HYLAND COMMUNITY LIVE
LINUX OPEN SOURCE SUMMIT EUROPE
HYLAND & OPEN SOURCE

- Linux Foundation member
- Open Source solutions
  - Alfresco and Nuxeo
  - Leader in ECM/CPS & DAM
  - More projects to come…
- Open Source user
  - To build products, services & solutions
  - Strong legal compliance
HACKTOBER FEST

- Alfresco will participate in 2022
- List of projects and repositories:
  
github.com/AlfrescoLabs/hacktoberfest-2022
DEVCON 2023

- Lots of work going on to make it happen
- Beginning of 2023
- Hyland’s Alfresco & Nuxeo
- More details and Call For Paper to come asap in a blog article
RESOURCES FROM THE COMMUNITY

From the Hub

- Alfresco Community Admin Tools, by shazada

- Using AWS OpenSearch with Alfresco Search Enterprise 3.1, by angelborroy

- Alfresco Login Issues & How To Solve Them, by angelborroy

- Removing latest transactions from Alfresco Search Services, by angelborroy

Release

- Activiti SDK v1.0.4, by PJ Lucidi
  https://github.com/OpenPj/activiti-sdk/releases/tag/v1.0.4
TTL SPEAKERS WANTED!

Topics
- Open source projects
- Showcase of your best work
- Tips and tricks on Alfresco products
- Discussions on best practices
- And more! Just pitch it to the team

- Technical talk only!
- About Alfresco & Nuxeo or associated technologies

Benefits for Speakers
- Visibility in the ecosystem
- Goodies
- And other advantages
Empathetic approach to containerized deployments

MAKE YOUR PRODUCT AVAILABLE FOR EVERYONE!

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Developer Evangelist

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Community Manager

September 29, 2022
AGENDA

Users, use cases & Docker solutions
Docker Extension
Docker Compose
Docker Compose Installer
Docker Compose SDK
Conclusion & Questions
USERS, USE CASES & DOCKER SOLUTIONS
ALFRESCO CONTAINERS

UI
Search
Transform
Messages
Repository
Database
WHY WE NEED DIFFERENT SOLUTIONS?

OK, Alfresco is cloud native
-> Designed to be deployed in production with Docker or Kubernetes

But before deployment at scale, there are some steps:

Evaluation
-> Non tech people need an easy way to test and evaluate
-> Part of the decision process

Adoption
-> Tech people need to try different configurations and prepare deployment in their information system
-> Integrators need a development environment
USE CASES & DOCKER SOLUTION

No code / low code evaluation
“I don’t know what Docker is”
doctor extension (desktop)

Production / DevOps
“I use Docker everyday”
doctor compose installer

Tech evaluation
“I use Docker occasionally”
doctor compose

Development / Integration
“I use Docker for development”
doctor compose sdk
DOCKER EXTENSION
USE CASE

DOCKER EXTENSION

No code / low code evaluation
“I don’t know what Docker is”
docker extension (desktop)

- One single click to deploy out-of-the-box Alfresco from Docker Desktop app
- No persistent storage
- No support for addon deployment
- Not recommended for dev / prod environments
**Requirements**

- Docker Desktop

- *Not yet available in the Docker Extension Marketplace*
Alfresco Docker Extension - Source Code

**BETA** Docker Extension SDK

- UI: ReactJS + MUI
- Docker Desktop Client: Docker + Navigation
TODO

- Support for **ARM64** architecture
  - The rise of *Apple Silicon* chips
- Additional containers
  - UI
  - Web Proxy
- Increase verbosity and feedback
  - Container transitions: pulling, running,…
  - Error details and how to fix them
- Ability to manage a persistent deployment (*start-and-stop*)
Docker Extensions Publication Guidelines (from Docker)

- **Test**
  - For crashes, bugs, and performance issues
  - With potential users
    - Consider the needs of both new and existing users of your extension
  - On various platforms (Mac, Windows*, Linux)

- **Ensure**
  - You’ve ran Docker Extension validation checks
  - The *UI styling* is in line with Docker Desktop guidelines
  - The Extension support both *light* and *dark* mode

