

Hyland™

Alfresco Tech Talk Live #148

June 21, 2023

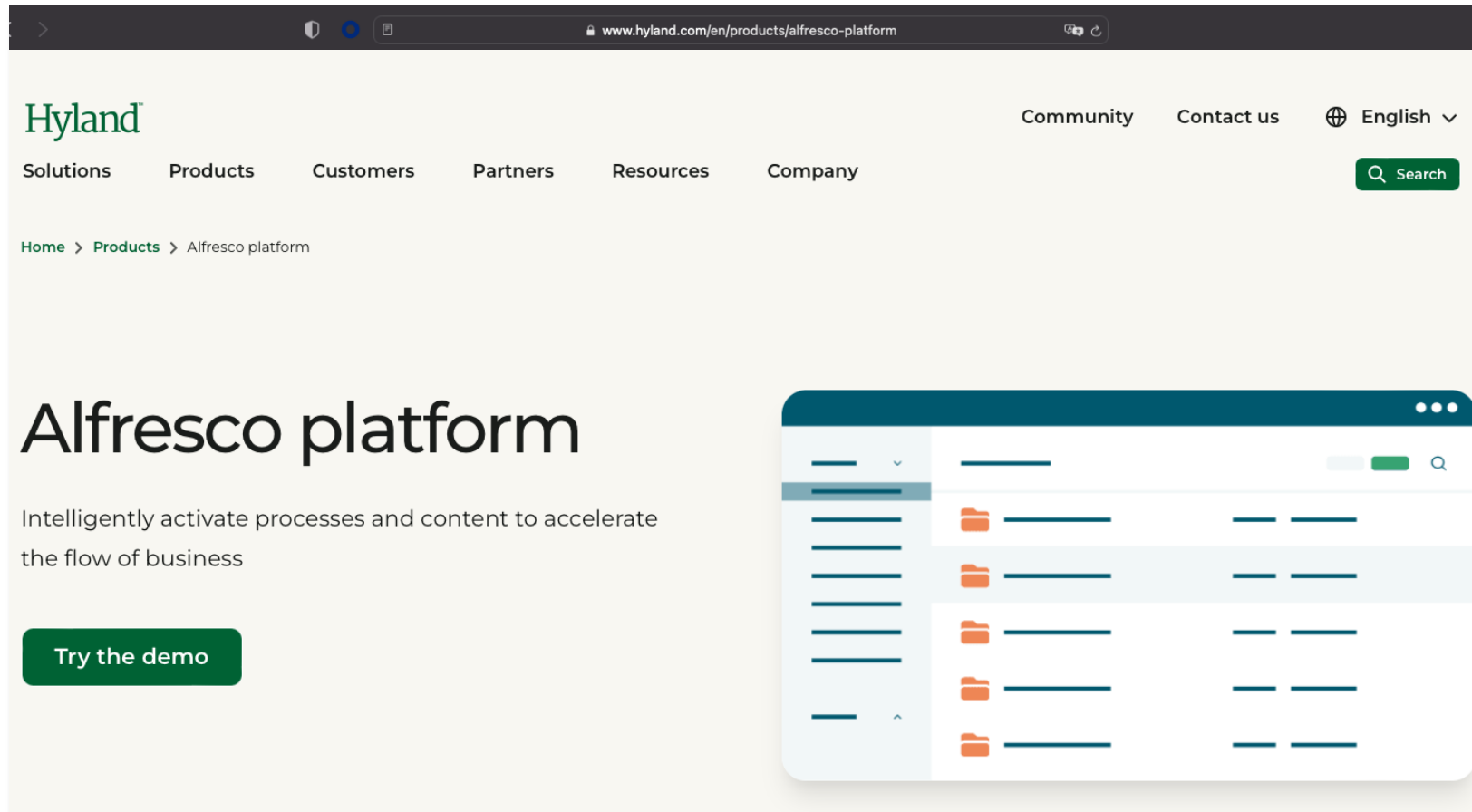
Agenda



- Community news
- Reduce Alfresco Content Services Operational Burden with AWS Serverless

Check out the new Hyland.com

[Alfresco.com](https://alfresco.com) and [Nuxeo.com](https://nuxeo.com) will be decommissioned soon!



Register today for CommunityLIVE in Las Vegas

October 1–2

Hands-on technical training

Advanced technical training for OnBase, Perceptive Content,
Alfresco and Nuxeo platform users

[Learn more](#)

October 3–5

CommunityLIVE main conference

Keynotes, networking and expert-led sessions for all

[Learn more](#)

Find additional details on this year conference in [What's new with CommunityLIVE](#)

[Register today](#)

Do you have an innovative Hyland Solution?

