107cache-1.1.jar
jsr305-3.0.2.jar
juniversalchardet-2.4.0.jar
junrar-7.5.5.jar
jutf7-1.0.0.jar
jwarc-0.29.0.jar
kxml2-2.3.0.jar
lang-tag-1.7.jar
listenablefuture-9999.0-empty-to-avoid-conflict-with-guava.jar
log4j-api-2.24.3.jar
log4j-core-2.24.3.jar
log4j-slf4j2-impl-2.24.3.jar
lucene-analysis-common-9.7.0.jar
lucene-core-9.7.0.jar
```



Alfresco Platform Configuration – Authentication sync with LDAP server



```
[alfresco@89a02a9d5837 ~]$ cd /usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-25.2.0.64-Copy
hk2-utils-3.0.6.jar                                     truelicense-xml-1_29-patched.jar
htmllexer-2.1.jar                                       txw2-4.0.5.jar
htmlparser-2.1.jar                                      vorbis-java-core-0.8.jar
httpasyncclient-4.1.5.jar                                vorbis-java-tika-0.8.jar
httpclient-4.5.14.jar                                   woodstox-core-7.0.0.jar
httpclient5-5.5.jar                                     wsdl4j-1.6.3.jar
httpcore-4.4.16.jar                                    xalan-2.7.3-alfresco.jar
httpcore-nio-4.4.16.jar                                 xercesImpl-2.12.2.jar
httpcore5-5.3.4.jar                                    xml-resolver-1.2.jar
httpcore5-h2-5.3.4.jar                                 xmlbeans-5.2.2.jar
httpmime-4.5.14.jar                                   xmldb-schema-core-2.3.1.jar
icu4j-75.1.jar                                         xmlsec-4.0.3.jar
istack-commons-runtime-4.1.2.jar                         xmpbox-2.0.31.jar
j2objc-annotations-3.0.0.jar                           xmpcore-6.1.11.jar
jackcess-4.0.5.jar                                     xz-1.9.jar
jackcess-encrypt-4.0.2.jar                            yasson-3.0.4.jar
[alfresco@89a02a9d5837 lib]$
[alfresco@89a02a9d5837 lib]$ cd alfresco-repository-25.2.0.64-Copy
[alfresco@89a02a9d5837 alfresco-repository-25.2.0.64-Copy]$ ls
META-INF THIRD-PARTY.txt alfresco alfresco-global.properties.sample builddef.lst lib3party org queryRegister.dtd
[alfresco@89a02a9d5837 alfresco-repository-25.2.0.64-Copy]$
```



Alfresco Platform Configuration – Authentication sync with LDAP server



```
① @89a02a9d5837:/usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-25.2.0.64-Copy/alfresco/subsystems/Authentication/ldap
[alfresco@89a02a9d5837 lib]$ cd alfresco-repository-25.2.0.64-Copy
[alfresco@89a02a9d5837 alfresco-repository-25.2.0.64-Copy]$ ls
META-INF THIRD-PARTY.txt alfresco alfresco-global.properties.sample builddef.lst lib3party org queryRegister.dtd
[alfresco@89a02a9d5837 alfresco-repository-25.2.0.64-Copy]$ ls
META-INF THIRD-PARTY.txt alfresco alfresco-global.properties.sample builddef.lst lib3party org queryRegister.dtd
[alfresco@89a02a9d5837 alfresco-repository-25.2.0.64-Copy]$ cd alfresco
[alfresco@89a02a9d5837 alfresco]$ ls
action-services-context.xml           deprecated-model-bootstrap-context.xml   module-context.xml          reset-password-context.xml
activiti-context.xml                 desktop                           mt                         rule-services-context.xml
activities                          discussions-services-context.xml network-authentication-context.xml scheduled-jobs-context.xml
alfresco-shared.properties           distributionpolicies-context.xml node-locator-context.xml scheduler-core-context.xml
application-context-core.xml        domain                            node-services-context.xml schemacomp
application-context-highlevel.xml   download-services-context.xml notification-services-context.xml script-services-context.xml
application-context.xml            encryption-context.xml           oauth1-credentials-store-services-context.xml site-services-context.xml
attributes-service-context.xml     events-context.xml             oauth2-credentials-store-services-context.xml slingshot-context.xml
audit                             events2-context.xml           opencmis-context.xml       smartfolder-context.xml
audit-services-context.xml          extension                           opencmis-qnamefilter-context.xml social-publishing-context.xml
authentication-services-context.xml favourites-service-context.xml ownable-services-context.xml solr-facets-context.xml
authority-services-context.xml      form-services-context.xml       patch                         spring
blog-context.xml                   heartbeat                          public-services-context.xml st-context.xml
bootstrap                           ibatis                            public-services-security-context.xml subsystems
bootstrap-context.xml              imap                               quickshare-services-context.xml tagging-services-context.xml
bulk-import-context.xml            import-export-context.xml    logging-context.xml       template-services-context.xml
cache-context.xml                  invitation-service-context.xml links-services-context.xml templates
caches.properties                 mimetype                          minimal-context.xml     thumbnail
calendar-services-context.xml     logging-context.xml           ml                           rating-services-context.xml tika
client                            messages                           model                         remote-credentials-services-context.xml transfer-service-context.xml
comment-services-context.xml       messaging-context.xml         metadata                      remote-ticket-services-context.xml transforms
content-services-context.xml      metadata                           mimetype                     rendition-services-context.xml tx-cache-context.xml
copy-services-context.xml          minimal-context.xml           ml                           renditions                    usage-services-context.xml
core-services-context.xml          model                            model-specific-services-context.xml webdav-context.xml
custom-model-management-services-context.xml module                         repository.properties workflow
dao
dbscripts
deprecated-context.xml
[alfresco@89a02a9d5837 alfresco]$ cd subsystems
[alfresco@89a02a9d5837 subsystems]$ ls
ActivitiesFeed Authentication ContentStore Events Messaging Replication Search Subscriptions Synchronization Transformers email fileServers imap sysAdmin
[alfresco@89a02a9d5837 subsystems]$ cd Authentication
[alfresco@89a02a9d5837 Authentication]$ ls
alfrescoNtlm common-ldap-context.xml external identity-service kerberos ldap ldap-ad
[alfresco@89a02a9d5837 Authentication]$ cd ldap
[alfresco@89a02a9d5837 ldap]$ ls
ldap-authentication-context.xml ldap-authentication.properties
[alfresco@89a02a9d5837 ldap]$
```

}{





Apache Directory Studio Edit LDAP properties

Screenshot of the Apache Directory Studio interface showing the "Edit LDAP properties" feature for a Docker container.

Left Sidebar:

- Containers
- Images
- Volumes
- Dev Environments BETA
- Docker Scout
- Learning center
- Extensions
- Add Extensions

Container Details:

docker-alfrescoall-acs-1
alfresco-content-services-alfrescoall:development
c22b47626eee

Ports: 8080:8080 8888:8888

Status: Running (2 hours ago)

File Editor:

Logs **Inspect** **Bind mounts** **Exec** **Files** **Stats** Hide file editor

Name	Note	Size	Last modified	Mode
identity-service	ADDED		57 minutes ago	drwxr-xr-x
kerberos	ADDED		57 minutes ago	drwxr-xr-x
ldap	ADDED		57 minutes ago	drwxr-xr-x

File Path: /usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-23.2.0.60-copy/alfresco/subsystems/Authentication/ldap/authentication.properties

Properties:

```
# This flag enables use of this LDAP subsystem for authentication. It may be
# that this subsystem should only be used for synchronization, in which case
# this flag should be set to false.
ldap.authentication.active=true

#
# This properties file brings together the common options for LDAP authentication rather than editing the bean definitions
#
ldap.authentication.allowGuestLogin=true
# How to map the user id entered by the user to that passed through to LDAP
# - simple
#   - this must be a DN and would be something like
#     uid=%s,ou=People,dc=company,dc=com
# - digest
#   - usually pass through what is entered
#     %s
# If not set, an LDAP query involving ldap.synchronization.personQuery and ldap.synchronization.userIdAttributeName will
# be performed to resolve the DN dynamically. This allows directories to be structured and doesn't require the user ID to
```



Apache Directory Studio Edit LDAP properties

- ldap.authentication.active=true
- authentication.chain=localLDAP:ldap,alfrescoNtlm1:alfrescoNtlm
- #ldap.authentication.allowGuestLogin=false
- ldap.authentication.userNameFormat=cn=%s,ou=people,o=sevenseas
- ldap.authentication.java.naming.provider.url=ldap://host.docker.internal:389
- ldap.synchronization.active=true
- ldap.synchronization.java.naming.security.principal=uid\=admin,ou\=system
- ldap.synchronization.java.naming.security.credentials=secret
- ldap.synchronization.groupQuery=(objectclass\=groupOfUniqueNames)
- ldap.synchronization.personQuery=(objectclass\=person)
- ldap.synchronization.groupSearchBase=ou\=groups,o\=sevenseas
- ldap.synchronization.userSearchBase=ou\=people,o\=sevenseas
- ldap.synchronization.groupMemberAttributeName=uniquemember



Apache Directory Studio Edit LDAP properties

/usr/local/tomcat/shared/classes/alfresco-global.properties

```
86  
87 ## Authentication with local Directory server  
88 ldap.authentication.active=true  
89 authentication.chain=localLDAP:ldap,alfrescoNtlm1:alfrescoNtlm  
90 ldap.authentication.java.naming.provider.url=ldap://host.docker.internal:389  
91 ldap.authentication.userNameFormat=cn=%s,ou=people,o=sevenseas  
92  
93 ## Synchronization of user and group info from directory server  
94 ldap.synchronization.active=true  
95 ldap.synchronization.java.naming.security.principal=uid\=admin,ou\=system  
96 ldap.synchronization.java.naming.security.credentials=secret  
97 ldap.synchronization.groupQuery=(objectclass\=groupOfUniqueNames)  
98 ldap.synchronization.personQuery=(objectclass\=person)  
99 ldap.synchronization.groupSearchBase=ou\=groups,o\=sevenseas  
100 ldap.synchronization.userSearchBase=ou\=people,o\=sevenseas  
101 ldap.synchronization.groupMemberAttributeName=uniqueMember  
102  
103  
104
```



Apache Directory Studio Edit share-config-custom

docker-alfrescoall-share-1
alfresco-share-alfrescoall:development
6f883c066224
8180:8080 9898:8888

STATUS
Running (2 minutes ago)

Logs Inspect Bind mounts Exec **Files** Stats Hide file editor

Name	Note	Size	Last modified	Mode
shared	MODIFIED	10.7 KB	1 year ago	drwxr-xr-x
classes	MODIFIED	10.7 KB	4 months ago	drwxr-xr-x
alfresco	MODIFIED	10.7 KB	4 months ago	drwxr-xr-x

/usr/local/tomcat/shared/classes/alfresco/web-extension/share-config-custom.xml

```
1 <alfresco-config>
2
3   <config evaluator="string-compare" condition="Users" replace="true">
4     <users>
5       <!-- minimum length for username and password -->
6       <username-min-length>2</username-min-length>
7       <password-min-length>3</password-min-length>
8       <show-authorization-status>false</show-authorization-status>
9     </users>
10    <!-- This enables/disables the Add External Users Panel on the Add Users page. -->
11    <enable-external-users-panel>false</enable-external-users-panel>
12  </config>
```

Add

<https://docs.alfresco.com/content-services/7.2/develop/share-ext-points/share-config/>



Apache Directory Studio Edit share-config-custom

- <config evaluator="string-compare" condition="Users" replace="true">
- <users>
- <!-- minimum length for username and password -->
- <username-min-length>2</username-min-length>
- <password-min-length>3</password-min-length>
- <show-authorization-status>false</show-authorization-status>
- </users>
- <**enable-external-users-panel**>true</**enable-external-users-panel**>
- </config>



Apache Directory Studio Edit LDAP properties

Home My Files Shared Files Sites ▾ Tasks ▾ People Repository Admin Tools Debug Menu ▾



Admin Tools

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Groups

Search

Browse

Path: HMS Bounty

	ALFRESCO_ADMINISTRATORS	
	ALFRESCO_MODEL_ADMINISTRATORS	
	ALFRESCO_SEARCH_ADMINISTRATORS	
	ALFRESCO_SYSTEM_ADMINISTRATORS	
	EMAIL_CONTRIBUTORS	
	HMS Bounty	
	HMS Lydia	
	HMS Victory	
	SITE_ADMINISTRATORS	

<< < (1 of 1) > >>

<< < (1 of 1) > >>



Apache Directory Studio Edit LDAP properties

Screenshot of Apache Directory Studio showing the User Search results for 'Thomas'.

The search results table has columns: Name, User Name, Job Title, Email, Usage, and Quota.

Name	User Name	Job Title	Email	Usage	Quota
Thomas Hardy	thardy		thardy@royalnavy.mod.uk	0 bytes	
Thomas Quist	tquist		tquist@royalnavy.mod.uk	0 bytes	

A red curly brace highlights the 'Usage' and 'Quota' columns across both user entries. A red arrow points from the text 'Disable status. Need to Enable' to the 'Usage' column of the first user entry.

Disable status. Need to Enable



Apache Directory Studio Edit LDAP properties

localhost:8180/share/page/console/admin-console/users#state=panel%3Dview%26userid%3Dthardy%26search%3DThomas

Insert title here Empire New Tab How to use Assertio... Browser Automation... node.js - How can I... Freelancer-dev-810... Courses New Tab Airtel 4G Hotspot nt8F83 All Bookmarks

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu Administrator Search files, people, sites

Admin Tools

User Profile: Thomas Hardy

About

Thomas Hardy

Contact Information

Email: thardy@royalnavy.mod.uk

Telephone:

Mobile:

Skype:

IM:

Google Username:

Organization Details

Edit User Delete User

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

Replication Jobs

Users and Groups

Groups

Users



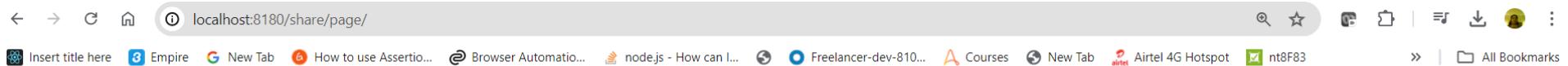
Enable Account Status

```
alfrescoall-ass:
  image: alfresco/alfresco-search-services:2.0.3
  environment:
    SOLR_ALFRESCO_HOST: alfrescoall-acs
    SOLR_ALFRESCO_PORT: 8080
    SOLR_SOLR_HOST: alfrescoall-ass
    SOLR_SOLR_PORT: 8983
    SOLR_CREATE_ALFRESCO_DEFAULTS: alfresco,archive
    ALFRESCO_SECURE_COMMS: "secret"
    JAVA_TOOL_OPTIONS: "-Dalfresco.secureComms.secret=secret"
  ports:
    - "8983:8983"
  volumes:
    - alfrescoall-ass-volume:/opt/alfresco-search-services/contentstore
    - alfrescoall-ass-volume:/opt/alfresco-search-services/data
alfrescoall-activemq:
  image: alfresco/alfresco-activemq:5.16.1
  mem_limit: 4g
  ports:
    - 8161:8161 # Web Console
    - 5672:5672 # AMQP
    - 61616:61616 # OpenWire
    - 61613:61613 # STOMP
```





Enable Account Status



Alfresco®
make business flow

Alfresco Share
Alfresco Community Edition

Horatio Hornblower

....

Sign In

© 2005-2024 Alfresco Software Inc. All rights reserved.



Enable Account Status

Horatio Hornblower Dashboard

GET STARTED
Take a quick tour of Alfresco Share or learn about advanced features.

My Sites

All Create Site

Quickly access your sites
A site is a project area where you can share and discuss content with other site members.

My Activities

Everyone's activities all items in the last 7 days

Follow what's going on in your sites
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as cor also see who is joining and leaving your sites.

Horatio Hornblower User Dashboard My Profile Help

Home Page

Use Current Page

Use My Dashboard

Logout



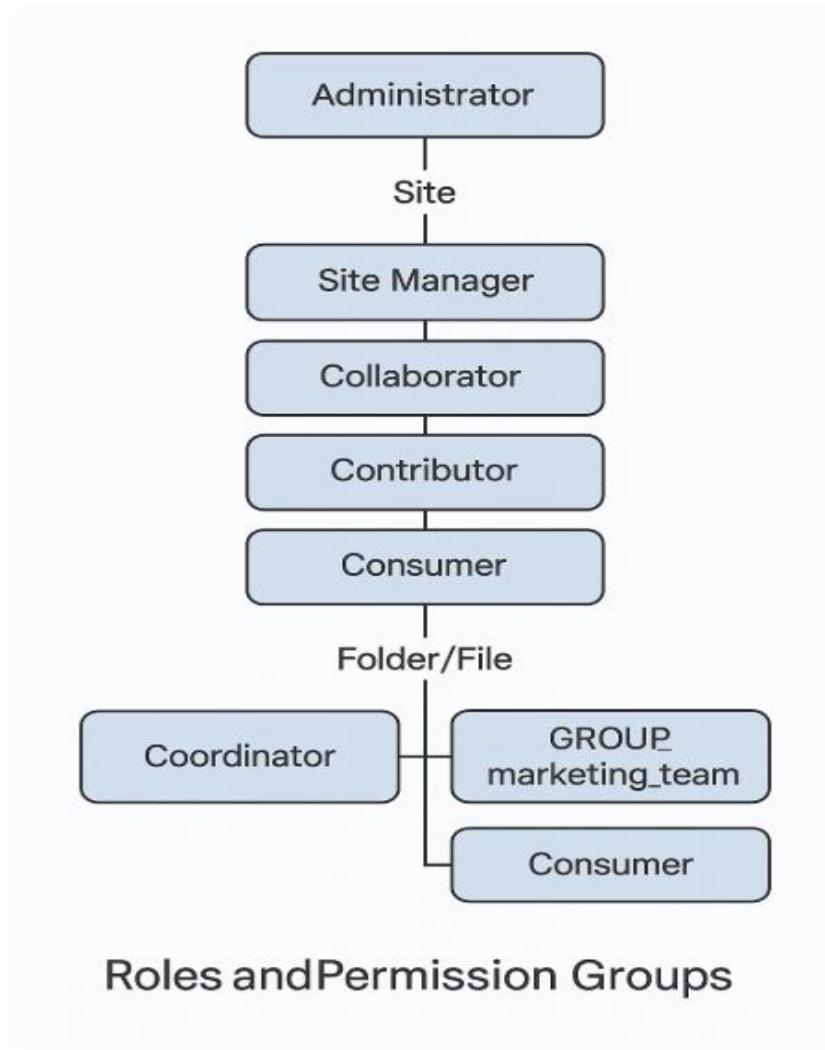
1. Roles vs Permission Groups



Concept	Description	Example
Role	Defines a set of permissions for a user within a specific context (site, folder, or document).	Site Manager, Collaborator, Contributor
Permission Group	A collection of users or groups that share one or more roles. Helps manage large user bases efficiently.	GROUP_marketing_team , GROUP_hr_reviewers



1. Roles vs Permission Groups





1. Roles vs Permission Groups

Content Services provides a handful of out-of-the-box roles with different levels of permissions in the repository:

- **Consumer** - can read content
- **Contributor** - can create and upload content
- **Editor** - can read and update content
- **Collaborator** - can do everything except moving and deleting other users content
- **Coordinator** - full access



2. Permission Model Layers



- Alfresco's access control is built on three layers:
- **Global Roles** (System-wide):
 - Apply to the entire repository.
 - Examples:
 - ALFRESCO_ADMINISTRATORS → Full system access
 - EVERYONE → All users
 - EMAIL CONTRIBUTORS → Users allowed to send documents via email



2. Permission Model Layers



- **Site Roles** (Specific to a Site in Share):
- Each Alfresco Share site defines its own role set and membership.
- Default Site Roles:

Role	Description	Permissions
Site Manager	Full control over site content and membership	Read/Write/Delete/Admin
Site Collaborator	Can read, edit, and create but not delete	Read/Write
Site Contributor	Can add new content but not edit/delete others'	Create/Read
Site Consumer	Read-only access	Read



2. Permission Model Layers



- **Site Roles** (Specific to a Site in Share):
- Each Alfresco Share site defines its own role set and membership.
- Default Site Roles:

Role	Description	Permissions
Site Manager	Full control over site content and membership	Read/Write/Delete/Admin
Site Collaborator	Can read, edit, and create but not delete	Read/Write
Site Contributor	Can add new content but not edit/delete others'	Create/Read
Site Consumer	Read-only access	Read



2. Permission Model Layers



- **b. Repository Groups**
- **Groups** are collections of users used to assign permissions collectively.
- You can create hierarchical groups (e.g., GROUP_FINANCE/TEAM_AUDIT).
- Defined and managed through:
 - **Admin Console**
(<http://localhost:8080/alfresco/s/admin/admin-tools>)
 - **Alfresco Share: Admin Tools → Users and Groups**
 - **REST API:** /alfresco/api/-default-/public/alfresco/versions/1/groups
 - **LDAP / AD Integration:** groups can sync automatically from an external directory.



3. Folder & File Permissions (Granular):

- Can override site-level defaults.
- Permissions like Consumer, Contributor, Editor, Coordinator.



Security and Permissions



- Alfresco uses an **Access Control List (ACL)** system internally.
Each node (file/folder) in the repository has an ACL containing *Access Control Entries (ACEs)*.
- a. Permission Model**
- Permissions are organized hierarchically:

Type	Description	Example
Base Permissions	Fundamental rights	Read, Write, Delete, CreateChildren
Aggregated Permissions	Collections of base permissions	Consumer = Read, Collaborator = Read + Write
Permission Groups	Logical grouping of permissions for roles	SiteContributor, SiteCollaborator



Security and Permissions



- **b. Permission Inheritance**
- By default, folders **inherit permissions** from their parent.
- You can **break inheritance** to set custom permissions on a folder or document.
- Managed via:
 - **Share UI:** Details → Manage Permissions → Inherit Permissions (toggle)
 - **Repository API:** cm:inheritPermissions property



3. How Roles and Permission Groups Are Used



• **Assigning Roles**

- When a user is added to a **Share Site**, they are assigned a *role* (e.g., Collaborator).
- Internally, this creates a mapping:
- GROUP_site_<sitename>_<role>
- Example:
 - **GROUP_site_marketing_SiteCollaborator**



Managing Permission Groups



- Admins can create *custom groups*:
 - Using **Admin Console** or **People Tool** in Alfresco Share.
 - Or through the **Alfresco REST API / LDAP sync**.
- These groups can then be assigned to sites, folders, or nodes instead of individual users — reducing admin overhead.



PermissionDefinitions.xml

/usr/local/tomcat/webapps/alfresco/WEB-INF/lib/alfresco-repository-25.2.0.64-
Copy/alfresco/model/permissionDefinitions.xml

XML ▼ ↶ ↷ 💾 ✖

