DEVELOPERS LIVE

Content & Commerce

with Adobe Experience Manager as a Cloud Service

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About Me

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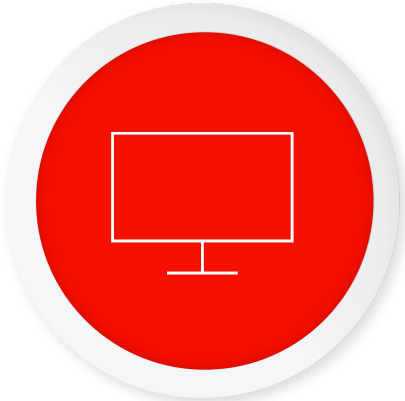
Agenda

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)

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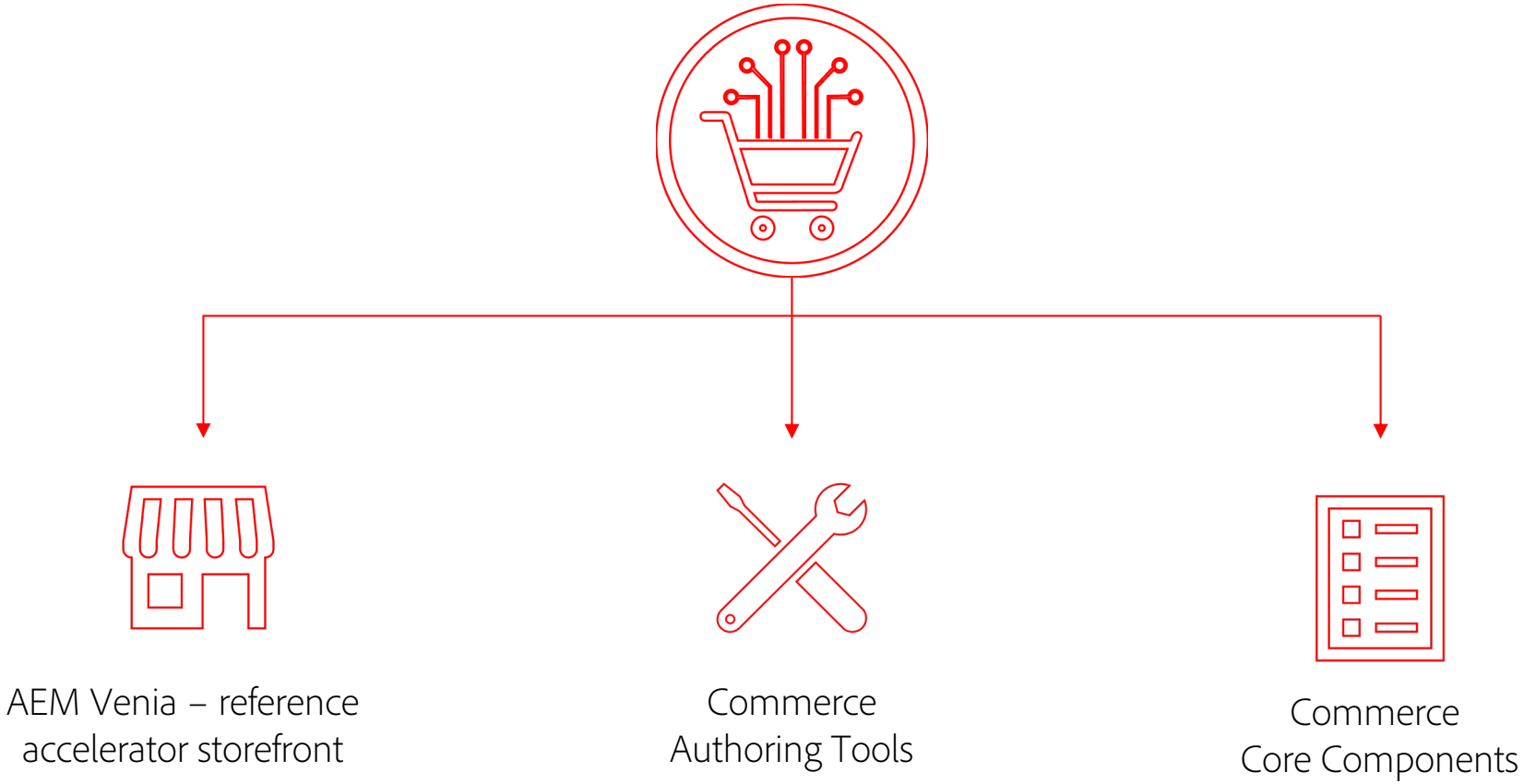
Commerce Integration Framework building blocks



