

Alfresco Content Services 7.0

LAUNCH WEBINAR

April 13, 2021

The Hyland logo is located on the right side of the slide. It consists of the word "Hyland" in a white, sans-serif font, with a registered trademark symbol (®) at the end. The background behind the text is a vertical gradient bar transitioning from green at the top to blue at the bottom.

Hyland®

WEBINAR SPEAKERS



Scott Craig
VP of Product Management



Steve Blair
Director, ACS Product Management



Christian Finzel
Senior Product Marketing Manager

AGENDA

- Introduction
- Overview of Alfresco Content Services 7.0
 - Install and Upgrade
 - Content at Scale
 - Elasticsearch
 - SDK
- What's Next for ACS?

INTRODUCTION

HYLAND + ALFRESCO = CUSTOMER VALUE



HYLAND & ALFRESCO ARE LEADERS IN THE 2020 GARTNER MQ



Alfresco has been recognized as a LEADER – first time in history

- Alfresco continues to be the #1 position amongst the open source players within the CSP market
- Gartner highlights Alfresco's capabilities around Content Services, Records Management and Open APIs



Hyland has been recognized as a LEADER for the 11th consecutive year

- Hyland was once again commended by Gartner for the strength of our industry expertise and industry solutions
- Recognized Hyland's continued efforts to deepen and broaden the platform's integration capabilities

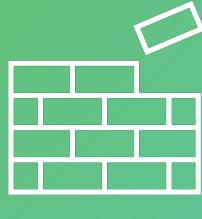
OVERVIEW OF ALFRESCO CONTENT SERVICES 7.0

ALFRESCO CONTENT SERVICES 7.0



Cloud native, scalable platform

- Modular approach provides customers a scalable platform
- Handle the growing volume of unstructured content and billions of documents



Platform extensibility

- Enhanced Developer experience with the Alfresco APIs and SDKs
- Speed up the development process and realize faster time to value



Improved search

- End users can locate the exact content they need easily and quickly
- Highly scalable direct searches, even in largest repositories
- Early Access of Elasticsearch



Open source by DNA

- Continued commitment for open standards and APIs
- Empowers organisations to easily integrate & customize Alfresco to meet their business needs

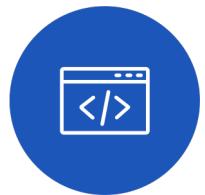
ALFRESCO CONTENT SERVICES VERSIONS

Alfresco Community Edition



Content

Core content components with core search & process engine, governance and security services



Developer experiences

Java APIs, REST API, ADF, SDKs

Alfresco Content Services 7.0



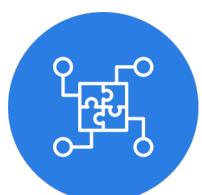
Business tooling

Migration, Bulk Editing, Elasticsearch, Content Insights, Artificial Intelligence, S3, Azure, MS O365, SAP, Salesforce



Ease of use

End-User applications ADW, Desktop Sync, Admin apps, Business Intelligence Tooling



Content centric process

Process, Modeler, App Generation and Deployment



Security & risk management

Governance, Roles & Security Admin, Certifications, Industry domain certifications

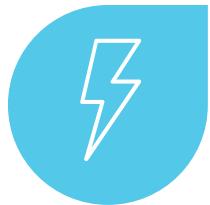
WHAT'S NEW

- INSTALL & UPGRADE
- CONTENT @ SCALE
- ALFRESCO SEARCH ENTERPRISE 3.0
- ALFRESCO SDK

INSTALL & UPGRADE

OVERVIEW

Updated capabilities for Installation & Deployment



What?

Ansible Playbooks for ACS 6.x, 7.x, Community
Helm 3 Charts for ACS 6.x, 7.x,
Alfresco Extension Inspector



Commercial?

All deployment scripts are available as Open Source



Why?

Majority of our base still uses Linux-based non-containerised environments



Supporting Details?

We continue to fully support the Docker Containers and add reference playbooks for Ansible non-containerise deployment



When?

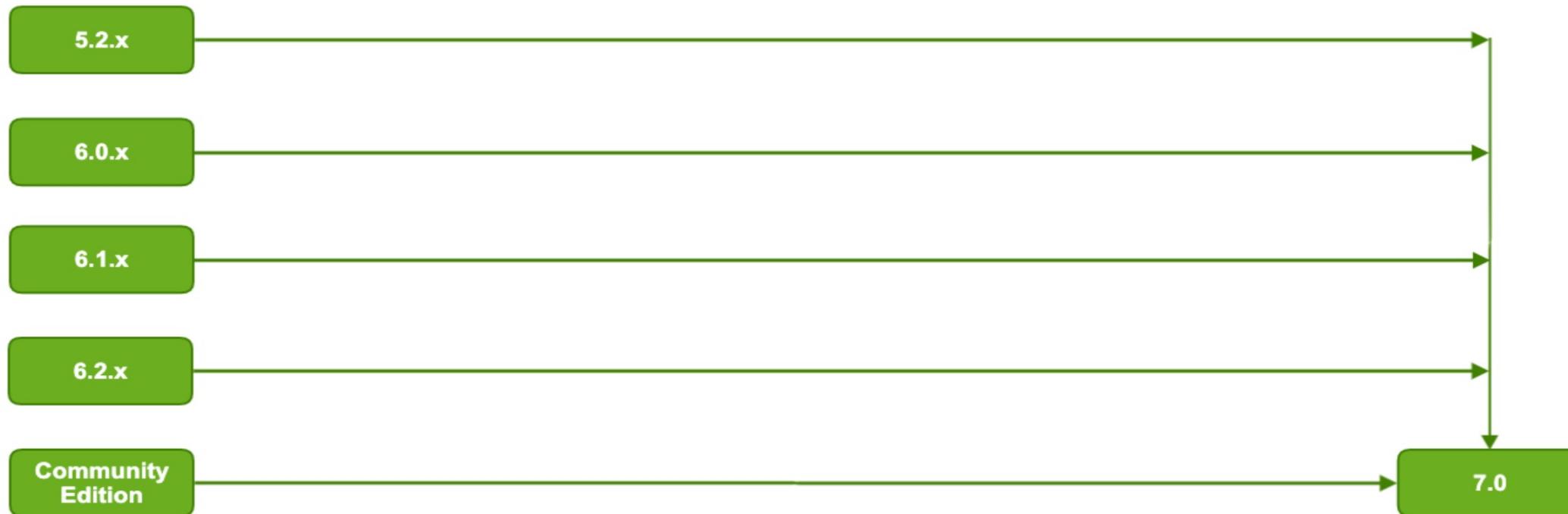
Available from 18 March 2021



Where?