We're excited to launch the [Hyland Customer Innovation Awards](#) at CommunityLIVE to recognize forward-thinking organizations that are leveraging Hyland's content services solutions and technology to do amazing things in their organizations and communities.

Check out the innovation award categories and [submit your Hyland solution](#) by **Friday, June 30**, for a chance to win a complimentary main conference pass.

Hyland Summit series

August-November 2023

Hyland Summit Colombia	Bogotá, Colombia	Thursday, 17 August
Hyland Summit London	London, UK	Tuesday, 10 October
Hyland Summit Paris	Paris, France	Thursday, 19 October
Hyland Summit Düsseldorf	Düsseldorf, Germany	Tuesday, 24 October
Hyland Summit Sydney (registration coming soon)	Sydney, Australia	Thursday, 2 November
Hyland Summit Madrid	Madrid, Spain	Tuesday, 7 November

[Visit the event page](#)

TTL Speakers wanted!

- Take the opportunity to showcase your work with the community
- About Alfresco, Nuxeo, and associated technologies
- Best practices, integration, scaling, cloud, ...

Alfresco 7.4

Available material

- [Release Notes](#)
- [Recording of TTL 147 – Alfresco Content Services 7.4 Release overview](#)
1h extensive presentation by the product managers

Resources to come

- Secure communications with ACS 7.4
- Adapting your logging configuration to *log4jv2*
- Migrating to Search Enterprise
- Share to ADF migration guide (thanks [Loftux](#) for the feedback!)
- Using Spring Security with ACS 7.4

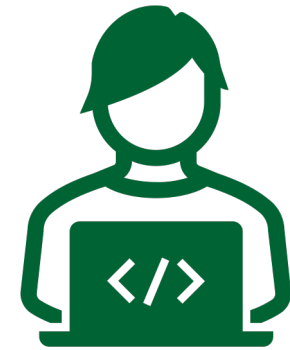
Resources

Blog posts

- [Using Podman with Alfresco](#)

Source Code

- [Alfresco Share Extension Catalog](#)
- [Alfresco Go CLI](#)
- [Docker Dev Environment for ADF](#)
- [Alfresco Discord Bot](#)
- [Alfresco Query Catalog Builder](#)



Today's talk



Reduce Alfresco Content Services Operational Burden with AWS Serverless

WeeMeng Chong

Sr Partner Solution Architect, Amazon Web Services

Additional resources

- Detailed configuration available in [Amazon Blog](#)
- Technical resources in [ServerlessACS-OpenSearch](#)

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TECH TALK LIVE #148

Reduce Alfresco Content Services Operational Burden with AWS Serverless

WeeMeng Chong

Snr Partner Solution Architect – Business Applications
Amazon Web Services

Serverless on AWS

Compute



AWS Lambda



AWS Fargate

Application integration



Amazon EventBridge



Amazon API Gateway



AWS Step Functions

Data store



Amazon Simple Storage Service (Amazon S3)



Amazon Elastic File System (Amazon EFS)