```
57      <!--
58
59      <permissionGroup name="FullControl" expose="true" allowFullControl="true"/>
60
61      <permissionGroup name="AdminServiceAccount" expose="false" allowFullControl="false">
62          <includePermissionGroup type="sys:base" permissionGroup="Read"/>
63          <includePermissionGroup type="sys:base" permissionGroup="Write"/>
64          <includePermissionGroup type="sys:base" permissionGroup="AddChildren"/>
65          <includePermissionGroup type="sys:base" permissionGroup="Delete"/>
```

RAM 9.23 GB CPU 3.15% Disk: 18.91 GB used (limit 1006.85 GB) ➤ ⓘ Update available



4. Technical Configuration (Advanced)

- In alfresco/extension/permissionDefinitions.xml, administrators can:
- Define **custom roles**.
 - Map roles to **permission sets** (e.g., ReadProperties, WriteContent, DeleteNode).

xml

```
<permissionSet name="CustomReviewer" extends="Consumer">
    <permission>WriteProperties</permission>
    <permission>CheckOut</permission>
</permissionSet>
```



4. Technical Configuration (Advanced)

docker-all-in-one-acss-1

Logs Inspect Bind mounts Exec **Files** Stats Hide file editor

Name ↑	Note	Size	Last modified	Mode
alfresco-jmxrmi.password		2.8 kB	4 months ago	-rw-r----
extension	MODIFIED		51 minutes ago	drwxr-xr-x
customPermissionDefinitions.xml	ADDED	1.3 kB	2 hours ago	-rwxr-xr-x
license			2 days ago	drwxr-xr-x
templates			5 months ago	drwxr-xr-x

/usr/local/tomcat/webapps/alfresco/WEB-INF/classes/alfresco/extension/customPermissionDefinitions.xml

XML

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE permissions PUBLIC "-//Alfresco//DTD Permission Definitions 1.0//EN"
3                                     "http://www.alfresco.org/dtds/permissionDefinitions.dtd">
4 <permissions>
5   <!-- Custom role for content nodes -->
6   <permissionSet type="cm:content" expose="true">
7     <permissions>
8       <permissionGroup name="DocumentReviewer" allowFullControl="false">
```

RAM 11.24 GB CPU 3.02% Disk: 18.92 GB used (limit 1006.85 GB) Update available



4. Technical Configuration (Advanced)

And in `permissionGroups.xml`, you can define hierarchical groups:

xml

```
<group name="GROUP_marketing_team">
    <member name="bob"/>
    <member name="alice"/>
</group>
```



Manage Permissions

Home My Files Shared Files Sites ▾ Tasks ▾ People Repository Admin Tools Debug Menu ▾ Administrator ▾ Search files, people, sites

Sample: Web Site Design Project Public Site Dashboard Project Library Project Wiki Project FAQ More ▾

RPS GROUP
Building Futuristic Infrastructure

Documents All Documents I'm Editing Others are Editing Recently Modified Recently Added My Favorites

Library Documents Agency Files (Agency related files) Modified over 15 years ago by Mike Jackson This folder holds the agency related files for the project No Tags Favorite Like 0 Comment Download as Zip View Details Edit Properties More... Budget Files (Project finance files) Modified over 15 years ago by Mike Jackson This folder holds the project budget and invoices No Tags Favorite Like 0 Comment Copy to... Move to... Manage Rules Delete Folder Manage Permissions Meeting Notes (Project meeting notes) Created over 15 years ago by Mike Jackson This folder holds notes from the project review meetings No Tags Favorite Like 0 Comment Manage Asp Manage Permissions Presentations (Project presentations) Created over 15 years ago by Mike Jackson

Categories Category Root

Tags

localhost:8180/share/page/site/swsdp/manage-permissions?nodeRef=workspace://SpacesStore/8bb36efb-c26d-4d2b-9199-ab6922f53c28



Manage Permissions

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu Administrator Search files, people, sites

Sample: Web Site Design Project Public Site Dashboard Project Library Project Wiki Project FAQ More

RPS GROUP Building Futuristic Infrastructure

Documents All Documents I'm Editing Others are Editing Recently Modified Recently Added My Favorites

Library Documents Agency Files (Agency related files) Modified over 15 years ago by Mike Jackson This folder holds the agency related files for the project No Tags Favorite Like 0 Comment Download as Zip View Details Edit Properties More... Budget Files (Project finance files) Modified over 15 years ago by Mike Jackson This folder holds the project budget and invoices No Tags Favorite Like 0 Comment Copy to... Move to... Manage Rules Delete Folder Manage Permissions Meeting Notes (Project meeting notes) Created over 15 years ago by Mike Jackson This folder holds notes from the project review meetings No Tags Favorite Like 0 Comment Presentations (Project presentations) Created over 15 years ago by Mike Jackson Category Root

Categories

Tags

localhost:8180/share/page/site/swsdp/manage-permissions?nodeRef=workspace://SpacesStore/8bb36efb-c26d-4d2b-9199-ab6922f53c28



Manage Permissions

Sample: Web Site Design Project Public

Site Dashboard Project Library Project Wiki Project FAQ More More ▾

RPS GROUP
Building Futuristic Infrastructure

Documents > Budget Files

Manage Permissions: Budget Files

Inherited Permissions

	Users and Groups
	EVERYONE
	site_swspd_SiteCollaborator
	site_swspd_SiteConsumer
	site_swspd_SiteContributor
	site_swspd_SiteManager

Locally Set Permissions

	Users and Groups	Role	Actions

Inherit Permissions [Add User/Group](#)

document Search

	Users and Groups	Role	Actions
	document-reviewers (GROUP_document-reviewers)		Add
	site_swspd_SiteCollaborator (GROUP_site_swspd_SiteCollaborator)		Add
	site_swspd_SiteConsumer (GROUP_site_swspd_SiteConsumer)		Add
	site_swspd_SiteContributor (GROUP_site_swspd_SiteContributor)		Add
	site_swspd_SiteManager (GROUP_site_swspd_SiteManager)		Add
	EVERYONE (GROUP_EVERYONE)		Add



Practical Scenario

Folder Structure



Step 1: Create User Groups

Use Admin Console or Share:

Group Name	Members	Purpose
GROUP_FINANCE	alice, bob	Full Finance staff
GROUP_HR	charlie, david	HR team
GROUP_PAYROLL	emma	Restricted payroll user
GROUP_INTERNs	ian, julia	Interns (no access)



Practical Scenario

⚙️ Step 2: Apply Base Permissions at Folder Level

📁 **Folder:** /Company Home/Finance

In Alfresco Share → Finance Folder → Manage Permissions

Group/User	Role	Inherit
GROUP_FINANCE	Collaborator	<input checked="" type="checkbox"/>
GROUP_HR	Consumer	<input checked="" type="checkbox"/>
GROUP_INTERNS	— (remove entry)	<input checked="" type="checkbox"/>

- ➡️ This ensures Finance users can **edit**, HR can **read**, and Interns cannot see the folder.



Practical Scenario

🔒 Step 3: Restrict “Payroll” Subfolder

Open /Finance/Payroll → Manage Permissions

1. Turn off “Inherit Permissions.”
2. Add specific group access:

Group/User	Role
GROUP_PAYROLL	Manager
GROUP_FINANCE	Consumer

Now, only Payroll officers manage files, and Finance can view only.



Practical Scenario

Step 4: Apply via REST API (alternative)

bash

Copy code

```
curl -u admin:admin -X POST \
-H "Content-Type: application/json" \
http://localhost:8080/alfresco/api/-default-/public/alfresco/versions/1/nodes/{finance-folder-id}
-d '{
  "permissions": [
    { "authorityId": "GROUP_FINANCE", "name": "Collaborator", "accessStatus": "ALLOWED" },
    { "authorityId": "GROUP_HR", "name": "Consumer", "accessStatus": "ALLOWED" }
  ]
}'
```



Practical Scenario

💻 Step 4: Apply via REST API (alternative)

bash

Copy code

```
curl -u admin:admin -X POST \
-H "Content-Type: application/json" \
http://localhost:8080/alfresco/api/-default-/public/alfresco/versions/1/nodes/{finance-folder-id}
-d '{
  "permissions": [
    { "authorityId": "GROUP_FINANCE", "name": "Collaborator", "accessStatus": "ALLOWED" },
    { "authorityId": "GROUP_HR", "name": "Consumer", "accessStatus": "ALLOWED" }
  ]
}'
```



Practical Scenario

For Payroll folder: **Optional**

bash

 Copy code

```
curl -u admin:admin -X PUT \
-H "Content-Type: application/json" \
http://localhost:8080/alfresco/api/-default-/public/alfresco/versions/1/nodes/{payroll-folder-} \
-d '{ "isInheritanceEnabled": false }'
```



Practical Scenario

Step 5: Using JavaScript Console Script (Repository Automation) Optional

If you have the **JavaScript Console** add-on installed:

javascript

```
var finance = search.findNode("workspace://SpacesStore/finance-folder-id");
finance.setPermission("Collaborator", "GROUP_FINANCE");
finance.setPermission("Consumer", "GROUP_HR");
finance.removePermission("Consumer", "GROUP_INTERN");

var payroll = search.findNode("workspace://SpacesStore/payroll-folder-id");
payroll.setInheritsPermissions(false);
payroll.setPermission("Manager", "GROUP_PAYROLL");
payroll.setPermission("Consumer", "GROUP_FINANCE");
```

- Run and check via Share "Manage Permissions."



Practical Scenario



Step 5: Using JavaScript Console Script (Repository Automation)

If you have the **JavaScript Console** add-on installed:

javascript

Copy code

```
var finance = search.findNode("workspace://SpacesStore/finance-folder-id");
finance.setPermission("Collaborator", "GROUP_FINANCE");
finance.setPermission("Consumer", "GROUP_HR");
finance.removePermission("Consumer", "GROUP_INTERNNS");

var payroll = search.findNode("workspace://SpacesStore/payroll-folder-id");
payroll.setInheritsPermissions(false);
payroll.setPermission("Manager", "GROUP_PAYROLL");
payroll.setPermission("Consumer", "GROUP_FINANCE");
```

- ➡ Run and check via Share "Manage Permissions."



Practical Scenario

⌚ Step 6: Verification

1. Login as "alice" (Finance):

- Can edit `/Finance/Reports` , `/Finance/Budget` .
- Can view `/Finance/Payroll` .

2. Login as "charlie" (HR):

- Can only view `/Finance` documents.
- No edit or delete options.

3. Login as "emma" (Payroll):

- Can edit only `/Finance/Payroll` .

4. Login as "ian" (Intern):

- Cannot see `/Finance` at all.



Practical Scenario

Step 7: Audit and Maintenance

- Enable Alfresco **audit subsystem** for permission changes.
- Export permission reports via:

sql

```
SELECT * FROM alf_access_control_list;
```

- Review periodically or automate checks using scheduled scripts.

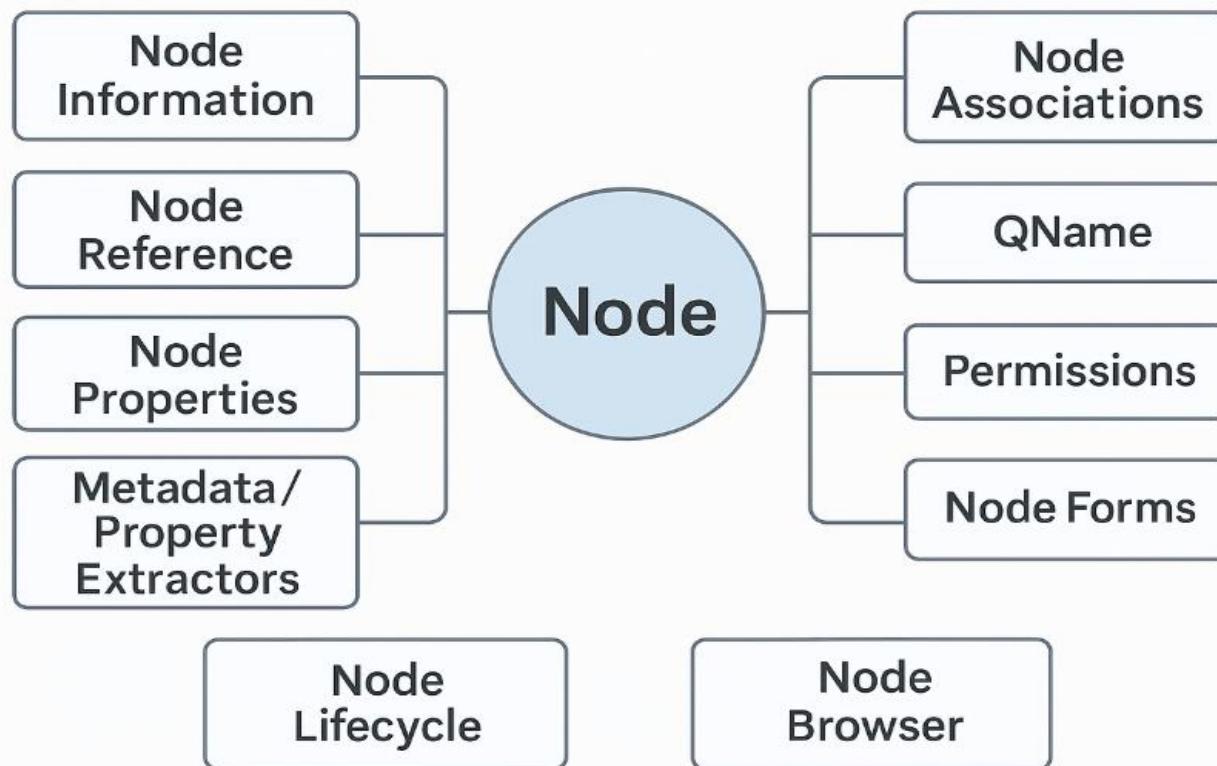


Practical Scenario

Folder	GROUP_FINANCE	GROUP_HR	GROUP_PAYROLL	GROUP_INTEGRNS
Finance	Collaborator	Consumer	—	None
Payroll	Consumer	—	Manager	None
Reports	Collaborator	Consumer	—	None



Alresćo Node Concepts





- **1. Node Information**
- Every piece of content (folder, document, or metadata entity) in Alfresco is represented as a **node**.
A node is the fundamental unit that stores:
- **Type** (e.g., cm:content, cm:folder)
- **UUID** (unique internal identifier)
- **Parent–child hierarchy** (folder structure)
- **Associations** to other nodes (peer or related links)
-  Each node is stored in a **store** (e.g., workspace, version, archive).



- **2. Node Reference**
- A **NodeRef** (Node Reference) uniquely identifies a node in Alfresco using this format:
- store://workspace://SpacesStore/<UUID>
- Example:
- workspace://SpacesStore/b9d4e930-bb50-4c4e-92b7-6a89a889d123
- This allows any service or script to directly locate and manipulate a node.



- **3. Node Properties**
- Nodes contain **properties** as name-value pairs, such as:
 - cm:name — filename
 - cm:creator — user who created it
 - cm:created — date/time created
 - cm:modified — date/time modified
- Properties are defined in the **content model** and can be queried using **XPath**, **CMIS**, or **Alfresco Query Language (AFTS)**.



- **4. Metadata / Property Extractors**
- When you upload or modify a file, Alfresco automatically extracts metadata (title, author, keywords, MIME type, etc.) using **metadata extractors** such as:
 - PDFBoxMetadataExtractor
 - ExifMetadataExtractor
 - OfficeMetadataExtractor
- These populate node properties automatically (e.g., from a Word document's title field to cm:title).



