

Create Web Experiences Using Adobe
Experience Manager



STUDENT WORKBOOK

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Create Web Experiences Using Adobe Experience Manager

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Introduction to Adobe Experience Manager

Introduction

In a globalized world, customers interact with brands by using a number of devices including mobile phones, tablets, personal computers, and smart displays in stores. Customers also want to spend minimum time searching through vast content. Hence, marketers must manage several user experiences and provide the right content at the right time. Adobe Experience Manager (AEM) enables you to design, anticipate, and deliver rapidly adaptable user experiences across web, mobile, in-store, and at any end point in the customer journey. This increases customer engagement and drives demand from online to physical interactions.

Objective

After completing this module, you will be able to:

- Explain the capabilities and benefits of AEM

Capabilities and Benefits of AEM

AEM includes the following applications to deliver compelling digital communication:

- AEM Sites for web experience management
- AEM Screens for digital signage
- AEM Assets for digital asset management and sharing
- AEM Forms for digital forms management and customer communication
- AEM Communities for formats involving user-generated content

AEM, at its core, is a content-centric application. To meet the challenging requirements of the marketplace, a combination of tools is necessary. Adobe offers this with the Adobe Experience Platform, and AEM is a part of the Experience Platform. The Experience Platform has extended capabilities and enables marketers to anticipate, manage, orchestrate, and deliver experiences that differentiate the brand throughout the customer journey and across any channel. This means you can support true omnichannel experiences across owned, earned, and paid channels. Content is delivered beyond the traditional web publishing and is available in a multitude of end points including screens, dynamic adaptive forms, documents, emails, socials, apps, and content services.

AEM Sites and Web Content Management

AEM Sites is a set of capabilities in AEM that focusses on creating and publishing web content. With AEM Sites, content authors can create websites consisting of many webpages with little or no programming skills.

AEM provides the following environments:

- Author
- Publish

You can create and edit the web pages on the author instance. After the website is created on the author instance and is ready for public consumption, it is published on the publish instance. The visitors of a website can access the content on the publish instance. In the production environment, the content is published to several publish servers to ensure that the content is accessible to users at all times.

We.Retail Reference Site and the Site Structure

AEM includes a reference website, We.Retail, that comes preloaded. It is a retail website for outdoor equipments. The purpose of We.Retail is to show the recommended way of setting up an online presence with AEM Sites.

The We.Retail site is built with:

- Recommended site structure for multinational websites
- Content fragments
- Responsive layout for all pages
- Editable templates for all templates
- eCommerce capabilities with a product catalog
- Communities pages



Note: Although We.Retail illustrates a retail vertical website, similar site structure can be applied to any vertical. Only the product catalog and cart features are retail specific.

Adobe Experience Manager User Interface



Introduction

Adobe Experience Manager (AEM) provides tools to efficiently create and deliver digital experiences to many marketing and publishing channels. To use the capabilities of AEM, you must first understand the basic user interface (UI) of AEM.

Objective

After completing this module, you will be able to:

- Navigate through the AEM UI

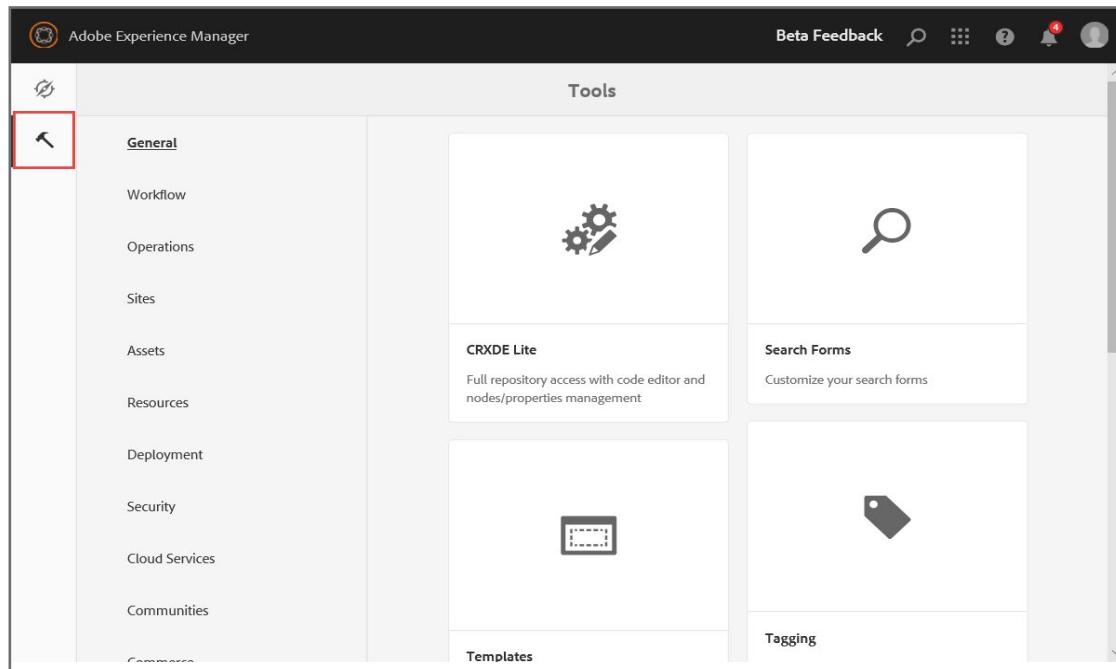
AEM UI

The UI of AEM combines the advantages of a web interface with the fluidity and responsiveness that is usually associated with desktop applications. The UI is optimized for authoring across desktop and mobile devices.

Mobile Device UI Actions	Desktop UI Actions
Tap	Click
Touch-and-hold	Double-click
Swipe	Hover

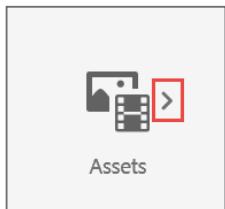
 **Note:** Refer to the Installation Appendix in this student guide if you need to install and start a local instance of AEM on your computer. However, this process should not be necessary as you will most likely use a preinstalled instance of AEM for this training.