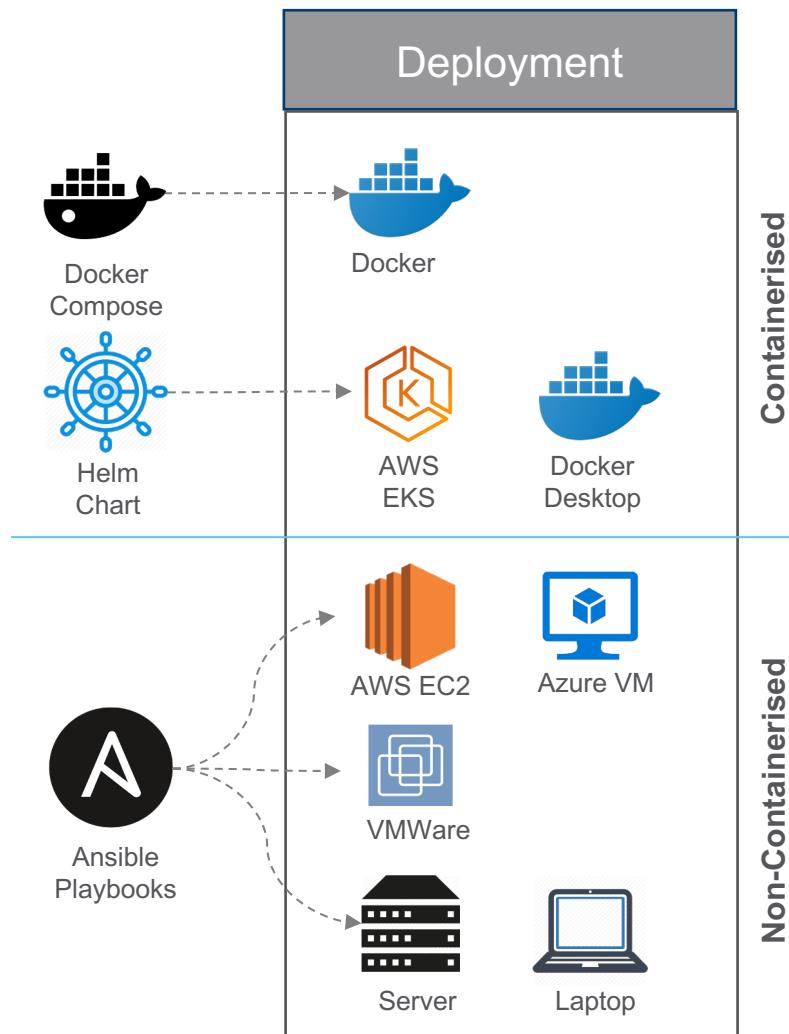
Helm Charts available on GitHub
Ansible Playbooks available on GitHub
Ansible Playbooks available as Zip download

CUSTOMER UPGRADE JOURNEY TO ACS 7.0



- Direct upgrades to Content Services 7.0 are supported from only 5.2.x and later.
- Content Services 7.0 introduces changes that require new releases of all modules. To upgrade to 7.0, you also need to update any of the module artifacts to which you're entitled.
- You must upgrade to a supported version of Alfresco Search Services before upgrading the repository to 7.0.
- Upgrades from Content Services 5.2 must first upgrade from Solr 4 to Alfresco Search Services
- For upgrades for versions pre- 5.2, please contact Services or a Partner to discuss and plan your upgrade

UPGRADE TOOLING TO HELP MOVING TO ACS 7.0



Product	Docker Compose	Helm 3	Ansible
ACS 6.x	✓	✓	✓ NEW
ACS 7.x	✓	✓	✓ NEW
ACS Community	✓	✓	✓ NEW
APS 1.11	(container only)	✓	
DBP	Alfresco University Sandbox	Pending	Pending
ACS Trial	✓		
APS Trial	(container only)		

Ansible & HELM Blog Posts are on hub.alfresco.com to guide you with more information

TYPICAL DEPLOYMENT ACS 7.0 STACKS

Infrastructure	Community	Enterprise
<ul style="list-style-type: none">• CentOS: 7 / 8• Tomcat: 9.0.41• Postgres: 13• OpenJDK: 11.0.7• ActiveMQ: 5.16.1• LibreOffice: 6.3.5• ImageMagick: 7.0.10	<p>Repository: 7.0.0</p> <p>Share: 7.0.0</p> <p>API Explorer 7.0.0</p> <p>Search Services: 2.0.1</p> <p>Transformation</p> <p>Engine: 2.3.10</p> <p>AOS: 1.4.0</p>	<p>Community plus:</p> <ul style="list-style-type: none">• ADW: 2.1• TransformationRouter: 1.3.2• Shared File System: 0.13.0• Sync Services: 3.4.0

CONTENT AT SCALE

QUERY ACCELERATOR

Query Accelerator is a new *enterprise-only* feature for optimising selected queries in very large content repositories.

- The function supports large customer deployments with hundreds of millions of nodes
- An admin defines a set of properties and aspects known as a “Query Set” to have faster searches vs. TMDQ or Solr
- Increased performance comes at a slight cost of additional space for denormalized databases tables and indexes