- **5. Node Associations**
- Besides hierarchical folder–file relationships, nodes can be **associated** in other ways:
- **Child associations:** define folder–content hierarchy.
- **Peer associations:** link related documents.
- **Source–target relationships:** used for cross-references (e.g., “Document A references Document B”).
- Defined in the model using assoc elements and represented in the repository using dotted lines (as shown in your first diagram).



- **6. QName (Qualified Name)**
- Every property, aspect, or association in Alfresco has a **QName**, which combines a **namespace prefix** and a **local name**:
- {<http://www.alfresco.org/model/content/1.0>}name
- or shortened as:
- cm:name
- QNames ensure that names are unique across models and modules.



- **7. Permissions**
- Each node has an **Access Control List (ACL)** defining who can:
 - Read
 - Write
 - Delete
 - Manage permissions
- Permissions are inherited from parent nodes unless explicitly overridden.
Common roles include Consumer, Contributor, Coordinator, and Editor.



- **8. Node Info**
- The **NodeInfo** object is a lightweight structure used by Alfresco services and APIs to:
 - Retrieve basic node metadata quickly.
 - Display node summaries in UI or REST responses.
 - Contains fields like NodeRef, name, type, and aspects.



- **9. Node Forms**
- Forms are used in **Alfresco Share** and **Aikau** to display and edit node metadata.
- **Form configurations** define which properties appear.
- Can be automatically generated from content models or customized using **form configuration XML** or **Aikau widgets**.
- Example: editing cm:title and cm:description in a document's properties panel.



- **10. Node Lifecycle**
- Nodes go through a defined **lifecycle**:
- **Created** → in the *Working Store*
- **Versioned** → if versioning is enabled
- **Archived** → when deleted (moves to *Archive Store*)
- **Purged** → permanently deleted from the repository
- Each step may trigger behaviors, policies, or rules (e.g., audit trails, workflows).



- **11. Node Browser**
- A powerful **admin tool** available in Alfresco Share (Admin Console → Node Browser) that allows you to:
- Query repository nodes by XPath, Lucene, or AFTS.
- Inspect properties, aspects, permissions, and associations.
- Copy or delete nodes directly.
- It's essential for debugging content model issues and verifying metadata.



Alfresco Node browser

Admin Tools

RPS GROUP
Building Futuristic Infrastructure

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser**
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Node Browser

Select Store: system://system

PATH:"/"

fts-alfresco Search

No results.

Name	Parent	Reference
10010084	No solr query support for store system://system	



Node Browser

- The **Node Browser** is a web-based interface in **Alfresco Share** that lets administrators:
- Search for nodes (folders, files, models, users, etc.)
- View and edit **metadata**, **aspects**, and **associations**
- Execute queries using **Lucene**, **XPath**, or **Alfresco Full Text Search (AFTS)**
- Inspect a node's **NodeRef**, **QName**, **Type**, and **Properties**
- Debug issues with content models, permissions, or associations



Node Browser

-  **2. How to Access the Node Browser**
-  **For Alfresco Share (Community or Enterprise)**
- Log in as **admin**.
- Go to:
- <http://localhost:8080/share/page/console/admin-console>
- Click on
"Node Browser" under the **Repository Services** section.
-  **Direct Access (Shortcut URL)**
- <http://localhost:8080/share/page/console/admin-console/nodebrowser>



Node Browser

-  **3. Node Browser Interface Overview**

Section	Description
Query Language	Choose the language: Lucene, XPath, FTS (AFTS), or NodeRef.
Query Input Box	Enter your query (e.g., TYPE:"cm:content" or PATH:"/app:company_home/*").
Store Selector	Choose the store to query: - workspace://SpacesStore (main) - versionStore://version2Store - archive://SpacesStore
Results Table	Displays node details (NodeRef, Name, Type, Aspects, etc.).
Actions	View properties, delete, or view associations.



Node Browser

• 4. Common Query Examples

Purpose	Query Example	Notes
Find all documents	TYPE:"cm:content"	Shows all content items
Find all folders	TYPE:"cm:folder"	Lists all folders
Find a node by name	@cm\\:name:"contract.pdf"	Escaping is required for colons
Find all files in Company Home	PATH:"/app:company_home/**"	Traverses subfolders
Find by type in a custom model	TYPE:"my:invoice"	Custom type search
Find by aspect	ASPECT:"cm:titled"	All nodes with titled aspect
Find recently modified	@cm\\:modified:[NOW-1DAY TO NOW]	Date range
Find a node by NodeRef	Paste full NodeRef in NodeRef tab	e.g., workspace://SpacesStore/1b2c3d...



Node Browser

- 🔎 5. Viewing Node Details

Section	Description
General Info	NodeRef, Type, Store, UUID, Path
Properties	All metadata properties and values
Aspects	List of aspects applied to the node
Associations	Relationships with other nodes
Children	Subfolders or linked nodes
Permissions	ACL info (who has access)



Node Browser

-  **6. Typical Use Cases**

Scenario	Purpose
Debugging custom content models	Check if your type/aspect and properties were correctly applied.
Checking node associations	Validate custom peer or parent-child relationships.
Testing content rules	Confirm that rule-based behaviors (e.g., add aspect) are applied.
Validating versioning	Inspect versionStore for historic document nodes.
Recovering deleted content	Switch to archive://SpacesStore and restore deleted nodes.



Node Browser

• 7. Switching Stores

Store	Purpose
workspace://SpacesStore	Main active repository
versionStore://version2Store	Historical versioned nodes
archive://SpacesStore	Soft-deleted nodes (Trashcan)
system://system	Internal Alfresco system metadata



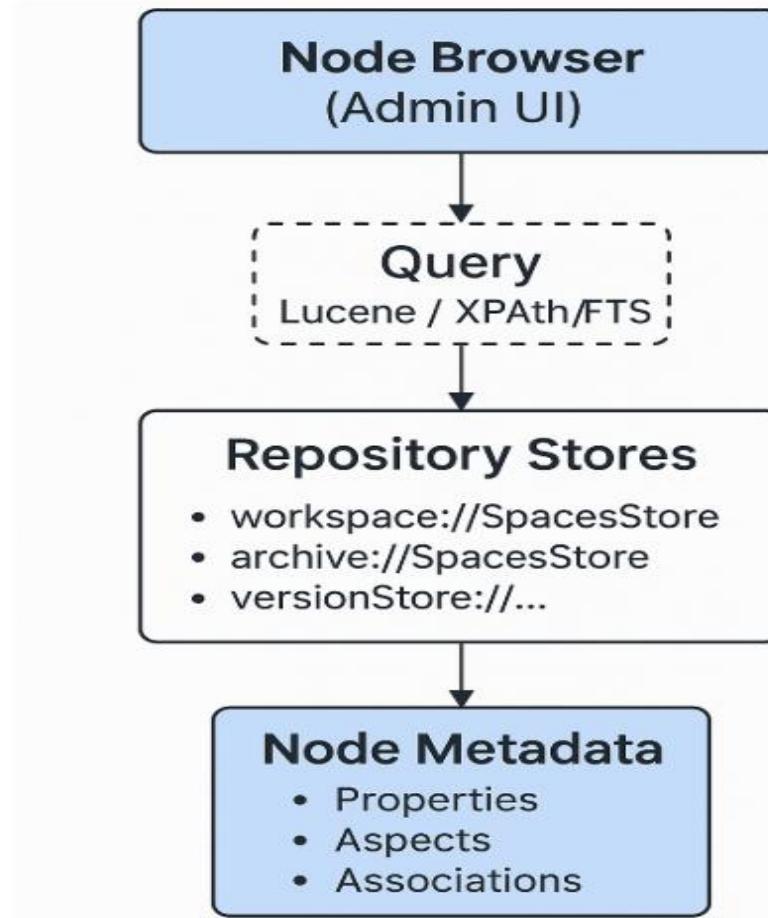
Node Browser

• 8. Node Browser vs REST API

Feature	Node Browser	REST API
UI-based	Yes	No
Query flexibility	High (Lucene, XPath, FTS)	Moderate
Node inspection	Direct visual	JSON output
Suitable for	Debugging & learning	Automation & integration



Alfresco Node browser





1. Search from Alfresco Share (User UI)

-  **Steps**
- Log in to **Alfresco Share**.
- In the top-right **Search Bar**, type your query (e.g., file name, keyword, metadata).
- Hit **Enter** to open the **Search Results page**.
- You can filter results on the left:
 - File Type
 - Folder
 - Modified Date
 - Author
 - Tags



1. Search from Alfresco Share (User UI)

Goal	Search Bar Example
Find a document by name	contract.pdf
Find by metadata property	contractId:CNT-2025-001
Find all contract documents	TYPE:"my:contractDocument"
Find by tag	TAG:"Legal"
Find by date	modified:[NOW-30DAYS TO NOW]



1. Search from Alfresco Share (User UI)



Home My Files Shared Files Sites ▾ Tasks ▾ People Repository Admin Tools Debug Menu ▾ Administrator ▾

RPS GROUP
Building Futuristic Infrastructure

Search

Search in: Repository ▾

Filter by:

- ▼ Creator
Alice Beecher 1
- ▼ File Type
Adobe PDF Document 1
- ▼ Size
100KB to 1MB 1
- ▼ Modifier
Administrator 1

Selected Items... 1 - results found

Project Contract.pdf (Project Contract for Green Energy) [i](#)
Contract for the Green Energy project
Modified over 14 years ago by Administrator | **Size:**373 KB | **Site:** Sample: Web Site Design Project
In folder: /Agency Files/Contracts



2. Using the Node Browser (Admin Tool)



- **Steps**
- Go to
- `http://<your-host>:8080/share/page/console/admin-console/nodebrowser`
- Choose:
 - **Store:** workspace://SpacesStore (main store)
 - **Language:** FTS, Lucene, or XPath



2. Using the Node Browser (Admin Tool)

Language	Description
Fts-alfresco	Full Text Search
lucene	Solar -- > legacy lucene syntax
xpath	Path based search CMIS models



2. Using the Node Browser (Admin Tool)

Language	Description
Cmis-strict/cmis-alfresco	CMIS query syntax
Db:cmis	SQL syntax



2. Using the Node Browser (Admin Tool)

Purpose	Query
All documents	TYPE:"cm:content"
Custom type	TYPE:"my:contractDocument"
File name	@cm\name:"Alfresco_UI_Model_Checklist.pdf" "
Created by a user	@cm\creator:"admin"
Modified recently	@cm\modified:[NOW-7DAYS TO NOW]
Containing a word	TEXT:"insurance"



2. Using the Node Browser (Admin Tool)

RPS GROUP
Building Futuristic Infrastructure

Admin Tools

Tools

- Application
- Category Manager
- Module Browser
- Node Browser**
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Node Browser

TYPE: "cm:content"

Select Store: workspace://SpacesStore

Search for 'TYPE:"cm:content"' found over 100 results (search took 594ms). Showing first 100 only.

Name	Parent	Reference
cm:page.title.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa 866c-4947-873e
cm:page.full-width-dashlet.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa 6ca8-46a2-861e
cm:page.component-1-1.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa 3703-482a-92ea
cm:page.component-1-2.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa bc5e-4e41-86af
cm:page.component-2-1.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa cb63-4b82-970e
cm:page.component-2-2.user~admin~dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa 3c5b-4ebb-becc
cm:dashboard.xml	/app:company_home/st:sites/cm:surf-config/cm:pages/cm:user/cm:admin	workspace://Spa 1d06-4308-9dac
cm:component-site-configuration.xml	/app:company_home/st:sites/cm:surf-config/cm:components	workspace://Spa



3. From the Repository (Folder Navigation)

- You can browse through:
- Repository → Company Home → [Your Folder Structure]
- and use the **“Search within this folder”** bar to limit results to that section only.



4. Using CMIS Query (Advanced / Developer Use)



- If you connect via **CMIS clients** (e.g., Workbench, Postman, or custom app):
- `SELECT * FROM cmis:document`
- `WHERE cmis:name LIKE '%contract%'`
- For a custom type:
- `SELECT * FROM my:contractDocument WHERE my:contractId = 'CNT-2025-001'`

5. Using the Alfresco REST API (Modern Approach) – Only Works when Solr Reachable



- You can search with a REST call:
- **Endpoint:**
- POST /alfresco/api/-default-/public/search/versions/1/search
- **Body:**
- {
- "query": {
- "query": "TYPE:'my:contractDocument' AND @my\\:contractId:'CNT-2025-001'"
- },
- "paging": {
- "maxItems": 50,
- "skipCount": 0
- }
- }
- **Result:** JSON with NodeRefs, paths, and metadata.

6. Using SQL-like Search in Database (for troubleshooting only)



```
C:\ Administrator: Command Prompt - docker exec -it ead83ce32701 psql -U alfresco

C:\Windows\System32>docker exec -it ead83ce32701 psql -U alfresco
psql (16.5 (Debian 16.5-1.pgdg120+1))
Type "help" for help.

alfresco=# \l
                                         List of databases
   Name    |  Owner   | Encoding | Locale Provider | Collate      | Ctype      | ICU Locale | ICU Rules | Access privileges
   ----+-----+-----+-----+-----+-----+-----+-----+-----+
alfresco | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | =c/alfresco      +
postgres | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | alfresco=CTc/alfresco
template0 | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | =c/alfresco      +
template1 | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | alfresco=CTc/alfresco
(4 rows)

alfresco=#
```

6. Using SQL-like Search in Database (for troubleshooting only)



```
Administrator: Command Prompt - docker exec -it ead83ce32701 psql -U alfresco
List of relations
 Schema |      Name       | Type | Owner
-----+----------------+-----+-----
public | act_evt_log   | table| alfresco
public | act_ge_bytarray | table| alfresco
public | act_ge_property | table| alfresco
public | act_hi_actinst | table| alfresco
public | act_hi_attachment | table| alfresco
public | act_hi_comment | table| alfresco
public | act_hi_detail | table| alfresco
public | act_hi_identitylink | table| alfresco
public | act_hi_procinstant | table| alfresco
public | act_hi_taskinst | table| alfresco
public | act_hi_varinst | table| alfresco
public | act_id_group | table| alfresco
public | act_id_info | table| alfresco
public | act_id_membership | table| alfresco
public | act_id_user | table| alfresco
public | act_procdef_info | table| alfresco
public | act_re_deployment | table| alfresco
public | act_re_model | table| alfresco
public | act_re_procdef | table| alfresco
public | act_ru_event_subscr | table| alfresco
public | act_ru_execution | table| alfresco
public | act_ru_identitylink | table| alfresco
public | act_ru_job | table| alfresco
public | act_ru_task | table| alfresco
public | act_ru_variable | table| alfresco
public | alf_access_control_entry | table| alfresco
public | alf_access_control_list | table| alfresco
public | alf_ace_context | table| alfresco
public | alf_acl_change_set | table| alfresco
public | alf_acl_member | table| alfresco
public | alf_activity_feed | table| alfresco
public | alf_activity_feed_control | table| alfresco
public | alf_activity_post | table| alfresco
public | alf_applied_patch | table| alfresco
public | alf_audit_app | table| alfresco
public | alf_audit_entry | table| alfresco
public | alf_audit_model | table| alfresco
public | alf_auth_status | table| alfresco
public | alf_authority | table| alfresco
public | alf_authority_alias | table| alfresco
public | alf_child_assoc | table| alfresco
:
```



9+  ENG IN 18:03 01-11-2025

6. Using SQL-like Search in Database (for troubleshooting only)



- If you have direct DB access (read-only):
- SELECT q.local_name, n.uuid, n.audit_created, p.string_value
- FROM alf_node n
- JOIN alf_qname q ON n.type_qname_id = q.id
- JOIN alf_node_properties p ON n.id = p.node_id
- WHERE q.local_name = 'content'
- AND p.string_value LIKE '%contract%';

6. Using SQL-like Search in Database (for troubleshooting only)



```
C:\Windows\System32>docker exec -it ead83ce32701 psql -U alfresco
psql (16.5 (Debian 16.5-1.pgdg120+1))
Type "help" for help.

alfresco=# \l
                                         List of databases
   Name    |  Owner   | Encoding | Locale Provider | Collate      | Ctype       | ICU Locale | ICU Rules | Access privileges
   +-----+-----+-----+-----+-----+-----+-----+-----+
alfresco | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | =c/alfresco      +
postgres | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | alfresco=CTc/alfresco
template0 | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | =c/alfresco      +
template1 | alfresco | UTF8    | libc          | en_US.utf8  | en_US.utf8  |             |             | alfresco=CTc/alfresco
(4 rows)

alfresco=# \c alfresco
You are now connected to database "alfresco" as user "alfresco".
alfresco=# \dt
alfresco=# SELECT q.local_name, n.uuid, n.audit_created, p.string_value
FROM alf_node n
JOIN alf_qname q ON n.type_qname_id = q.id
JOIN alf_node_properties p ON n.id = p.node_id
WHERE q.local_name = 'content'
AND p.string_value LIKE '%contract%';
 local_name | uuid | audit_created | string_value
-----+-----+-----+-----+
(0 rows)

alfresco=#

```



7. Search in Archive Store (Deleted Items)



- If a document was deleted:
- Go to **Node Browser**.
- Switch **Store** → **archive://SpacesStore**.
- Run:
- `TYPE:"cm:content" AND @cm\:name:"contract.pdf"`
- You can **restore** it from there.



