



# Adobe Experience Manager content and commerce



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## Adobe Experience Manager content and commerce

Adobe Experience Manager and Adobe's Commerce Integration Framework (CIF) work together with any commerce engine to empower brands with differentiated digital shopping experiences anywhere.

With Adobe Experience Manager content and commerce, brands can scale and innovate faster to differentiate commerce experiences and capture accelerating online spend. CIF combines the immersive, omnichannel, and personalized experiences in Experience Manager with any number of commerce solutions to bring differentiated experiences to all parts of the shopping journey, reducing time to value and driving higher conversion.

#### Adobe Experience Manager commerce can help.



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 powerful authoring tools with the latest product information



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

## Why use a CMS with integration module.

With ever-increasing customer expectations for online commerce experiences, brands are pressured to deliver differentiated experiences and more content faster. However, implementing a content management platform often requires heavy time and budget investments in developing foundational elements, such as custom components and authoring tools, and accrues costs in maintenance and upgrades.

Experience Manager Sites offers CIF as an add-on module for Experience Manager as a Cloud Service that provides out-of-the-box commerce core components, authoring tools, and a reference storefront to accelerate go-live, enable seamless collaboration across teams, and drive conversion. With CIF, brands can integrate Experience Manager with Magento Commerce, part of Adobe Experience Cloud, as well as any commerce engine of choice. CIF also works with other Experience Manager offerings (on-premises and Managed Services) but differs in the way it is deployed.

With Experience Manager content and commerce, brands can:

- > Scale and innovate faster
- > Personalize experiences to drive conversion
- > Create once, and publish everywhere
- > Enrich and differentiate experiences for customers
- > Streamline authoring with commerce data access

## **Benefits of CIF.**

CIF provides out-of-the-box commerce core components that reduce the need for custom code, accelerating the time to market for brands. All core components are integrated out of the box with Adobe's client-side data layer to hydrate customer profiles, such as the unified profile. This profile captures in detail a visitor's behavior, which can be used to predict and personalize the customer journey in real time.

The CIF add-on brings product context into Experience Manager and provides authoring tools such as a product console and product/category pickers that empower the marketer to create and deliver shoppable experiences in Experience Manager without relying on the developer. Advantages include:

- > Out-of-the-box integration—Easily integrate Experience Manager with Magento Commerce.
- > Abstraction integration layer—Standardize and encapsulate integrations with multiple commerce systems.
- Headless and omnichannel experiences support—Provide support for single-page and multipage applications and GraphQL endpoints.
- Serverless, microservice-based process and business logic layer—Customize and extend commerce services.
- > **Unified authoring**—Provide seamless commerce data integration with marketing content to deliver a unified authoring experience in Experience Manager.

With CIF, authors in Experience Manager have all the information at their fingertips without leaving Experience Manager and the context they are in. Commerce is deeply embedded in the Experience Manager architecture. Use the built-in picker to find, browse, and use products, or use search to quickly find every productrelated piece of data and experience from various sources in one place. This unified content and commerce authoring experience enables marketers to innovate quickly with highly efficient workflows.

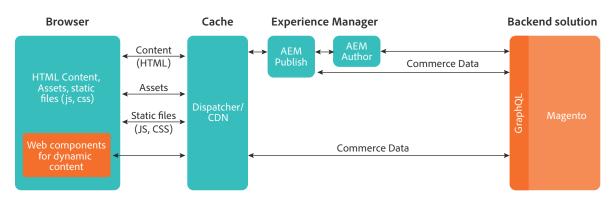
#### How CIF works: Integrating Experience Manager and a commerce solution.

#### **Recommended integration pattern**

Experience Manager owns the entire glass and integrates commerce services via GraphQL APIs. This pattern unlocks the full flexibility of Experience Manager to tailor rich media site designs across channels and enable them for commerce via the commerce solution.



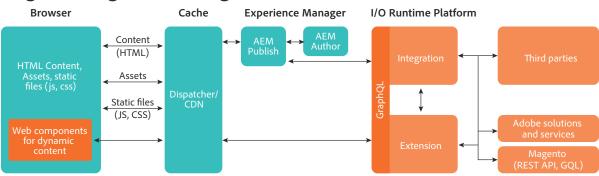
Scenario 1: Experience Manager and Magento Commerce integration using CIF.



Experience Manager and Magento are seamlessly integrated using CIF. The main communication channel between Experience Manager and Magento is the Magento GraphQL API. CIF builds on the GraphQL support.

Within CIF, there is support for server-side and client-side communication patterns. Server-side API calls are implemented using the built-in, generic GraphQL client in combination with a set of generated data models for the Magento GraphQL schema. Additionally, any GraphQL query or mutation in GQL format can be used. For the client-side components, which are build using React, Apollo Client is used. The recommended approach is to use server-side rendering for static pages and cacheable data and client-side rendering for dynamic attributes or personalized data. CIF brings product context into Experience Manager and allows data handling responsibilities to be delineated between content and commerce, with Experience Manager handling content and Magento handling commerce data.

# Scenario 2: Experience Manager and third-party commerce engine integration using CIF.



Some brands may require third-party solutions in addition to a Commerce back end to power their storefront. CIF can be used in such integration scenarios where, in addition to Magento, a third-party solution also needs to be integrated with Experience Manager.

To integrate Experience Manager and a third-party solution and reuse CIF elements, some additional development is needed. The additional development is an integration layer that maps Adobe Commerce GraphQL APIs to the third-party's APIs. The integration layer needs to be hosted on the Adobe I/O Runtime platform, Adobe's serverless platform, as shown in the architecture diagram. This integration layer encapsulates the integration logic and creates a separation of concern between Experience Manager and the third-party solution. This allows the CIF elements to be used in an agnostic way with various third-party solutions.

#### For more information.

- > Experience Manager Commerce as a Cloud Service: https://docs.adobe.com/content/help/en/ experience-manager-cloud-service/commerce/home.html
- > Experience Manager CIF Core Components: https://github.com/adobe/aem-core-cif-components
- > Experience Manager Venia reference storefront: https://github.com/adobe/aem-cif-guides-venia
- > Third-party integration reference: https://github.com/adobe/commerce-cif-graphql-integration-reference
- > Adobe I/O Runtime: https://www.adobe.io/apis/experienceplatform/runtime.html



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