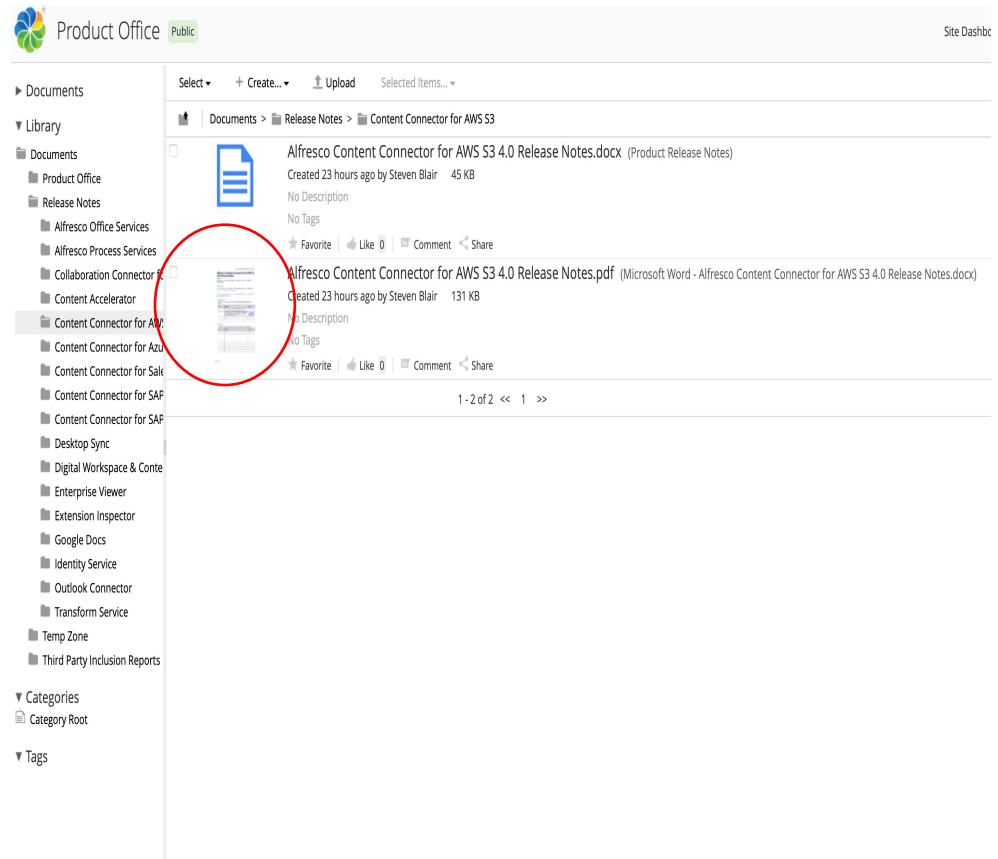
The screenshot shows the Alfresco Admin Console interface. At the top, there's a header bar with the Alfresco logo and the text "Alfresco | Query Accelerator". Below the header, a sub-header says "View and manage query accelerator query set configuration files." On the left, a sidebar lists various system services: System Summary, Consoles (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, Subscription Service, Support Tools (Active Sessions, Hot Threads, Thread Dump). The "Query Accelerator" item in the Repository Services section is highlighted with a red circle. In the main content area, there's a "Query Set Configuration Service" section with a "Refresh Query Set" button (also circled in red) and a description: "Reload and refresh query set JSON files.". To the right, there are fields for "Query Set Name" (with a placeholder "The name of the query set to be removed from the registry and database.") and "Query Set Version Number" (with a placeholder "The version number of the query set to be removed from the registry and database."). Below these is a "Remove Query Set" button and the text "Remove query set from registry and database". At the bottom, there's a "Query Sets" table:

Name	Version	Status	Tablename	Table Exists in Database
it_test01	1	LIVE	alf_qs_it_test01_v1	yes
it_test02	1	LIVE	alf_qs_it_test02_v1	yes

RENDITIONS IMPROVEMENTS

Changes to behaviour to how ACS stores Renditions as individual nodes in the repository:

- New control over CMIS uploads on generating doclib thumbnails to enable/disable thumbnail creation on CMIS
- Selectively disable renditions to avoid extra load
- Supports customers who would like to selectively disable out of the box renditions, to avoid unnecessary processing while ingesting large numbers of documents.
- Change to ADW not requesting "doclib" renditions on upload by default for Thumbnails that removes explicit request on every upload



CLEAN-UP JOBS OPERATE AT SCALE

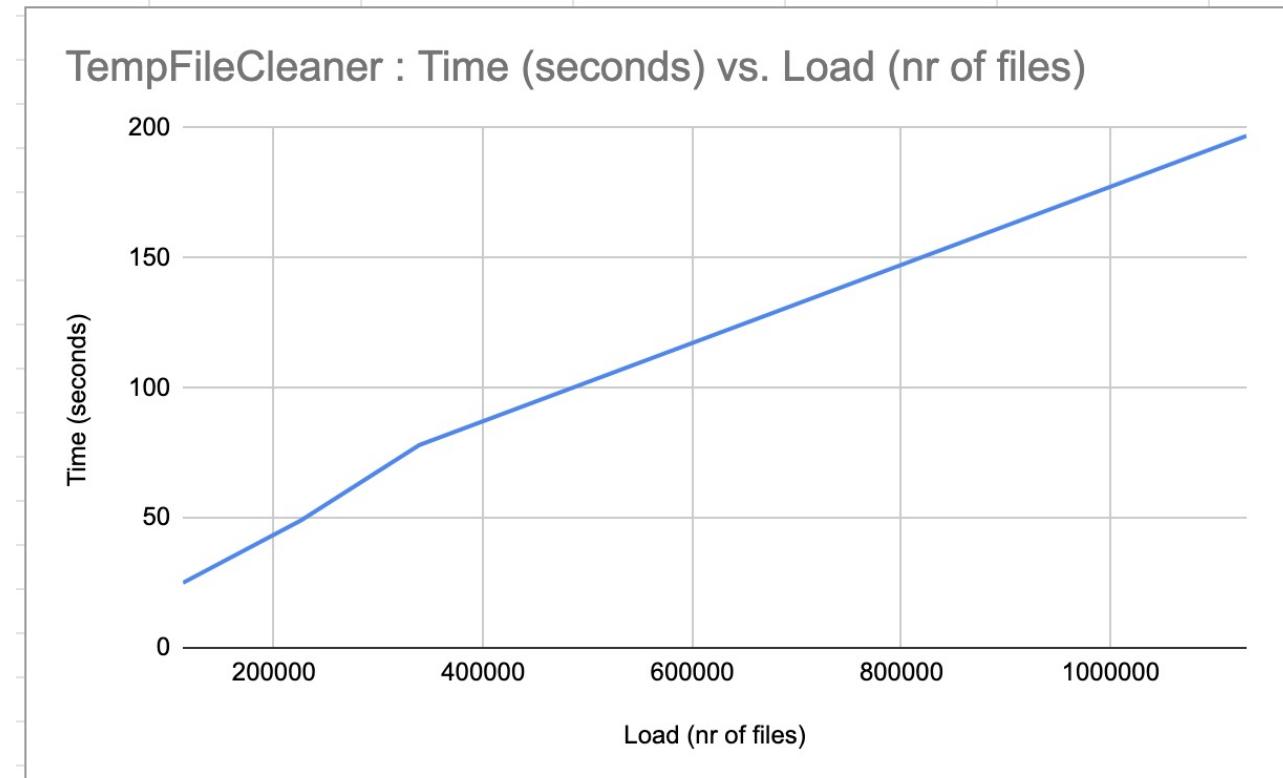
Improvements for Clean up jobs that fail @ Scale which can cause unreliability, support calls &/or the system to be unstable.

