



DEVELOPERS LIVE

Content & Commerce with Adobe Experience Manager as a Cloud Service

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About Me



Markus Haack
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 @mhaack



Agenda



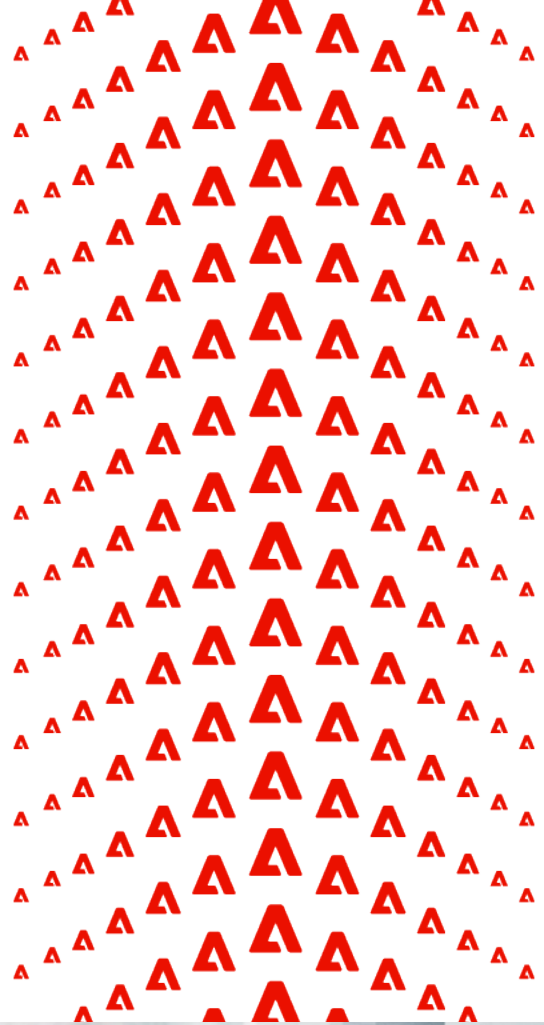
Intro to AEM
Content &
Commerce



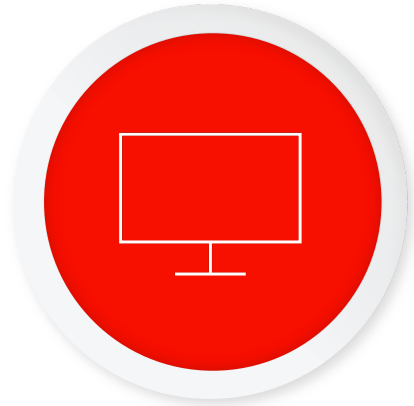
AEM Commerce as
a Cloud Service



AEM Commerce
Local Development



Adobe Experience Manager Content and Commerce



Adobe Experience Manager

A powerhouse combo of Content and Digital Asset Management for exceptional commerce experience creation and delivery



Adobe Commerce Integration Framework (CIF)

Connecting commerce engines with AEM to provide a seamless content and commerce authoring experience with live product context