After you log in to the AEM author instance on the web browser, the **Navigation** screen appears. The **Navigation** screen consists of the content area, side panel, and header bar as shown in the screenshot below:



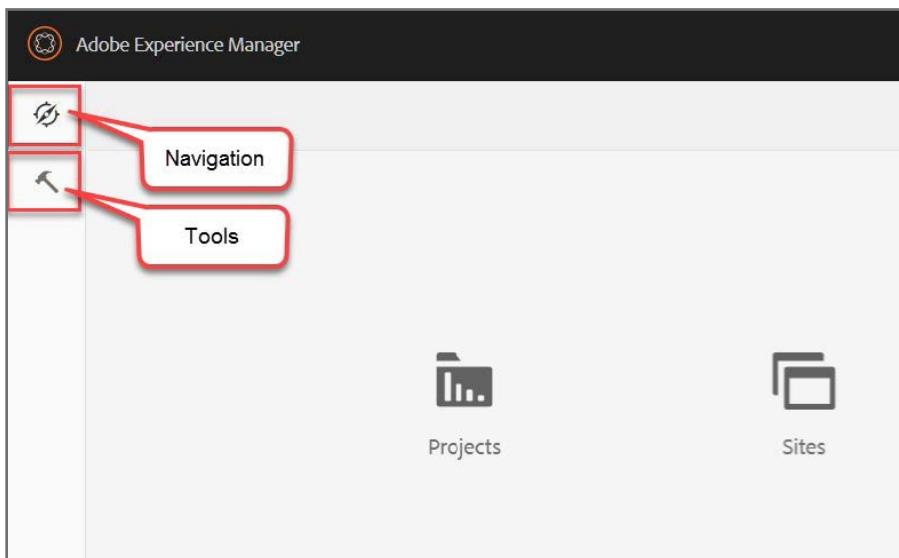
Content Area

From the content area, you can access all the solution-specific web applications in AEM. The content area is basically the Navigation screen. Certain applications have a carat symbol next to it, as shown below, to indicate that the application has subfolders in it. For example, Assets application has subfolders such as Files.



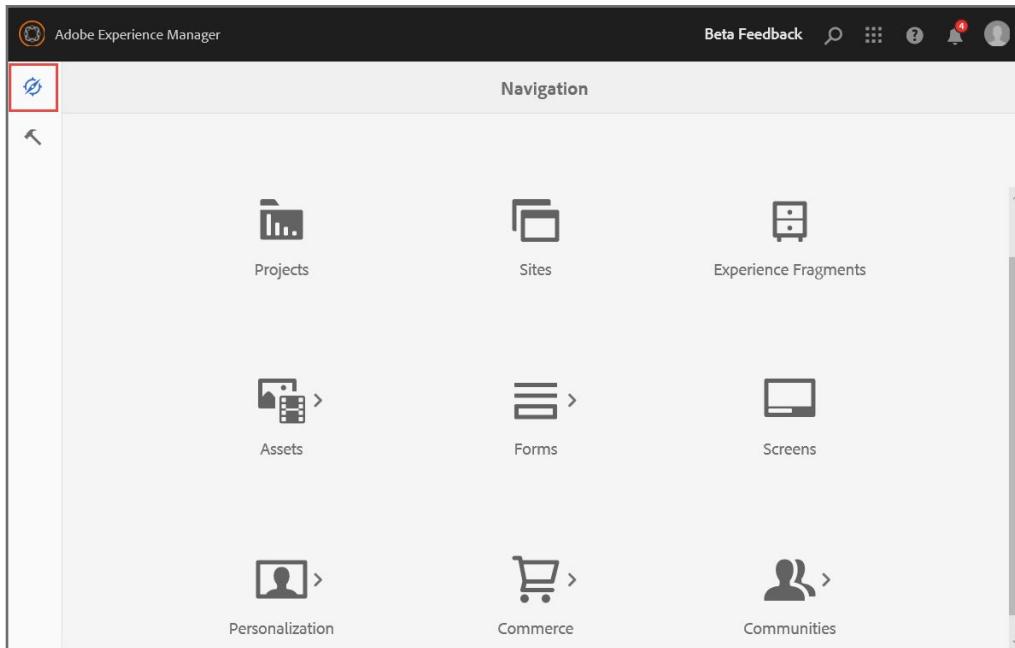
Side Panel

From the side panel, you can navigate between the Navigation and Tools panels.



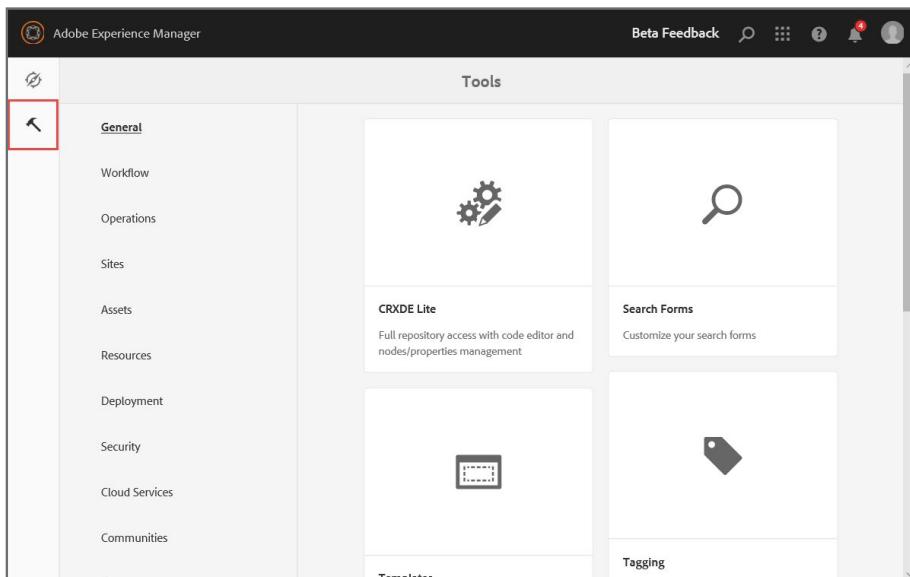
Navigation

The Navigation panel, denoted by the compass icon as shown in the below screenshot, displays all the AEM applications available in the UI. Authors use the Navigation panel mainly to manage and build content for AEM Sites and leverage assets.