7. Search in Archive Store (Deleted Items)



Admin Tools

RPS GROUP
Building Futuristic Infrastructure

Node Browser

Select Store: workspace://SpacesStore

TYPE:"cm:content" AND @cm:name:"contract.pdf"

fts-alfresco Search

Search for 'TYPE:"cm:content" AND @cm:name:"contract.pdf"' found 1 results (search took 76ms)

Name	Parent	Reference
cm:Project Contract.pdf	/app:company_home/st:sites/cm:swsdp/cm:documentLibrary/cm:Agency_x0020_Files/cm:Contracts	workspace://SpacesStore/1a0b110f-1e09-4ca2-b367-fe25e4964a4e

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser**
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

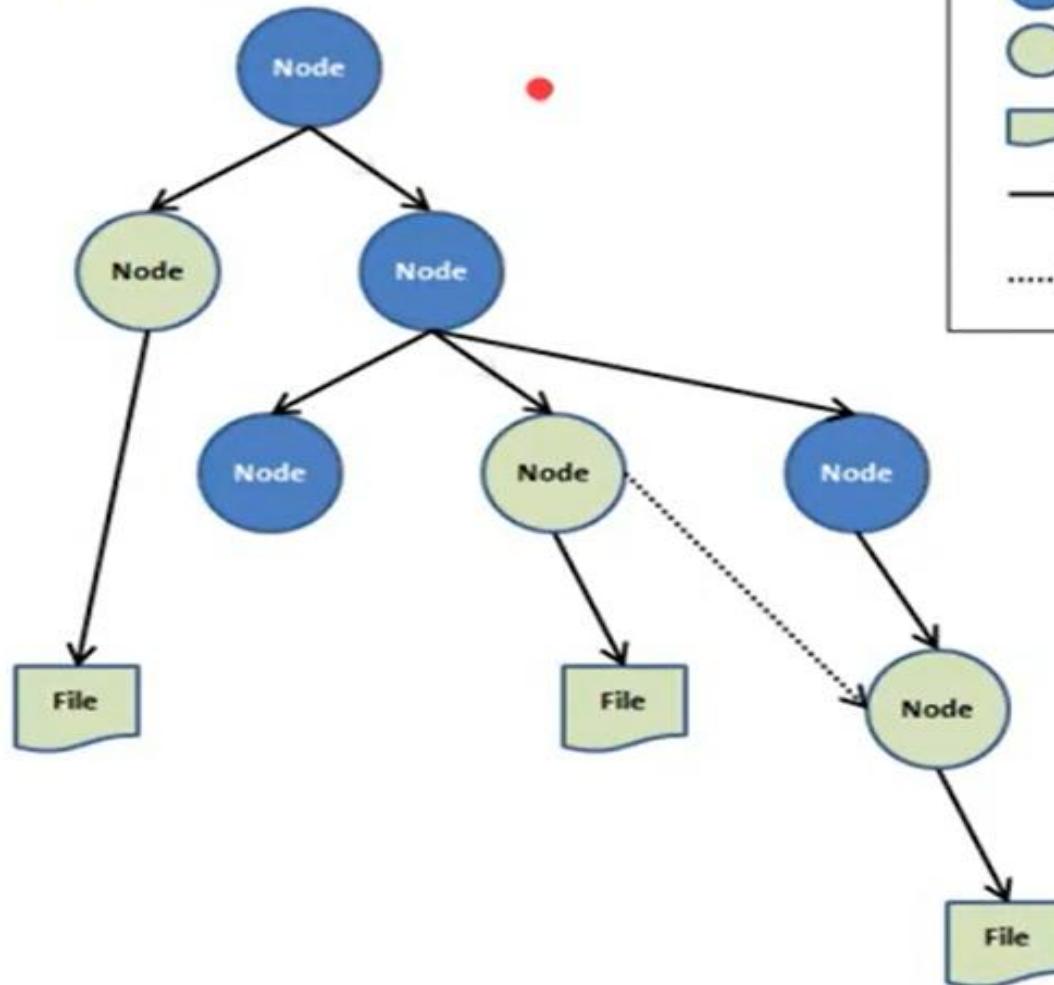
Users and Groups

- Groups
- Users



Repository Structure

Alfresco Repository



- Folder Node
- File Node
- Physical File
- Parent-Child Relationship
- Source-Target Relationship (Peer)



Repository Structure (Node Relationships)

Element	Description
Folder Node (Blue)	Represents a folder (container) in the repository. It can contain subfolders or files.
File Node (Green Circle)	Represents metadata of a file (document). It is linked to the actual content file stored in the Content Store .
Physical File (Rectangle)	The actual binary file stored on disk (e.g., in the content store, using hashed paths).
Parent–Child Relationship (→)	Defines the hierarchical folder–file structure (e.g., a folder contains files or subfolders).
Source–Target Relationship (…)	Defines peer or association relationships (e.g., document linked to another document, or file referencing related data).

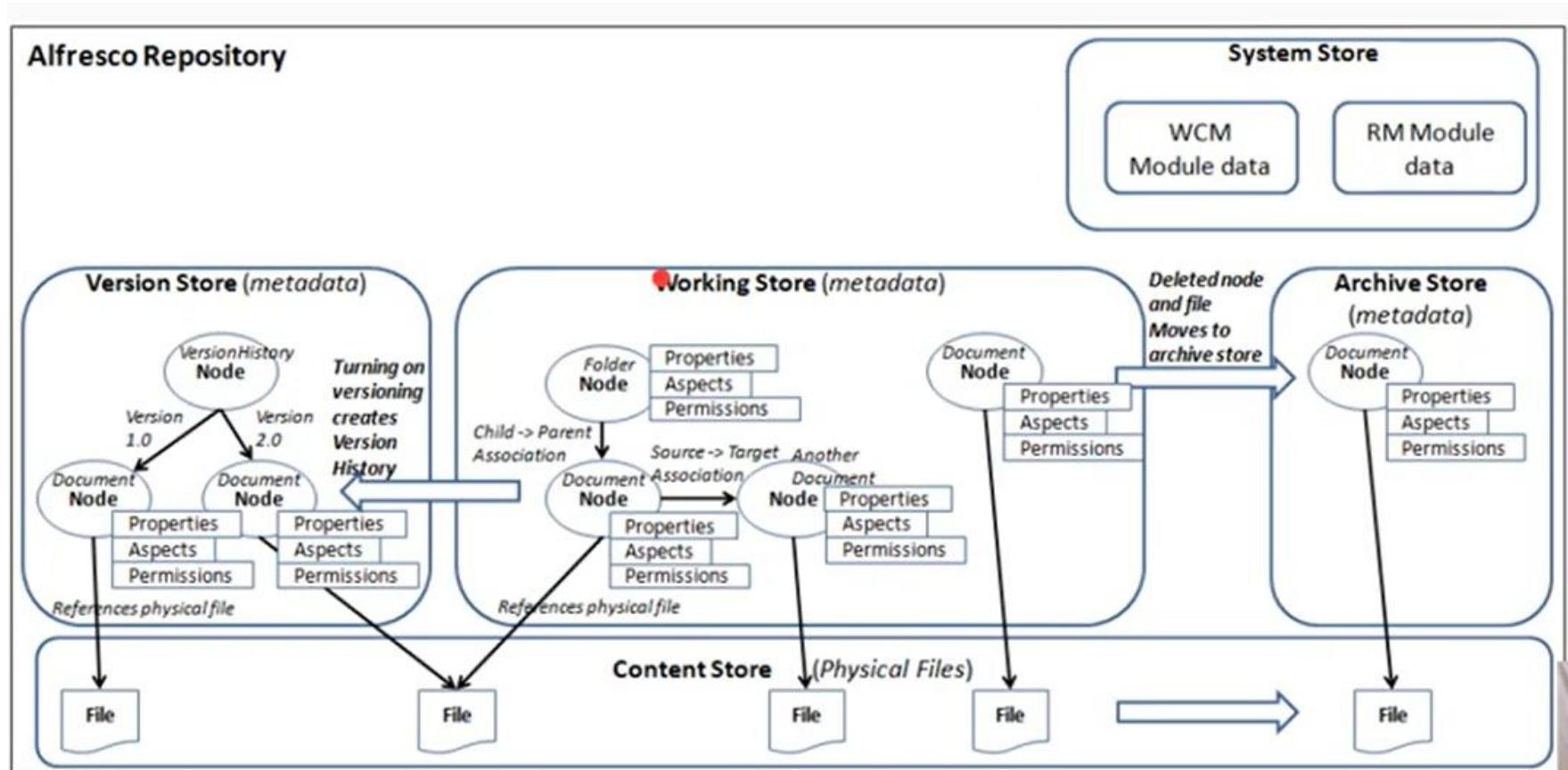


Repository Structure (Node Relationships)

- **Explanation**
- Every content item in Alfresco (folder or file) is a **node**.
- **Nodes contain metadata**, while **files contain content**.
- The repository hierarchy starts at a **root folder node**, branching down into folders and files.
- Files have **peer associations** (dotted lines) for advanced relations (e.g., “related document” links).



Repository Structure





Repository Structure

Store	Description
Working Store (metadata)	The main live workspace — all active documents and folders reside here. Contains nodes with properties, aspects, and permissions.
Version2 Store (metadata)	Stores older versions of documents when versioning is enabled. Each version has its own node referencing the same or new physical file.
Content Store (physical files)	Stores the binary content of all files. It is shared by all metadata stores.
Archive Store (metadata)	Stores deleted documents and folders (soft-deleted). Used for recovery or permanent deletion.
System Store	Holds internal system metadata — e.g., WCM module data, Records Management module data, etc.



Repository Structure

Store	Description
Light weight version store	Legacy – was used before version2 store. Small temporary copies of legacy docs. Alfresco 4.x



Key Workflows

- **◆ Normal Document Flow**
- A **Document Node** resides in the **Working Store** with:
 - Metadata (properties)
 - Aspects (e.g., versionable, auditable)
 - Permissions
 - A pointer to a **Physical File** in the **Content Store**
- If versioning is turned on → Alfresco creates corresponding entries in the **Version Store**.
- When deleted → The document moves from the Working Store → **Archive Store**.



Key Workflows

- **◆ Versioning**
- Turning on versioning creates a **VersionHistory Node**.
- Each version (1.0, 2.0, ...) points to its own **Document Node**.
- Document Nodes reference content in the **Content Store**.
- **◆ Deletion**
- When you delete a file, it isn't immediately removed — it's transferred to the **Archive Store** (can be restored).



Relationships Recap

Relationship	Description
Child → Parent	Folder–file hierarchy
Source → Target	Document–document association (peer)
References physical file	Metadata node points to actual file content



Repository Link Enable / Disable

- <config evaluator="string-compare" condition="Header">
- <header>
- <app-items>
- <item id="repository" index="30" label="link.repository" href="repository">
- <!-- any evaluator that returns true will show the item -->
- <evaluator type="org.alfresco.web.evaluator.user.IsAdmin"/>
- <evaluator type="org.alfresco.web.evaluator.HasAuthority">
- <param name="authority">GROUP_REPO_BROWSERS</param>
- </evaluator>
- </item>
- </app-items>
- </header>
- </config>



Repository Link Enable / Disable

docker-all-in-one-share-1

4e9ff8bdceae [Logs](#) [alfresco-share-all-in-one:development](#)
[8180:8080](#) [9898:8888](#)

STATUS
Running (5 minutes ago) [Stop](#) [Start](#)

Logs Inspect Bind mounts Exec **Files** Stats

Name	Note	Size	Last modified
> src			2 years ago
tmp -> ..//var/tmp		10 Bytes	3 years ago
> var			2 years ago

/usr/local/tomcat/shared/classes/alfresco/web-extension/share-config-custom.xml

XML [Raw](#) [Download](#)

```
111     </config>
112
113     <config evaluator="string-compare" condition="Header">
114         <header>
115             <app-items>
116                 <item id="repository" index="30" label="link.repository" href="repository">
117                     <!-- any evaluator that returns true will show the item -->
118                     <evaluator type="org.alfresco.web.evaluator.user.IsAdmin"/>
119                     <evaluator type="org.alfresco.web.evaluator.HasAuthority">
120                         <param name="authority">GROUP_REPO_BROWSERS</param>
121                     </evaluator>
122                 </item>
123             </app-items>
124         </header>
125     </config>
```



Repository Link Enable / Disable

repository link



Home My Files Shared Files Sites ▾ Tasks ▾ People Repository Admin Tools Debug Menu ▾

Administrator ▾



Administrator Dashboard



GET STARTED

Take a quick tour of Alfresco Share or learn about advanced features.

My Sites

All ▾

Create Site



Quickly access your sites

My Activities

Everyone's activities ▾

all items ▾

in the last 7 days ▾



Follow what's going on in your sites



Repository Link Enable / Disable

No repository link

Horatio Hornblower Dashboard

RPS GROUP
Building Futuristic Infrastructure

GET STARTED
Take a quick tour of Alfresco Share or learn about advanced features.

My Sites

All Create Site

Quickly access your sites
A site is a project area where you can share and discuss content with other site members.

My Activities

Everyone's activities all items in the last 7 days

Follow what's going on in your sites
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as content updates and likes. You'll also see who is joining and leaving your sites.

Horatio Hornblower User Dashboard My Profile Help Home Page Use Current Page Use My Dashboard Logout

Search files, people,

A red oval highlights the "Logout" link in the user menu.



Repo Link to Ldap User

Admin Tools

Groups

Path: ALFRESCO_ADMINISTRATORS

Group	User
ALFRESCO_ADMINISTRATORS	Administrator (admin)
ALFRESCO_MODEL_ADMINISTRATORS	Horatio Hornblower (Horatio Hornblower)
ALFRESCO_SEARCH_ADMINISTRATORS	
ALFRESCO_SYSTEM_ADMINISTRATORS	
Content Manager (Content_Manager)	
EMAIL_CONTRIBUTORS	
Finance (Group_Finance)	
HMS Bounty	
HMS Lydia	
HMS Victory	
HR (Group_HR)	
Intern (Group_Intern)	

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users



Repo Link to Ldap User

Home My Files Shared Files Sites Tasks People **Repository** Admin Tools Debug Menu Horatio Hornblower Search

Horatio Hornblower Dashboard

GET STARTED
Take a quick tour of Alfresco Share or learn about advanced features.

My Sites
All • Create Site
Quickly access your sites
A site is a project area where you can share and discuss content with other site members.

My Activities
Everyone's activities • all items • in the last 7 days •
Follow what's going on in your sites
The activities in this list let you follow the changes in the sites you belong to. You'll see things such as content updates and likes joining and leaving your sites.

My Tasks
Active Tasks • Start Workflow
Active Tasks | Completed Tasks

My Documents
I've Recently Modified •



Model

- A model is a fundamental building block of the content repository that provides a foundation for structuring content and working with content.
- A model has the following characteristics:
 - It describes the data being stored.
 - It allows the management of content metadata by applying custom types or aspects to the content and folders.
 - It is uniquely identified by its defined Namespace, Prefix, and Name.
 - It is defined using a small set of building blocks: custom types, aspects, properties, and constraints.



Model

```
<model name="my:customModel" xmlns="http://www.alfresco.org/model/dictionary/1.0">
  <description>My Custom Content Model</description>
  <author>Parameswari</author>
  <version>1.0</version>
</model>
```



Namespaces

- Defines prefixes for custom elements and properties.

```
<namespaces>
  <namespace uri="http://www.example.com/model/custom/1.0" prefix="my"/>
</namespaces>
```



Types

- Each **type** represents a new kind of content (e.g., an insurance policy document, customer record, etc.).

```
<types>
  <type name="my:policyDocument">
    <title>Policy Document</title>
    <parent>cm:content</parent>
    <properties>
      <property name="my:policyNumber">
        <type>d:text</type>
        <mandatory>true</mandatory>
        <index enabled="true"/>
      </property>
      <property name="my:policyHolderName">
        <type>d:text</type>
      </property>
      <property name="my:policyStartDate">
        <type>d:date</type>
      </property>
    </properties>
  </type>
</types>
```



Types

```
<associations>
    <association name="my:relatedClaim">
        <source>
            <mandatory>false</mandatory>
            <many>false</many>
        </source>
        <target>
            <class>my:claimDocument</class>
            <mandatory>false</mandatory>
            <many>true</many>
        </target>
    </association>
</associations>
</type>
</types>
```



Content Model Overview

- In **Alfresco**, a **content model** defines *what kinds of content* can exist in the repository, *what metadata* they have, and *how they relate* to each other.
- It's the backbone of the Alfresco Repository's structure.

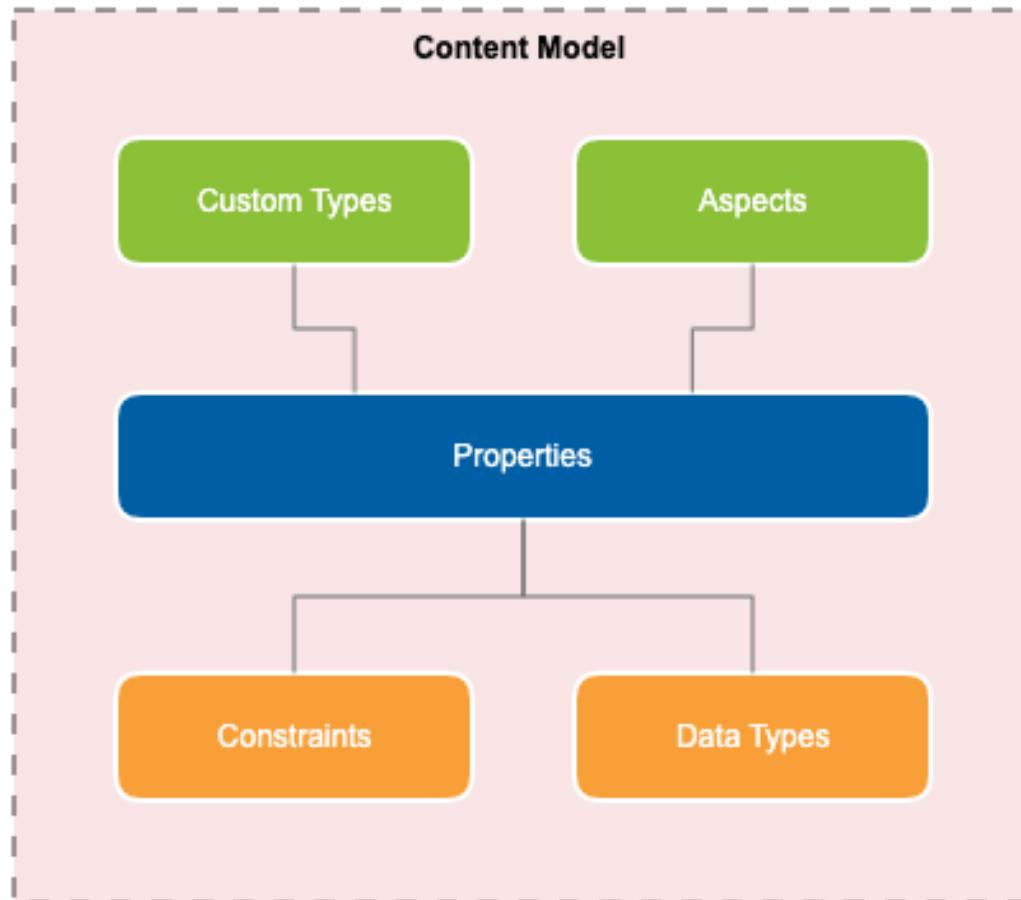


What is a Content Model?

- A **content model** describes the **types**, **properties**, **aspects**, and **associations** that define how data is stored, categorized, and related in Alfresco.
- It's written in XML and deployed to the repository.
- A **content model** defines the structure of custom content types and metadata in Alfresco Repository.
It contains:
 - **Types** → custom document types (e.g. my:invoice)
 - **Aspects** → reusable metadata groups (e.g. my:reviewable)
 - **Properties** → metadata fields (e.g. my:invoiceNumber)
 - **Constraints** → validation rules or fixed value lists



What is a Content Model?





Custom types

- A custom type enumerates the properties and relationships that a file of that type can support.
- Typically, types represents nodes with support for properties and the ability to inherit the definition of a parent type.
- Content and Folder are the two important types defined out-of-the-box.



Aspects

- An aspect is a collection of properties that can encapsulate both data and behavior, providing a flexible tool for modeling content.
- Aspects add extra functionality and properties to the models by attaching them to custom types.
- A file must be of a single type but may have one or more aspects attached to it.
- By default, the content repository comprises of some out-of-the-box aspects, such as Classifiable, Versionable, and so on.



Aspects

```
<aspects>
  <aspect name="my:reviewable">
    <title>Reviewable Aspect</title>
    <properties>
      <property name="my:reviewer">
        <type>d:text</type>
      </property>
      <property name="my:reviewDate">
        <type>d:date</type>
      </property>
    </properties>
  </aspect>
</aspects>
```



Properties

- Properties are metadata which describes the content.
- For example, Author is a property which specifies the person who wrote the content.