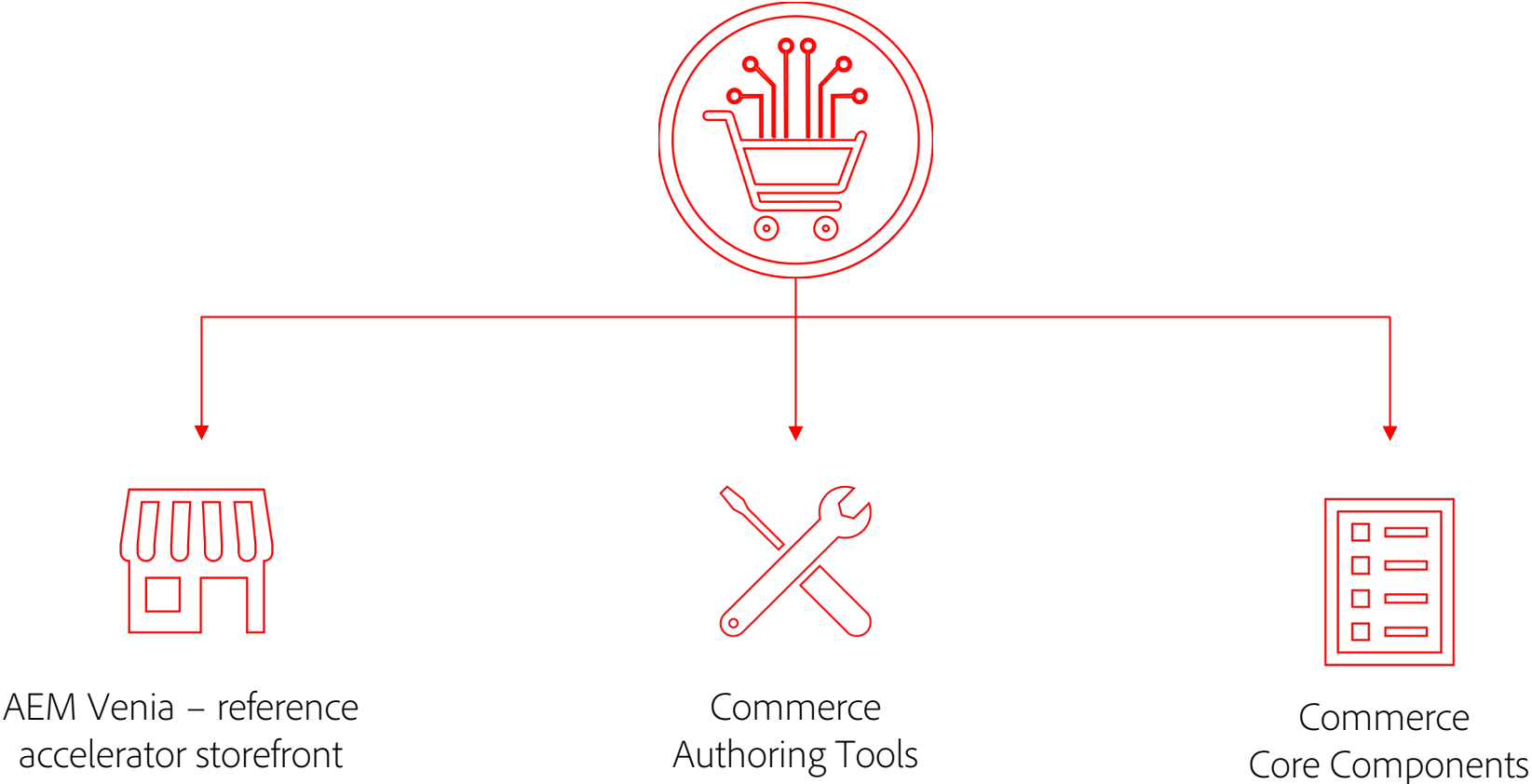


Commerce Engines

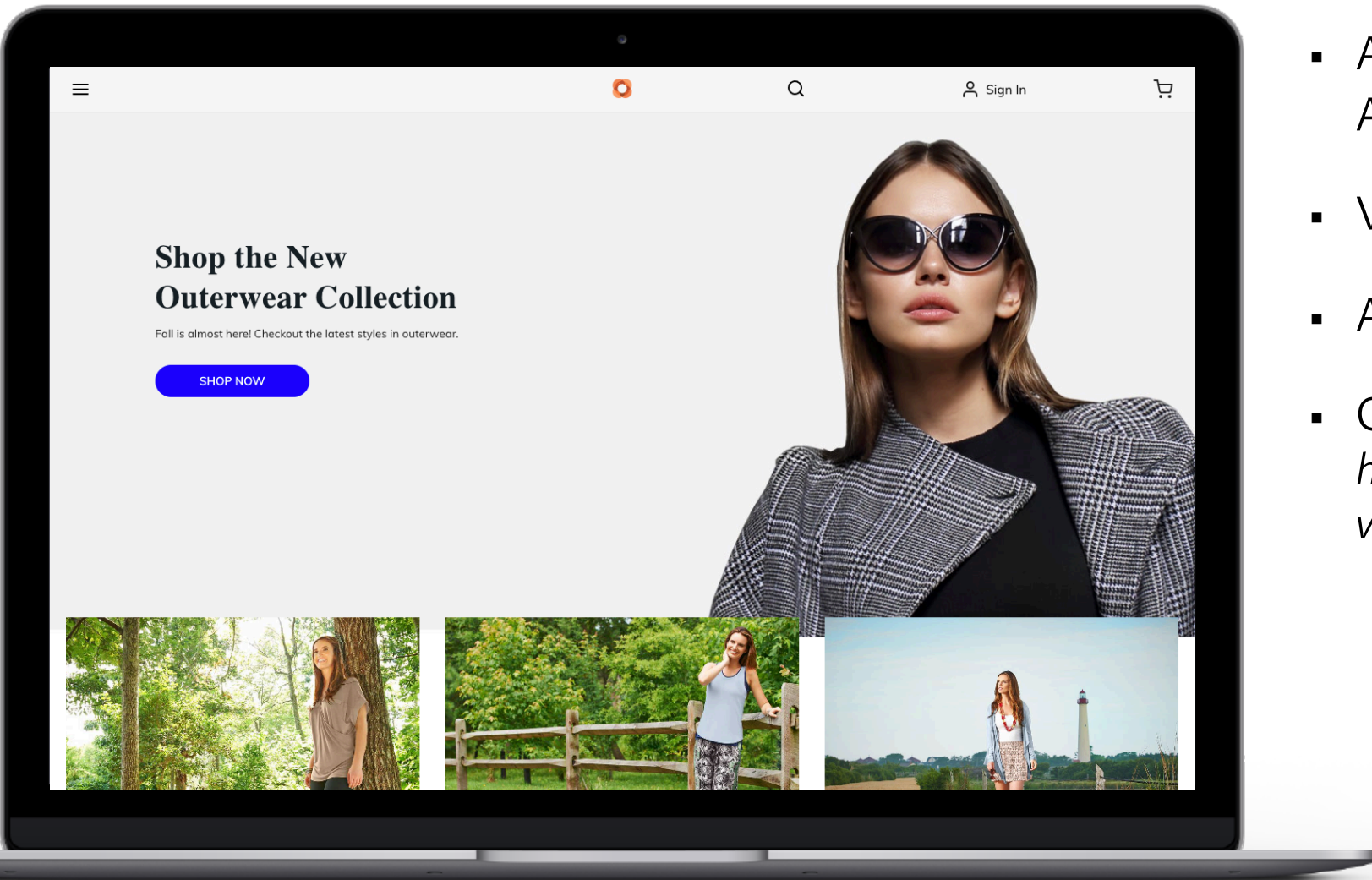
Supporting commerce engine integration from Magento Commerce to any commerce engine(s)



Commerce Integration Framework building blocks

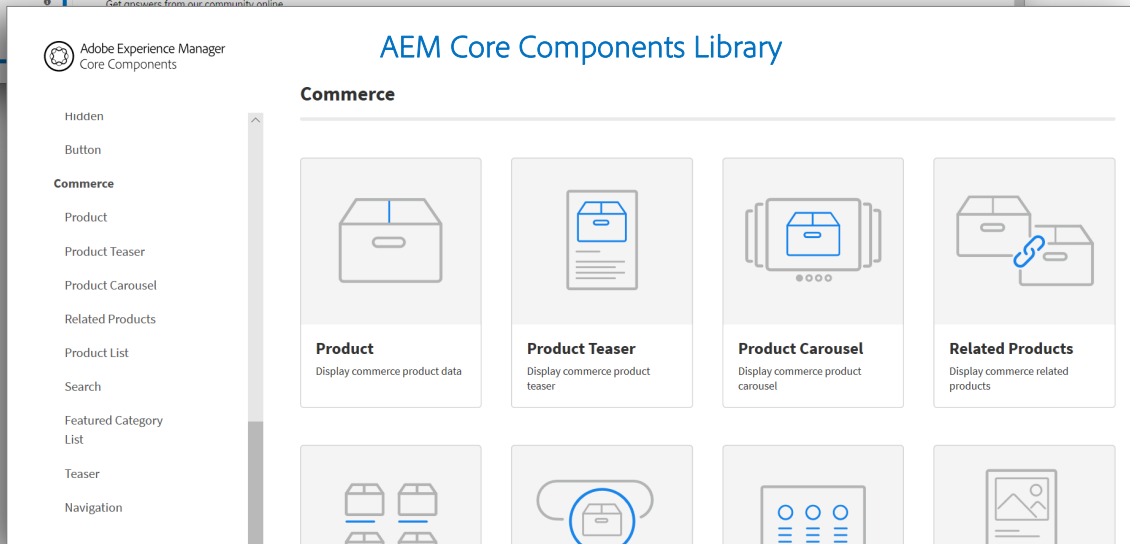
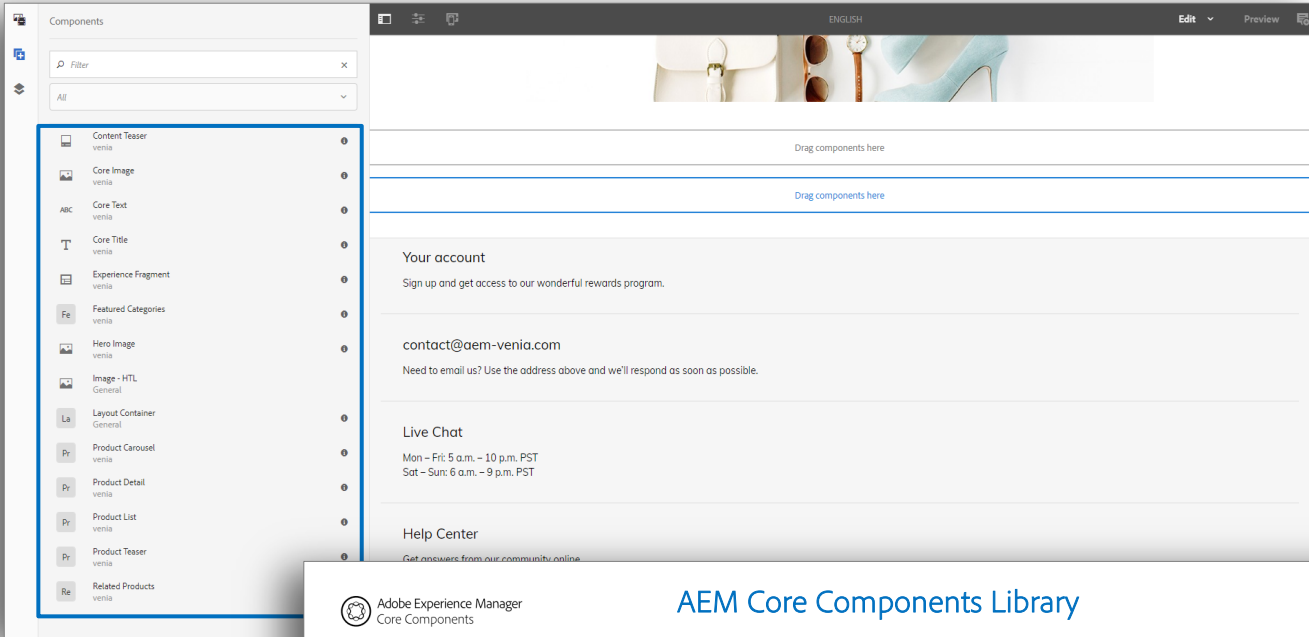