Amazon DynamoDB



Amazon Aurora Serverless

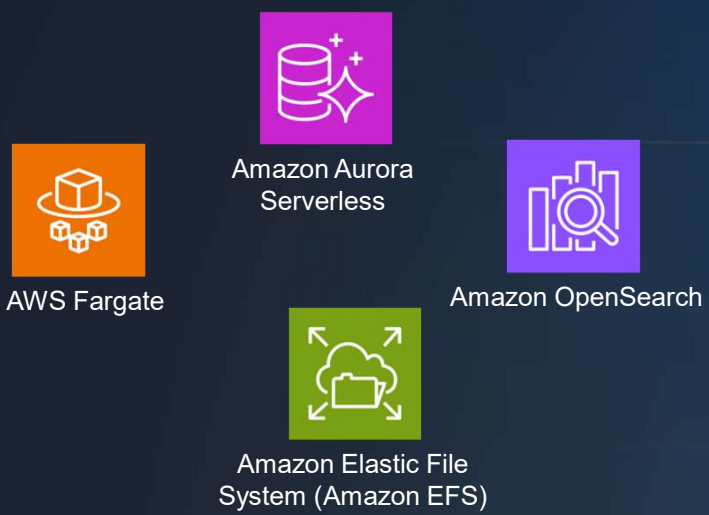


Amazon Neptune Serverless



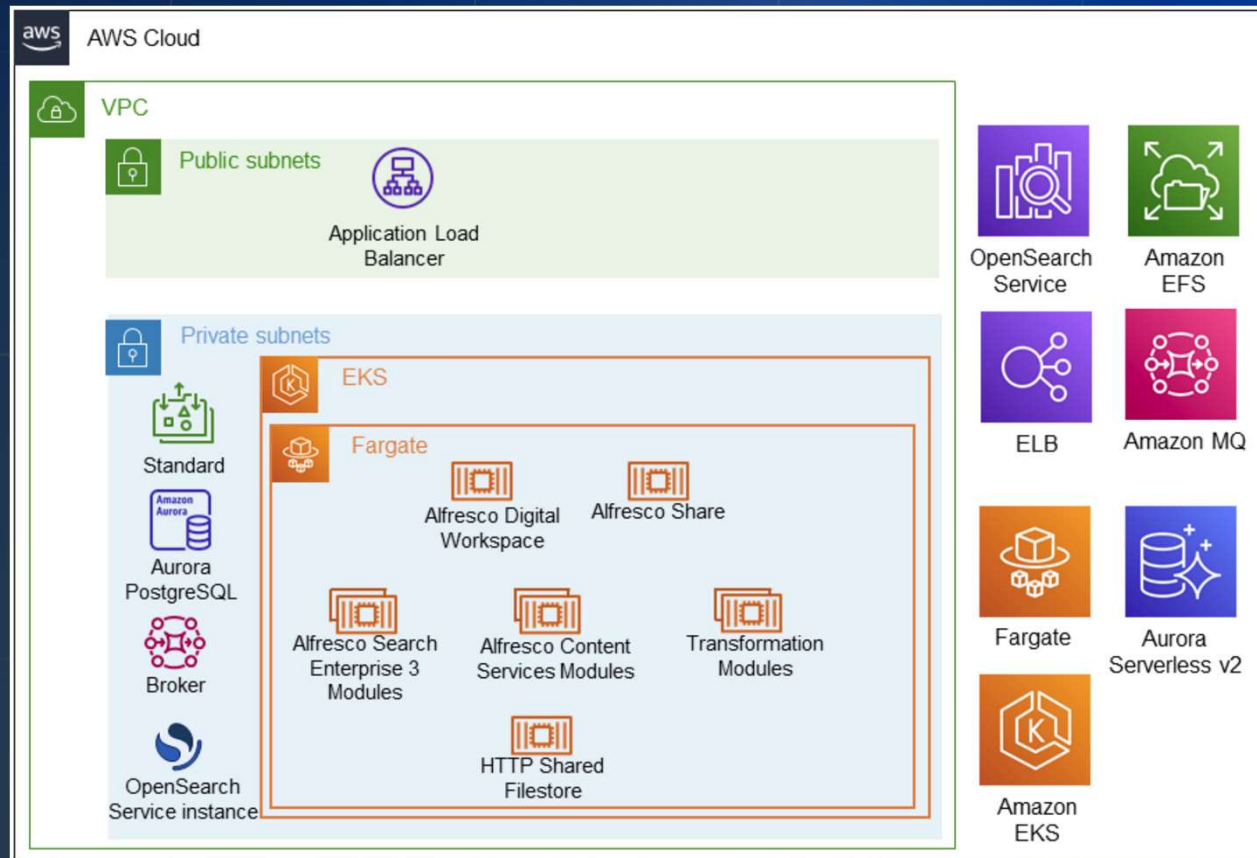
Amazon OpenSearch Serverless

Going Serverless on AWS with minimal effort



Alfresco Content Services on AWS Serverless

Infrastructure component	AWS serverless replacement
Database	Aurora Serverless v2
File Server	Amazon EFS
Compute hosts	Fargate
Elasticsearch	Amazon OpenSearch Serverless *



AWS Partner Network (APN) Blog

1. Install command line tools: AWS CLI, Docker, kubectl and eksctl
2. Deploy EKS cluster on AWS Fargate with eksctl. Sample template provided in blog.
3. Deploy AWS services with CloudFormation. Sample template provided in blog.
4. Create a k8s storage configuration for EFS.
5. Create a k8s deployment template from the Hyland provided helm chart.
6. Patch the k8s deployment template to use sticky sessions with Amazon Application Load Balancer (ALB) rather than the chart provided NGINX.
7. Create k8s secrets for the container registry and Alfresco license.
8. Deploy the k8s template with kubectl.
9. Update your DNS with the IP of the ALB.
10. Login to Alfresco.