Tools Panel

The Tools panel, denoted by the hammer icon as shown in the below screenshot, displays all the AEM administrative consoles, developer tools, and other technical consoles. AEM developers and administrators usually use the Tools panel to develop and administer websites, digital assets, and other aspects of the content repository.



Header Bar

The head bar displays the AEM logo, Solution Switcher, Help, Inbox, and User. The header bar changes depending on the process or the action that you perform in the content area.



The following table describes various options on the tool bar:

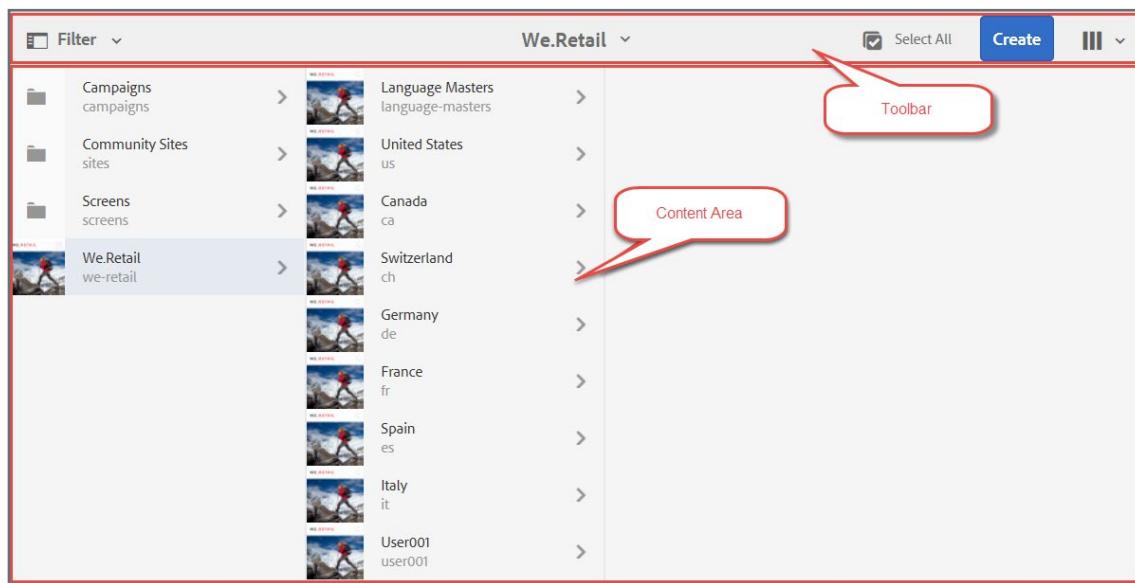
Serial Number	Symbol	Purpose
a.	Global Navigation	Enables you to select the AEM link to navigate between consoles.
b.	Search	Enables you to search for content across consoles without switching between different consoles.
c.	Solutions	Enables you to seamlessly switch to another solution from Adobe Advertising Cloud, Adobe Marketing Cloud, Adobe Analytics Cloud, and Adobe Experience Cloud. However, these solutions must be integrated with AEM.
d.	Help	Enables you to access the documentation website, AEM community, customer care, release notes of the current version of AEM, version details of AEM, and keyboard shortcuts.
	Keyboard Shortcuts	Enables you to quickly access common tasks and functions when editing pages. The following are some commonly used keyboard shortcuts: e: Edit p: Properties ctrl+c: Copy m: Move
e.	Inbox	Enables you to view and access tasks, create new tasks, and assign them to users, specify task's priority, and reassign tasks with workflows and projects.
f.	User	Enables you to manage user preferences. The user options are: Impersonate as: To test the user behavior as if you signed in as another user (available only to those with this permission) My Preferences: To configure user preferences for the instance Profile: To edit user settings Sign Out: To log off from the current session The following options are available in My Preferences : Language: To select the language used for the authoring environment Window Management: To open pages in a new window or in the current window Show Help Overlays: To view help tutorials when first viewing a console or editor in AEM Show desktop actions for Assets: To display the desktop icon on assets Annotation Color: To select the color to be used for adding annotations on pages or assets Authoring mode: To select the default UI mode (Touch-Optimized or Classic) used when authoring a page Enable Assets Home Page: To customize the Assets home page Relative Date Presentation: To define the presentation of dates in AEM. You can choose between time spans being presented such as relative (3 days ago) or absolute dates (April 4, 2018).

 **Note:** To enable the Show desktop actions for the Assets option, you need to integrate AEM with the AEM Desktop App. The Enable Assets Home Page option will be available only if your system administrator has enabled Assets Home Page experience for your organization. If the Assets Home Page experience is not enabled in your implementation of AEM, the Enable Assets Home Page option is unavailable.

Interface Elements of a Site

The interface elements of a Site are:

- Toolbar
- Content Area



Toolbar

The toolbar in the Sites console consists of the following options:

- Rail Selector
- Breadcrumbs
- Select All
- Create
- Views

Rail Selector

The **Rail Selector** on the left of the toolbar enables you to open and close a panel to the left side. Depending on the console context, the drop-down menu from the **Rail Selector** has different options. For example, in the **Sites** console, the panel has **Content Only**, **Content Tree**, **Timeline**, **References**, and **Filter**.

- Content Only

The Content Only option is the default view of the Sites layout.

- Content Tree

The Content Tree option enables you to view and navigate through the different hierarchies of a site.

After clicking the **Content Tree** option, a side panel appears to the left of the screen.

- Timeline

The Timeline option enables you to view and initiate events that occur on a selected resource. For example, in the Sites console, if you select a page and click **Timeline**, all the event types, such as Comments, Versions, and Workflows, associated with the selected page appear.

- References

The References option enables you to view all the connections and references associated with a resource. For example, in the Sites console, if you select a page and then click **References**, all the page references, such as Source, Copies, Links, and Content References appear.

- Filter

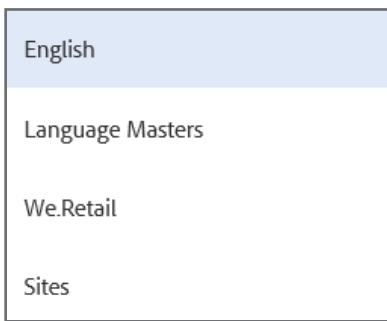
The Filter option enables you to further filter content that you want to view based on tags, modified date, publish status, and livecopy status. The Filter panel is similar to the Search panel with the appropriate location filters preset.