Production-ready AEM Venia Reference Storefront



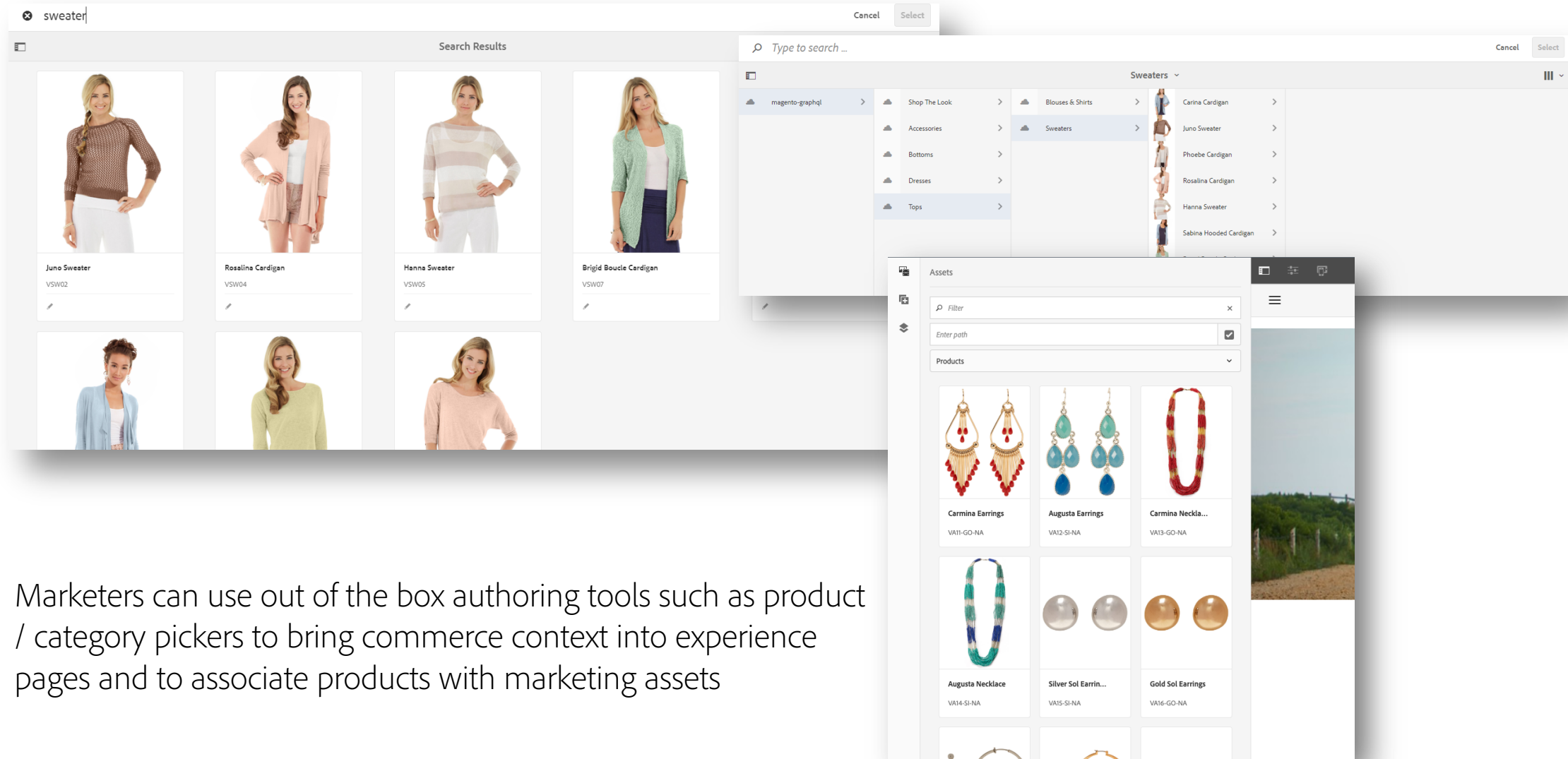
- Accelerate storefront development on AEM
- Visualize typical B2C experience
- Achieved with CIF Core Components
- Open-source:
<https://github.com/adobe/aem-cif-guides-venia>

Commerce Core Components



- Commerce Core Components are part of AEM Components Library
- Reduce the need for custom code and help accelerate time to market
- Building blocks that can be easily extended by developers to build a flexible foundation for future optimizations
- Configurable with easy drag & drop functionality for marketers to create experience pages with content and commerce
- Internationalization support for all components

Commerce Authoring | Bring product context into AEM

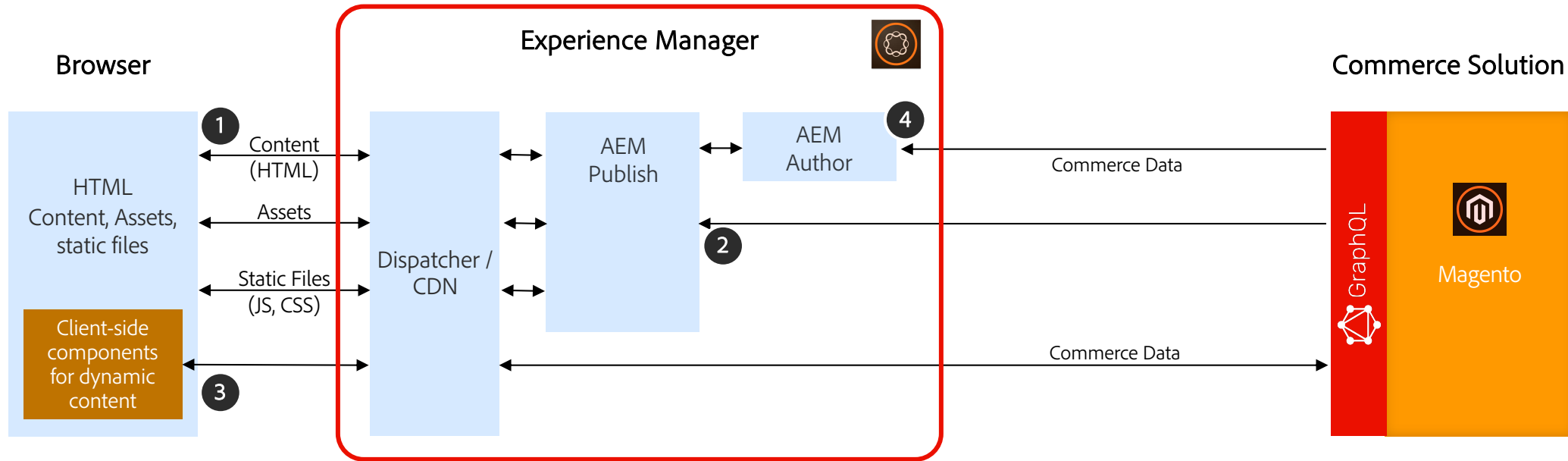


Marketers can use out of the box authoring tools such as product / category pickers to bring commerce context into experience pages and to associate products with marketing assets