- **tempFileCleanerTrigger**

New tempFileCleanerTrigger configurations to be able to to configure a maximum number of files/time duration that the *TempFileCleaner* can delete

- **propTablesCleanupTrigger** (Postgres in 7.0, other DBs post-7.0)

Work has shown that clean-up jobs on number of files vs. time (up to 100M) linear performance



IMPROVED METADATA EXTRACTION + STANDARDIZED INTERFACE

- **Metadata Extracts:**
 - The out of the box extraction of metadata is now generally performed asynchronously
 - T-Engines connected to the repository either as part of the Alfresco Transform Service or as a local transformer which provides better security, scalability and reliability.
 - Metadata extraction is now extensible, out-of-process, and independently scalable.
- **Single Transform Engine to work with:**
 - Developers have a simple and stable interface to the file transformation service, in order to provide transformers for custom use-cases.
 - Standardized interface allows Community Developers to easily upgrade their custom transformers to run on Enterprise.

Customer Benefits

- Faster findability of content through metadata search at scale
- Simple file transformation service that is easy to run, maintain, and extend

ADDITIONAL HEADLINES

■ Translation

- All new functionality / UI strings have been translated into our 15 supported languages

■ Hotfixes prior to 7.0

- All 6.2.2 bug / fixes are included in the release

■ Alfresco applications, solutions, connectivity

- Upgraded and compatible with ACS 7.0
- New Stack support

The screenshot displays the Alfresco Content Services web interface. At the top, there's a navigation bar with links like 'Home', 'Your Files', 'Shared Files', 'Sites', 'Tasks', 'Users', 'Repositories', and 'Administration'. On the right, there's an 'Administrator' dropdown and a search bar. Below the navigation is a sidebar with categories: 'Documents' (including 'Data Dictionary', 'Guest Home', 'Imap Attachments', 'IMAP Home', 'Shared', 'Sites', 'User Homes'), 'Categories' (including 'Your Files'), 'Tags' (with a note 'No tags found'), and 'System' (with a note 'No system tags found'). The main content area shows three folder items: 'Data Dictionary' (changed by 22 days ago, managed by System User), 'Guest Home' (created by 22 days ago, root space), and 'Imap Attachments' (created by 22 days ago, attachments). At the bottom of the main area, it says 'Consola de administración Host: a50a57ca97be IP: 172.30.0.2'. To the right, there's a 'Resumen del sistema' (System Summary) section with detailed information about the system's environment, including Java version, memory usage, and Alfresco versions. It also lists various services and protocols (FTP, WebDAV, Solr, Clusters) and audit features.

ALFRESCO APPLICATIONS, SOLUTIONS, CONNECTIVITY

Alfresco Portfolio March 2021 Compatible with ACS 7.0

- Alfresco Process Automation (PaaS)
- Alfresco In-Process SDK, Alfresco Event SDK
- Alfresco Process Services
- Alfresco Identity Service
- Alfresco Extension Inspector
- Alfresco Intelligence Services
- Alfresco Content Services for iOS, Android
- Alfresco Digital Workspace
- Alfresco Content Connector for S3
- Alfresco Development Framework
- Alfresco Mobile Workspace
- Alfresco Federation Services
- Alfresco Governance Services Enterprise
- Alfresco Collaboration Connector for Microsoft 365
- Alfresco Content Accelerators for Claims, Policies & Procedures
- Alfresco Enterprise Viewer
- Alfresco Content Connector for Azure

STACK UPDATES FOR ACS 7.0 (AND ONWARDS)

In 7.0

Added

- CentOS 8
- Tomcat 9.0
- Active MQ 5.16
- PostgreSQL 13.1
- Microsoft 365 (Office 2019)
- Amazon Corretto 11

Removed

- Windows Server 2016
- Microsoft Office 2013
- Postgres 10.9
- OpenJDK 11.01

Planned for post-7.0.0

Coming Next

- RHEL 8.2
- SUSE 15
- Ubuntu 20.04
- PostgreSQL 12.4
- SQL Server 2019
- MariaDB 10.5
- MySQL 8.0

Always check the [Supported Platforms](#) page for the latest official stack information

ALFRESCO SEARCH ENTERPRISE 3.0 WITH ELASTICSEARCH

(Early Access Release)

WHY ELASTICSEARCH?



Industry is trending towards Elasticsearch

- Analyst and customer feedback indicates increasing enterprise adoption



Optimize for cloud

- Utilize a modern search engine designed for cloud deployments
- Retain support for on-prem and hybrid deployments



Enable support for a managed search service

- Considerable advantages for customers in terms of cost and effort



Zero customization

- Simplify where possible
- Reduce reliance on Alfresco-specific knowledge



Scalability

- Number of customers at scale is growing
- Simplify deployment at scale

ALFRESCO SEARCH ENTERPRISE 3.0 M1

ACS 7.0 offers early access to Elasticsearch. This is ideal for customers who want to evaluate Elasticsearch ahead of the full release later this year.