Breadcrumbs

The Breadcrumbs enable you to navigate within a specific console. By default, the breadcrumb displays the title of the currently selected item. For example, in the below screenshot, notice the breadcrumb displays English as the English page is selected.

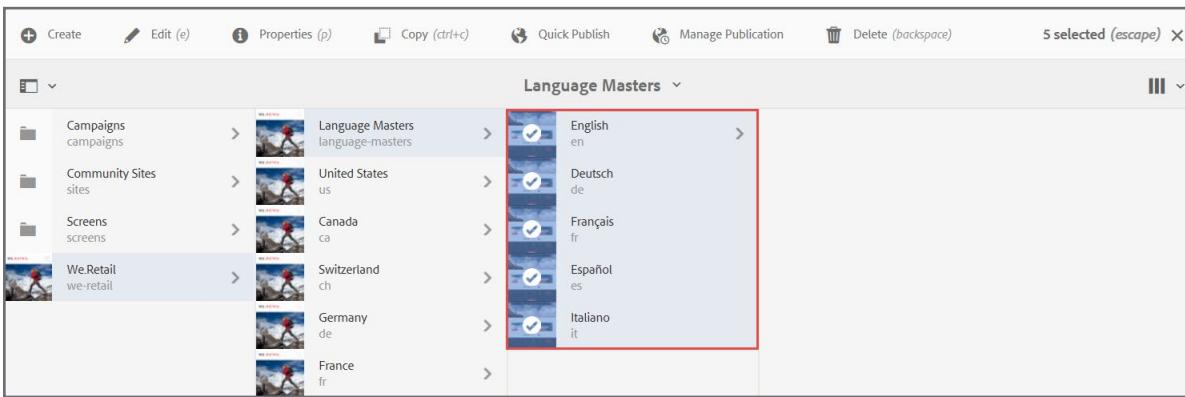


When you click the breadcrumb, the hierarchies of the site displays. For example, when you click English on the breadcrumb, the subpages of the English site appear, as shown in the following screenshot:



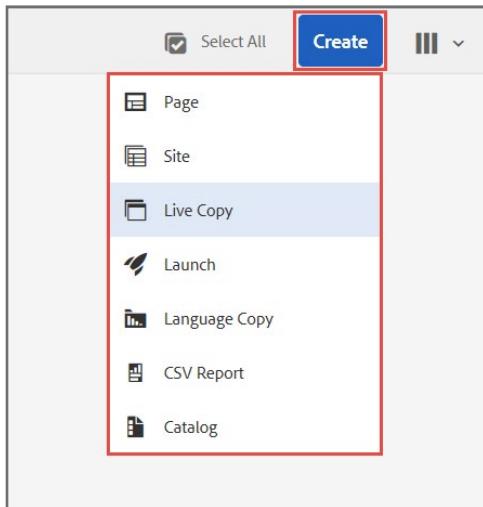
Select All

The **Select All** option enables you to select all the subpages available under a page. After you select multiple pages, a toolbar with different options such as create, edit, properties, copy, quick publish, manage publications, and delete appears, as shown in the below screenshot:



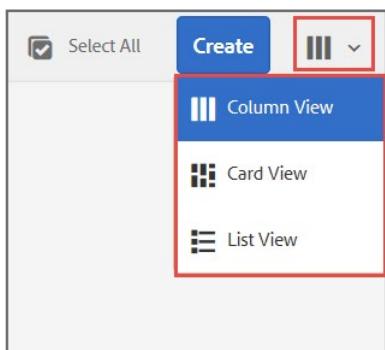
Create

The **Create** option enables you to create a Page, Site, Live Copy, Launch, Language Copy, CSV Report, and Catalog depending on the context, as shown in the screenshot below. For example, you can create a page only if a site is selected.



Views

The **Views** option enables you to view, navigate, and select content by using Column, Card, and List views.



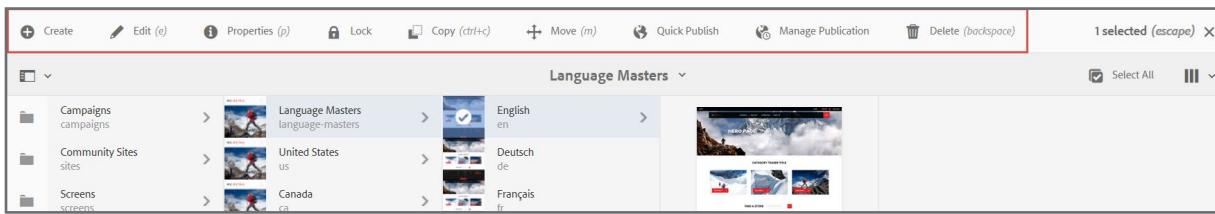
The following table describes various view options:

View	Purpose
Column	Lists information for each resource in the form of a tree
Card	Displays information for each resource in the form of cards
List	Lists information for each resource

Apart from the UI elements discussed above, AEM also provides certain UI elements when a page is selected. For example, when the English page is selected in the List View, an Actions Bar appears on the top of the screen. Similarly, when the English page is selected in the Card View, the Quick Actions menu appears when you hover over or touch-and-hold the page.