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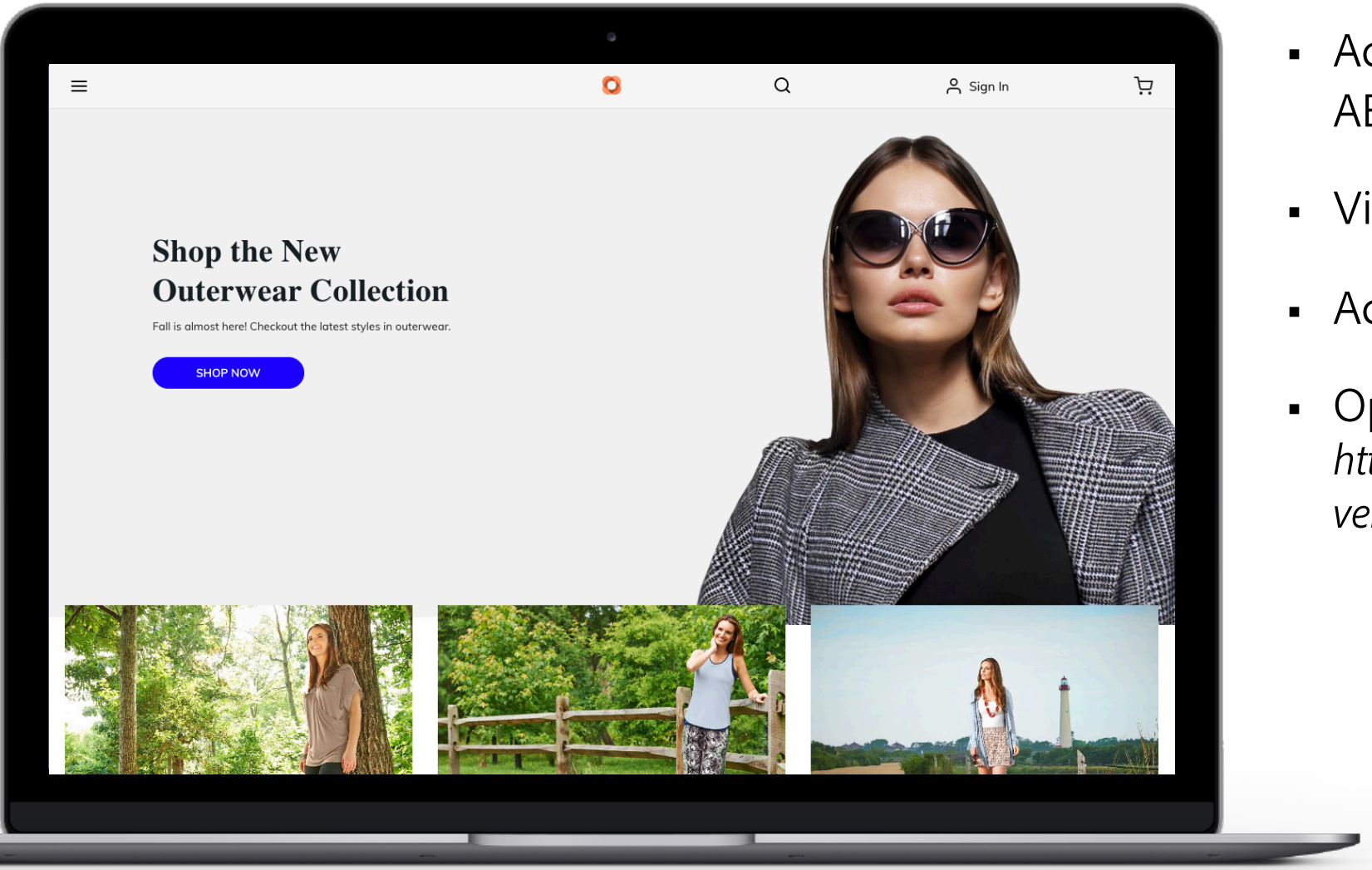
Production-ready AEM Venia Reference Storefront



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

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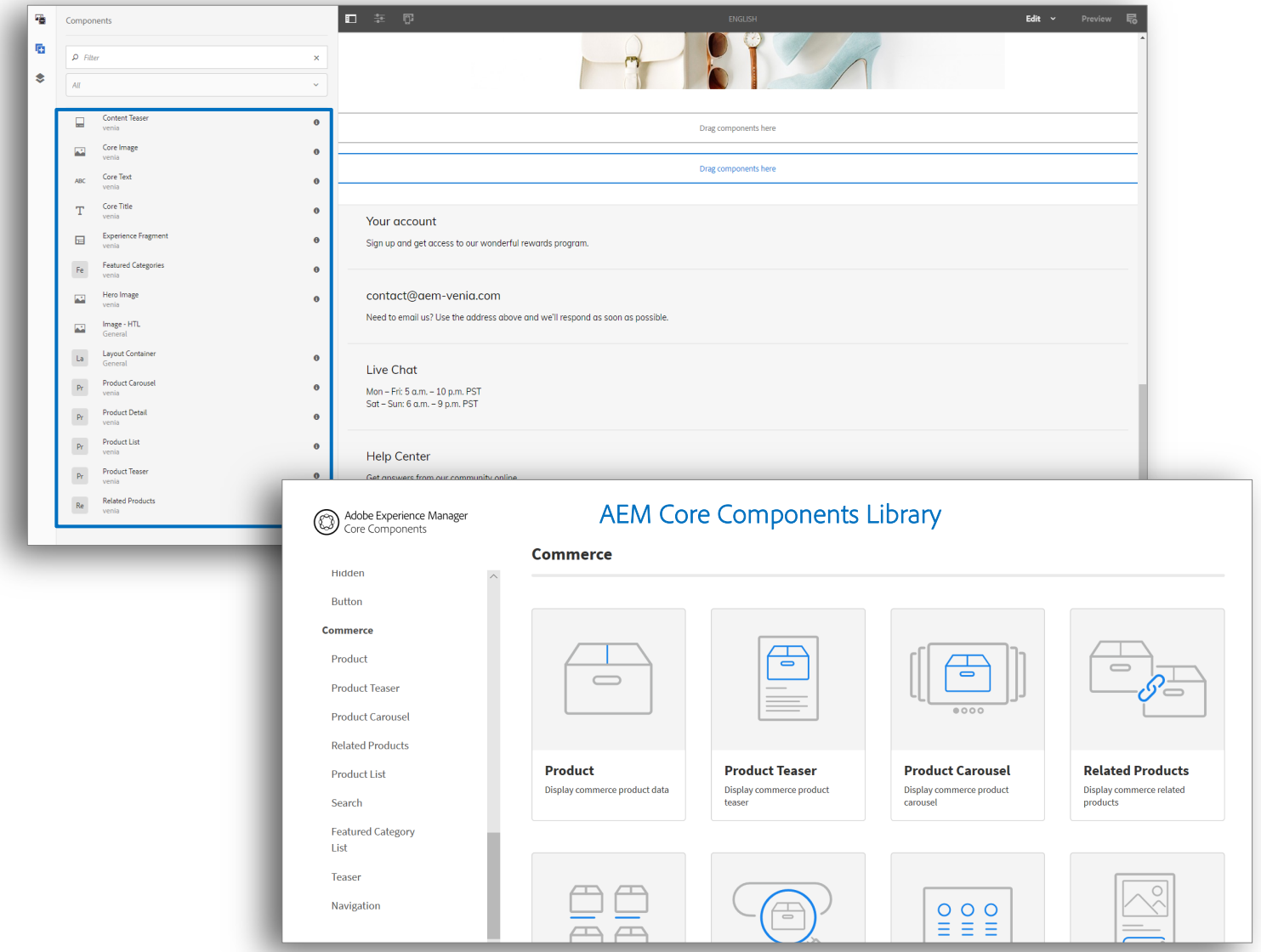
Commerce Core Components