Key product features

- Elasticsearch (Search 3.0) is an alternative to Solr (Search 2.0)
- Decoupled architecture allows the search index to be managed and scaled independently from Alfresco
- “Pure Elasticsearch” – means zero customizations
- New deployment options
- “Live indexing” approach optimised for availability and query performance
- Index/database comparison tool for verification of index

CUSTOMER BENEFITS WITH ALFRESCO SEARCH ENTERPRISE 3.0



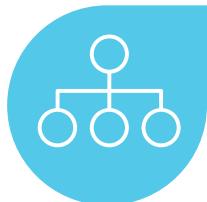
Simplified Maintenance

Common maintenance tasks moved to Elasticsearch rather than Alfresco



Decoupled Elasticsearch

Take advantage of Elastic administration and auto-scaling for the search index
Leverage existing Elasticsearch expertise within your organization and externally



Flexible Deployment

Deploy against a pre-existing cluster, or as a managed service



Performance

Near-instant availability of content for search after ingestion

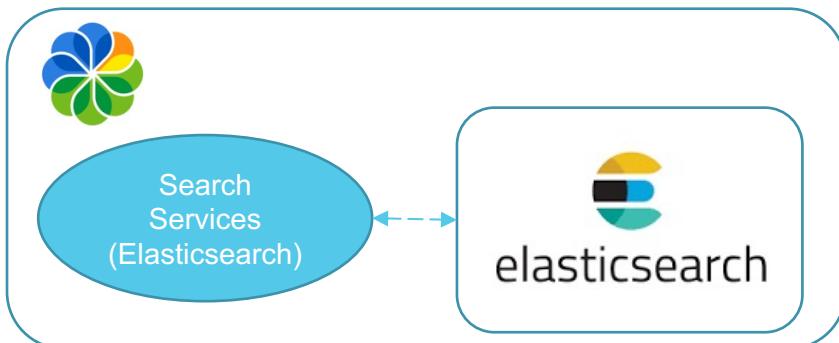
Customers get the best of both storage and indexing solutions:

- Modern, scalable search engine from Elastic
- Scalable and secure content repository from Alfresco

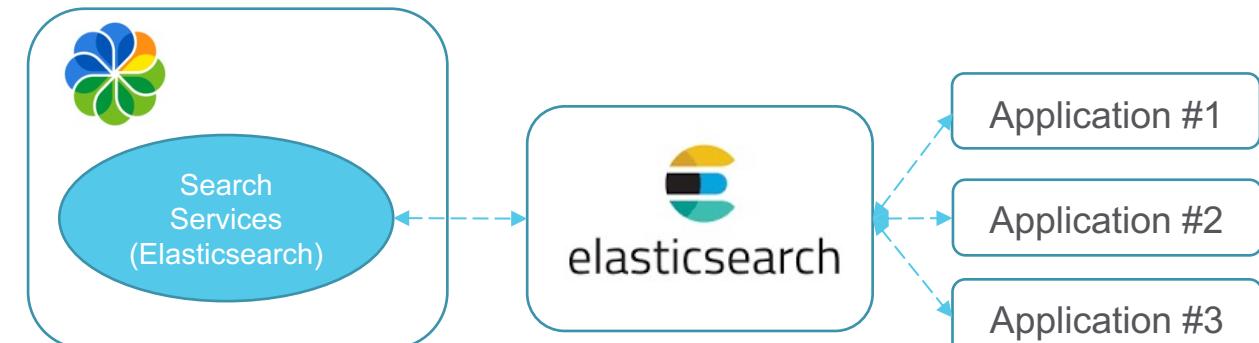
CUSTOMER DEPLOYMENT OPTIONS

Option	ACS Deployment	Search Deployment
1	On-prem	On-prem
2	On-prem	Self-managed, provider cloud
3	On-prem	Managed service, provider cloud
4	Self-managed, provider cloud	Self-managed, provider cloud
5	Self-managed, provider cloud	Managed service, provider cloud

Dedicated Elasticsearch instance



General Elasticsearch instance



ALFRESCO SDK

EVOLVING OUR CURRENT SDK (DEVELOPER EXPERIENCE)



Through the
“in-process” SDK (v4)

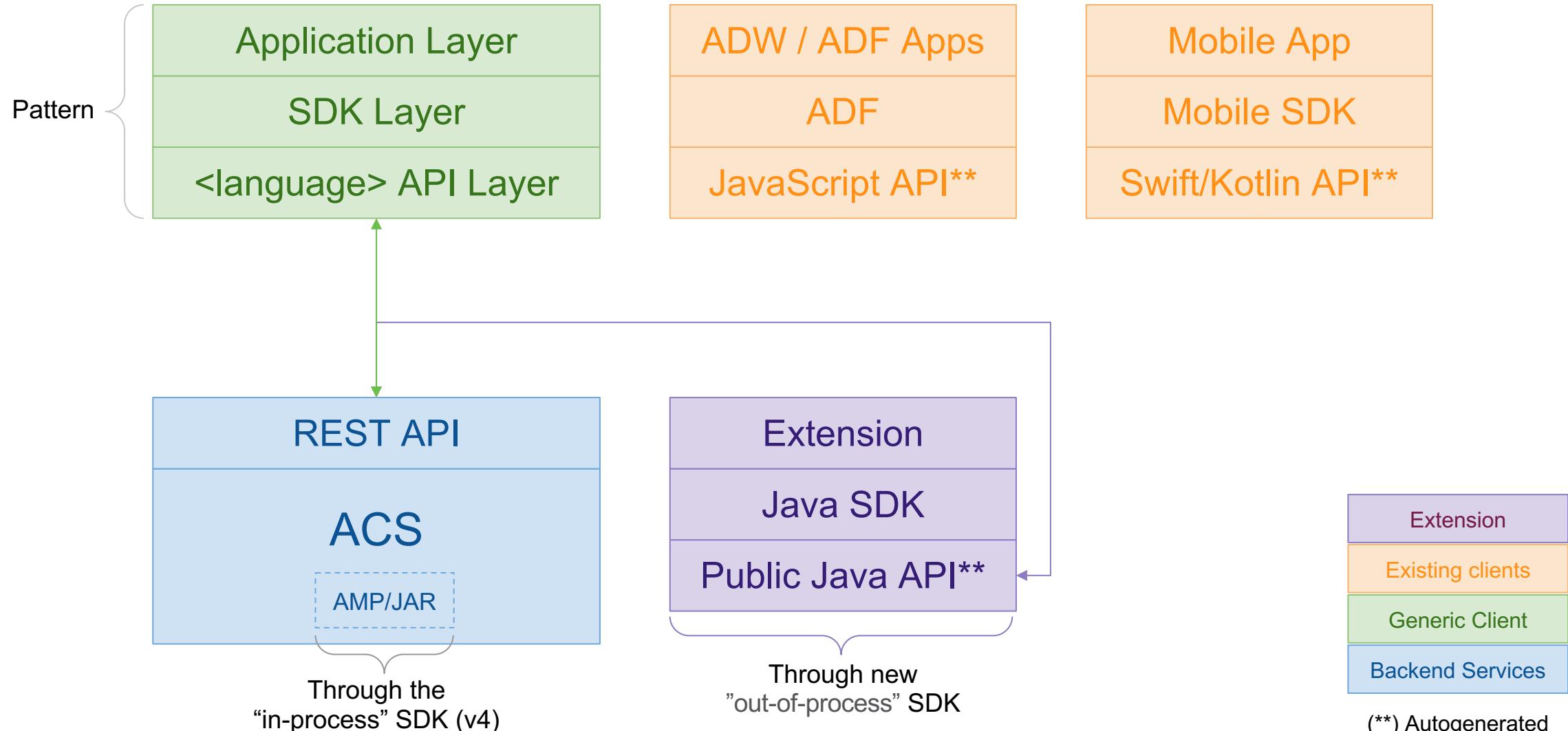
- With the current “in-process” extension mechanism:
- Customers can override any part of ACS which causes upgrade and support issues
 - Stability and security can be compromised
 - Requires regular stop/start in deployment
 - Requires minutes to re-deploy ACS + extensions during the development