Actions Bar

The actions bar provides different actions you can perform on a resource within a console. The following screenshot shows the available actions that you can perform on a page:

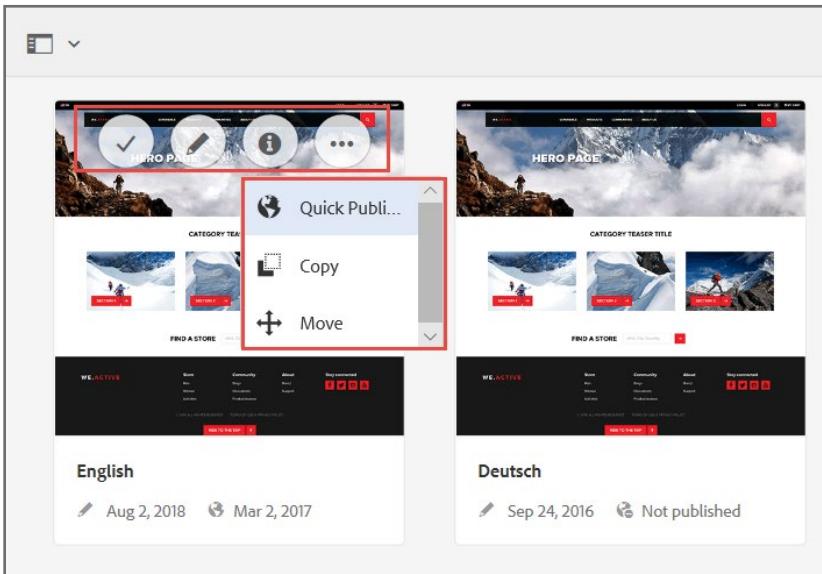


The following table describes each item on the actions bar:

Item	Purpose
Create	Helps create different resources such as pages, sites, templates, and folders.
Edit	Helps open the page editor where you can add or delete content from the selected page
Properties	Helps edit different properties such as title, tags, description, tags, thumbnail, and permissions associated with a resource. Properties are categorized into different groups and are dependent on the item you select.
Lock	Helps lock a page so that no other users can modify the contents. This is useful when you are making a lot of edits to a specific page, or when you need to freeze a page for a short while.
Copy	Helps create a copy of the original resource in the destination.
Move	Helps move a resource from a source to a destination. After you move a resource, it is no longer available in the source.
Quick Publish	Helps activate (publish) the content created on the author instance to the publish instance. Content on the publish instance is live on the website.
Manage Publications	Helps publish or unpublish the content at a specific time.
Delete	Helps delete a resource from the console.

Quick Actions

The options on the quick actions toolbar vary based on the console and context. For example, the screenshot below displays quick actions such as Select, Edit, Properties, Quick Publish, Copy, and Move available for a page in the Sites console:



Note: The Select action is explained as below. All the other actions are discussed in the Actions Bar section.

Select

The Select option helps display the actions bar by selecting one or more resources such as pages or assets. The icons in the actions bar change to reflect the actions that are available for the selected resource. The Select action is available in all the views. For example, in Card view, when you hover over a resource, the Select action appears in the quick action toolbar. In List view, you can select an item by clicking on the tick/checkmark icon on a resource.

Content Area

The content area enables you to navigate up the page hierarchy within a specific console. For example, from the **Sites** console, if you have the **We.Retail** page selected, you can navigate to the **48 hours of Wilderness** page.

The screenshot shows the AEM Experience console interface. On the left, there's a navigation panel with items like 'Campaigns', 'Community Sites', 'Screens', and 'We.Retail'. The 'We.Retail' item is highlighted with a red box. To its right is a tree view of site structures. Under 'Language Masters', there are nodes for 'English' (en), 'Deutsch' (de), 'Français' (fr), 'Español' (es), and 'Italiano' (it). Under 'Experience', there are nodes for 'Men' (men), 'Women' (women), 'Equipment' (equipment), 'About Us' (about-us), 'Products' (products), and 'User' (user). A red box highlights the '48 hours of Wilderness' node under the 'Experience' category. The right side of the screen shows a list of pages with their titles and URLs, such as 'Arctic Surfing In Lofoten' (arctic-surfing-in-lofoten) and '48 hours of Wilderness' (hours-of-wilderness).

AEM Consoles

The AEM consoles displays functionalities that enable you to create and manage digital content. The functionalities are available in various consoles, specific to the type of content. You can access the consoles form the Navigation panel. The following are the consoles available in the Navigation panel:

- Projects
- Site
- Experience Fragments
- Assets
- Forms
- Screens.
- Personalization
- Commerce
- Communities

Projects

The **Projects** console enables you to access the projects in AEM directly, as shown in the screenshot below. Projects are virtual dashboards, using which you can build teams working on specific projects. You can allow the teams access to resources, workflows, and tasks to meet a common goal.

The screenshot shows the AEM Projects console interface. At the top, there's a header with a 'Select All' checkbox, a 'Create' button, and a 'Grid' icon. Below the header, there are two main sections. On the left, a dark panel displays 'MASTER PROJECTS' and 'Masters'. On the right, a larger section is titled 'WE.RETAIL' and features a thumbnail image of a person climbing a snowy mountain. Below the thumbnail, the project details are listed: 'PROJECT We.Retail', 'Reference Implementation', 'Active', and a timestamp '10/28/16, 10:24 AM'.

Sites

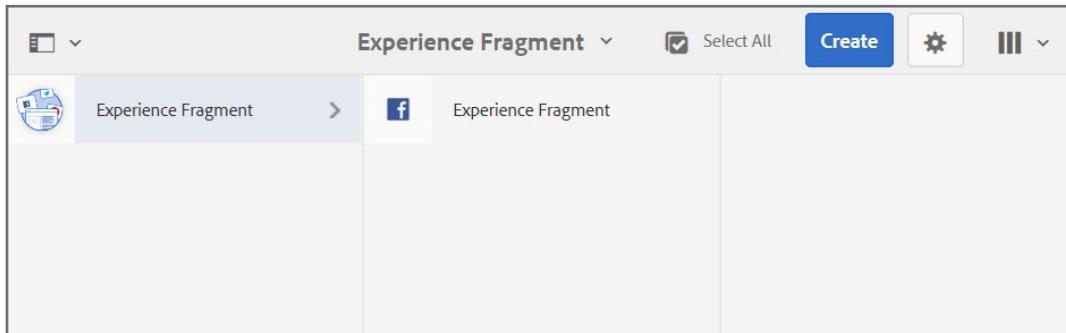
The **Sites** console helps create, view, and manage websites. In this console, you can create, edit, copy, move, and delete pages, start workflows, and publish pages.

As a reference website, AEM includes the We.Retail site. The below screenshot displays the Sites administration console with several webpages from the We.Retail website.