Constraints

- Constraints control the input property values.
- For example, you can specify that the author's name must not be more than 40 characters in length.

```
<constraints>
    <constraint name="my:policyTypeConstraint" type="LIST">
        <parameter name="allowedValues">
            <list>
                <value>Health</value>
                <value>Auto</value>
                <value>Life</value>
            </list>
        </parameter>
    </constraint>
</constraints>
```



Manage content models

- To view the actions menu of a content model:
- Log into Alfresco Share as a user that is a member of the ALFRESCO_MODEL_ADMINISTRATORS permission group and click **Admin Tools > Model Manager**.
- Click the **Actions** dropdown against the content model.



Manage content models

Action	Description
Activate	Activates ↓ the model. This action can only be performed if the content model is currently Inactive .
Deactivate	Deactivates ↓ the content model. This action can only be performed if the content model is currently Active .
Delete	Delete the content model. This action can only be performed if the content model is currently Inactive .
Edit	Update the information for a content mode. This action can only be performed if the content model is currently Inactive .
Export	Downloads the content model as a .zip file to upload into another environment or repository.



Model Manager

RPS GROUP
Building Futuristic Infrastructure

Model Manager

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager**
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Models are used to manage custom types and aspects.
You can create a new model, or select an existing model name, and create and view associated custom types and aspects.

[Create Model](#) [Import Model](#)

Models

Name	Namespace	Status	Actions
No models found. Click Create Model to get started.			



Model Manager

Home My Files Shared Files Sites Tasks People Repository Admin Tools Debug Menu Administrator

RPS GROUP
Building Futuristic Infrastructure

Models are used to manage your data. You can create a new model.

Create Model Import

Models

Name

No models found. Click Create Model to start.

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Create Model

Namespace: *

Use numbers, letters and URI characters only Enter a unique model namespace. For example, if you're creating a model for financial documents you might use a URI similar to <http://www.mycompany.com/model/finance/1.0>.

Prefix: *

Enter a namespace prefix for the model. This is shorthand for the namespace URI and is used as the namespace prefix and for advanced search property syntax.

Name: *

Enter a name for the model.

Creator:

Enter an optional creator of the model.

Description:

Create Cancel



Model Manager

Create Model

Namespace: * Enter a unique model namespace. For example, if you're creating a model for financial documents you might use a URI similar to http://www.mycompany.com/model/finance/1.0.

Prefix: * Enter a namespace prefix for the model. This is shorthand for the namespace URI and is used as the namespace prefix and for advanced search property syntax.

Name: * Enter a name for the model.

Creator: Enter an optional creator of the model.

Description:

Create **Cancel**



Model Manager

Models are used to manage custom types and aspects.

You can create a new model, or select an existing model name, and create and view associated custom types and aspects.

[Create Model](#)

[Import Model](#)

Models

Name	Namespace	Status	Actions
policyModel	http://www.example.com/model/policy/1.0	Inactive	Actions ▾

Models are used to manage custom types and aspects.

You can create a new model, or select an existing model name, and create and view associated custom types and aspects.

[Create Model](#)

[Import Model](#)

Models

Name	Namespace	Status	Actions
policyModel	http://www.example.com/model/policy/1.0	Active	Actions ▾



Model Manager

Model Manager

policyModel

<< Show Models Create

Custom Types

Name
No types found. Click Create Custom Type

Aspects

Name
No aspects found. Click Create Aspects

Create Custom Type

Name: *

Use numbers, letters, hyphens (-) and underscores (_) only Enter a name for the type. This will automatically prefix the model namespace.

Parent Type: cm:content (Content)

Select the parent type. The custom type inherits all properties and aspects assigned to the parent.

Display Label:

Enter a display label for the type.

Description:

Create Cancel



Model Manager

Create Custom Type

Name: * Enter a name for the type. This will automatically prefix the model namespace.

Parent Type: Select the parent type. The custom type inherits all properties and aspects assigned to the parent.

Display Label: Enter a display label for the type.

Description:

Buttons:



Model Manager

policyModel

Active Parent Model

<< Show Models

Create Custom Type

Create Aspect

Custom Types

Name	Display Label	Parent	Layout	Actions
pol:policyDocument	Policy Document	cm:content	No	Actions ▾

Aspects

Name	Display Label	Parent	Layout	Actions
------	---------------	--------	--------	---------

No aspects found. Click Create Aspect to get started.



Model Manager

RPS GROUP
Building Futuristic Infrastructure

Model

policyModel - policyDo

<< Show Types and Aspects

Properties

Name

No properties found. Click Create

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager**
- Sites Manager

Repository

Replication Jobs

Users and Groups

Groups

Users

Create Property

Name: *

Use numbers, letters, hyphens (-) and underscores (_) only
Enter a name for the property. This will automatically prefix the model namespace.

Display Label:
Enter a display label for the property.

Description:

Data Type: Select the data type this property can contain.

Requirement: Select if the property value is optional or mandatory.

Multiple: Select if the property should be multivalued

Create **Create and Start Another** **Cancel**

Supplied free of charge with no support, no certification, no maintenance, no warranty and no indemnity by Alfresco or its Certified Partners. Click here for support.



Model Manager

Create Property

Name: * policyNumber
Enter a name for the property. This will automatically prefix the model namespace.

Display Label: Policy Number
Enter a display label for the property.

Description: Policy Number

Data Type: d:long ▾
Select the data type this property can contain.

Requirement: Mandatory ▾
Select if the property value is optional or mandatory.

Multiple:
Select if the property should be multivalued.

Create **Create and Start Another** **Cancel**



Model Manager

policyModel - policyDocument

Active Parent Model

<< Show Types and Aspects

Create Property

Properties

Name	Display Label	Data Type	Requirement	Default Value	Multivalued	Actions
pol:policyHolderName	Policy Holder Name	d:text	Optional		No	Actions ▾
pol:policyNumber	Policy Number	d:long	Mandatory		No	Actions ▾
pol:policyStartDate	Policy Start Date	d:date	Optional		No	Actions ▾
pol:policyType	Policy Type	d:text	Optional		No	Actions ▾



Aspects

policyModel

Active Parent Model

<< Show Models

Create Custom Type

Create Aspect

Custom Types

Name	Display Label	Parent	Layout	Actions
pol:policyDocument	Policy Document	cm:content	No	Actions ▾

Aspects

Name	Display Label	Parent	Layout	Actions
pol:reviewable	Reviewable		No	Actions ▾



Aspects

policyModel

Active Parent Model

<< Show Models Create Custom Type Create Aspect

Custom Types

Name	Display Label	Parent	Layout	Actions
pol:policyDocument	Policy Document	cm:content	No	Actions ▾

Aspects

Name	Display Label	Parent	Layout	Actions
pol:reviewable	Reviewable		No	Actions ▾

policyModel - reviewable

Active Parent Model

<< Show Types and Aspects Create Property

Properties

Name	Display Label	Data Type	Requirement	Default Value	Multivalued	Actions
pol:reviewDate	Review Date	d:date	Optional		No	Actions ▾
pol:reviewer	Reviewer	d:text	Optional		No	Actions ▾



Constraints

Policy Type Edit Property x

You can't change the data type of a property in an active model.

Requirement:

You can't change the mandatory state of a property in an active model.

Multiple:

You can't change the multi-valued state of a property in an active model.

Default Value:

Enter a default value for this property that is appropriate for the selected data type.

Constraint:

Select an optional constraint for the property.

List of Values: *



Layout Design For Model

RPS GROUP
Building Futuristic Infrastructure

Model Manager

policyModel - policyDocument

<< Show Types and Aspects

Active Parent Model

Use the Layout Designer to define how properties you create are displayed.

Properties Layout Area

double column panel

Policy Number [policyNumber]	Policy Type [policyType]
Policy Start Date [policyStartDate]	Policy Holder Name [policyHolderName]
Aa Name [cm:name]	Aa Title [cm:title]
Created Date [cm:created]	Aa Author [cm:author]

Tools

- Application
- Category Manager
- Module Browser
- Node Browser
- Search Manager
- Tag Manager
- Model Manager**
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users



Layout Design For Aspect

policyModel - reviewable

Active Parent Model

<< Show Types and Aspects

Use the Layout Designer to define how properties you create are displayed.

Properties

Layout Area



single column panel

Aa Reviewer [reviewer]

Review Date [reviewDate]

+ Create Property



Create Site

Create Site

x

Type: Collaboration Site ▾

Name: * InsuranceDocs

Site ID: * insureddocs

This is part of the site address. Use numbers and letters only.

Description:

Visibility: Public

Everyone in your organization can access this site.

Moderated

Everyone in your organization can find this site and request access. Access is given by Site Managers.

Private

Only people added by a Site Manager can find and use this site.

Create

Cancel



Test in Node Browser

Node Browser Select Store: workspace://SpacesStore

TYPE: "pol:policyDocument"

storeroot Search

Search for 'TYPE: "pol:policyDocument"' found 1 results (search took 3ms)

Name	Parent	Reference
		workspace://SpacesStore/604fc8cf-6b9b-4075-8fc8-cf6b9ba075b6



Create Site – Document Library

New Folder

New Folder Details

* Required Fields

Name: *

Title:

Description:

Save

Cancel



Create Site – Document Library

- Apply custom type and aspect to a file in Alfresco Share
 - In your site, click **Document Library** to access the library.
 - Click on a file in the library to view it in the file preview screen.
 - To apply the type, perform the following steps:
 - Under **Document Actions**, click **Change Type**.
 - In the **Change Type** window, select whitePaper (dc:whitePaper) from the **New Type** drop-down list.
 - Click **OK**.
 - **Note:** The type properties are displayed on the file preview page, under **Properties**. You can edit these properties using **Edit Properties** under **Document Actions**.
 - In the **Writer** field, enter User1.
 - In the **domain** field, select Sales.
 - Click **Save**.



Create Site – Document Library

InsuranceDocuments Public

Site Dashboard Document Library Site M...

RPS GROUP
Building Futuristic Infrastructure

Documents > claims

Policy123.pdf 1.0
Modified by Administrator on Sun 2 Nov 2025 09:50:24 | ★ Favorite | Like 0 | Comment | Share

Previous Next 1 / 1 Maximize Download

Policy Document

Policy Number	ABC-123456
Policy Holder	Ravi Kumar
Policy Type	Life Insurance
Premium Amount	₹75,000
Expiry Date	01-Nov-2026

Terms and Conditions

This policy covers the insured against death or disability as per the policy type selected. Premiums must be paid on time to keep the policy active. Failure to pay may result in lapse of benefits. Please...

Document Actions

- View In Browser
- Edit Offline
- Upload New Version
- Edit Properties
- Move to...
- Copy to...
- Delete Document
- Start Workflow
- Manage Permissions
- Become Owner
- Manage Aspects



Create Site – Document Library

The screenshot shows a 'Change Type' dialog box centered over a document library interface. The dialog has a red header bar with the title 'Change Type'. Below it is a white input field labeled 'New Type:' containing a dropdown menu with the placeholder 'Select type...'. The dropdown menu is open, showing several options: 'Select type...', 'Smart Folder Template', 'ACME Document', and 'Policy Document (pol:policyDocument)'. The last option, 'Policy Document (pol:policyDocument)', is highlighted with a blue background. A pink hand-drawn style bracket is drawn around the 'Select type...' dropdown and the highlighted option. To the right of the dialog, there is a vertical toolbar with various document management actions: 'Edit Properties', 'Move to...', 'Copy to...', 'Delete Document', 'Start Workflow', 'Manage Permissions', 'Become Owner', 'Manage Aspects', and 'Change Type'. Below this toolbar, there is a section titled 'Tags' with '(None)' listed. Further down is a 'Share' section with a link 'Copy this link to share the current pa...' and a URL 'http://localhost:8180/share/page/site/insur...'. At the bottom is a 'Properties' section.

Change Type

New Type: Select type... *

Select type...

Smart Folder Template

ACME Document

Policy Document (pol:policyDocument)

Edit Properties

Move to...

Copy to...

Delete Document

Start Workflow

Manage Permissions

Become Owner

Manage Aspects

Change Type

Tags

(None)

Share

Copy this link to share the current pa...

http://localhost:8180/share/page/site/insur...

Properties



Create Site – Document Library

(None)

Aspects for Policy

Available to Add

- Effectivity (cm:effectivity)
- Summarizable (cm:summarizable)
- Versionable (cm:versionable)
- Templatable (cm:templatable)
- Emailed (cm:emailed)
- Email Alias (emailserver:aliasable)
- Taggable (cm:taggable)
- Geographic (cm:geographic)
- EXIF (exif:exif)
- Audio (audio:audio)
- Index Control (cm:indexControl)
- Restrictable (dp:restrictable)
- Custom Smart Folder (smf:customConfigSmartFolder)
- System Smart Folder (smf:systemConfigSmartFolder)
- Security Classified (acme:securityClassified)

Currently Selected

- Inline Editable (app:inlineeditable)
- Reviewable (pol:reviewable)

Apply changes Cancel

Older Versions

This document has no |



Create Site – Document Library

▼ Share

Copy this link to share the current page

<http://localhost:8180/share/page/site/insurededocuments/document->

▼ Properties

A Policy Number: (None) Policy Type: (None)
Policy Start Date: (None) Policy Holder Name: (None)
Name: Policy Title: (None)
Created Date: Sun 2 Nov 2025 Author: (None)
09:35:13

Reviewer: (None)

Review Date: (None)

▼ Workflows

This document is not part of any workflows.

▼ Version History

Latest Version

1.0 | **Policy**
 Administrator 7 minutes ago
(No Comment)

Older Versions

This document has no previous versions.



Practical Scenario

- **1) Scenario at a glance**
- **Site & folders**
Insurance site → Policies/ , Claims/ , Evidence/ , Approved/
- **Model:** Insurance Model
Prefix: ins • **Namespace:** <http://example.com/insurance/1.0>
- **Key objects**
 - **Types:** ins:policy, ins:claim
 - **Aspects:** ins:policyInfo, ins:claimInfo, ins:evidenceInfo
 - **Associations**
 - ins:policy → (child-assoc, many) → ins:claim
 - ins:claim ↔ (peer, many) → cm:content (evidence docs)
 - **Constraints:** dropdown lists & regex for numbers; min/max for dates & amounts
- **Built-ins we'll leverage:** cm:content, cm:folder, aspects cm:titled, cm:versionable, cm:taggable, cm:auditable
- **Automation (UI rules):** apply aspects, set defaults, start review workflow, transform to PDF, extract metadata



Create Model

Edit Model x

Namespace: *

Enter a unique model namespace. For example, if you're creating a model for financial documents you might use a URI similar to <http://www.mycompany.com/model/finance/1.0>.

Prefix: *

Enter a namespace prefix for the model. This is shorthand for the namespace URI and is used as the namespace prefix and for advanced search property syntax.

Name:

You can't change the name of an existing model.

Creator:

Enter an optional creator of the model.

Description:

Save Cancel



Create Type

Edit Custom Type

x

Name: ins_policyInfo

You can't change the name of an existing type.

Parent Type: cm:content (Content) ▾

Select the parent type. The custom type inherits all properties and aspects assigned to the parent.

Display Label: Policy Info

Enter a display label for the type.

Description:

Save

Cancel



Create Property

Property	Type	Required	Constraint type	Values / Pattern
ins_policyNumber	Text	<input checked="" type="checkbox"/>	Regular Expression	<code>^[A-Z]{2}-\d{6}\$</code>
ins_policyType	Text	<input checked="" type="checkbox"/>	List of Values	Health , Vehicle , Home , Life
ins_holderName	Text	<input checked="" type="checkbox"/>	—	—
ins_startDate	Date	<input checked="" type="checkbox"/>	—	—
ins_endDate	Date	<input type="checkbox"/>	—	—



Create Property

Edit Property

Name:

You can't change the name of an existing property.

Display Label:

Enter a display label for the property.

Description:

Data Type:

Select the data type this property can contain.

Requirement:

Select if the property value is optional or mandatory.



Create Property

Edit Property

Select if the property should be multivalued.

Default Value:

Enter a default value for this property that is appropriate for the selected data type.

Constraint:

Regular expression ▾

Select an optional constraint for the property.

Regular Expression: *

^[A-Z]{2}-\d{6}\$

Enter the regular expression to use as a constraint.

Indexing:

Free Text ▾

Select whether the property can be searched on and what search types are supported. Use the Basic or Free Text options unless you have specific advanced requirements.

Save

Cancel



Create Property

Aspect 2: ins_claimInfo

Property	Type	Required	Constraint Type	Values
ins_claimNumber	Text	<input checked="" type="checkbox"/>	—	—
ins_claimStatus	Text	<input checked="" type="checkbox"/>	List of Values	New , UnderReview , Approved , Rejected
ins_claimAmount	Double	<input checked="" type="checkbox"/>	Min/Max	Min = 0
Association (use Add Association button)	—	—	—	Type: "Association" / Target: cm:content / Many = true / Name = ins_hasEvidence



Create Property

Aspect 3: ins_evidenceInfo

Property	Type	Required	Constraint Type	Values
ins_evidenceType	Text	—	List of Values	Invoice, Photo, Report, Other
ins_remark	Text	—	—	—



Test in Node Browser

Admin Tools

RPS GROUP
Building Futuristic Infrastructure

▼ Tools

- Application
- Category Manager
- Module Browser
- Node Browser**
- Search Manager
- Tag Manager
- Model Manager
- Sites Manager

Repository

- Replication Jobs

Users and Groups

- Groups
- Users

Node Browser

TYPE: "ins:ins_policyInfo"

Select Store: workspace://SpacesStore

storeroot

Search

Search for 'TYPE: "ins:ins_policyInfo"' found 1 results (search took 1ms)

Name	Parent	Reference
		workspace://SpacesStore/604fc8cf-6b9b-4075-8fc8-cf6b9ba075b6



Test in Node Browser

Node Browser

```
SELECT * FROM cm:dictionaryModel
```

Select Store: workspace://SpacesStore

db-cmis Search

Search for 'SELECT * FROM cm:dictionaryModel' found 2 results (search took 23ms)

Name	Parent	Reference
cm:policyModel	/app:company_home/app:dictionary/app:models	workspace://SpacesStore/9db33ac2-bbaa-4a3a-b33a-c2bbaa4a3a08
cm:InsuranceModel	/app:company_home/app:dictionary/app:models	workspace://SpacesStore/12f8490d-baf8-46ff-b849-0dbaf8e6ff0b



Add Js to Extract Policy Number From Doc

RPS GROUP
Building Futuristic Infrastructure

▼ Documents
I'm Editing
My Favorites

▼ Repository
Repository
Data Dictionary
Email Templates
Imap Configs
Messages
Models
Node Templates
Presentation Templates
Rendering Actions Space
Replication Actions Space
RSS Templates
Saved Searches
Scheduled Actions
Scripts

Select + Create... Upload Selected Items...