- Read Docker Extension Terms of Service
"I use Docker occasionally"

- One single command to deploy **out-of-the-box** Alfresco from **Docker CLI**
- No persistent storage
- No support for addon deployment
- Not recommended for **prod** environments
USER EXPERIENCE

Alfresco Community Downloading Page

7.2 Community install

- For all ACS 7.2 Community install options refer to https://docs.alfresco.com/content-services/community/install/
- Containerized deployment using Docker. Follow the instructions for installing using Docker Compose, https://docs.alfresco.com/content-services/community/install/containers/docker-compose/

*For further Docker setup details please visit GitHub.
- Non-containerized deployment using Ansible. Follow the instructions for installing using Ansible, https://docs.alfresco.com/content-services/community/install/ansible/

Requirements

- Docker Desktop
- Docker Compose
- Git Client

Install using Docker Compose

Use this information to quickly start up Community Edition using Docker Compose.

Note: While Docker Compose is often used for production deployments, the Docker Compose file provided is recommended for development and test environments only. Customers are expected to adapt this file to their own requirements, if they intend to use Docker Compose to deploy a production environment.

To deploy Community Edition using Docker Compose, download and install Docker →, then follow the steps below. Make sure that you've reviewed the prerequisites before continuing.

1. Clone the project locally, and change directory to the project’s docker-compose folder:

   ```
   git clone https://github.com/alfresco/acs-deployment.git
   cd acs-deployment/docker-compose
   ```

   Note: Make sure that exposed ports are open on your host computer. Check the docker-compose.yml file to determine the exposed ports - refer to the heat:container port definitions. You’ll see they include 5432, 8080, 8083 and others.

2. Deploy Community Edition, including the repository, Share, Postgres database, Search Services, etc.:

   ```
   docker-compose -f community-docker-compose.yml up
   ```
DEMO

oss-demo $ git clone git@github.com:Alfresco/acs-deployment.git
Cloning into 'acs-deployment'...
remote: Enumerating objects: 8302, done.
remote: Counting objects: 100% (801/801), done.
remote: Compressing objects: 100% (383/383), done.
remote: Total 8302 (delta 490), reused 672 (delta 394), pack-reused 7501
Receiving objects: 100% (8302/8302), 8.52 MiB | 8.17 MiB/s, done.
Resolving deltas: 100% (5225/5225), done.
oss-demo $ cd acs-deployment/docker-compose
docker-compose $ ls
7.0.N-docker-compose.yml  README.md
7.1.N-docker-compose.yml  community-docker-compose.yml
docker-compose $ docker compose -f community-docker-compose.yml up
HOW WE DID IT

Alfresco Deployment - Source Code

docker-compose.yml

- postgres: 0.5 GB
- activemq: 1.0 GB
- transform: 1.5 GB
- solr6: 2.0 GB
- alfresco: 2.0 GB
- share: 1.0 GB
- content-app: 0.2 GB
- proxy: 0.2 GB

> 8 GB RAM
DOCKER COMPOSE INSTALLER
USE CASE

"I use Docker everyday"

- Tailored build of Docker Compose
- One single command to deploy customized Alfresco from Docker CLI
- Persistent storage
- Support for addon deployment
- Recommended for prod environments
USER EXPERIENCE

DOCKER COMPOSE ALFRESCO

Which ACS version do you want to use?
How many GB RAM are available for Alfresco?
Do you want to use HTTPs for Web Proxy?
What is the name of your server?
Choose the password for your admin user
What HTTP port do you want to use?
Do you want to use FTP (port 2121)?
Do you want to use MariaDB instead of PostgreSQL?
Are you using different languages?
Select the method for Alfresco-SOLR communication
Do you want to use credentials for Events service?
Do you want to create an internal SMTP server?
Do you want to create an internal LDAP server?
Select the addons to be installed
Are you using a Windows host to run Docker?