Complete walkthrough of deployment can be found on <https://aws3-demo.link/UAqjta>



The screenshot shows an AWS Partner Network (APN) blog post. The header includes the AWS logo and navigation links for Products, Solutions, Pricing, Documentation, Learn, Partner Network, AWS Marketplace, and Customer Enablement. The article title is "Using Amazon OpenSearch Service with Serverless Alfresco Content Services" by WeeMeng Chong and Alexandre Chapellon, dated 21 MAR 2023. The article discusses how Hyland Software's Alfresco Content Services (ACS) 7.3 enables enterprises to deliver open, flexible, and highly scalable solutions by providing capabilities for full-featured enterprise content services. It mentions that Amazon OpenSearch Service is a managed service from Amazon Web Services (AWS) that lets you run OpenSearch clusters without having to worry about managing, monitoring, and maintaining your infrastructure. The article also notes that Amazon OpenSearch Service provides Elasticsearch database service to Alfresco Search Enterprise. Additionally, it states that AWS Fargate is a serverless compute technology used to run containers without having to manage servers. The database service supporting the Alfresco repository is Amazon Aurora Serverless v2, which is available for the PostgreSQL-Compatible Edition. The article concludes by stating that these products present a powerful yet efficient platform to build your content management system. With serverless computing, infrastructure management tasks like capacity provisioning and patching are handled by AWS, so you can focus on your users. The post describes a simplistic deployment to show the ease in which Amazon OpenSearch Service is used with Alfresco Content Services and Alfresco Search Enterprise running in Amazon Elastic Kubernetes Service (Amazon EKS) on AWS Fargate. Production-grade deployments that require high availability and durability can be guided by this post. Please contact your AWS and Hyland account teams for assistance in designing a production grade deployment. Hyland Software is an AWS Competency Partner and AWS Marketplace Seller that enables customers to digitalize their workplaces and fundamentally transform their operations.



Want to work with Hyland Software?

Connect



View of ACS Deployment with Openlens Desktop

The screenshot displays the OpenLens Desktop interface for a Kubernetes cluster. The left sidebar shows the navigation menu with 'Workloads' selected. The main panel shows the 'Pods' view for the 'alfresco' namespace, listing 16 items. The table below provides a detailed view of these pods.

Name	Namespace	Containers	Restarts	Controlled By	Node	Age	Status
acs-alfresco-dw-548d9c9bcd-jq8vp	alfresco	■	0	ReplicaSet	fargate-ip-192-168-116	15h	Running
acs-alfresco-cs-imagemagick-69fd6c55bc-gmxj	alfresco	■	0	ReplicaSet	fargate-ip-192-168-102	4d22h	Running
acs-alfresco-cs-libreoffice-5d79c768df-fd7wf	alfresco	■	2	ReplicaSet	fargate-ip-192-168-66-2	30m	Running
acs-alfresco-cs-pdfrenderer-86678fc678-r2h7t	alfresco	■	0	ReplicaSet	fargate-ip-192-168-126	4d22h	Running
acs-alfresco-cs-repository-76986cd79f-hskw6	alfresco	■	0	ReplicaSet	fargate-ip-192-168-76-6	4d22h	Running
acs-alfresco-cs-share-77686f58cc-lwcdq	alfresco	■	0	ReplicaSet	fargate-ip-192-168-103	30m	Running
acs-alfresco-cs-tika-56c9fcbdc7-f9xr6	alfresco	■	0	ReplicaSet	fargate-ip-192-168-112	16h	Running
acs-alfresco-cs-transform-misc-558bd56688-ng	alfresco	■	0	ReplicaSet	fargate-ip-192-168-103	4d22h	Running
acs-alfresco-elasticsearch-connector-content-7t	alfresco	■	0	ReplicaSet	fargate-ip-192-168-107	4d22h	Running
acs-alfresco-elasticsearch-connector-mediation	alfresco	■	1	ReplicaSet	fargate-ip-192-168-113	4d22h	Running
acs-alfresco-elasticsearch-connector-metadata-	alfresco	■	0	ReplicaSet	fargate-ip-192-168-108	4d22h	Running
acs-alfresco-elasticsearch-connector-path-65d4	alfresco	■	0	ReplicaSet	fargate-ip-192-168-77-1	4d22h	Running
acs-alfresco-elasticsearch-connector-reindexing	alfresco	□ □	0	Job	fargate-ip-192-168-99-2	4d22h	Succeeded
acs-alfresco-filestore-8549d7b984-j8ltz	alfresco	■	0	ReplicaSet	fargate-ip-192-168-107	4d22h	Running
acs-alfresco-router-6d796947f-22dfs	alfresco	■	0	ReplicaSet	fargate-ip-192-168-114	4d22h	Running
alfresco-dir-creator-7fhtf	alfresco	□	0	Job	fargate-ip-192-168-120	4d22h	Succeeded