Repository > Data Dictionary > Scripts

	alfresco docs.js.sample (Lucene Search) Created 11 days ago by System User 535 bytes Search and log all docs containing text No Tags Favorite Like 0 Comment Share
	append copyright.js.sample (Append Copyright to file) Created 11 days ago by System User 341 bytes Append Copyright line to text or HTML files No Tags Favorite Like 0 Comment Share
	backup and log.js.sample (Backup and logging Script) Created 11 days ago by System User 1 KB Backup files and log the date and time No Tags Favorite Like 0 Comment Share
	backup.js.sample (Backup Script) Created 11 days ago by System User 596 bytes Simple document backup script No Tags Favorite Like 0 Comment Share
	example test script.js.sample (Example Test Script) Created 11 days ago by System User 2 KB Example of various API calls No Tags Favorite Like 0 Comment Share
	extractPolicyNumber.js Created 5 minutes ago by Administrator 1 KB No Description No Tags



Add Js to Extract Policy Number From Doc

- 📁 Space Templates
- 📁 Transfers
- 📁 Web Client Extension
- 📁 Web Scripts
- 📁 Web Scripts Extensions
- 📁 Workflow Definitions
- 📁 Guest Home
- 📁 Imap Attachments
- 📁 IMAP Home
- 📁 Shared
- 📁 Sites
- 📁 Training
- 📁 User Homes

Categories

- 📄 Category Root

★ Favorite | Like 0 | Comment Share

★ Favorite | Like 0 | Comment Share

★ Favorite | Like 0 | Comment Share

`example test script.js.sample` (Example Test Script) 1.0

Created 12 days ago by System User 2 KB

Example of various API calls

No Tags

★ Favorite | Like 0 | Comment Share

`extractPDFPolicyNumber.js`

Created about a day ago by Administrator 2 KB

No Description

No Tags

★ Favorite | Like 0 | Comment Share

`extractPolicyBasic.js`

Created 4 minutes ago by Administrator 2 KB

No Description

No Tags



Add Rule to Site Folder

InsuranceDocuments Public

Site Dashboard Document Library Site Members  

RPS GROUP
Building Futuristic Infrastructure

Documents > claims

claims: Rules

Rules from claims

Drag rules and click Save to reorder.

1 ✓  extractrule
2 ✓  extractPolicyNumber

Save Reset

Select js script from repository scripts

Inherit Rules  

extractrule

Description:

Active
 Run in background
 Rule applied to subfolders

When:
Items are created or enter this folder

If all criteria are met:
All Items

Perform Action:
Extract common metadata fields



Extracted Data

▼ Properties

Name: InsuranceDocument.txt

Title: (None)

Description: (None)

Creator: admin

Created Date: Sat 8 Nov 2025 16:55:34

Modifier: admin

Modified Date: Sat 8 Nov 2025 16:56:03

Size: 1 KB

Mimetype: Plain Text

Author: (None)

ins:ins_holderName: Mr. Arjun Sharma

ins:ins_policyType: Health Insurance

ins:ins_policyNumber: HP-001234

ins:ins_startDate: Mon 1 Jan 2024

ins:ins_endDate: Wed 1 Jan 2025

Using policyBasic.js

.



PDF to Txt Transformation using script

RPS GROUP
Building Futuristic Infrastructure

InsuranceDocuments Public

Select ▼ + Create... ▼ Upload Selected Items... ▼

Documents > insuredocs

 InsuranceDocument.pdf	Created a minute ago by Administrator 26 KB
No Description	
No Tags	
★ Favorite Like 0 Comment Share	
 InsuranceDocument.txt	Modified just now by Administrator 26 KB
No Description	
No Tags	
★ Favorite Like 0 Comment Share	

1 - 2 of 2 << 1 >>

Documents

- All Documents
- I'm Editing
- Others are Editing
- Recently Modified
- Recently Added
- My Favorites

Library

- Documents
- insuredocs
- policies

Categories

- Category Root

Tags



PDF to Txt Transformation using rule

New Rule

* Required fields

General

Name: * Convert PDF to Txt

Description:

Define Rule

When: Items are created or enter this folder

If all criteria are met:

Mimetype is Adobe PDF Document

Unless all criteria are met:

Perform Action:

Transform and copy content

Mimetype: Plain Text to Documents

Other Options

Disable rule Run rule in background
 Rule applies to subfolders If errors occur run script: Select...



PDF to Txt Transformation using script

Action	Purpose
Transform and copy content	Convert document format and copy to another folder
Transform and copy image	Specifically for image conversions (resize, format change)
Extract common metadata fields	Reads metadata (title, author, keywords) from the document
Execute script	Run a JavaScript or server-side script (for example, to extract text, assign properties, etc.)



Test in API

localhost:8080/api-explorer/?urls.primaryName=Model%20API#/types/listTypes

The screenshot shows a browser window with the Alfresco API Explorer. The URL in the address bar is `localhost:8080/api-explorer/?urls.primaryName=Model%20API#/types/listTypes`. The page header includes the Alfresco logo and a dropdown menu set to "Model API". The main content area is titled "Alfresco Content Services REST API" with a note about the Model API definition. A "Model API" button is highlighted in green. At the bottom right, there is a "Authorize" button with a lock icon.

Alfresco Content Services REST API^①

[Base URL: /alfresco/api/-default-/public/alfresco/versions/1]
definitions/alfresco-model.yaml

Model API

Provides access to the model features of Alfresco Content Services.

Authorize



Test in API

<http://localhost:8080/alfresco/api/-default-/public/alfresco/versions/1/types?skipCount=0&maxItems=100>

Server response

Code Details

200

Response body

```
"entry": {
    "isArchive": true,
    "includedInSupertypeQuery": true,
    "isContainer": false,
    "model": {
        "id": "ins:InsuranceModel",
        "author": "Administrator",
        "namespaceUri": "http://example.com/insurance/1.0",
        "namespacePrefix": "ins"
    },
    "id": "ins:ins_claimInfo",
    "title": "Claim Info",
    "parentId": "cm:content"
},
{
    "entry": {
        "isArchive": true,
        "includedInSupertypeQuery": true,
        "isContainer": false,
        "model": {
            "id": "ins:InsuranceModel",
            "author": "Administrator",
            "namespaceUri": "http://example.com/insurance/1.0",
            "namespacePrefix": "ins"
        },
        "id": "ins:ins_evidenceInfo",
        "title": "evidenceInfo",
        "parentId": "cm:content"
    }
}
```

[Copy](#) [Download](#)

Response headers

```
cache-control: no-cache
connection: keep-alive
content-type: application/json; charset=UTF-8
date: Thu, 06 Nov 2025 11:23:06 GMT
x-acme-test: Thu, 06 Nov 2025 11:23:06 GMT
```



Test in API

http://localhost:8080/alfresco/api/-default-/public/alfresco/versions/1/aspects?skipCount=0&maxItems=100

Server response

Code Details

200 Response body

```
        "description": "Alfresco Share Data List Model",
        "namespaceUri": "http://www.alfresco.org/model/datalist/1.0",
        "namespacePrefix": "dl"
    },
    "id": "dl:gantt",
    "title": "Gantt"
}
{
    "entry": {
        "includedInSupertypeQuery": true,
        "description": "Applied to documents that should have restricted distribution",
        "isContainer": false,
        "model": {
            "id": "dp:distributionPoliciesModel",
            "author": "mike.hatfield@alfresco.com",
            "description": "Distribution Policies Model",
            "namespaceUri": "http://www.alfresco.org/model/distributionpolicies/1.0/model",
            "namespacePrefix": "dp"
        },
        "id": "dp:restrictable",
        "title": "Restrictable"
    }
},
{
    "entry": {
        "includedInSupertypeQuery": true,
        "description": "Email Alias",
        "isContainer": false
    }
}
```

Response headers



Alfresco Workflow

- A workflow is a sequence of connected tasks applied to a document or other item of content.
- Each task can be performed by a person, a group, or automatically.
- A workflow is not for external integration nor collecting, disseminating, or coordinating information not directly tied to a document or other item of content in Alfresco Content Services.
- References in this overall documentation to terms like process, tasks, or other tooling are in the context of Alfresco Content Services and as such capabilities are considered workflow.



Alfresco Workflow

- For example, we might have a document that you needed reviewing and approving by several people.
 - The sequence of connected tasks would be:
 - Send an email to each reviewer asking them to review the document within a certain time
 - Each reviewer reviews the document
 - Each reviewer approves or rejects the document
 - If enough reviewers approve, the task is completed successfully.

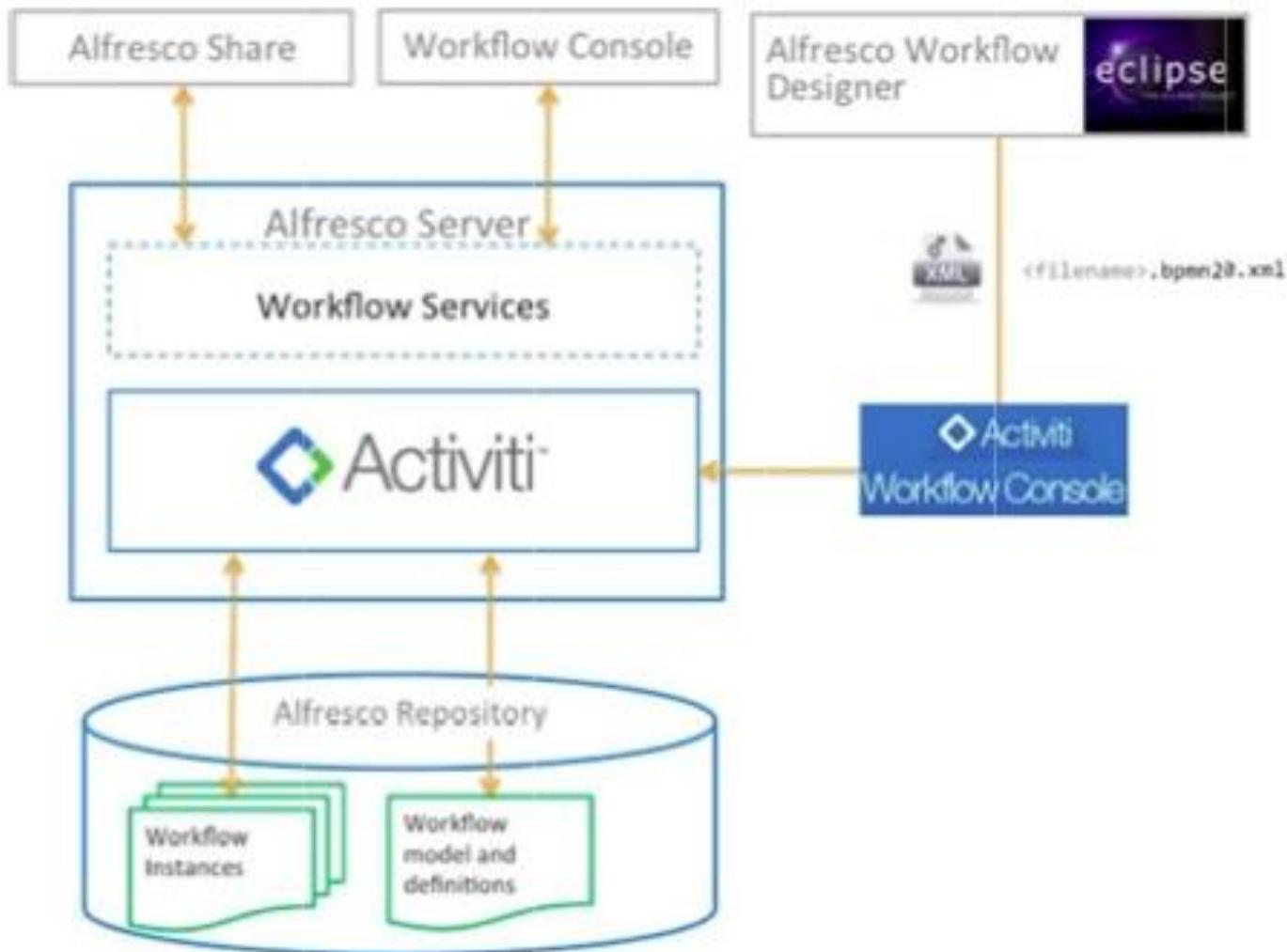


Alfresco Workflow Definitions

- Adhoc
 - Enables you to assign a task to a single user
- Group Review & Approve
 - Enables you to set up review and approval of content, assigning the workflow task to a single group.
- Parallel Review & Approve
 - Enables you to set up review and approval of content, assigning the workflow task to multiple users.
- Pooled Review & Approve
 - Enables you to set up review and approval of content, assigning the workflow task to multiple users.
 - One user can take ownership of the task at a time, completing it or returning it to the pool to be claimed by another user associated with the task.
- Review & Approve
 - Enables you to set up review and approval of content, assigning the workflow task to a single user.

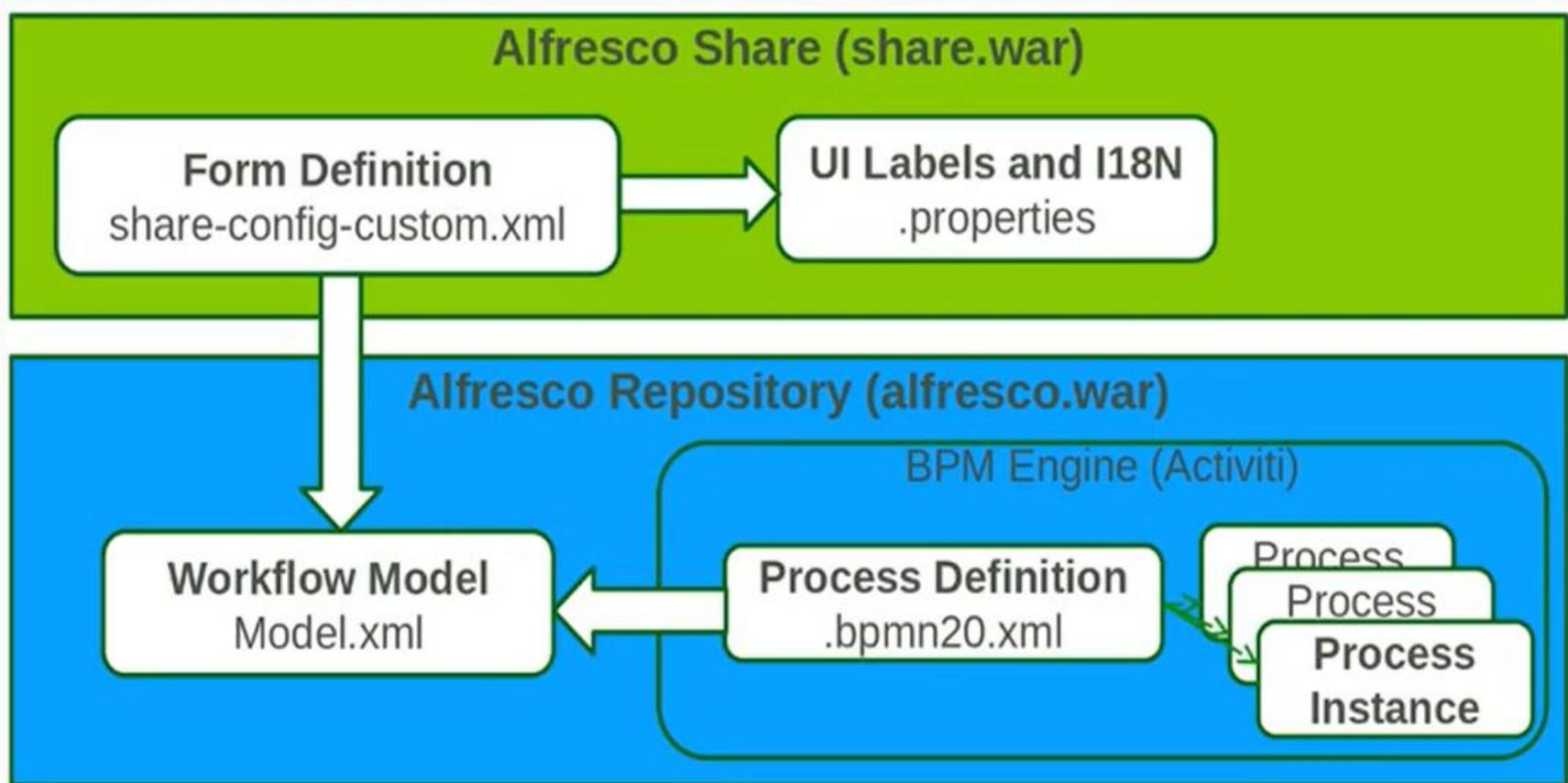


Workflow Architecture



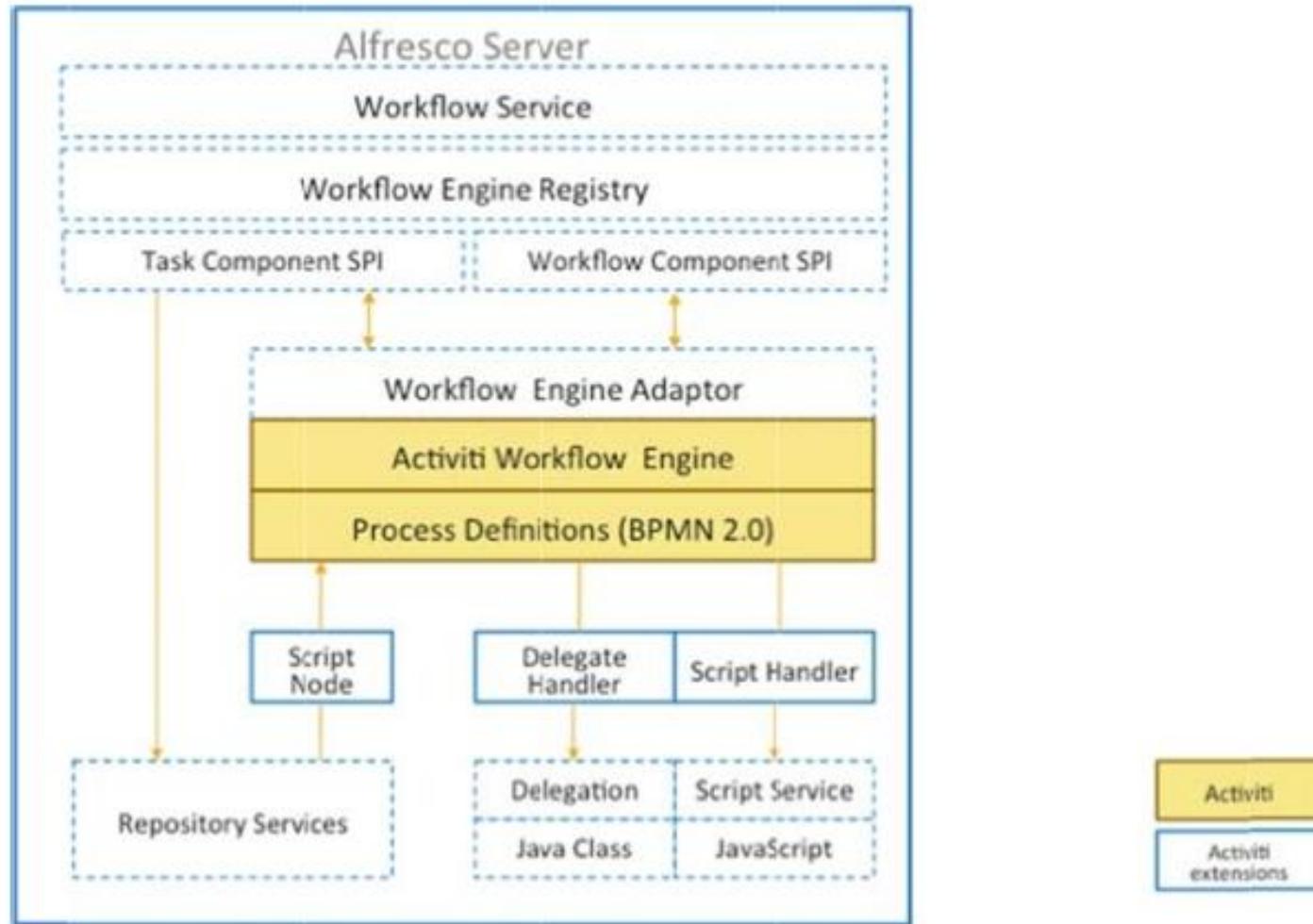


Workflow Architecture





Workflow Architecture





Setting up Activiti designer

- Installing Eclipse
- Installing Activiti designer

1. Start Eclipse.
2. In the eclipse menu bar, click **Help > Install New Software**.
3. Click **Add**.

The Add Repository dialog is displayed.