The screenshot shows the AEM Sites administration console. The left sidebar lists site structures: 'Campaigns', 'Community Sites', 'Screens', and 'We.Retail'. The 'We.Retail' item is highlighted with a red border. The main content area shows a tree structure of site pages under 'We.Retail'. The root node 'We.Retail' has children for 'Language Masters', 'United States', 'Canada', 'Switzerland', 'Germany', 'France', 'Spain', and 'Italy'. Each of these nodes has further children, such as 'English', 'Deutsch', 'Français', 'Español', 'Italiano', and other language-specific pages like 'Men', 'Women', 'Equipment', 'About Us', 'Products', and 'User'. The entire tree structure under 'We.Retail' is also highlighted with a red border.

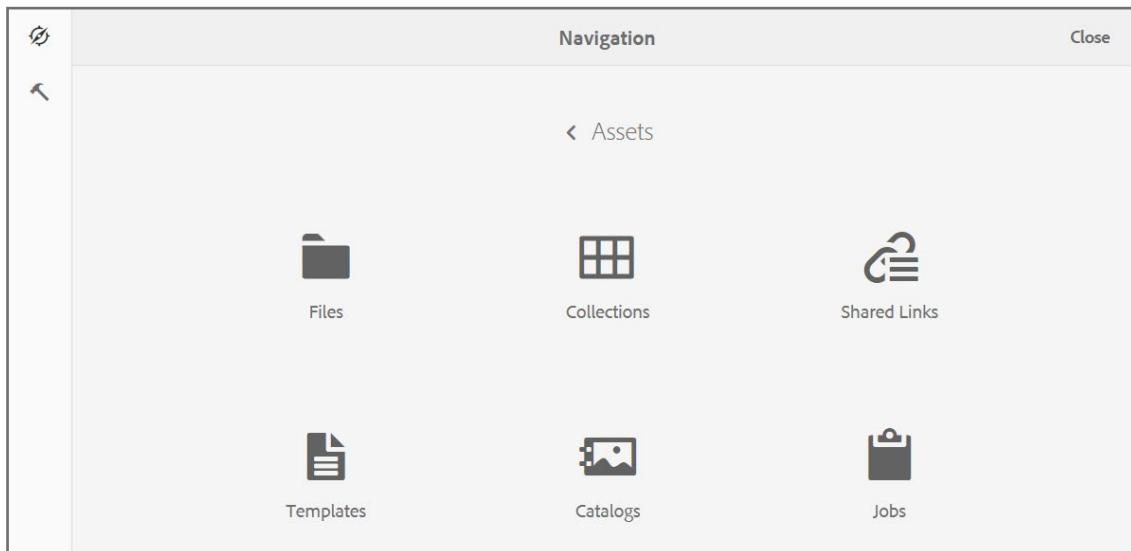
Experience Fragments

The **Experience Fragments** console enables you to create reusable fragments on a page that can be included across webpages, social media channels such as Facebook and Pinterest, and content services. Experience Fragments can consist of different variations that can be created with specific delivery channels. There are no built-in Experience Fragments in AEM.



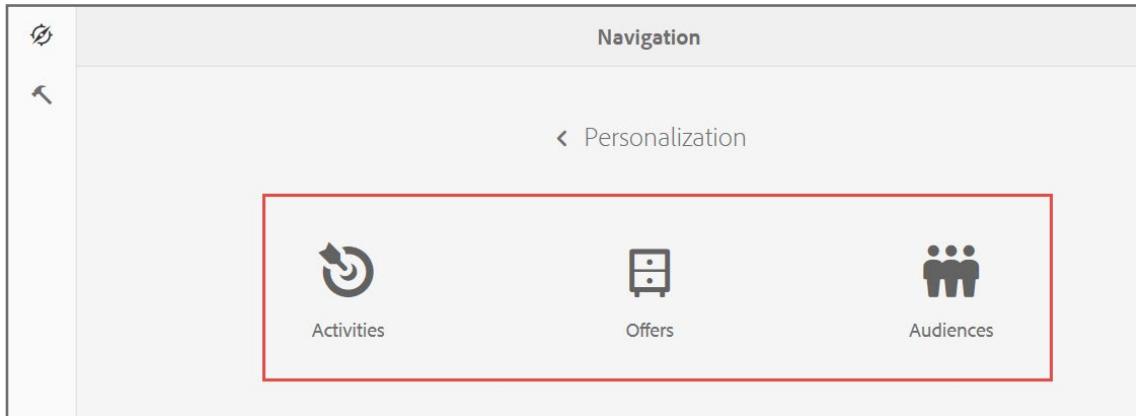
Assets

The **Assets** console enables you to import, organize, and manage digital assets such as images, videos, documents, audio files, and content fragments. You can use assets to compose complex content types such as webpages, webforms, Content Fragments and Experience Fragments.



Personalization

The **Personalization** console provides a framework of tools for authoring targeted content and simulating personalized user experiences. The subconsoles available in the Personalization console are Activities, Offers, and Audiences, as shown in the screenshot below:



 **Note:** Most of the concepts, tasks, and processes covered in this training course are in the Sites console. Other training offerings cover the Forms, Screens, Commerce and Communities consoles, and are not covered in this training.

References

Use the following links for more information on:

- [AEM 6.5 Basics of the AEM User Interface](#)

Basic Authoring Skills

Introduction

Adobe Experience Manager (AEM) Sites enables you to build websites without being a computer programmer. Websites are groups of webpages that relate to each other through ownership, topic, or other criteria. AEM consists of a collection of tools that enable users, usually referred to as content authors or authors, to develop websites.