- 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

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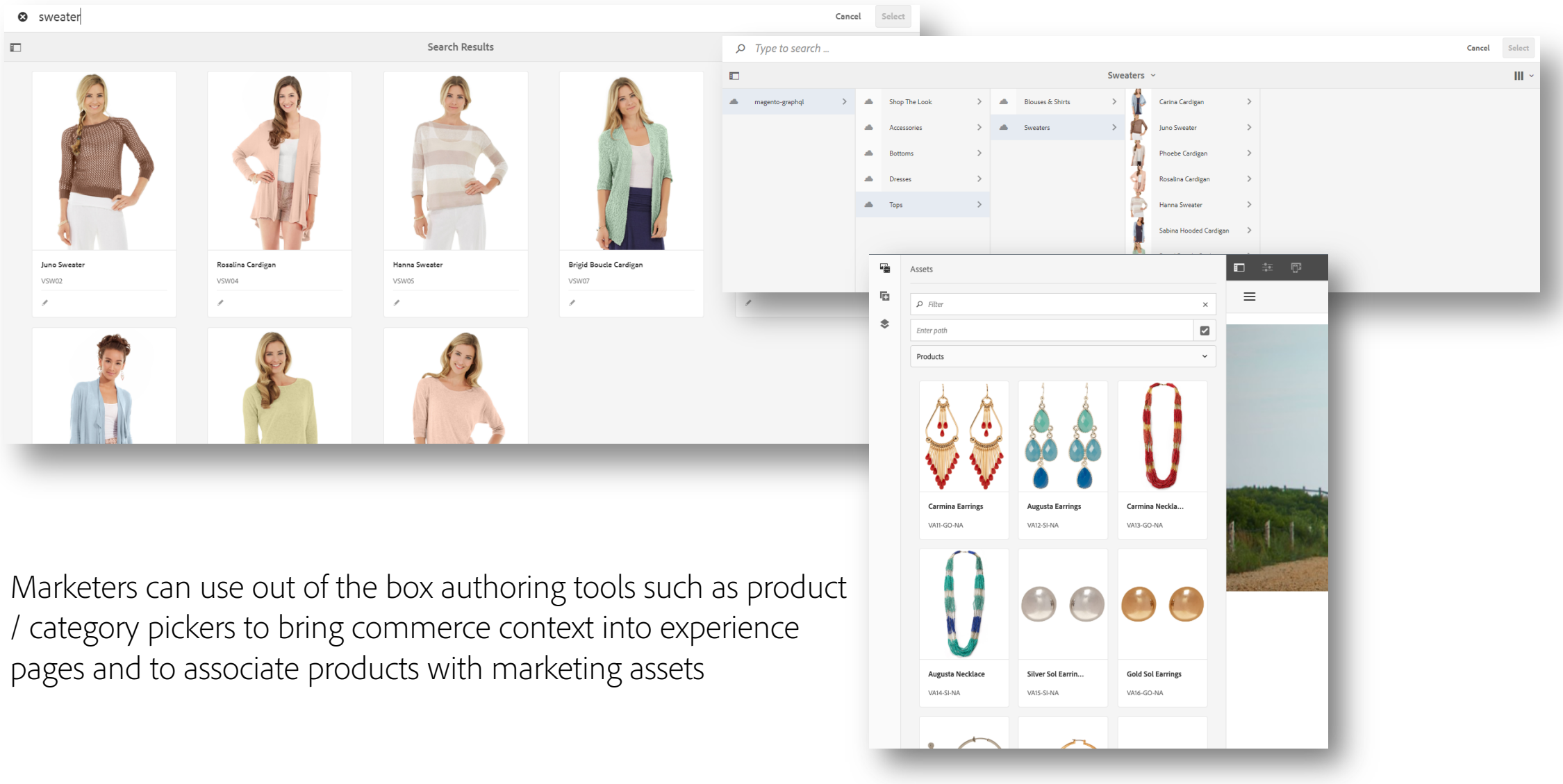
Commerce Authoring | Bring product context into AEM



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

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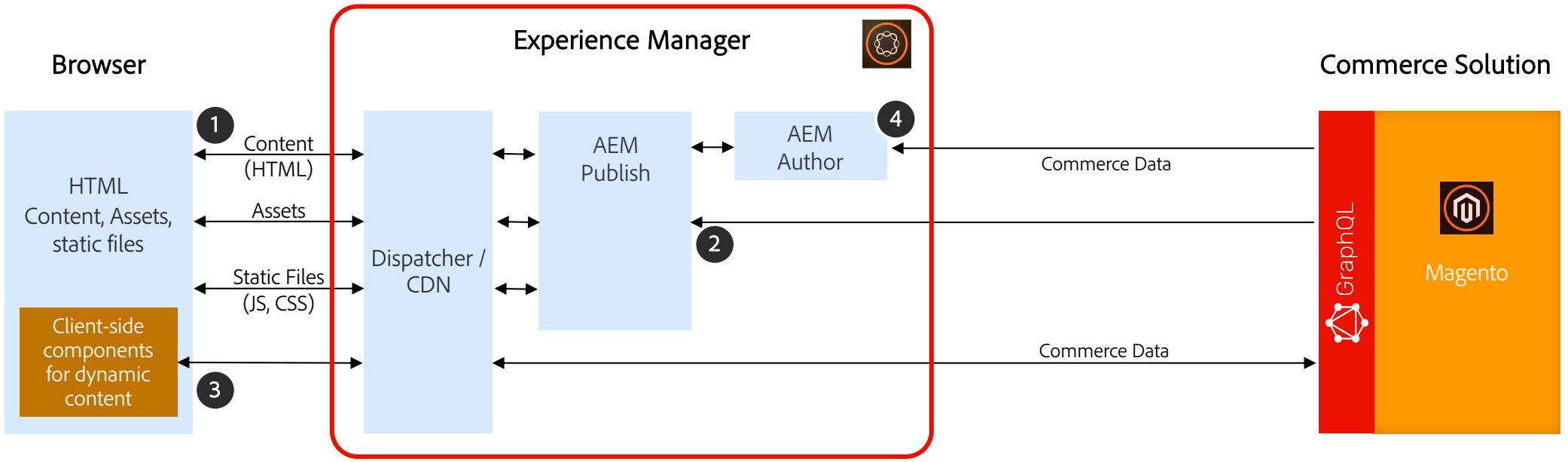
AEM Commerce as a Cloud Service