AEM Commerce as a Cloud Service Architecture

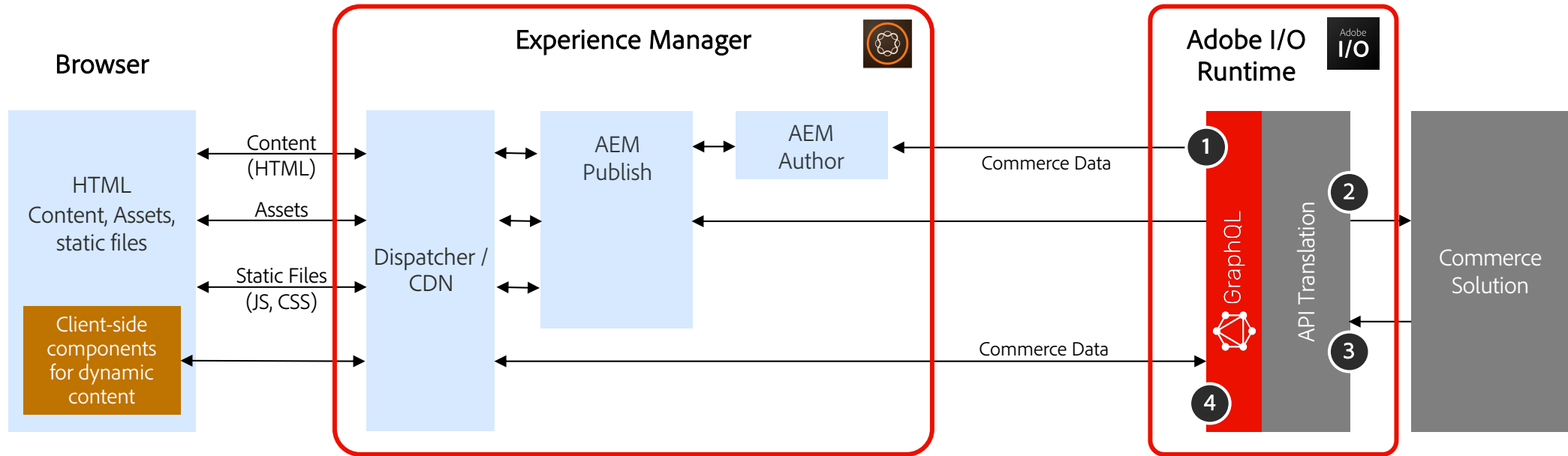


Today's AEM commerce high level architecture | Magento



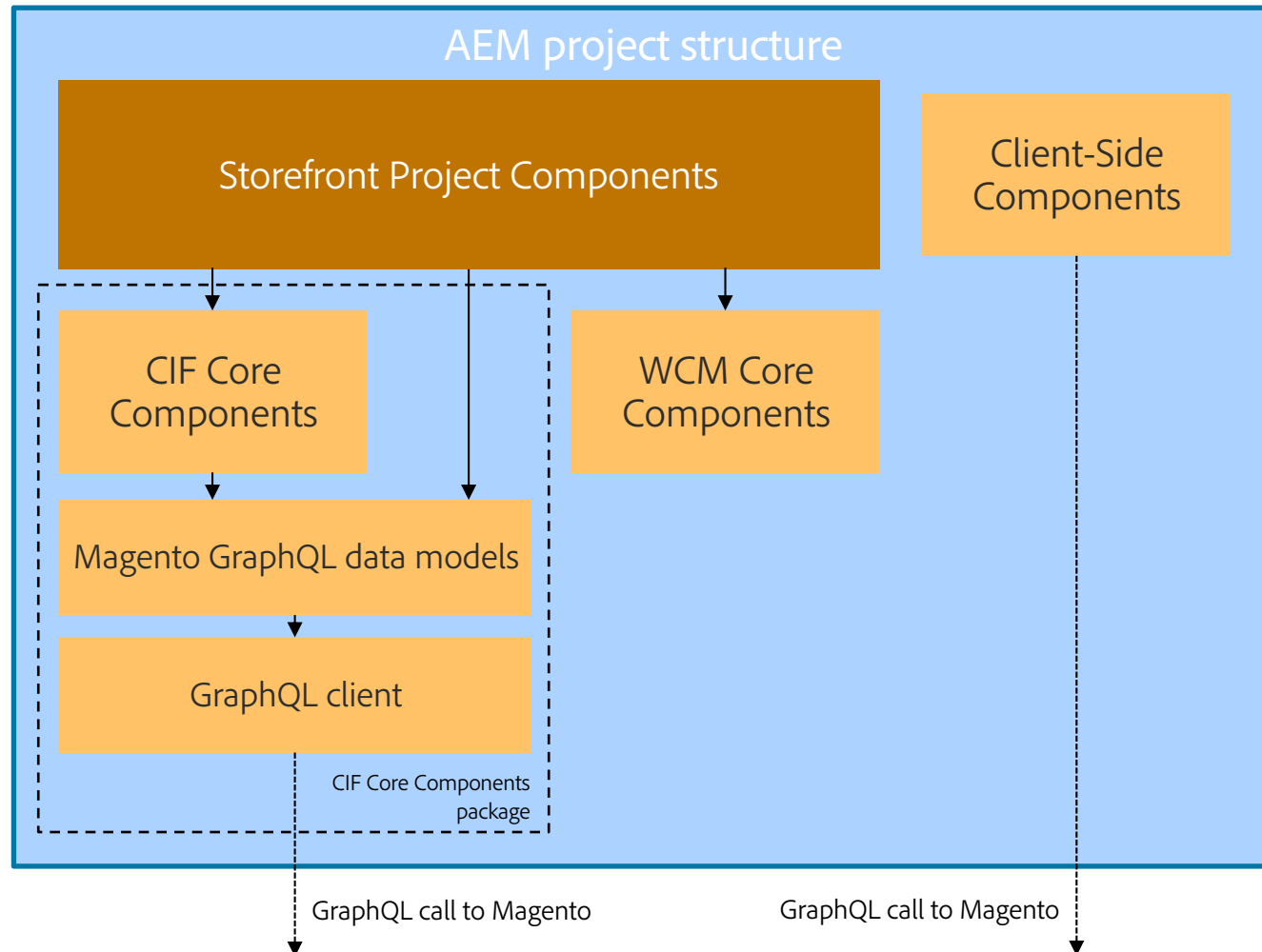
- 1 Browser requests page, assets and static files from AEM Publish via Dispatcher / CDN
- 2 AEM Publish requests commerce data to render shopping experiences
- 3 Client-side components exchange non-cacheable data and render experience with Magento
- 4 AEM Author integrates staged and live product data for authoring tools

Today's AEM commerce high level architecture | 3rd party commerce



- 1 GraphQL API endpoint provided via on Adobe I/O Runtime or custom alternative
- 2 GraphQL resolver will invoke I/O Runtime actions for request mapping
- 3 API response from commerce will be transformed into common GraphQL schema
- 4 GraphQL object hierarchy aggregated and send back to client

Commerce Core Components



- CIF Core Components are used as part of the customer project
- Embedded in our production-ready AEM Venia Reference Storefront
- Customer components will overlay CIF Core Components, similar like AEM WCM Core Components
- Core Components have data layer support build in
- Magento GraphQL models and GraphQL client are OSGI bundles, embedded in the CIF Core Components package

AEM Commerce as a Cloud Service

Start your engines



AEM & Commerce – Ready to start the project?