Objectives

After completing this course, you will be able to:

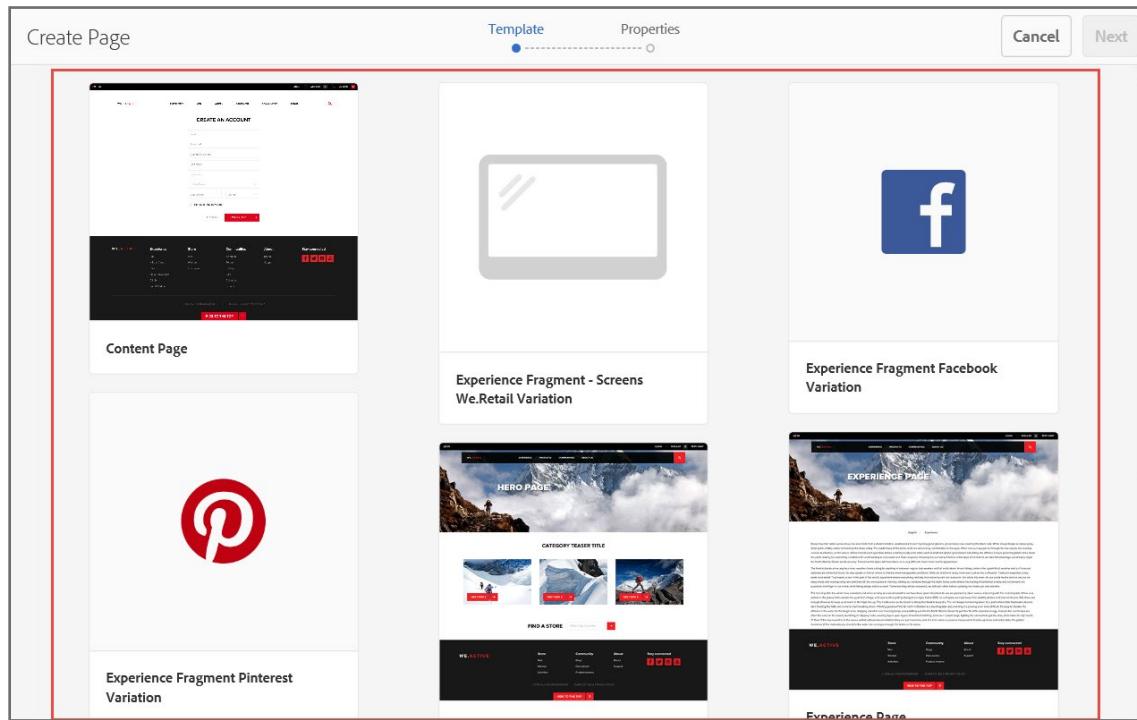
- Explain AEM templates
- Explain creating pages
- Create pages and subpages
- Explain the interface elements of the page editor
- Edit a page using components
- Edit a page layout
- Describe component styles in AEM
- Apply component styles in pages
- Describe the page properties
- Edit page properties
- Explain editing bulk page properties
- Add a common property to multiple pages

AEM Templates

A template enables you to define the layout and overall look of a webpage. Every webpage is created based on a template. Templates are constructed by defining components, which are used to give the page the layout and look.

As an author, you can choose from available templates to expand a website with new pages. The choice of a template defines how the fundamental structure and style of the new page will be. The template also determines the components that enables you to add the content to a webpage.

AEM provides different types of templates as part of the We.Retail website, as shown in the below screenshot:



Exercise 1: Create pages and subpages

Prerequisite: Log in to the AEM instance as instructed by the trainer.

 **Note:** If you are not using a hosted environment provided by the trainer, you must start and log in to the AEM author instance on your system. If necessary, refer to the Installation section of the Appendix to learn how to install and start the AEM author instance.

Scenario

You are working with a retail store and the marketing team has decided to create a website. The website must consist of webpages and subpages to display information about the company, and the products that the company offers. You as an author must create webpages.

In this exercise, you will create the following page structure within the **We.Retail** reference site:

----> **User0XX** (where 0XX is the user number assigned to you for this training)