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

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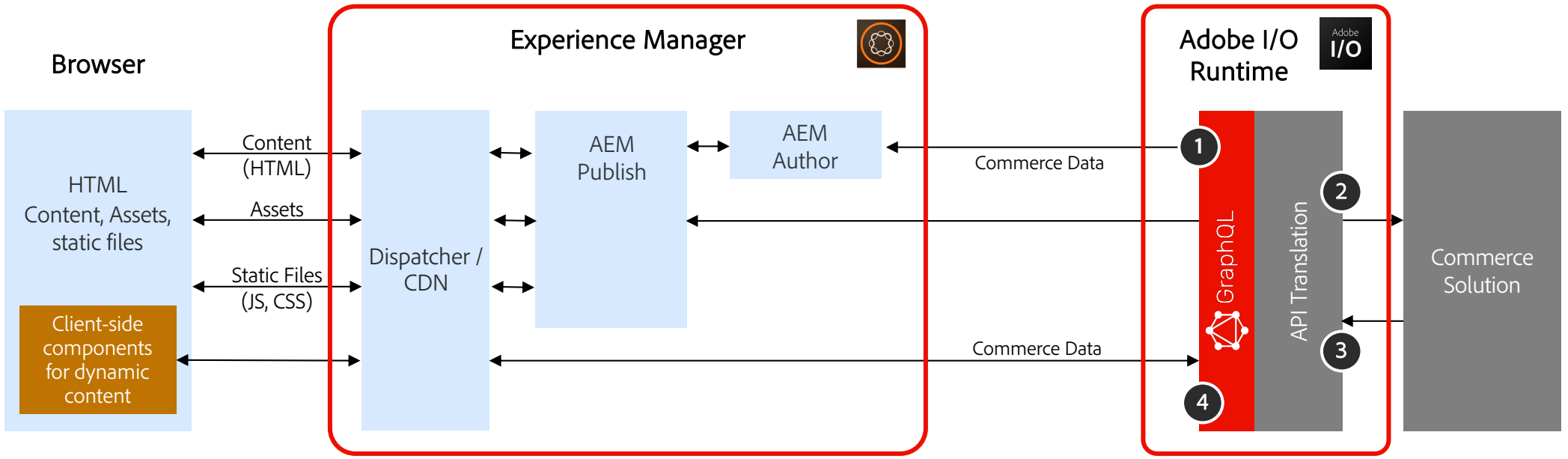
Today's AEM commerce high level architecture | 3rd party commerce



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

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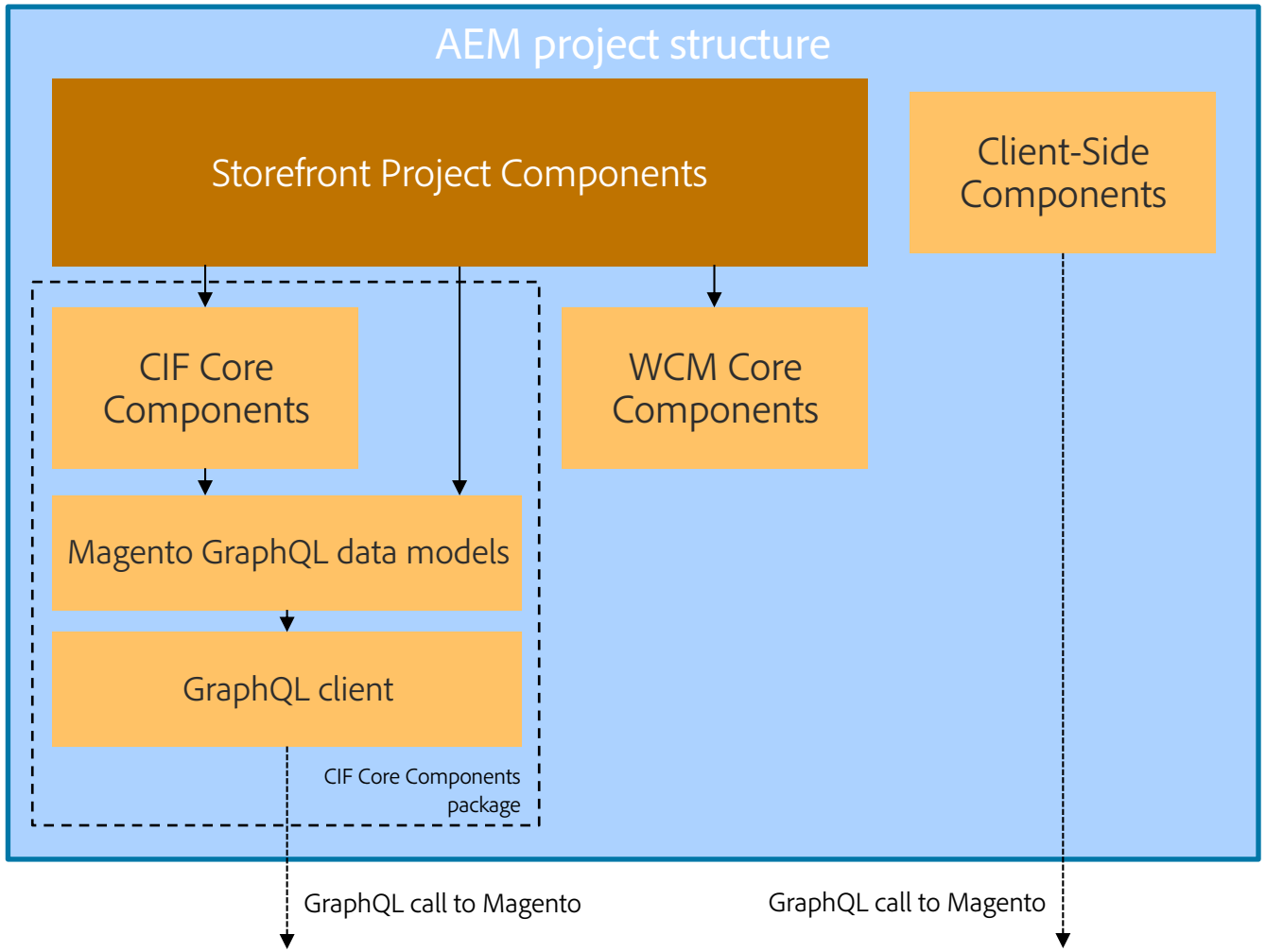
Commerce Core Components