Customer Benefit

Applying the current set of mature and acceptable tools, such as Maven for the current SDK to the Alfresco developer experience, allows Java developers to easily become productive on the Alfresco platform

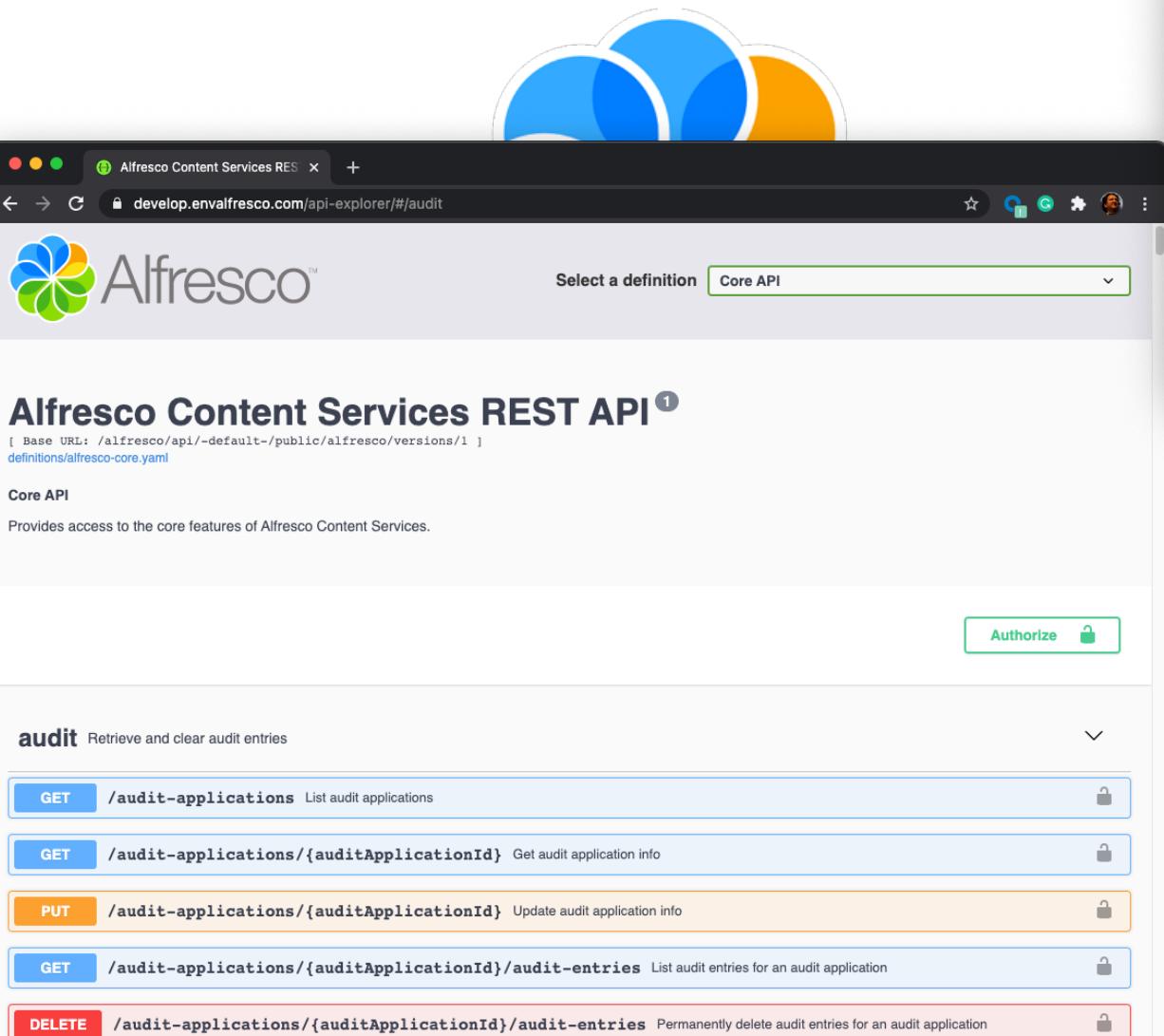
DEVELOPMENT WE ARE TARGETING TO SUPPORT

(*) This represents the ideal logical interactions and does not take into account current architecture or roadmap priorities



(**) Autogenerated

WHAT IS RELEASED



The screenshot shows the Alfresco Content Services REST API documentation for the audit endpoint. It includes a navigation bar with the Alfresco logo, a dropdown menu for selecting definitions (Core API is selected), and a detailed description of the audit endpoint. The audit endpoint allows retrieving and clearing audit entries. It provides methods for listing audit applications, getting audit application info, updating audit application info, listing audit entries for an audit application, and permanently deleting audit entries.