CloudFormation stacks

The screenshot shows the AWS CloudFormation console interface. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and regional settings for Ohio. Below this, the breadcrumb 'CloudFormation > Stacks' is visible. The main content area is titled 'Stacks (4)' and includes several action buttons: a refresh icon, 'Delete', 'Update', 'Stack actions', and 'Create stack'. There is also a search filter 'Filter by stack name' and a dropdown menu set to 'Active'. A 'View nested' toggle is turned on, and pagination shows '1' of 1 items. The stack list table has four columns: 'Stack name', 'Status', 'Created time', and 'Description'. All four stacks shown have a status of 'CREATE_COMPLETE'.

Stack name	Status	Created time	Description
ttl-afg	CREATE_COMPLETE	2023-06-14 23:46:41 UTC-0400	AWS serverless infrastructure services for Alfresco Content Services 7.3 with Search Enterprise 3.2.
eksctl-TTL-aFG-addon-iamserviceaccount-kube-system-efs-csi-controller-sa	CREATE_COMPLETE	2023-06-14 23:17:52 UTC-0400	IAM role for serviceaccount "kube-system/efs-csi-controller-sa" [created and managed by eksctl]
eksctl-TTL-aFG-addon-iamserviceaccount-kube-system-aws-load-balancer-controller	CREATE_COMPLETE	2023-06-14 23:15:50 UTC-0400	IAM role for serviceaccount "kube-system/aws-load-balancer-controller" [created and managed by eksctl]
eksctl-TTL-aFG-cluster	CREATE_COMPLETE	2023-06-14 22:55:39 UTC-0400	EKS cluster (dedicated VPC: true, dedicated IAM: true) [created and managed by eksctl]

AWS resources



Amazon Aurora Serverless



AWS Fargate



Amazon Elastic File System (Amazon EFS)



Amazon OpenSearch

The screenshot shows the AWS CloudFormation console for a stack named 'ttl-afg'. The left pane displays a list of stacks, with 'ttl-afg' selected and showing its creation status as 'CREATE_COMPLETE'. The right pane shows the 'Outputs' tab for this stack, listing six outputs:

Key	Value	Description	Export
DatabaseEndPoint	alfrescodbv2-cluster.cluster- east-2-rds.amazonaws.com	Database Server Instance ID	-
FailOverAmazonMQBrokerEndPoint	failover:(ssl://b- east-2.amazonaws.com:61617)	AmazonMQ OpenWire endpoint	-
FileSystemMount	fs- efs-us- east-2.amazonaws.com	File system ID	-
OpenSearchDomainEndPoint	vpc- east-2.es.amazonaws.com	OpenSearch domain endpoint	-

Serverless is more than compute

COMPUTE



AWS
Lambda

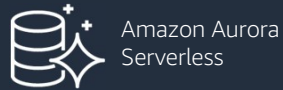


AWS
Fargate

DATA STORES



Amazon
S3



Amazon Aurora
Serverless



Amazon
DynamoDB

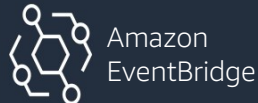
INTEGRATION



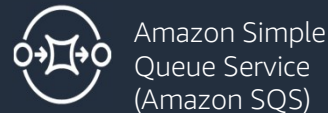
Amazon
API Gateway



AWS
AppSync



Amazon
EventBridge



Amazon Simple
Queue Service
(Amazon SQS)