- 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

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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

1

Entitlement & Provisioning

AEM Sites + AEM Commerce add-on

2

Self-service configuration

Connect AEM Commerce with your Commerce system

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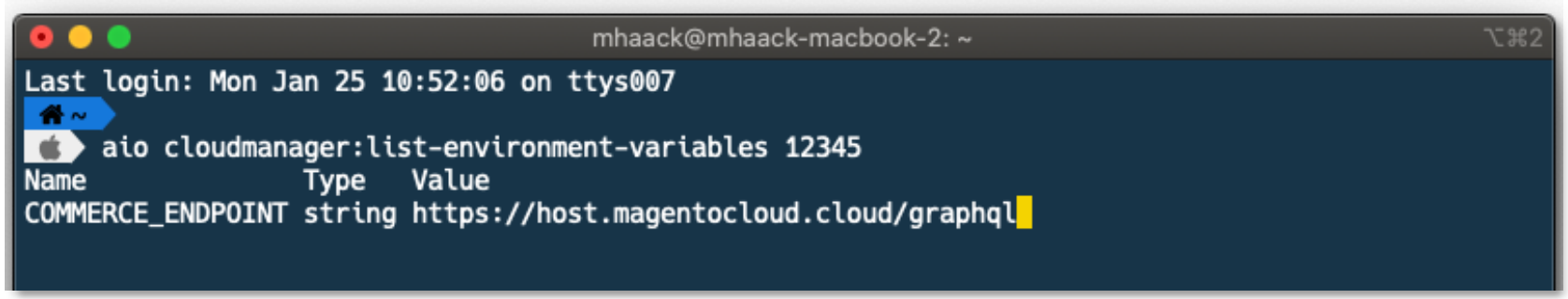
Connect AEM & Commerce

- 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)



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

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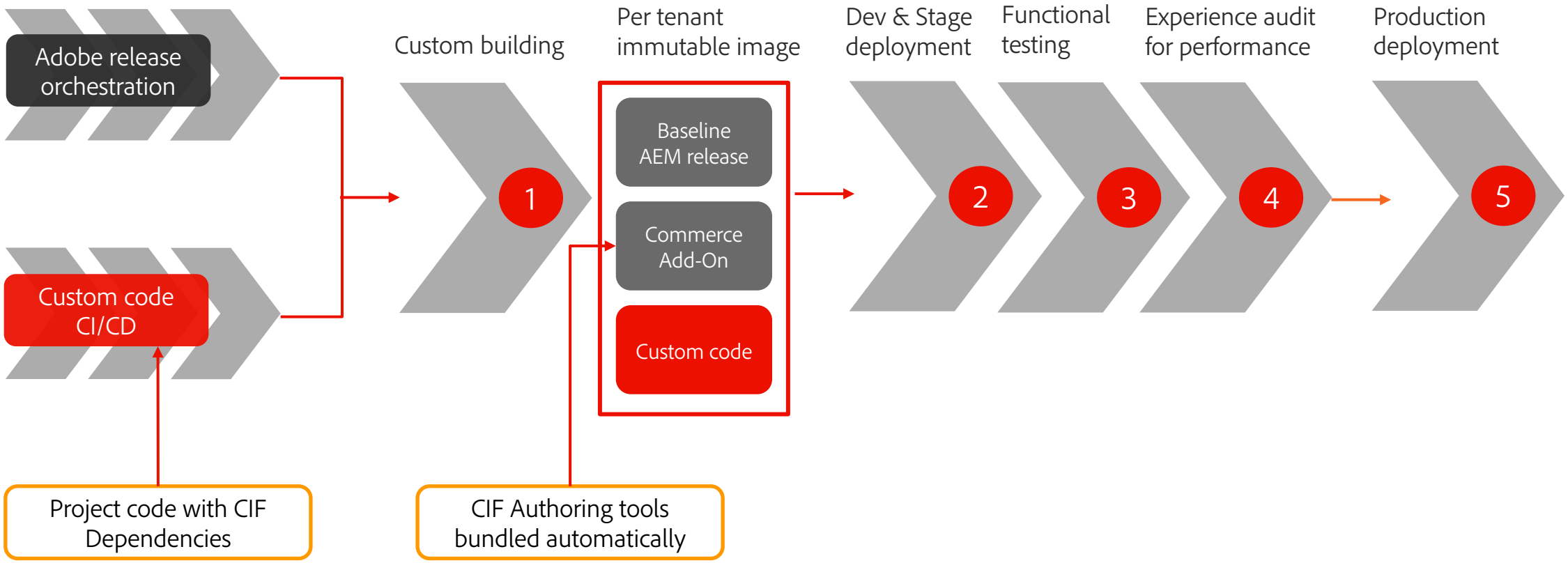
One CI/CD pipeline for delivering exceptional experiences