4. Fill in the name field with ActivitiBPMN 2.0 designer, and fill in the location field with the following URL:

`https://www.activiti.org/designer/update/`

5. Click **OK**.
6. Click **Next** and accept any license agreement check boxes, and then click **Finish**.

Eclipse will install the latest version of the Activiti designer eclipse plugin.



Setting up Activiti designer

Screenshot of the Eclipse IDE interface showing the 'Install' dialog box for Activiti BPMN Designer.

The 'Available Software' list shows two items:

Name	Version
Activiti BPMN Designer	5.18.0.201508100929
Activiti Eclipse BPMN 2.0 Designer	

Details section checkboxes (selected):

- Show only the latest versions of available software
- Hide items that are already installed
- Group items by category
- Contact all update sites during install to find required software

Progress bar: Calculating requirements and dependencies.

Buttons at the bottom: < Back, Next >, Finish, Cancel.

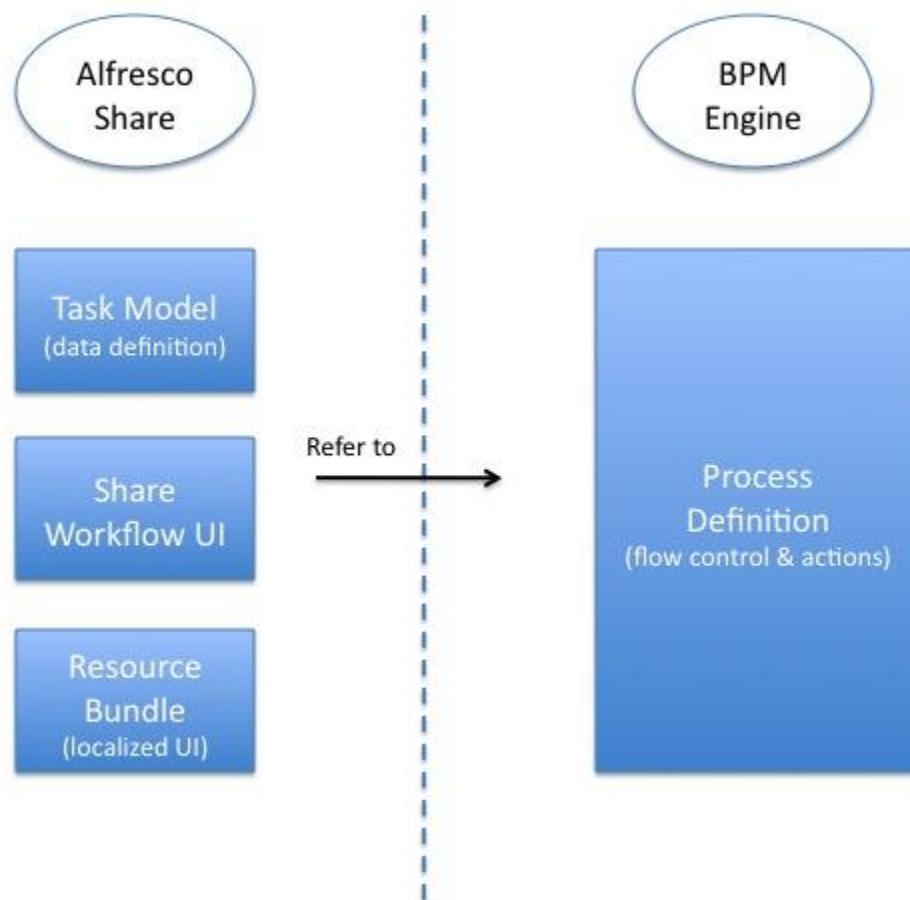


Workflow

- **1) Scenario (what users do in Share)**
- A user uploads a document to “/Company Home/Contracts”.
- From **More... → Start Workflow**, they choose **Two-Level Approval**.
- They enter: Approver 1, Approver 2, Due date, and Reason.
- Approver 1 sees a task in **My Tasks** → Approve/Reject (+ comment).
- If approved, it goes to Approver 2 for final approval.
- If finally approved, the document gets an “Approved” aspect + properties and is moved to “Contracts/Approved”. If rejected at any step, it gets “Rejected” aspect and is moved to “Contracts/Rejected”.

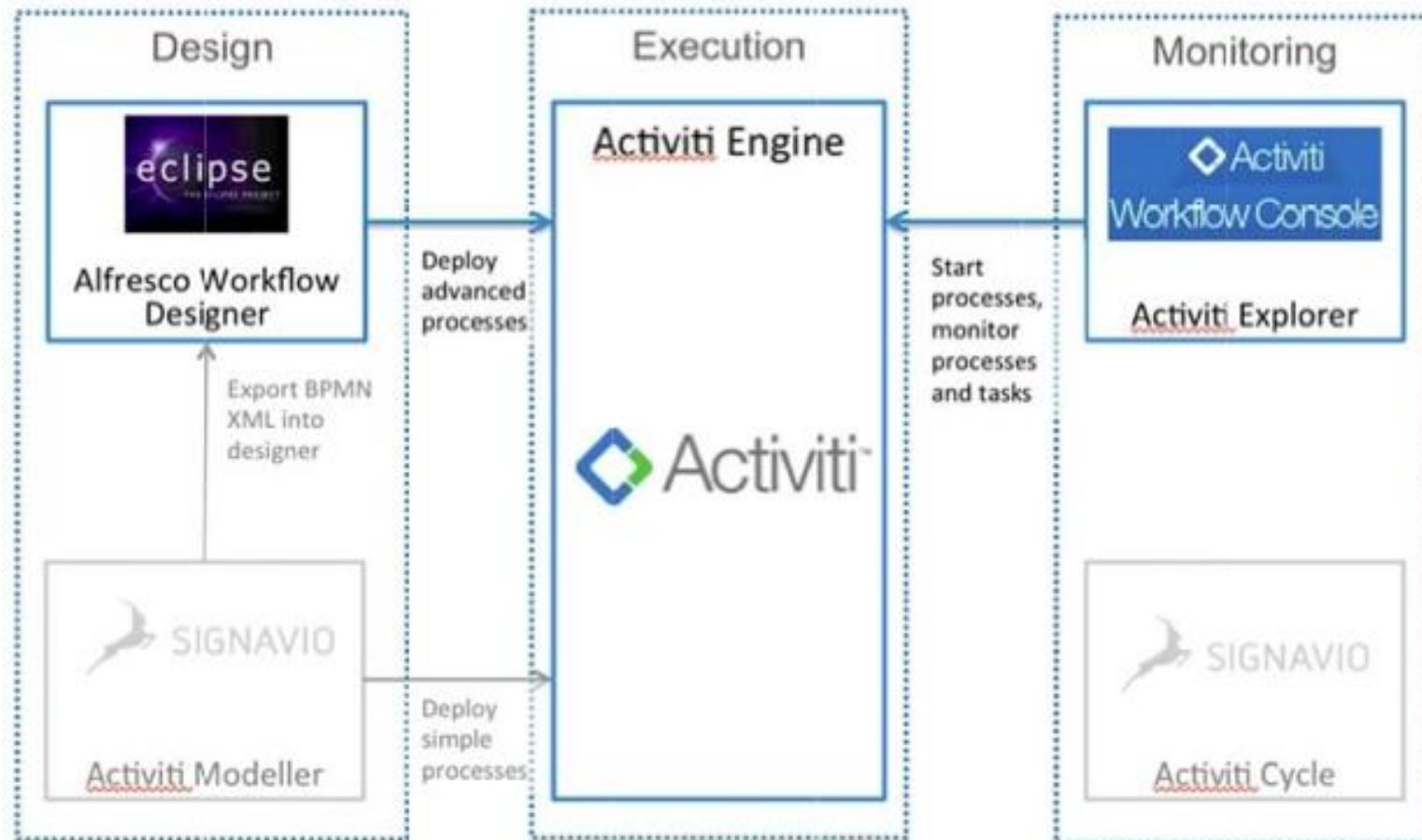


Workflow Artifacts





Workflow Tools





Alfresco Workflow Document

- <https://ecmarchitect.com/alfresco-developer-series-tutorials/workflow/tutorial/tutorial.html#hello-world-examples>



Activiti using Alfresco Web console

<http://localhost:8080/alfresco/s/admin/admin-workflowconsole>

Command

show definitions all

localhost:8080/alfresco/s/admin/admin-workflowconsole

Insert title here Empire New Tab How to use Assertio... Browser Automatio... node.js - How can I... Freelancer-dev-810... Courses New Tab Airtel 4G Hotspot nt8F83

Admin Console Host: ef85704e36ea IP: 172.21.0.7

Alfresco Workflow Admin Console

System Summary
Consoles
Model and Messages Console
Tenant Console
Workflow Console
Support Tools
Node Browser

Command (type 'help' for help)

```
Last command: show definitions all
Duration: 83ms
```

Execute

Result

```
id: activiti$activitiAdhoc:1:4 , name: activiti$activitiAdhoc , title: New Task , version: 1
id: activiti$activitiInvitationModerated:1:23 , name: activiti$activitiInvitationModerated , title: Invitation - Moderated , version: 1
id: activiti$activitiInvitationNominated:1:26 , name: activiti$activitiInvitationNominated , title: Site Invitation - Nominated , version: 1
id: activiti$activitiInvitationNominatedAddDirect:1:29 , name: activiti$activitiInvitationNominatedAddDirect , title: Add user activiti invitation process , version: 1
id: activiti$activitiParallelGroupReview:1:20 , name: activiti$activitiParallelGroupReview , title: Review and Approve (group review) , version: 1
id: activiti$activitiParallelReview:1:16 , name: activiti$activitiParallelReview , title: Review and Approve (one or more reviewers) , version: 1
id: activiti$activitiReview:1:8 , name: activiti$activitiReview , title: Review And Approve (single reviewer) , version: 1
id: activiti$activitiReviewPooled:1:12 , name: activiti$activitiReviewPooled , title: Review and Approve (pooled review) , version: 1
id: activiti$my-process:1:35 , name: activiti$my-process , title: My Process , version: 1
id: activiti$resetPassword:1:32 , name: activiti$resetPassword , title: On Premise Reset Password process , version: 1
```



Activiti using Alfresco Web console



Command (type 'help' for help)

```
use definition activiti$helloworld:1:2804
```

Last command: start
Duration: 739ms

Execute

Result

```
started workflow id: activiti$2901 , def: helloworld
no further transitions
```



Activiti using Alfresco Web console



Command (type 'help' for help)

```
use definition activiti$helloworld:1:2804
```

Last command: start
Duration: 739ms

Execute

Result

```
started workflow id: activiti$2901 , def: helloworld
no further transitions
```



Activiti using Alfresco Web console



Command (type 'help' for help)

```
start
```

Last command: use definition activiti\$helloworld:1:2804

Duration: 1ms

Execute

Result

```
definition: activiti$helloworld:1:2804 , name: helloworld , version: 1
workflow: None
path: None
```



Activiti using Alfresco Web console



Command (type 'help' for help)

Last command: start

Duration: 374ms

Execute

Result

```
started workflow id: activiti$2970 , def: helloworld
no further transitions
```



Activiti using Alfresco Web console Commands

Command	What it does
show workflows all	Shows all running workflows.
use workflow <workflow id> where <workflow id> is something like activiti\$6300	Makes all subsequent commands happen in the context of the specified workflow.
show transitions	Shows all leaving transitions.
signal <path id> <transition> where <path id> is something like activiti\$6334 and transition is the name of the leaving transition you want to take. Leave off the transition to take the default.	Signals the token. Good when your workflow is stuck on a node or when you want to take a transition without fooling with the task management UI.
desc path <path id> where <path id> is something like activiti\$6334	Dumps the current context. Great for debugging process variables.
end workflow <workflow id> where <workflow id> is something like activiti\$6300	Cancels the specified workflow.
show definitions all	Shows the current deployed workflows.
undeploy definition <workflow id> or undeploy definition name <workflow name>	Undeploys the specified workflow and stops any workflows running with that definition. The <workflow id> variant undeploys a specific version of a workflow.



Custom Work Flows

Screenshot of a developer's environment showing a BPMN diagram and its corresponding XML file.

The left sidebar shows the project structure:

- activitidemo
- src
 - main
 - java
 - resources
 - processes
 - static
 - templates
 - application.properties- test
- .gitattributes
- .gitignore
- HELP.md
- mvnw
- mvnw.cmd
- pom.xml
- External Libraries
- Scratches and Consoles

The right pane displays the BPMN-Activiti-Diagram for the file `order.bpmn20.bpmn20.xml`.

The diagram consists of three main elements:

- A green circle representing a start event.
- A rounded rectangle representing a task labeled "Review Document".
- A red circle representing an end event.

The flow starts at the green circle, goes to the "Review Document" task, and ends at the red circle.

The XML table below the diagram provides details about the process:

ID	order.bpmn20
Name	order.bpmn20
Documentation	(empty)

At the bottom, the status bar shows the path: activitidemo > src > main > resources > processes > order.bpmn20.xml. The system tray indicates the user is connected to ENG IN, has a battery level, and the date is 09-11-2025 at 12:13.



Custom Work Flows

Repository Browser

The screenshot shows the RPS GROUP logo and tagline "Building Futuristic Infrastructure". The left sidebar has sections for "Documents" (I'm Editing, My Favorites) and "Repository" (Repository, Data Dictionary, Email Templates, Imap Configs, Messages, Models, Node Templates, Presentation Templates, Rendering Actions Space, Replication Actions Space, RSS Templates, Saved Searches, Scheduled Actions, Scripts, Smart Folder Downloads, Smart Folder Templates, Solr Facets Space). The main area is titled "Repository Browser" and shows a file list. A red line highlights the breadcrumb path "Repository > Data Dictionary > Workflow Definitions". The list contains:

- order.bpmn (Created 3 days ago by Administrator, 26 KB, No Description, No Tags)
- scwf-helloWorldUI.bpmn20.xml (Modified just now by Administrator, 2 KB, No Description, No Tags)

A red curly brace groups the two items in the list.

File	Created/Modified	Size	Description	Tags
order.bpmn	3 days ago	26 KB	No Description	No Tags
scwf-helloWorldUI.bpmn20.xml	just now	2 KB	No Description	No Tags



Custom Work Flows

Select ▾ + Create... ▾ Upload Selected Items... ▾

Repository > Data Dictionary > Workflow Definitions

<input type="checkbox"/>		order.bpmn	Created 4 days ago by Administrator	26 KB
		No Description		
		No Tags		
		Favorite Like 0 Comment Share		
<input type="checkbox"/>		order.bpmn20.xml	Modified 5 minutes ago by Administrator	3 KB
		No Description		
		No Tags		
		Favorite Like 0 Comment Share		
<input type="checkbox"/>		scwf-helloWorldUI.bpmn20.xml	Modified 28 minutes ago by Administrator	3 KB
		No Description		
		No Tags		
		Favorite Like 0 Comment Share		

1 - 3 of 3 << 1 >>



Custom Work Flows

▼ Properties

Auto Version - on update properties only: No

Created Date: Sun 9 Nov 2025 12:09:47

Workflow Engine Id: activiti

Workflow Deployed: Yes ✓

Creator: admin

Name: order.bpmn20.xml ✓

Locale: en_IN

Version Label: 1.3

Workflow Name: activiti\$order.bpmn20

Modifier: admin

Modified Date: Sun 9 Nov 2025 12:28:44

Auto Version: Yes

Version Type: MINOR

Initial Version: Yes

Last Accessed Date: (None)

Encoding: UTF-8

Size: 2727

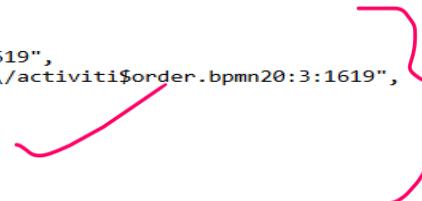
Mimetype: text/xml



Custom Work Flows

<http://localhost:8080/alfresco/service/api/workflow-definitions?refresh=true>

```
"name": "activiti$activitiParallelGroupReview",
"title": "Review and Approve (group review)",
"description": "Assign a review task to a group",
"version": "1"
},
{
"id" : "activiti$activitiParallelReview:1:16",
"url": "api\\workflow-definitions\\activiti$activitiParallelReview:1:16",
"name": "activiti$activitiParallelReview",
"title": "Review and Approve (one or more reviewers)",
"description": "Assign a review task to multiple reviewers",
"version": "1"
},
{
"id" : "activiti$activitiReview:1:8",
"url": "api\\workflow-definitions\\activiti$activitiReview:1:8",
"name": "activiti$activitiReview",
"title": "Review And Approve (single reviewer)",
"description": "Assign a review task to a single reviewer",
"version": "1"
},
{
"id" : "activiti$activitiReviewPooled:1:12",
"url": "api\\workflow-definitions\\activiti$activitiReviewPooled:1:12",
"name": "activiti$activitiReviewPooled",
"title": "Review and Approve (pooled review)",
"description": "Assign a review task to multiple reviewers, who can take ownership of the task",
"version": "1"
},
{
"id" : "activiti$my-process:1:35",
"url": "api\\workflow-definitions\\activiti$my-process:1:35",
"name": "activiti$my-process",
"title": "My Process",
"description": "This is my custom process",
"version": "1"
},
{
"id" : "activiti$order.bpmn20:3:1619",
"url": "api\\workflow-definitions\\activiti$order.bpmn20:3:1619",
"name": "activiti$order.bpmn20",
"title": "order.bpmn20",
"description": "order.bpmn20",
"version": "3"
},
```





Custom Work Flows



TestSite Public

Workflow:

Please select a workflow... ▾

My Process

This is my custom process

New Task

Assign a new task to yourself or a colleague

order.bpmn20

order.bpmn20

Review and Approve (group review)

Assign a review task to a group

Review and Approve (one or more reviewers)

Assign a review task to multiple reviewers

Review and Approve (pooled review)

Assign a review task to multiple reviewers, who can take ownership of the task

Review And Approve (single reviewer)

Assign a review task to a single reviewer

SomeCo Whitepaper Submission

SomeCo Whitepaper Submission



Custom Work Flows

Copy this link to share the current page

<http://localhost:8180/share/page/site/testsite/document-details?nodeRef=workspace%3AContract.pdf>

▼ Properties

Name: Contract.pdf

Title: (None)

Description: (None)

Author: (None)

Mimetype: Adobe PDF Document

Size: 26 KB

Creator: admin

Created Date: Sun 9 Nov 2025
12:30:27

Modifier: admin

Modified Date: Sun 9 Nov 2025
12:30:27

▼ Workflows

This document is part of the following workflow(s):



(No Message)
order.bpmn20



Custom Work Flows

My Tasks ?