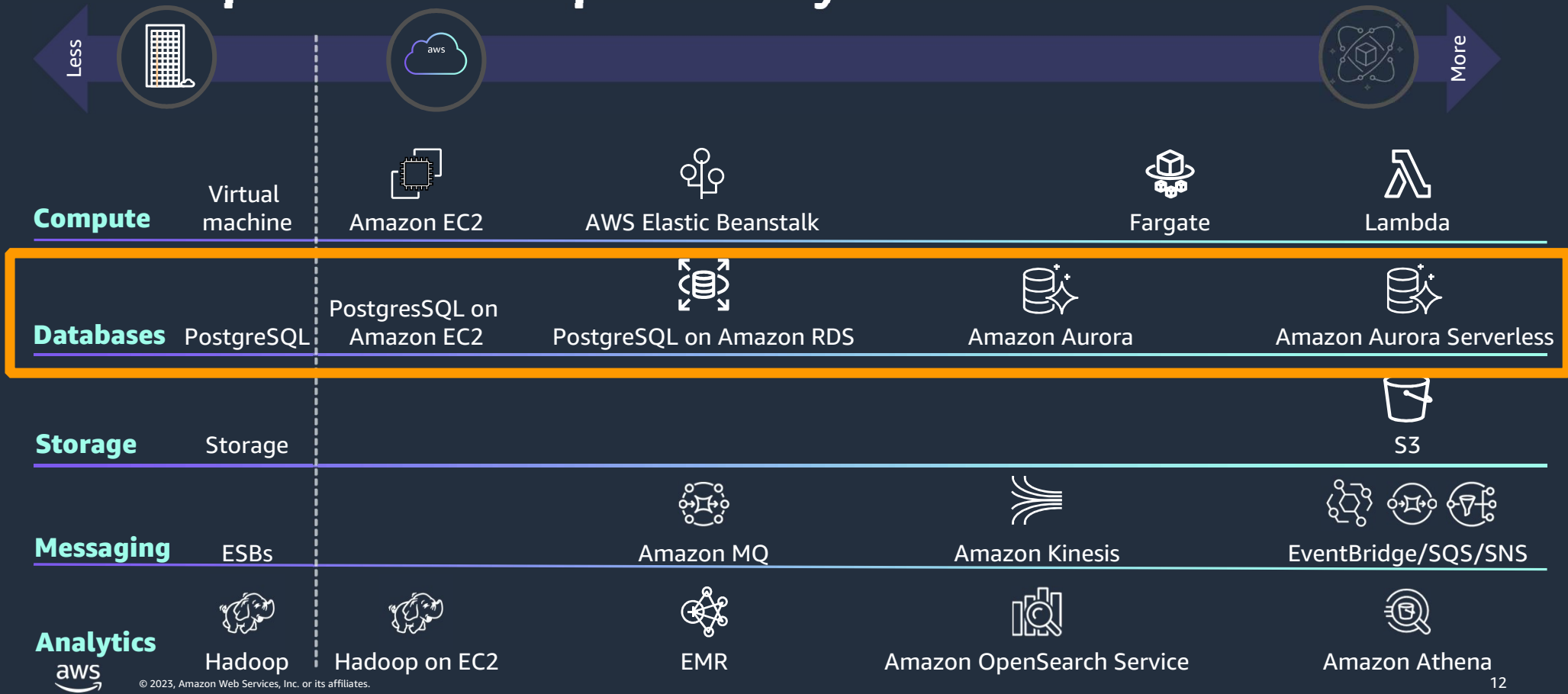
Amazon Simple
Notification Service
(Amazon SNS)