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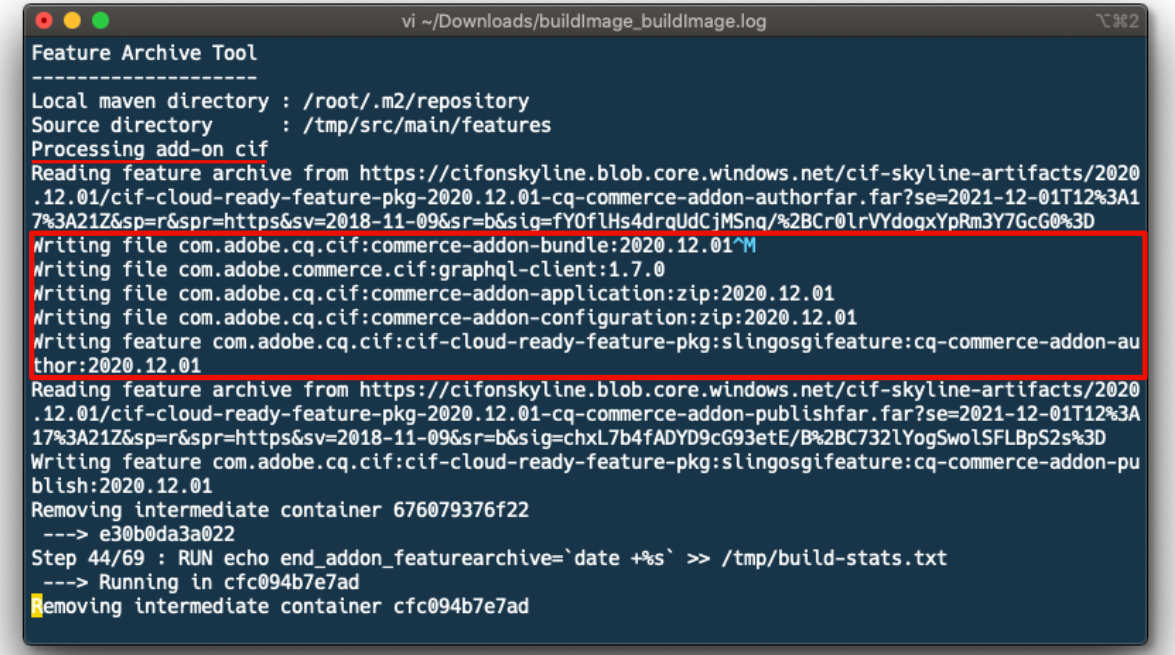
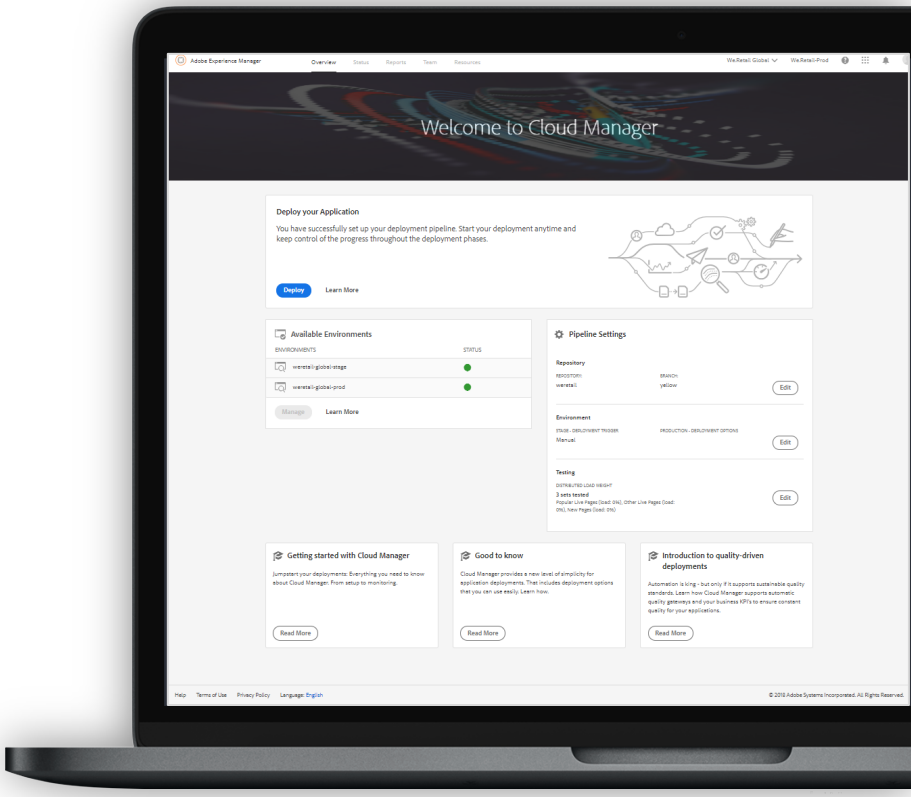
Get you project ready

- 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





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AEM Commerce as a Cloud Service