- Requirements
  - Docker Desktop
  - Docker Compose
  - NodeJS
  - Yeoman
    - alfresco-docker-installer
DEMO

DOCKER INSTALLER

What HTTP port do you want to use (all the services are using the same port)? 8080
Do you want to use FTP (port 2121)? No
Do you want to use MariaDB instead of PostgreSQL? No
Are you using different languages (this is the most common scenario)? Yes
Would you like to use Shared Secret or HTTPS for Alfresco-SOLR communication? secret
Do you want to use credentials for Events service (ActiveMQ)? No
Do you want to create an internal SMTP server? No
Do you want to create an internal LDAP server? No
Select the addons to be installed:
Are you using a Windows host to run Docker? No
Do you want to use a start script? No
Do you want to get the script to create host volumes? No

create .env
create docker-compose.yml
create alfresco/Dockerfile
create alfresco/modules/amps/empty
create alfresco/modules/jars/empty
create share/Dockerfile
create share/web-extension/share-config-custom-dev.xml
create share/modules/amps/empty
create share/modules/jars/empty
create search/Dockerfile
create config/nginx.conf
create config/nginx.htpasswd

No change to package.json was detected. No package manager install will be executed.
oss-demo $ docker compose up --build --force-recreate
HOW WE DID IT

Alfresco Docker Installer - Source Code

- docker-compose.yml
  (6.x, 7.x)
- addons
- images
- keystores
- scripts
- docker-compose.yml
  - postgres persistent
  - activemq persistent
  - solr6* persistent
  - alfresco* persistent
  - transform
  - share*
  - content-app
  - proxy
DOCKER
COMPOSE
SDK
USE CASE

DOCKER SDK

Development / Integration
“I use Docker for development”
docker compose sdk

- One single command to deploy customized Alfresco from Docker CLI
- Support for development deployment
- Recommended for dev environments
$ mvn archetype:generate -Dfilter=org.alfresco:
1: remote -> org.alfresco.maven.archetype:activiti-jar-archetype
2: remote -> org.alfresco.maven.archetype:alfresco-allinone-archetype
3: remote -> org.alfresco.maven.archetype:alfresco-amp-archetype
4: remote -> org.alfresco.maven.archetype:alfresco-platform-jar-archetype
5: remote -> org.alfresco.maven.archetype:alfresco-share-jar-archetype
6: remote -> org.alfresco.maven.archetype:share-amp-archetype

$ ./run.sh start
start() {
    docker volume create test-acs-volume
    docker volume create test-db-volume
    docker volume create test-ass-volume
    docker-compose -f "${COMPOSE_FILE_PATH}" up --build -d
}
$ mvn archetype:generate -Dfilter=org.alfresco:
1: remote -> org.alfresco.maven.archetype:activiti-jar-archetype
2: remote -> org.alfresco.maven.archetype:alfresco-allinone-archetype
3: remote -> org.alfresco.maven.archetype:alfresco-amp-archetype
4: remote -> org.alfresco.maven.archetype:alfresco-platform-jar-archetype
5: remote -> org.alfresco.maven.archetype:alfresco-share-jar-archetype
6: remote -> org.alfresco.maven.archetype:share-amp-archetype
$ ./run.sh build_start
HOW WE DID IT

Alfresco SDK – Source Code

Maven

docker-compose.yml
- postgres persistent
- activemq
- solr6 persistent
- alfresco* persistent
- transform
- share*
- content-app
- proxy
KUBERNETES
Alfresco has a cloud native architecture and is ready for K8S & HELM to be deployed at scale
RESOURCES
REFERENCES

- Alfresco Docker Extension - Source Code
  https://github.com/AlfrescoLabs/alfresco-docker-extension

- Docker Extensions Publication Guidelines (from Docker)
  https://www.docker.com/products/extensions/submissions

- Alfresco Community Downloading Page

- Alfresco Deployment - Source Code
  https://github.com/Alfresco/acs-deployment

- Alfresco Docker Installer - Source Code
  https://github.com/Alfresco/alfresco-docker-installer

- Alfresco SDK – Source Code
  https://github.com/Alfresco/alfresco-sdk
Images in title slides dreamed by Stable Diffusion
https://github.com/CompVis/stable-diffusion
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