Alfresco Content Services REST API¹

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

Core API

Provides access to the core features of Alfresco Content Services.

audit Retrieve and clear audit entries

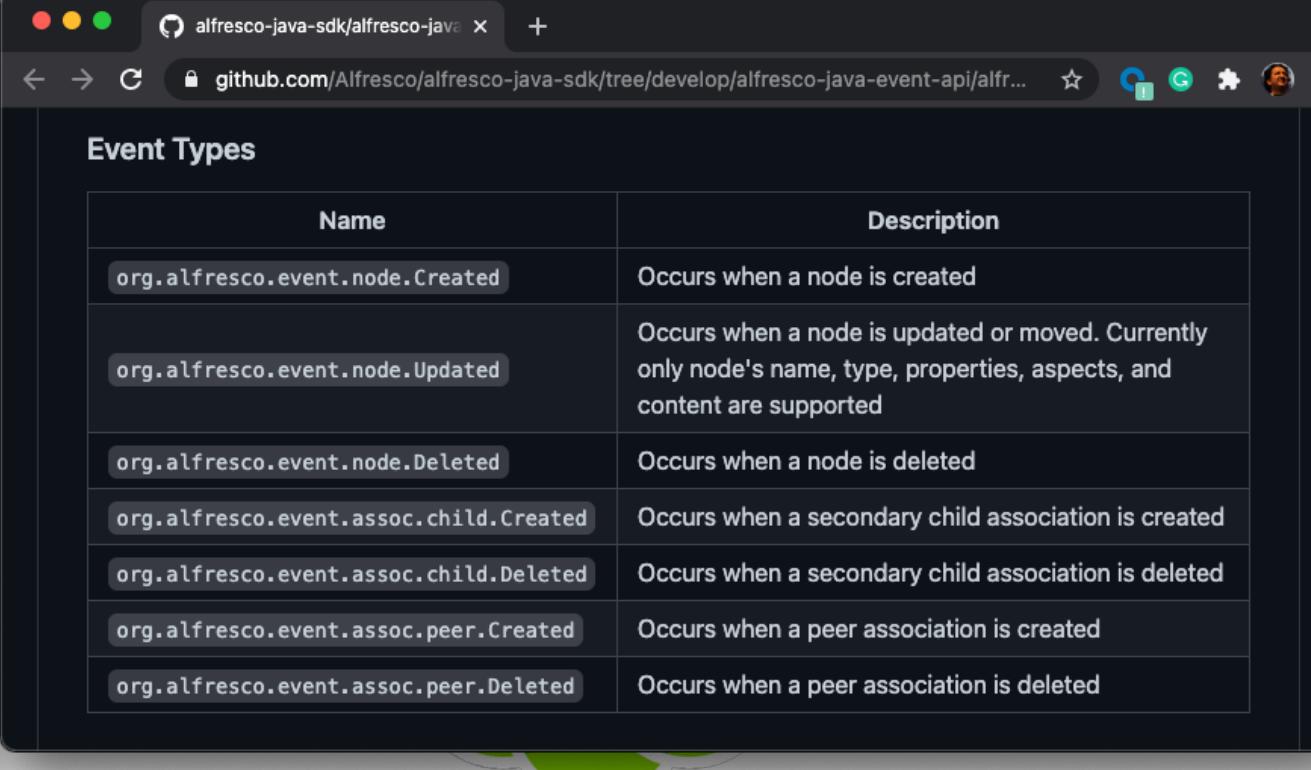
GET /audit-applications List audit applications

GET /audit-applications/{auditApplicationId} Get audit application info

PUT /audit-applications/{auditApplicationId} Update audit application info

GET /audit-applications/{auditApplicationId}/audit-entries List audit entries for an audit application

DELETE /audit-applications/{auditApplicationId}/audit-entries Permanently delete audit entries for an audit application



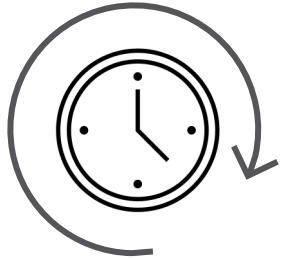
The screenshot shows a browser window displaying the Alfresco Java Event API documentation. The page title is "Event Types". A table lists eight event types with their descriptions:

Name	Description
org.alfresco.event.node.Created	Occurs when a node is created
org.alfresco.event.node.Updated	Occurs when a node is updated or moved. Currently only node's name, type, properties, aspects, and content are supported
org.alfresco.event.node.Deleted	Occurs when a node is deleted
org.alfresco.event.assoc.child.Created	Occurs when a secondary child association is created
org.alfresco.event.assoc.child.Deleted	Occurs when a secondary child association is deleted
org.alfresco.event.assoc.peer.Created	Occurs when a peer association is created
org.alfresco.event.assoc.peer.Deleted	Occurs when a peer association is deleted

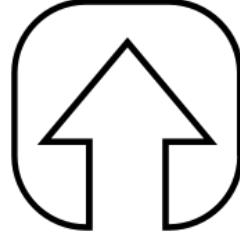
New “out-of-process” extension mechanism
supported for ACS 7+
New documentation section in doc site
ACS Eventing support
ACS REST API support

SUMMARY

CUSTOMER BENEFITS



Enhanced developer experience



Simplified deployment and upgrades



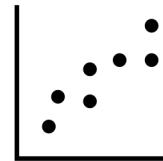
Reduce business risk and strengthen compliance



Lower cost of operations



Improved user productivity & experience



Auto-scalable platform

ALFRESCO PRODUCT PORTFOLIO

Delivered 2020

Content Centric Process (DBP)

- ✓ Content (ACS) & Process (APS) integration in the Digital Business Platform

Security & Risk Management

- ✓ Alfresco Federation Services - Govern In Place
- ✓ SEC Compliant storage
- ✓ Single Sign-On across the portfolio