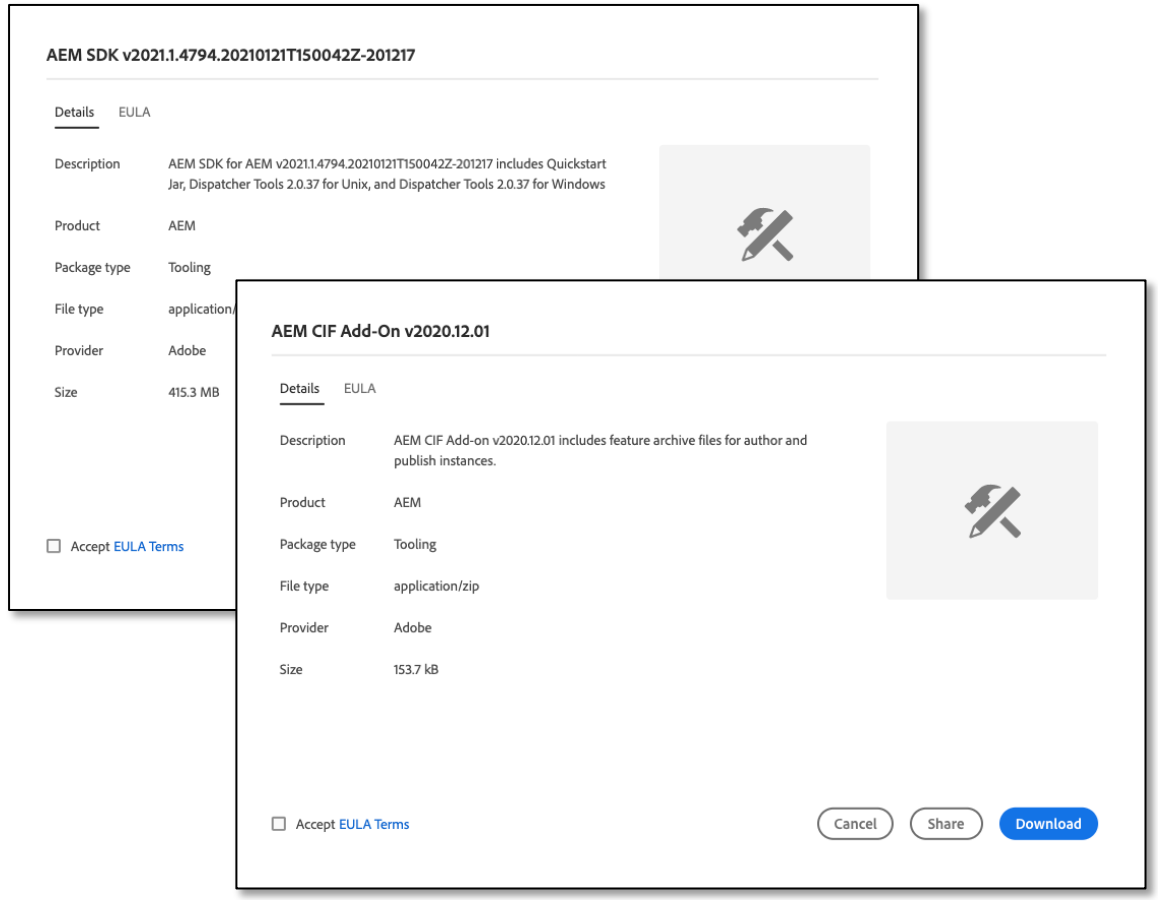
Local development setup

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

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



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

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Local development environment setup

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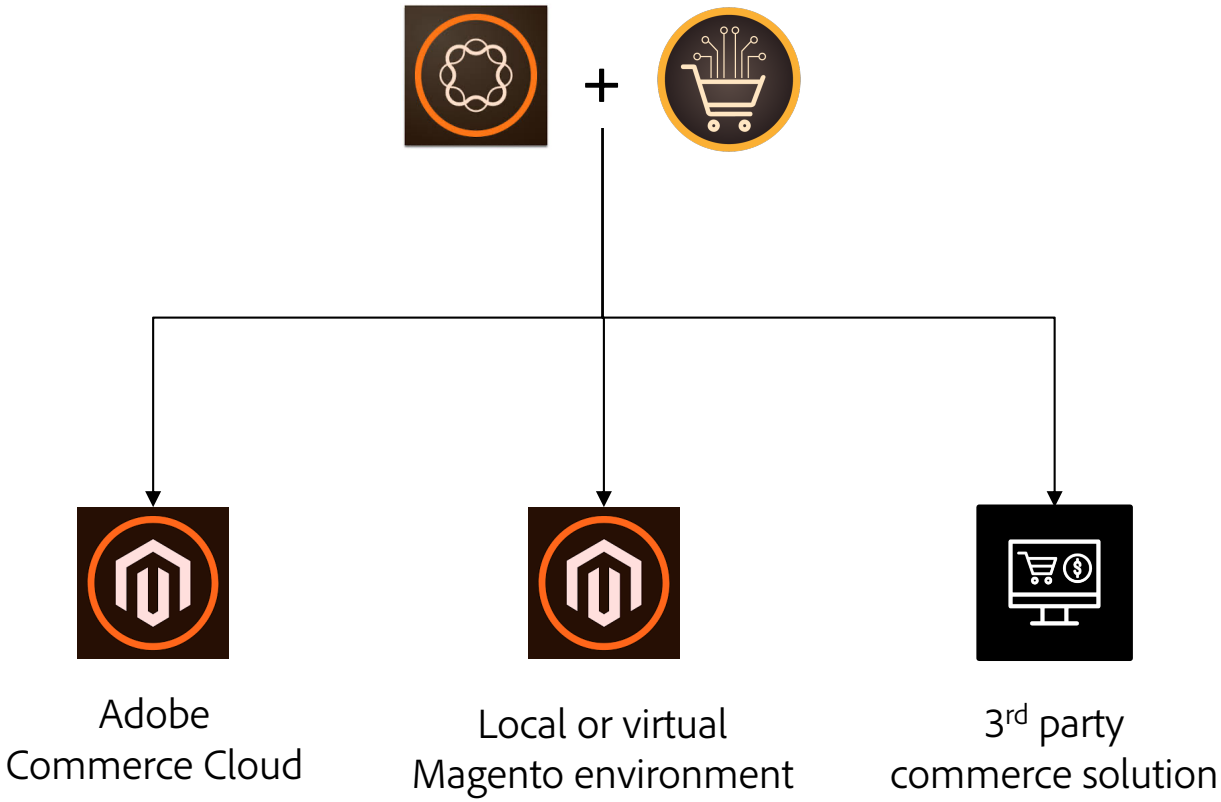

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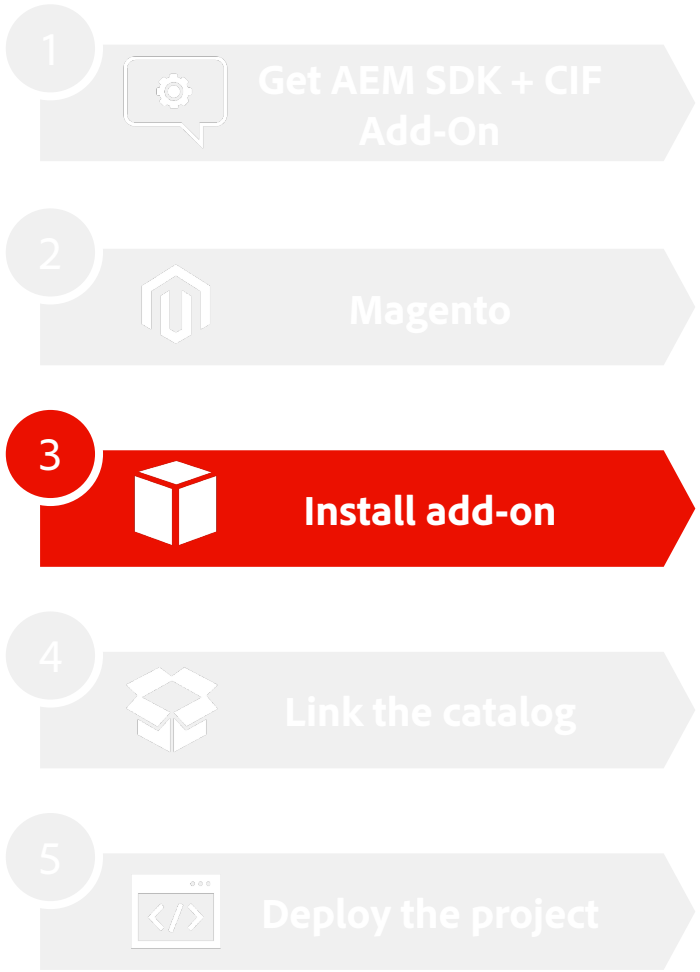
Local development environment setup