Active Tasks ▾  Start Workflow

<< < 1 - 2 of 2 > >> Active Tasks | Completed Tasks

The document was reviewed and approved.
15 November, 2025
Approved, Not Yet Started

Review Document
Workflow Task, Not Yet Started





Custom Work Flows

My Tasks

Active Tasks ▾ Start Workflow

<< < 1 - 1 of 1 > >> Active Tasks | Completed Tasks

 Review Document
Workflow Task, Not Yet Started

Horatio



Custom Work Flows

Completed Workflows

Review the document

Due: 09 November, 2025

Started: 09 November, 2025

Ended: 09 November, 2025

Type: order.bpmn20

Description: order.bpmn20

Review the document

Due: 12 November, 2025

Started: 09 November, 2025

Ended: 09 November, 2025

Type: order.bpmn20

Description: order.bpmn20

Review the document

Due: 09 November, 2025

Started: 09 November, 2025

Ended: 09 November, 2025

Type: order.bpmn20

Description: order.bpmn20



Web scripts

- A **Web Script** in Alfresco is a combination of:
 - **URL mapping** (defines endpoint)
 - **JavaScript or Java backend logic**
 - **Template for rendering output (FTL or JSON)**
 - **XML descriptor** that binds them all together
 - Web Scripts can be deployed either in the **Repository (repo-tier)** or in **Share (web-tier)**.



Web scripts

Type	Description	Example
Repository Web Scripts	Run inside the Alfresco Repository (alfresco.war) and access the NodeService , SearchService , etc.	/alfresco/service/insurance/policies
Share Web Scripts	Run inside the Share web app (share.war), typically rendering pages or forms.	/share/page/your-custom-page
Remote Web Scripts	Run in an external application communicating with Alfresco via REST.	/alfresco/service/api/...



Web scripts

- We can use web scripts for various solutions, such as:
 - Integrating Content Services with third party systems
 - Providing feeds
 - Developing data services
 - Developing UI services such as portlets
 - Customizing search
 - Acting as a back-end to client tools, such as Orbeon Forms
 - Integrating with Microsoft Office
 - Developing Facebook applications
 - Building UI components in Surf



Web scripts

- Web Scripts are a way of implementing REST-based API.
- They could also be referred to as Web Services.
- They are stateless and scale extremely well.
- Repository Web Scripts are defined in XML, JavaScript, and Free Marker files and stored under alfresco/extension/templates/webscripts.
- Repository Web Scripts are referred to as Data Web Scripts as they usually return JSON or XML.

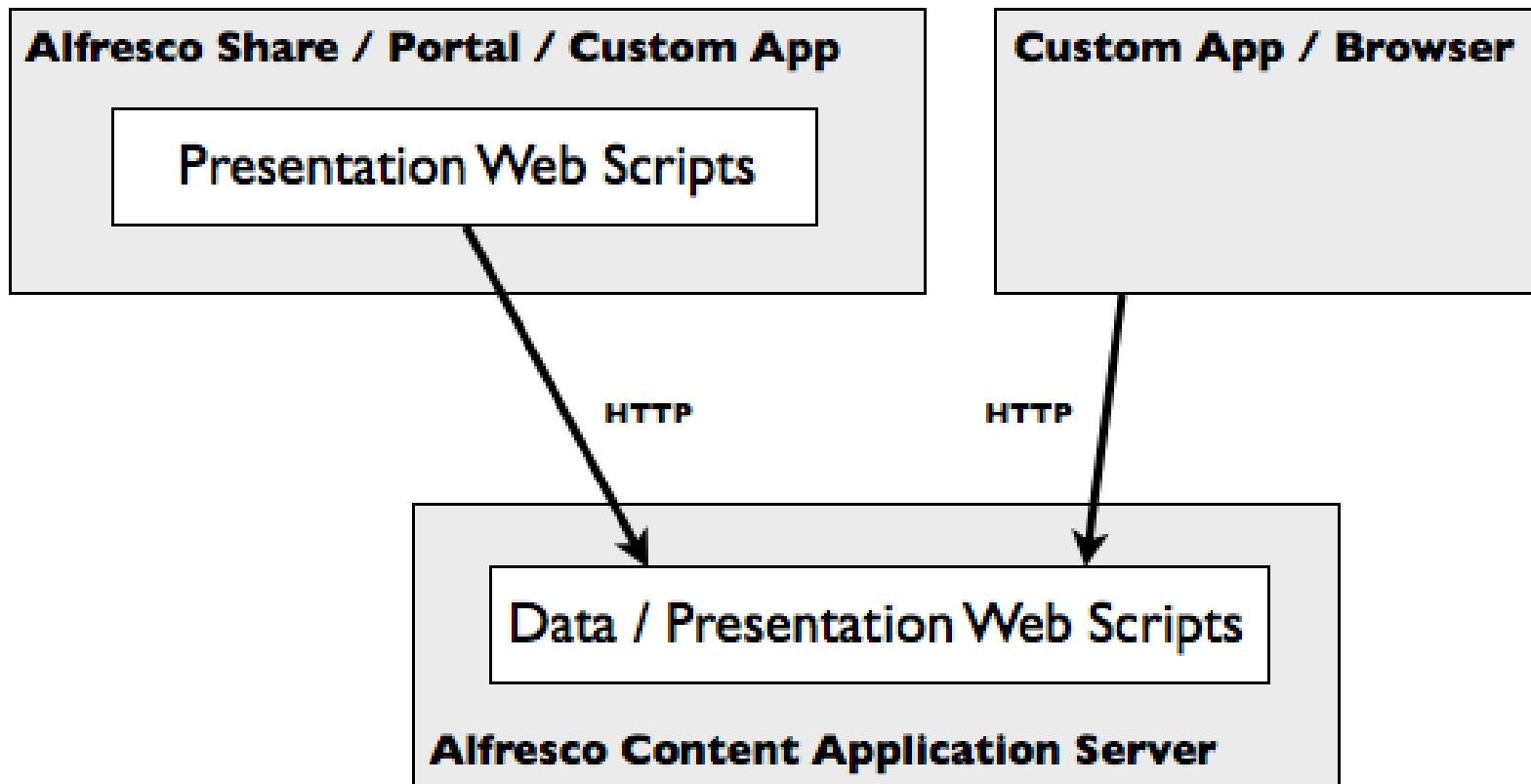


Web scripts Types

- A web script is a service bound to a URI that responds to HTTP methods such as GET, POST, PUT, and DELETE.
- There are two kinds of web scripts that use the same underlying code:
 - Data web scripts
 - Presentation web scripts

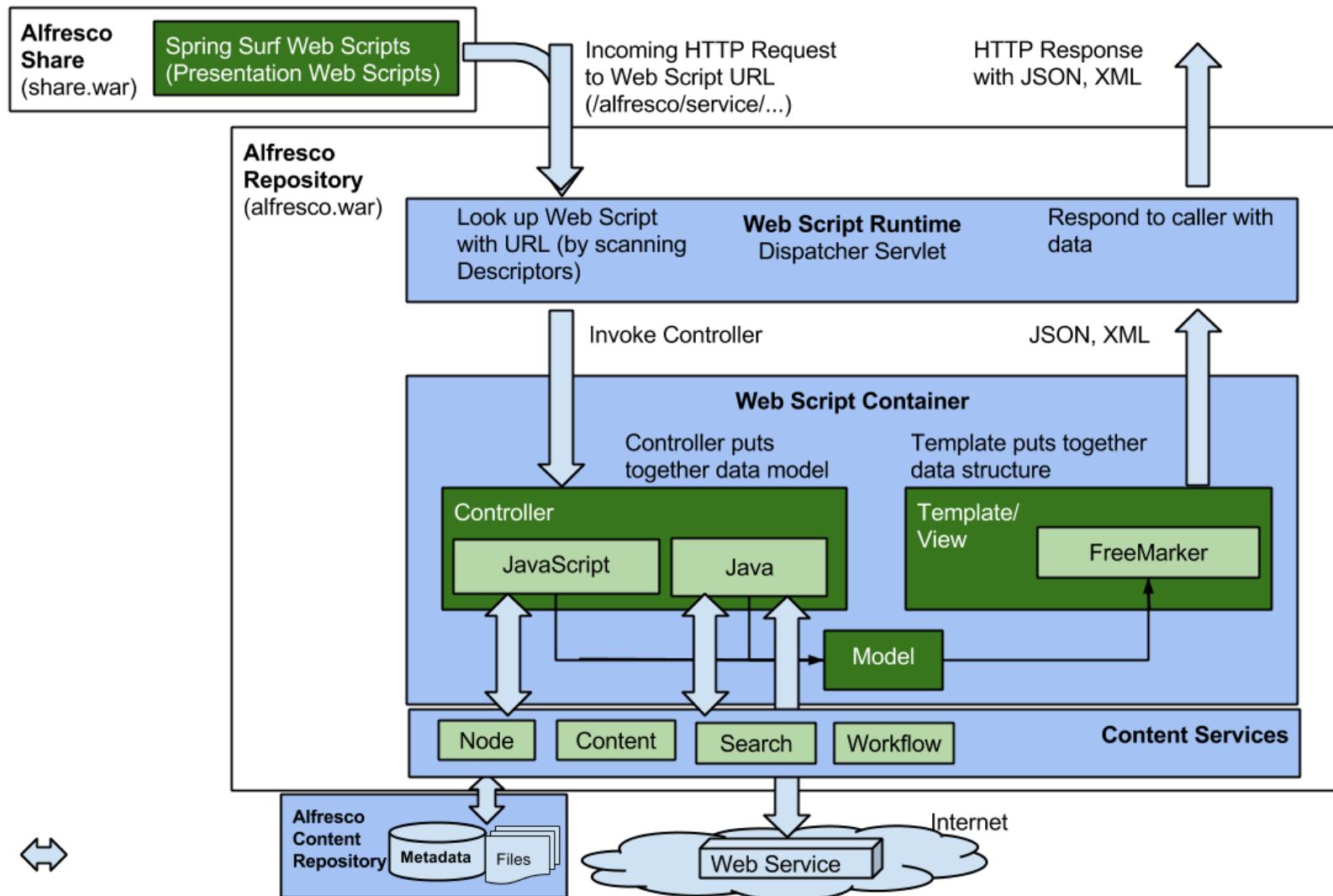


Web scripts Types





Web scripts





Web scripts

- Repository web scripts
 - Repository web scripts encapsulate access and modification of content/data held in the content repository; therefore, they are provided and exposed only by the Content Services server.
 - Data web scripts provide a server interface for client applications to query, retrieve, update, and perform processes, typically using request and response formats such as XML and JSON.

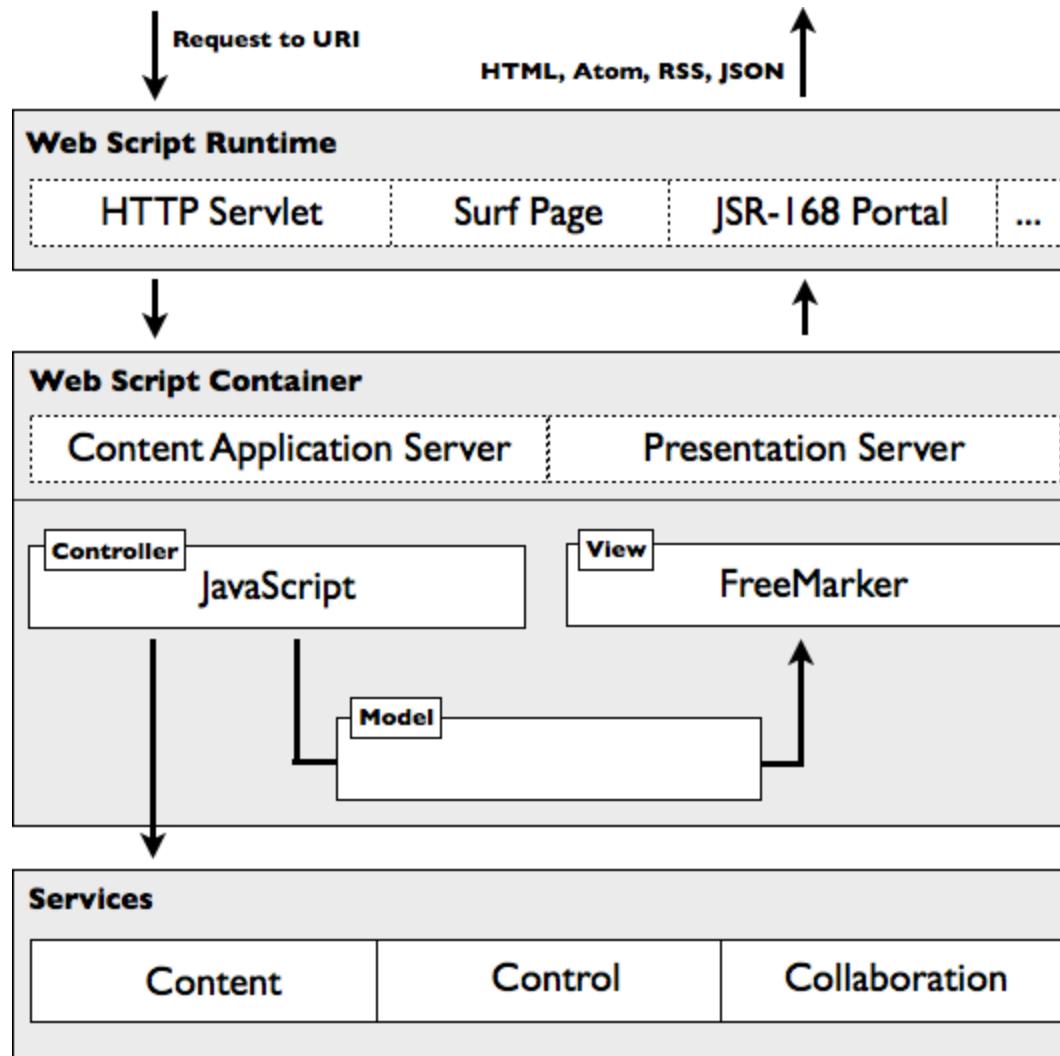


Web scripts

- Presentation web scripts
 - Presentation web scripts let you customize and extend the web UI.
 - They typically render HTML and can include browser-hosted JavaScript.
 - Unlike data web scripts, presentation web scripts can be hosted in the Content Services server or in a separate presentation server.
 - When hosted separately, presentation web scripts in the presentation server interact with data web scripts in the Alfresco content application server by using the Repository REST API.



Web scripts





Web scripts

<https://docs.alfresco.com/content-services/latest/tutorial/platform/web-scripts/#helloworldws>



The screenshot shows the Alfresco Content Services interface. The left sidebar has sections for 'Documents' (I'm Editing, My Favorites) and 'Repository' (Repository, Data Dictionary, Email Templates, Imap Configs, Messages, Models, Node Templates, Presentation Templates, Rendering Actions Space, Replication Actions Space, RSS Templates, Saved Searches, Scheduled Actions, Scripts, Smart Folder Downloads, Smart Folder Templates, Solr Facets Space, Space Templates, Transfers, Web Client Extension, Web Scripts, Web Scripts Extensions). The 'Web Scripts Extensions' folder is highlighted with a red circle and a red curly brace. The main area shows a list of items under 'org':

- org**
Modified 44 minutes ago by Administrator
No Description
No Tags
★ Favorite | Like 0 | Comment
- hello.get.desc.xml**
Created 33 minutes ago by Administrator 120 bytes
No Description
No Tags
★ Favorite | Like 0 | Comment Share
- hello.get.html.ftl**
Created 33 minutes ago by Administrator 11 bytes
No Description
No Tags
★ Favorite | Like 0 | Comment Share
- readme.html**
Created 14 days ago by System User 1 KB
How to customize an existing Web Script
No Tags
★ Favorite | Like 0 | Comment Share

At the bottom, there is a navigation bar with links: 1 - 4 of 4 << 1 >>

Must restart acs and share containers



Web scripts

← → ⌂ ⌂ localhost:8080/alfresco/service/index/all

Alfresco Index of All Web Scripts

Community schema 20,100

395 Web Scripts

[Back to Web Scripts Home](#)

Package: /

Hello

[GET /alfresco/service/hello](#)

Polite greeting

Authentication: none

Transaction: none

Format Style: any

Default Format: html

Id: hello.get

Descriptor: workspace://SpacesStore/app:company_home/app:dictionary/cm:extensionwebscripts/hello.get.desc.xml

Package: /alfresco/tutorials



Web scripts

Cache example

[GET /alfresco/service/cache](#)

Demonstrate cache controls

Authentication: user

Transaction: required

Format Style: any

Default Format: html

Id: [org/example/cache.get](#)

Descriptor: [workspace://SpacesStore/app:company_home/app:dictionary/cm:extensionwebscripts/org/example/cache.get.desc.xml](#)

Package: [/org/springframework/extensions/webscripts](#)



Web scripts

File Upload Sample

GET /alfresco/service/**multipart**

Form to upload file.

Authentication: user

Transaction: required

Format Style: any

Default Format: html

Id: org/example/**multipart.get**

Descriptor: workspace://SpacesStore/app:company_home/app:dictionary/cm:extensionwebscripts/org/example/**multipart.get.desc.xml**

File Upload Sample

POST /alfresco/service/**multipart**

Handling of **multipart/form-data** requests.

Authentication: user

Transaction: required

Format Style: any

Default Format: html

Id: org/example/**multipart.post**

Descriptor: workspace://SpacesStore/app:company_home/app:dictionary/cm:extensionwebscripts/org/example/**multipart.post.desc.xml**

Package: /org/springframework/extensions/webscripts

Web Scripts Home

GET /alfresco/service/

GET /alfresco/service/index



Web scripts

← → ⌂ ⌂



localhost:8080/alfresco/service/multipart



File: Policy123.pdf

Title: Policy DOC

Description:



Web scripts



localhost:8080/alfresco/service/multipart



Uploaded Contract.pdf of size 26,176.

Favorites | Link | Comment

<input type="checkbox"/>		Contract.pdf (Contract PDF) Created 3 minutes ago by Administrator 26 KB No Description No Tags Favorite Like 0 Comment Share
<input type="checkbox"/>		Policy123.pdf (Policy DOC) Created 5 minutes ago by Administrator 2 KB No Description No Tags Favorite Like 0 Comment Share

Under repository

Questions



Module Summary

- Alfresco Architecture
- Installation
- Content Model
- Configuration and Layouts
- Alfresco Share Components Customization
- Working with the new Aikau framework in Alfresco Share
- Workflows