1

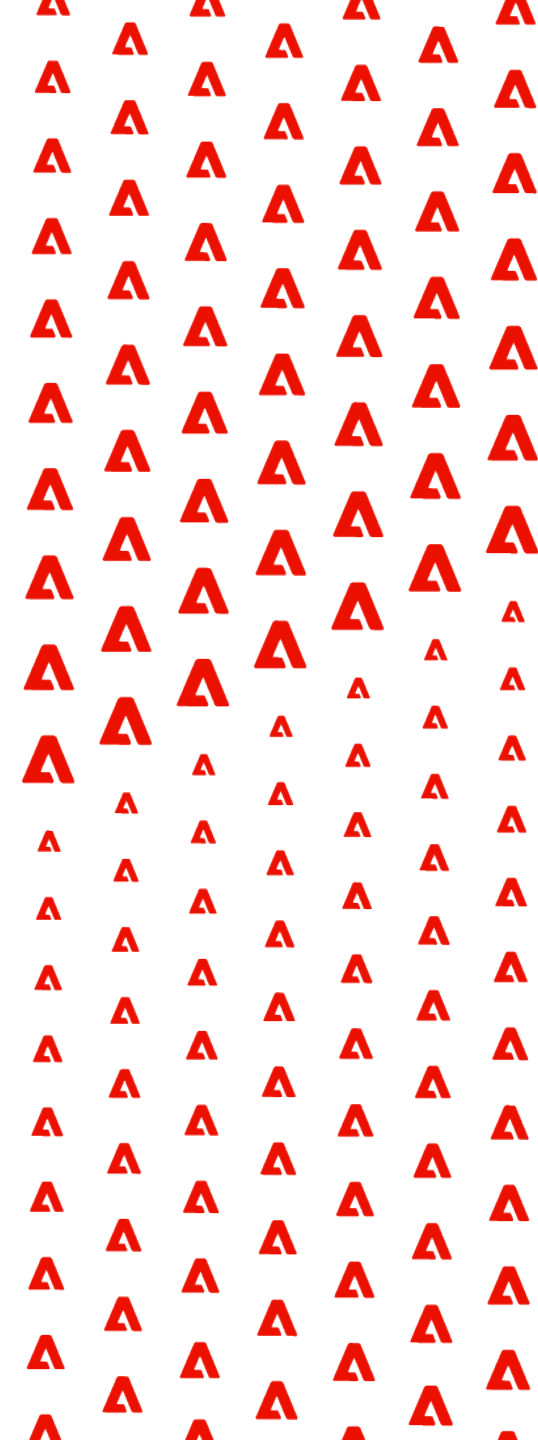
Onboarding to AEM Commerce

2

Connect to Commerce Solution

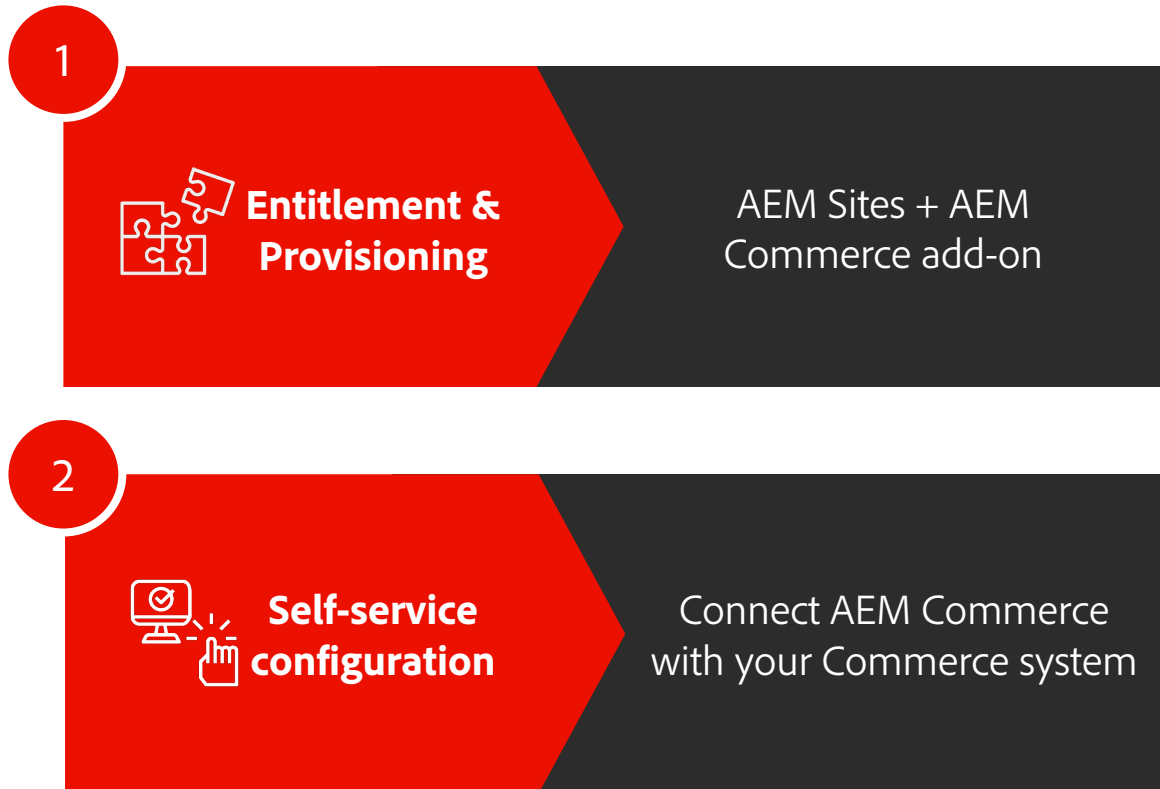
3

Deploy project code via Cloud Manager



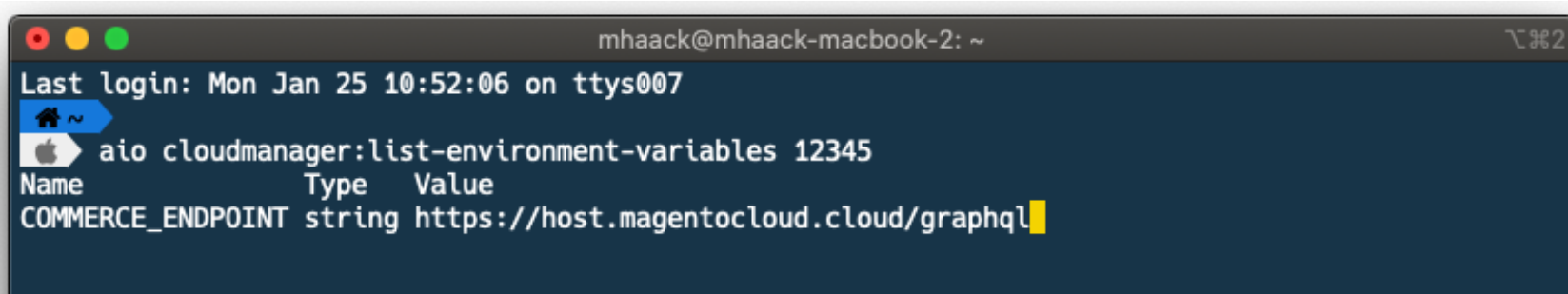
Onboarding

Onboarding for AEM Commerce as a Cloud Service in two steps only



Connect AEM & Commerce

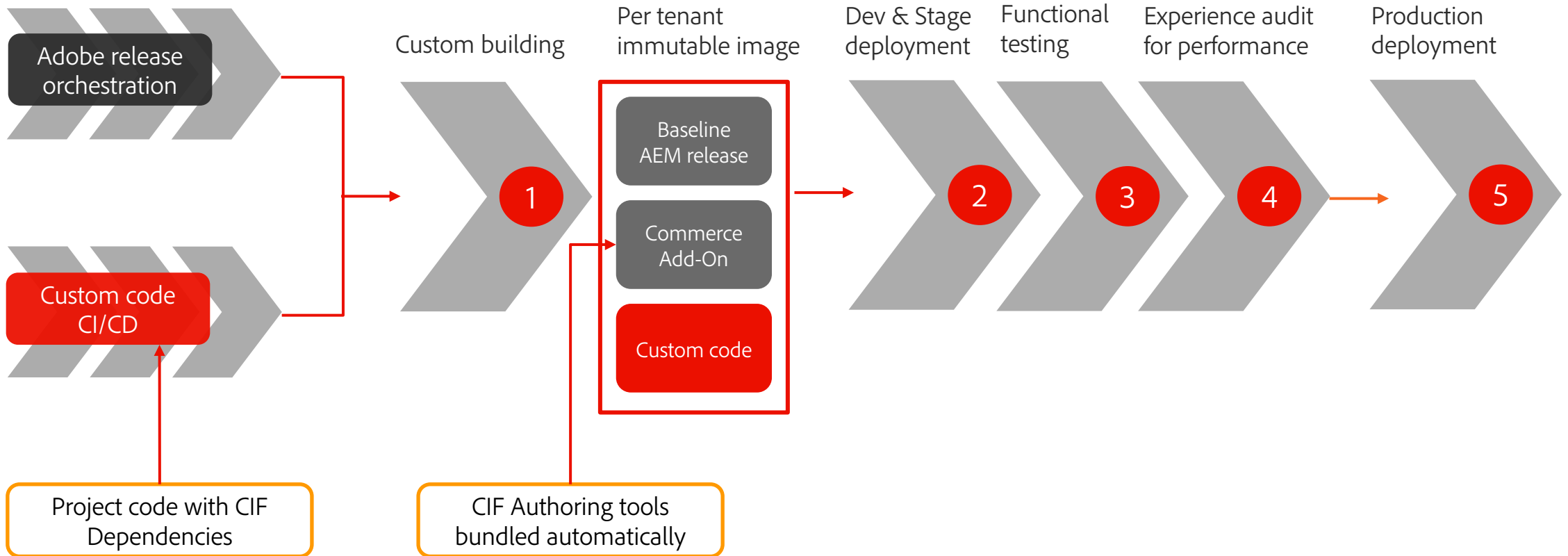
- Connect AEM to commerce system using AEM Cloud Service environment variables*
- Manage via Cloud Manager CLI tool
 - Adobe I/O CLI + Cloud Manger CLI plugin
 - Follow readme to setup authentication with Adobe I/O
- For AEM Commerce > only 1 environment variable **COMMERCE_ENDPOINT** required
- Optional Magento API token for preview and staged data access (requires Magento >= 2.4.2)



```
mhaack@mhaack-macbook-2: ~  
Last login: Mon Jan 25 10:52:06 on ttys007  
aio cloudmanager:list-environment-variables 12345  
Name      Type  Value  
COMMERCE_ENDPOINT string https://host.magentocloud.cloud/graphql
```

* See <https://experienceleague.adobe.com/docs/experience-manager-cloud-service/commerce/getting-started.html>