- 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

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Local development environment setup

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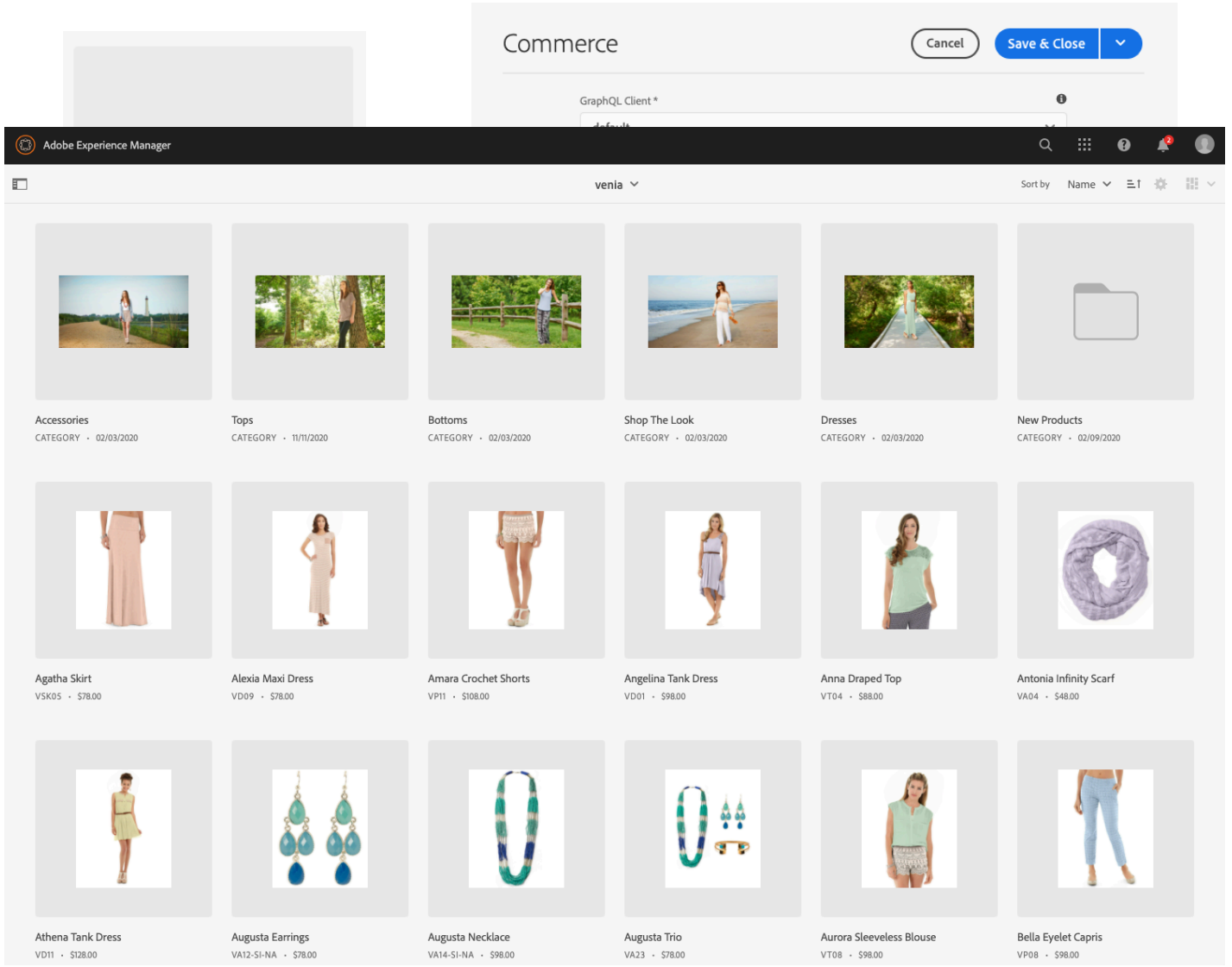
3. Install add-on
4. **Link the catalog**
5. Deploy the project



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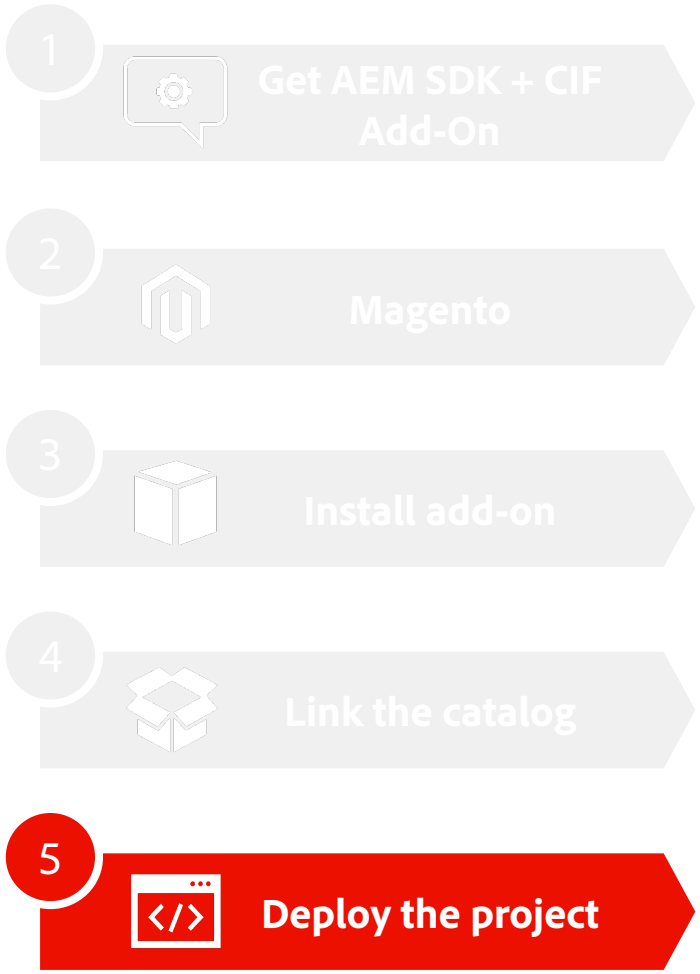
Local development environment setup



- 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
```

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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

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