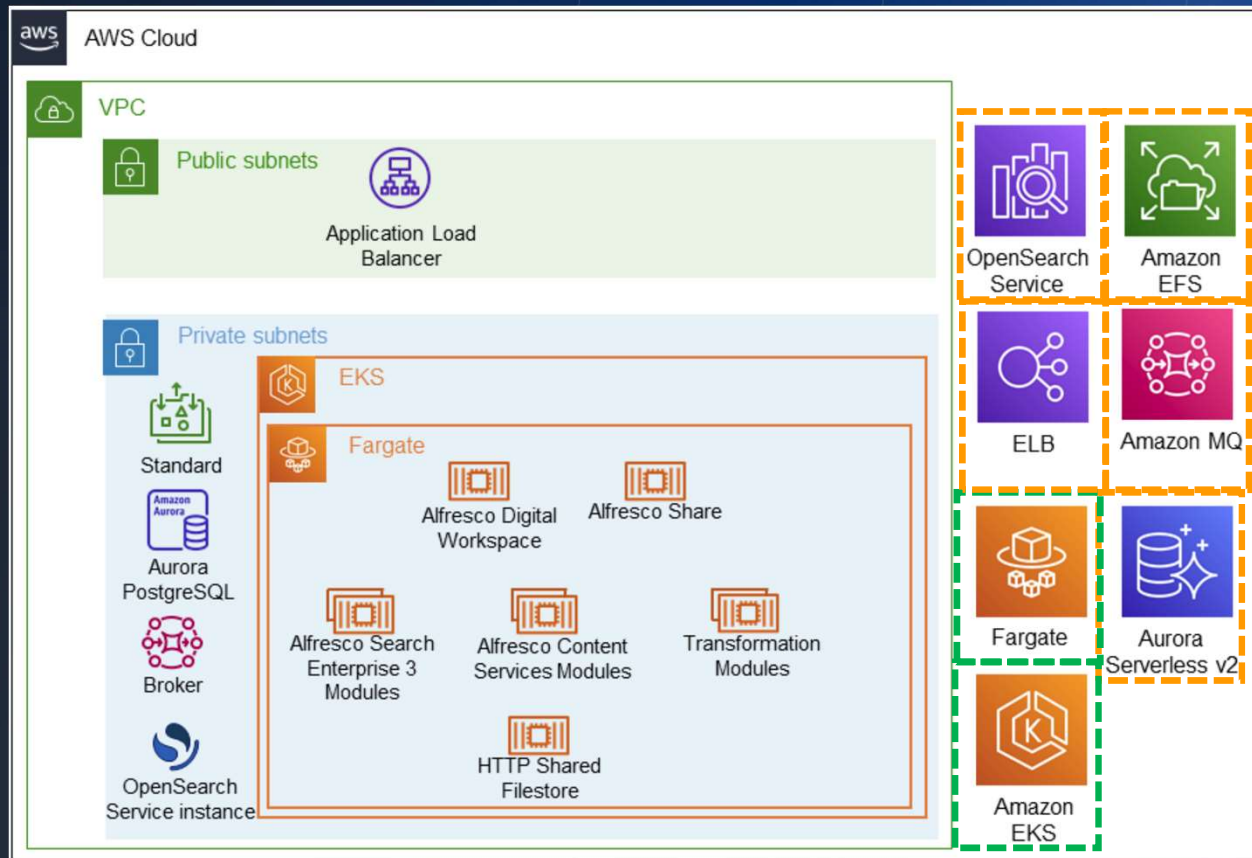
AWS
Step
Functions



AWS operational responsibility models



Alfresco Content Services on AWS Serverless



Lower TCO with AWS Serverless

409%
ROI over
five years

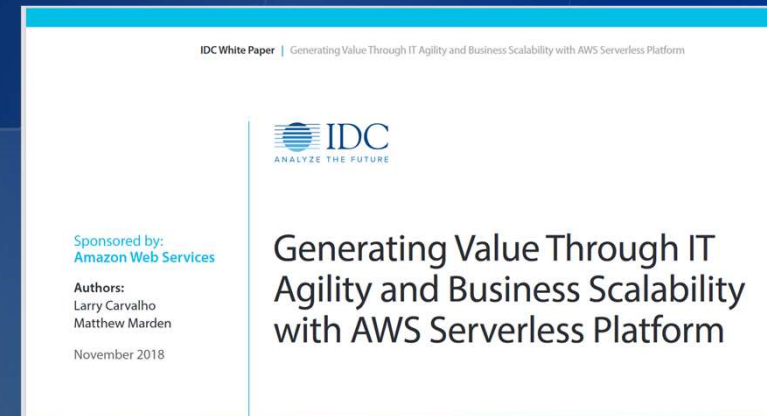
43%
Fewer security
incidents
per year

89%
Faster
compute
deployment

3x
More features
delivered
per year



**9 months
to payback!***



Sources: IDC, Nucleus Research, AWS Analysis
*Based on five year ROI analysis of Serverless
adoption

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Useful links



- APN blog- Alfresco on serverless AWS
 - <https://aws3-demo.link/UAqjta>



- AlfrescoLabs GitHub repository for blog code
 - <https://aws3-demo.link/OGyWqO>