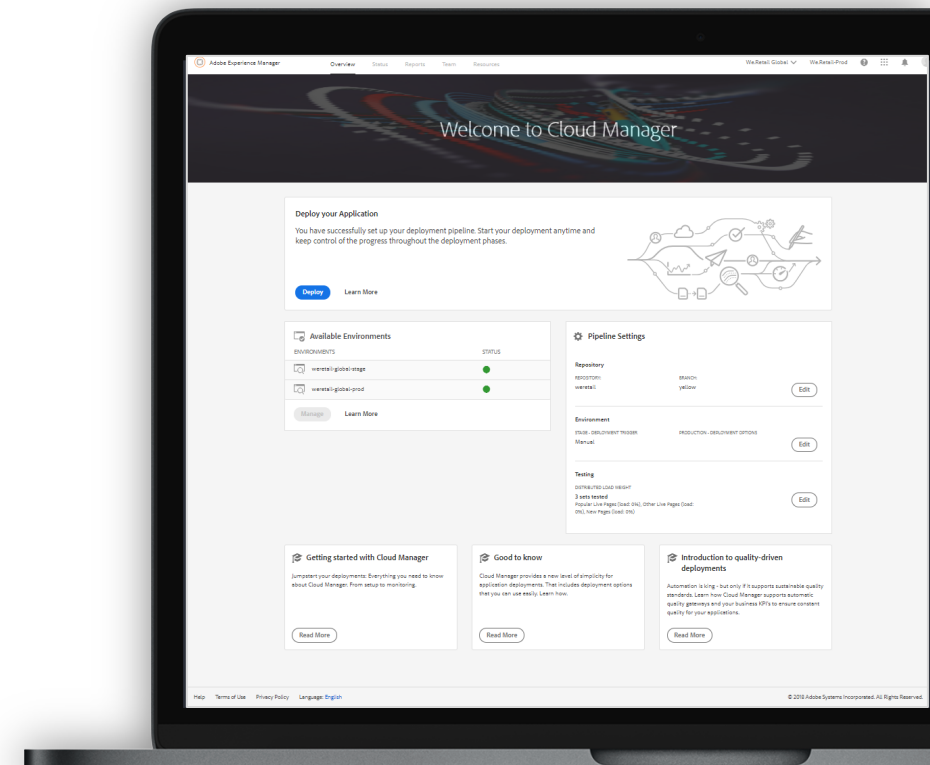
One CI/CD pipeline for delivering exceptional experiences



Get you project ready

- 3 ways to start: AEM Archetype or Venia Reference or manually add CIF dependencies
- Push to Cloud Manager Git repo and trigger manually or on git push
- Check CM image build logs for “Feature Archive Tool” and “CIF” messages

```
vi ~/Downloads/buildImage_buildImage.log
Feature Archive Tool
-----
Local maven directory : /root/.m2/repository
Source directory      : /tmp/src/main/features
Processing add-on cif
Reading feature archive from https://cifonskyline.blob.core.windows.net/cif-skyline-artifacts/2020
.12.01/cif-cloud-ready-feature-pkg-2020.12.01-cq-commerce-addon-authorfar.far?se=2021-12-01T12%3A1
7%3A21Z&sp=r&spr=https&sv=2018-11-09&sr=b&sig=fY0fLHs4drqUdCjMSnq/%2BCr0lrVYdoqYpRm3Y7GcG0%3D
Writing file com.adobe.cq.cif:commerce-addon-bundle:2020.12.01^M
Writing file com.adobe.cq.cif:commerce-addon-application:zip:2020.12.01
Writing file com.adobe.cq.cif:commerce-addon-configuration:zip:2020.12.01
Writing feature com.adobe.cq.cif:cif-cloud-ready-feature-pkg;slingsgifeature:cq-commerce-addon-au
thor:2020.12.01
Reading feature archive from https://cifonskyline.blob.core.windows.net/cif-skyline-artifacts/2020
.12.01/cif-cloud-ready-feature-pkg-2020.12.01-cq-commerce-addon-publishfar.far?se=2021-12-01T12%3A
17%3A21Z&sp=r&spr=https&sv=2018-11-09&sr=b&sig=chxL7b4fADYD9cG93etE/B%2BC732LYogSw0LSFLBpS2s%3D
Writing feature com.adobe.cq.cif:cif-cloud-ready-feature-pkg;slingsgifeature:cq-commerce-addon-pu
blish:2020.12.01
Removing intermediate container 676079376f22
----> e30b0da3a022
Step 44/69 : RUN echo end_addon_featurearchive=`date +%s` >> /tmp/build-stats.txt
----> Running in cfc094b7e7ad
Removing intermediate container cfc094b7e7ad
```



AEM Commerce as a Cloud Service

Local development setup



AEM & Commerce – Ready to start the project?