Content Centric Process

- ✓ Alfresco Process Automation low code builder in the Cloud

User Centric Workplace

- Content Accelerator of Claims/Policy Management
- Enterprise Viewer

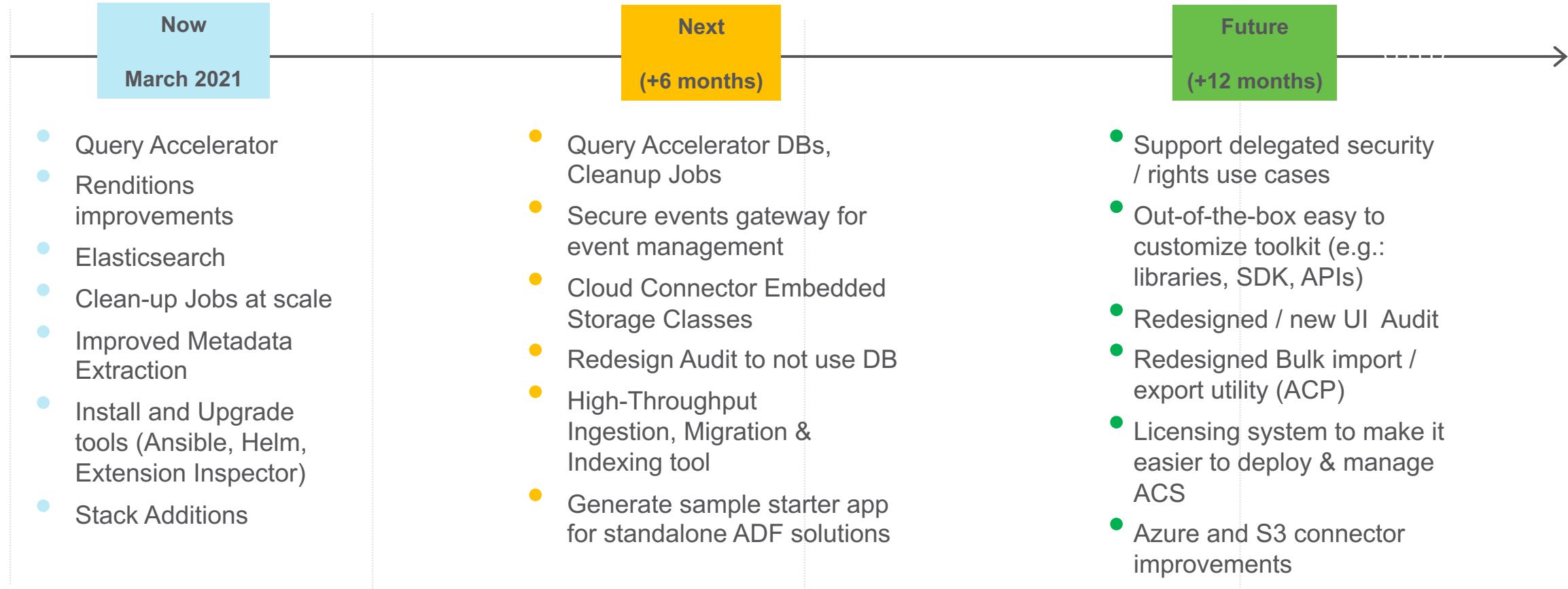
User Centric Workplace

- Salesforce Connector
- Recommended Content
- SAP Connector
- O365 Connector

Productivity Intelligence

- ✓ Modern business intelligence connectors to visualize analytics reports

ALFRESCO CONTENT SERVICES ROADMAP

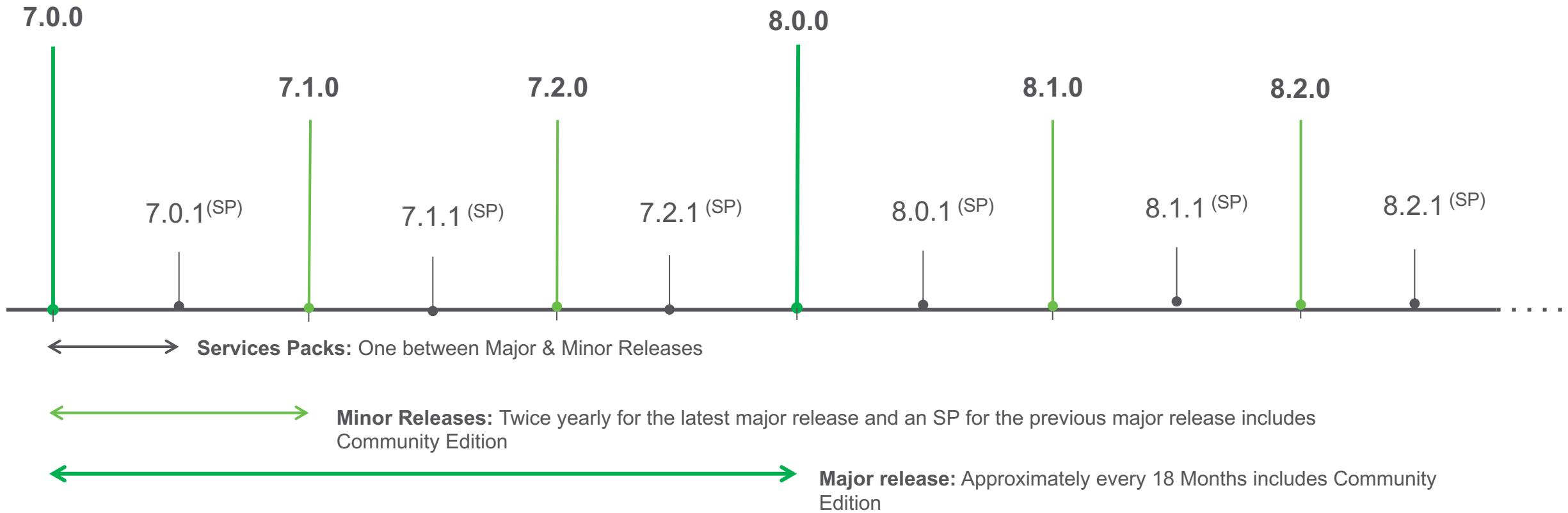


Notes:

- Timelines are an example and not commitment subject to release goals
- Release content subject to change

ACS RELEASE CADENCE

Enterprise and Community releases are released on the same cadence



Notes:

- With every Major/Minor Enterprise release there is a Community Version release (but not SPs)
- Timelines are an example and not commitment subject to release goals
- Release numbers / nomenclature subject to change

ALFRESCO PORTFOLIO SUMMARY

Scale & Performance Improvements

- Read / Write / Ingestion scalability
- Query @ Scale (Query Accelerator)
- Improvements to Scheduled Jobs
- Auto-scaling for Search Index
- Faster findability of content through improved metadata creation

Installation & Deployment Improvements

- New installers for non-containerised deployment
- Improved deployment for containerised environments
- New Alfresco Extension Inspector
- Flexible search deployment

Security & Risk Management Improvements

- PII marking on ingestion of content
- Access controls and application security marks
- Privacy process compliance

User Centric Workplace Improvements

- Collaboration Connector for Microsoft 365
- Offline content for Mobile users

Productivity Intelligence Improvements

- Business Intelligence tools
- Searchable video & audio using AI

Q&A

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