- APN blog- autoscaling EKS on Fargate
 - <https://aws3-demo.link/RYzdJM>



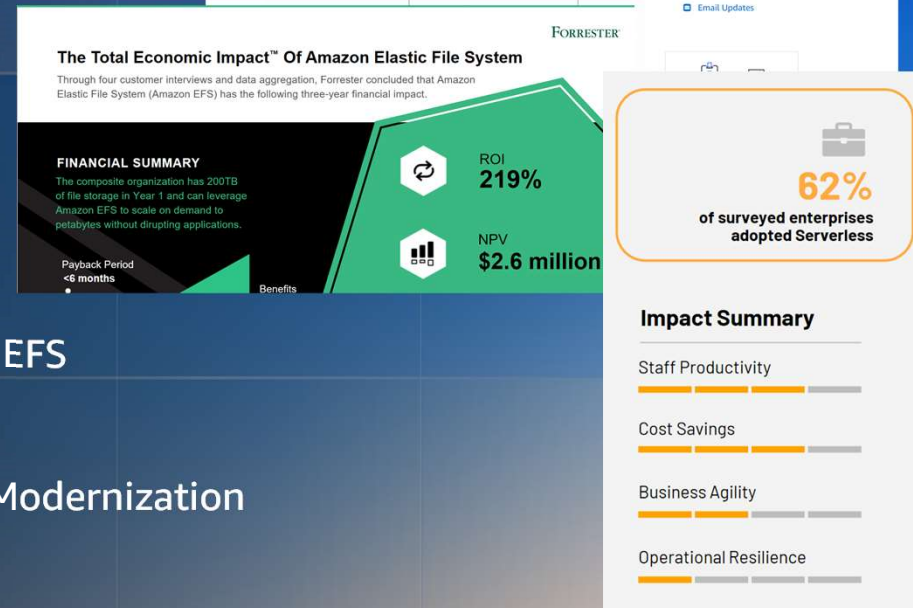
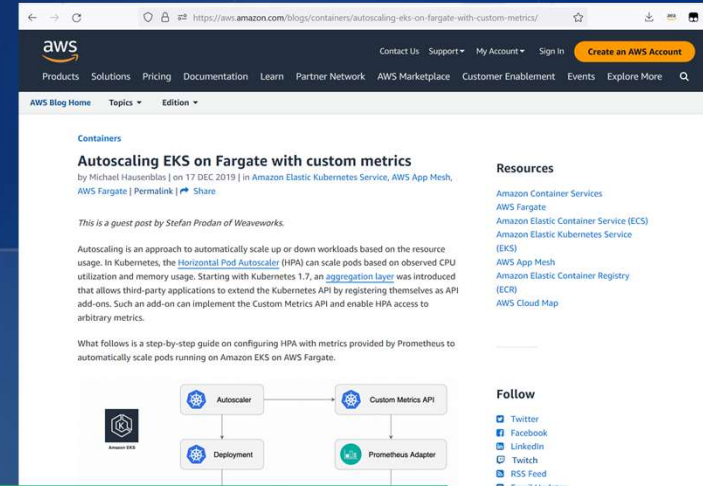
- IDC 2018 whitepaper on AWS serverless TCO
 - <https://aws3-demo.link/oXJmvx>



- Forrester 2021 Total Economic Impact study on EFS
 - <https://aws.amazon.com/efs/tco/>

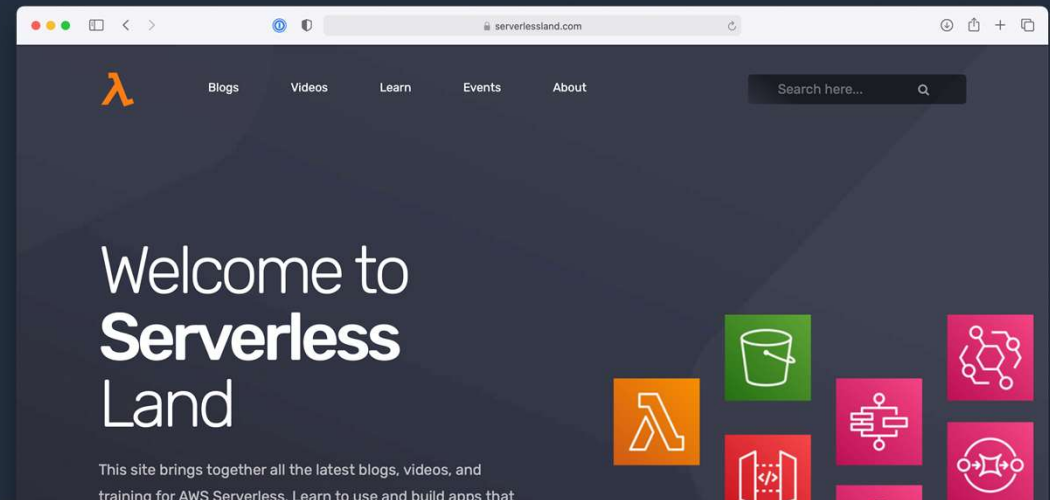


- Known 2022 paper on Business Value of Cloud Modernization
 - <https://aws3-demo.link/sOHMuS>



Want to dive deeper?

- Contact your AWS account team to discuss:
 - Serverless Immersion Day / Workshops
 - Serverless Well-Architected Review
 - Customized deep dives on technical topics
- Visit serverlessland.com



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<https://s12d.com/serverless-learning>





Thank you!

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