1

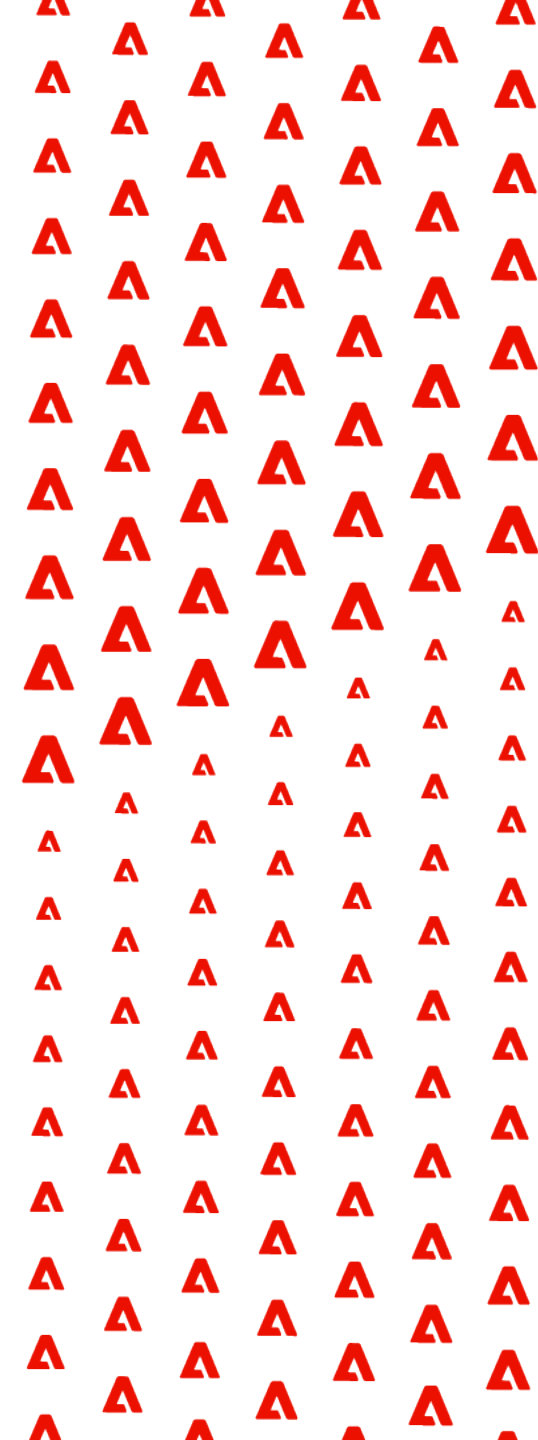
Get AEM Cloud SDK & CIF Add-On

2






Connect to Magento 2.3.5 or Magento 2.4

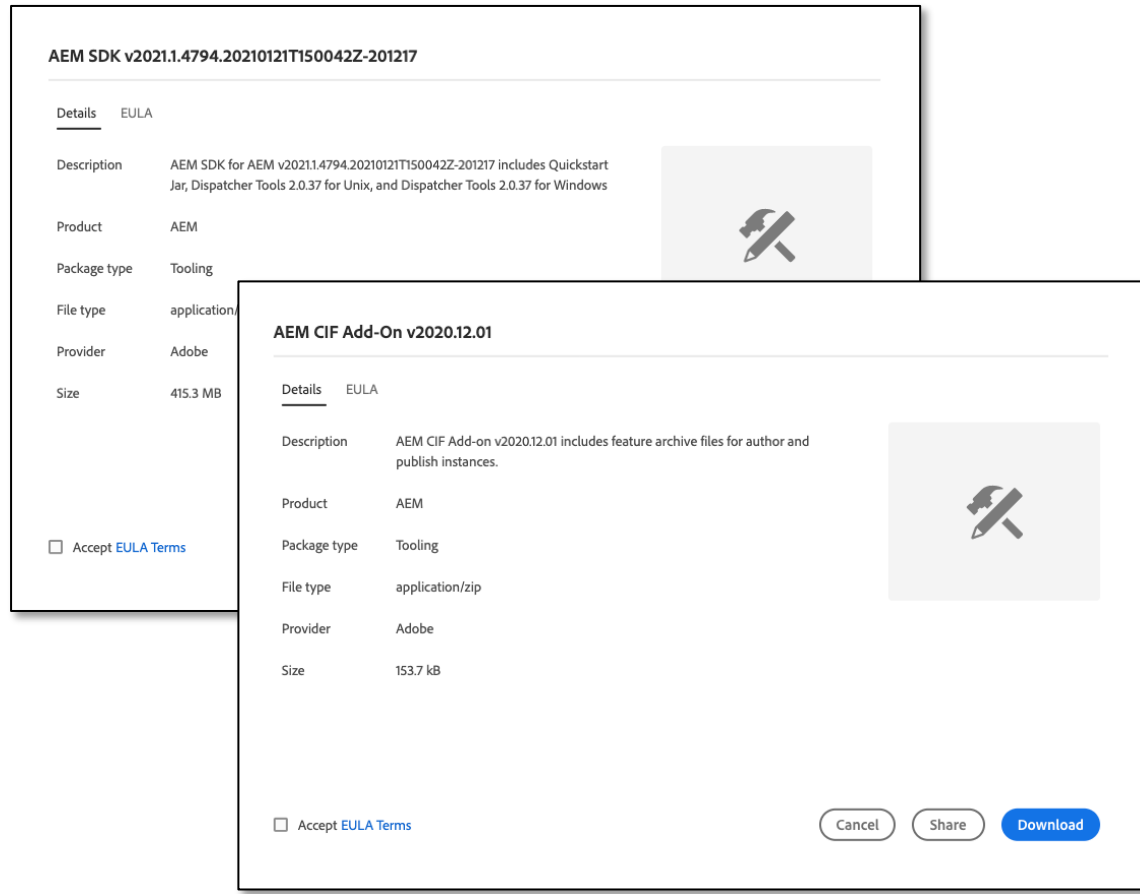
3

Deploy Venia reference project or start from AEM Archetype



Local development environment setup

-  **Get AEM SDK + CIF Add-On**
-  **Magento**
-  **Install add-on**
-  **Link the catalog**
-  **Deploy the project**



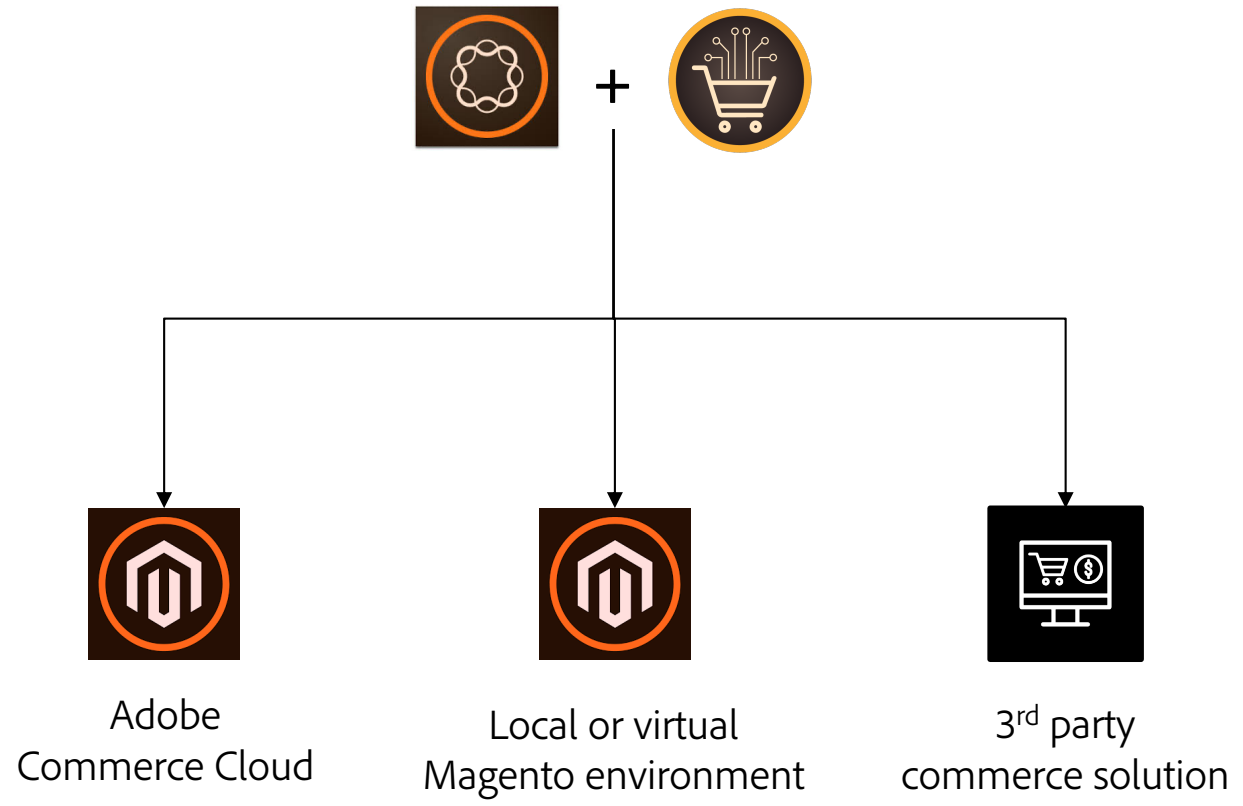
The screenshot displays two overlapping windows from the Adobe Experience Manager (AEM) software distribution interface. The top window shows details for 'AEM SDK v2021.1.4794.20210121T150042Z-201217'. The bottom window shows details for 'AEM CIF Add-On v2020.12.01'. Both windows include a 'Details' tab, a description, product name, package type, file type, provider, and size. Each window also has an 'Accept EULA Terms' checkbox and a 'Download' button.

| Product Name | Version | Size | File Type | Provider |
|----------------|--------------------------------------|----------|-----------------|----------|
| AEM SDK | v2021.1.4794.20210121T150042Z-201217 | 415.3 MB | application | Adobe |
| AEM CIF Add-On | v2020.12.01 | 153.7 kB | application/zip | Adobe |

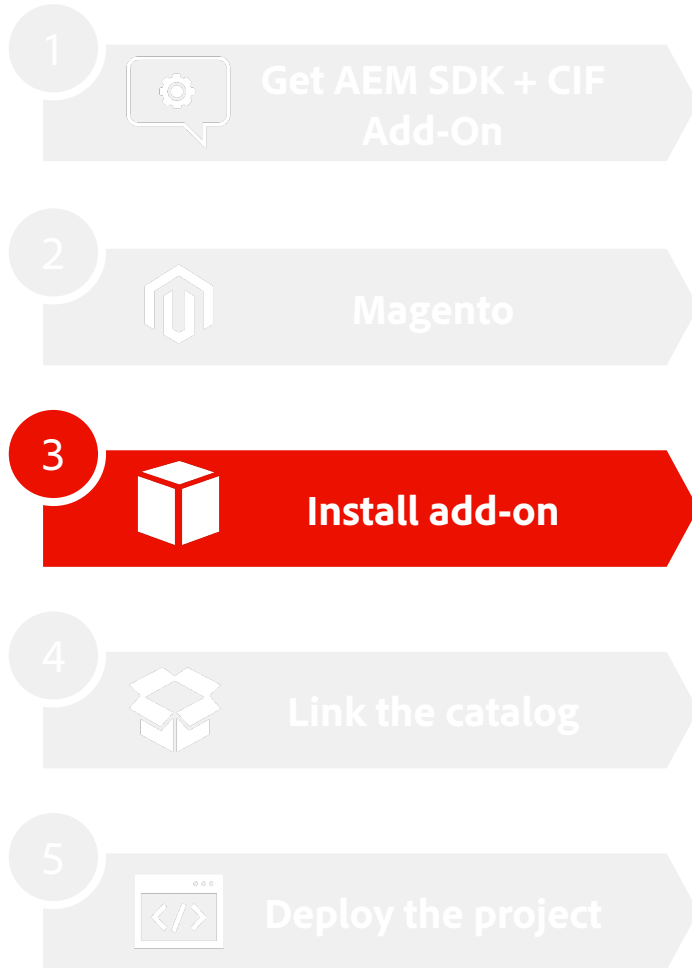
Adobe Software Download: <https://experience.adobe.com/#/downloads/content/software-distribution/en/aemcloud.html>

Local development environment setup

- 1 Get AEM SDK + CIF Add-On
- 2 **Magento**
- 3 Install add-on
- 4 Link the catalog
- 5 Deploy the project








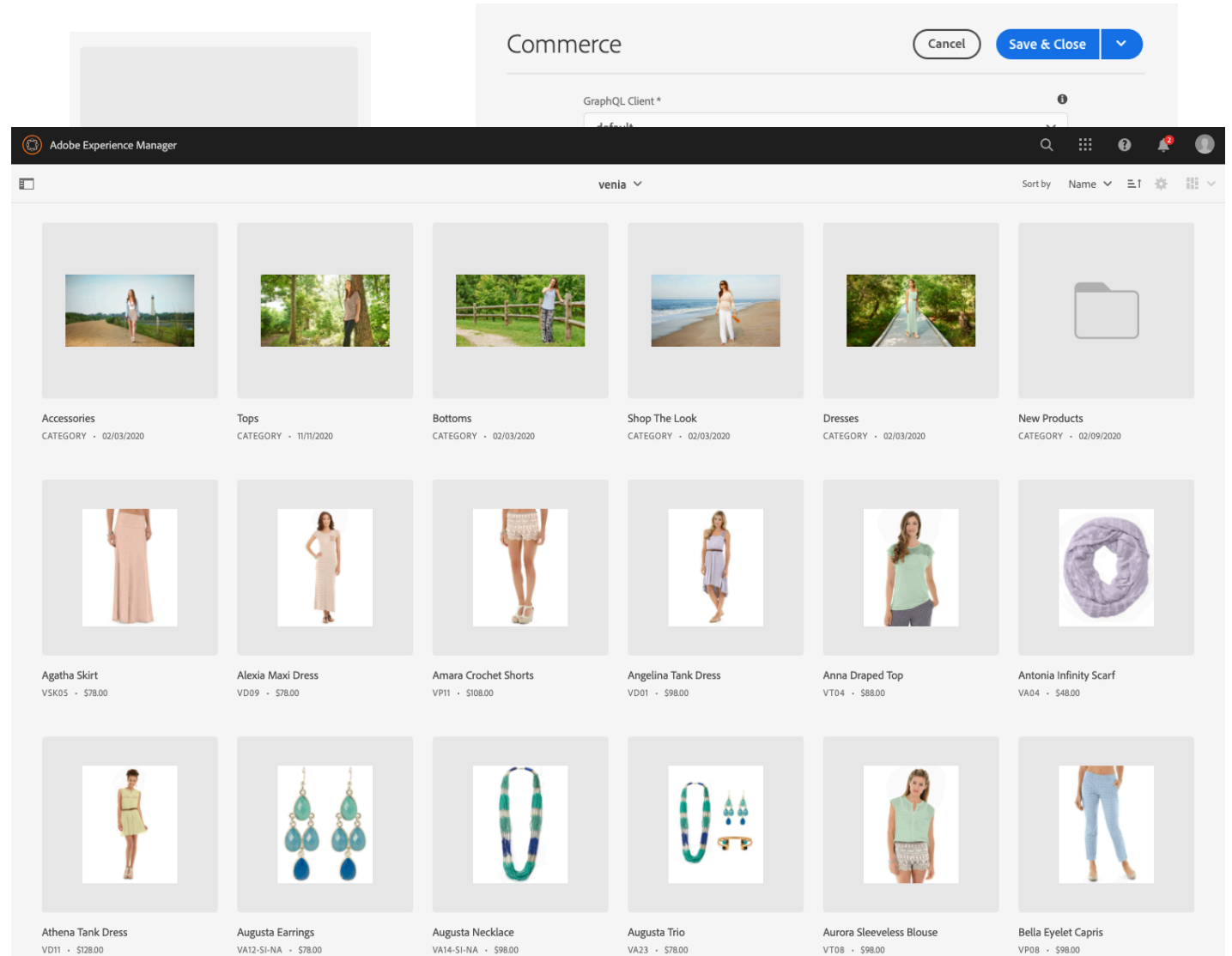
Local development environment setup



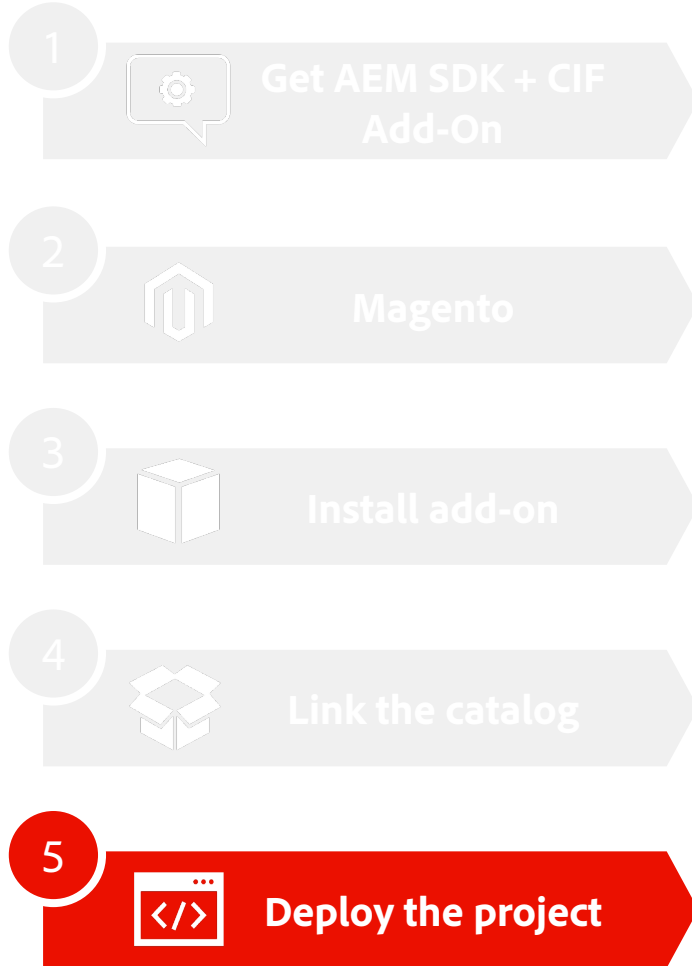
- Unpack the AEM .jar `java -jar <jar name> -unpack`
- Unpack the CIF add-on .zip
- Copy feature archive .far file to `crx-quickstart/install`
 - Use the correct one for AEM Author or AEM Publish
- Create a local OS environment variable named `COMMERCE_ENDPOINT`
 - Mac OSX: `export COMMERCE_ENDPOINT=https://demo.magentosite.cloud/graphql`
 - Windows: `set COMMERCE_ENDPOINT=https://demo.magentosite.cloud/graphql`
- Start the AEM SDK

Local development environment setup

- 1  Get AEM SDK + CIF Add-On
- 2  Magento
- 3  Install add-on
- 4  **Link the catalog**
- 5  Deploy the project



Local development environment setup



- Project setup
 - Get AEM Venia reference project from GitHub
 - Alternative build new empty project from AEM Archetype
 - Existing project: add CIF dependencies

```
<dependency>  
  <groupId>com.adobe.commerce.cif</groupId>  
  <artifactId>core-cif-components-all</artifactId>  
  <type>zip</type>  
  <version>x.y.z</version>  
</dependency>
```

- Install via Maven, like any other AEM project

```
mvn clean install -PautoInstallSinglePackage
```

Resources

Documentation

- AEM Commerce as a Cloud Service docs: <https://experienceleague.adobe.com/docs/experience-manager-cloud-service/commerce/home.html>
- Getting started with AEM Commerce as a Cloud Service: <https://experienceleague.adobe.com/docs/experience-manager-cloud-service/commerce/getting-started.html>
- Core Components Library: <https://www.aemcomponents.dev/>

GitHub Repositories:

- Commerce Core Components: <https://github.com/adobe/aem-core-cif-components>
- AEM Venia Reference Storefront: <https://github.com/adobe/aem-cif-guides-venia>
- AEM Project Archetype: <https://docs.adobe.com/content/help/en/experience-manager-core-components/using/developing/archetype/overview.html>

Support forum

- Experience League Community: <https://experienceleaguecommunities.adobe.com/t5/adobe-experience-manager/ct-p/adobe-experience-manager-community>