-----> **English**

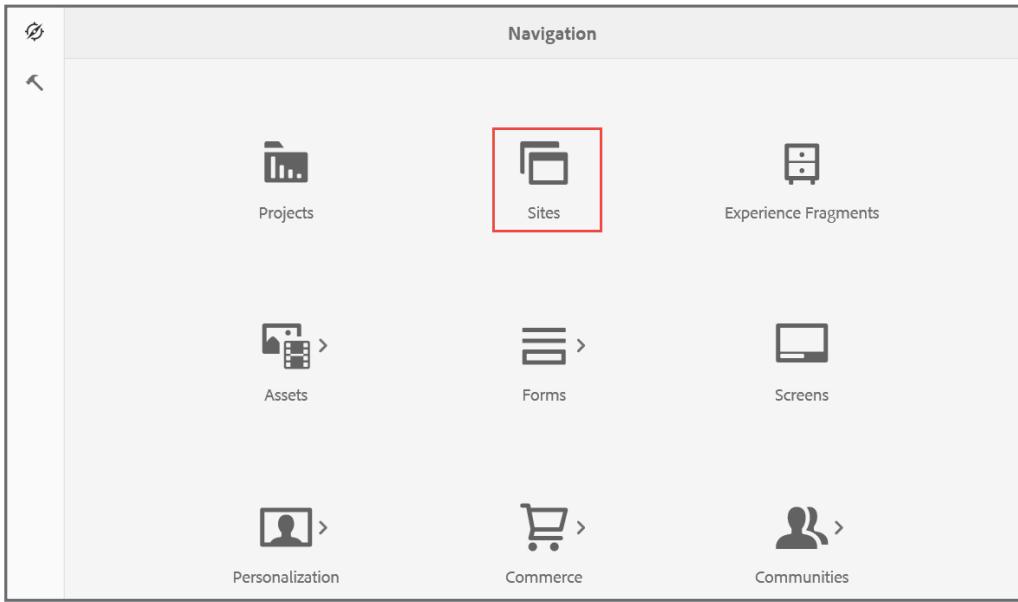
-----> **Products**

-----> **Experience**

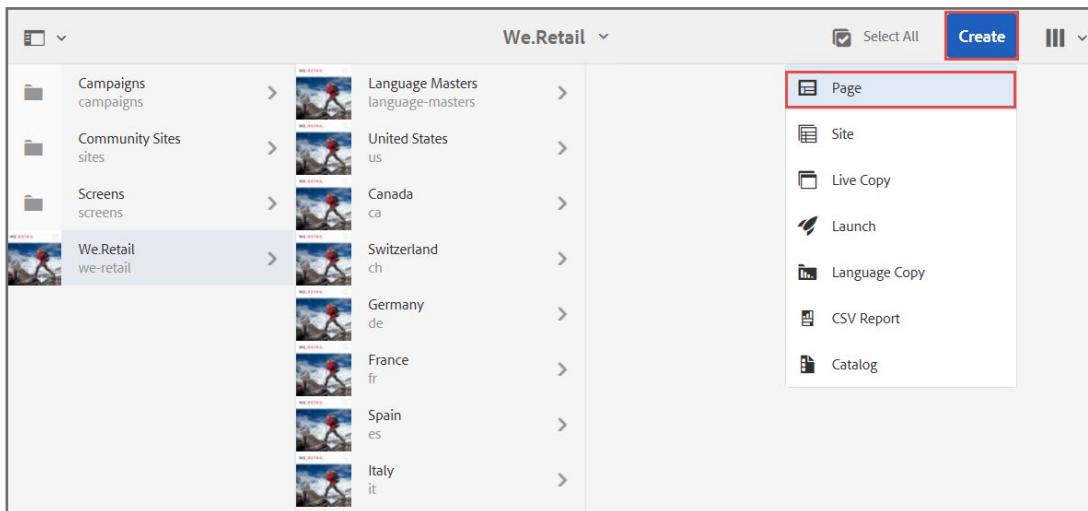
-----> **About Us**

To create a webpage:

- From the **Navigation** panel, click the **Sites** console, as shown. The **Sites** console opens.

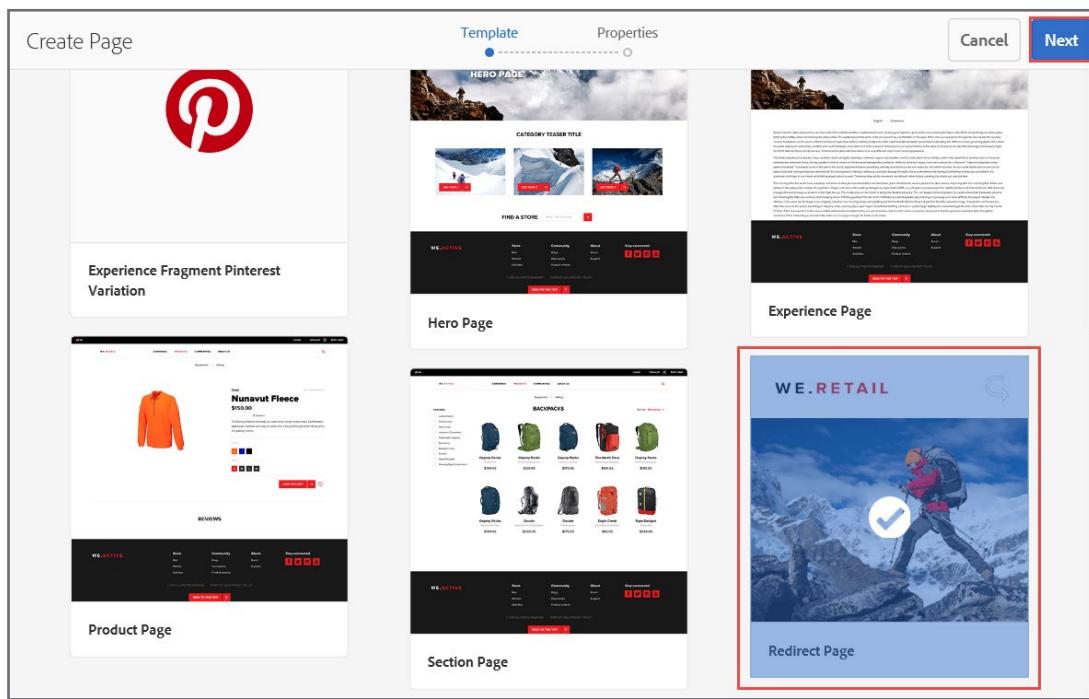


- Navigate to the **We.Retail** reference site.
- Click **Create** from the actions bar and select **Page** from the drop-down menu, as shown:



The **Create Page** wizard appears.

4. Select the **Redirect Page** template from the list of templates and click **Next** as shown:



Tip: If you cannot view the template thumbnails, clear the cache or open a new tab or window in InPrivate mode (in Internet Explorer) or in Incognito mode (Google Chrome), and then access the page.

The **Create Page** wizard opens on the **Basic** tab.

5. In the **Title** field, enter **User0XX** (where 0XX is the user number assigned to you for this training) and click **Create**, as shown. In this example, **User001** has been entered.

Basic	Advanced	Social Media
Title and Tags <input type="text" value="User001"/> User001 <input type="text"/> <input type="text"/>		

The **Success** dialog box appears.

 **Note:** You must create your pages and assets with a unique identifier such as your username (User0XX) to easily identify your pages and assets and differentiate them from those of your peers' created in the same environment.

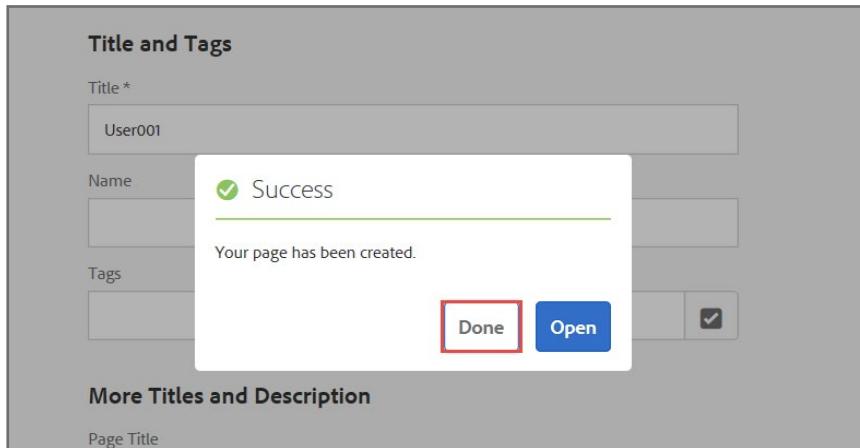
 **Note:** The URL is derived from the **Name** field. If the name field is left blank, the name will be the same as the title without special characters and all lowercase with dashes instead of spaces. For example, if the title is About Us, the name would be about-us. The name field also determines the last segment of the URL before the URL extension such as .html. In this example, the URL would result in something similar to this URL: <http://mydomain.com/content/mysite/about-us.html>

The URL is constructed as a sequence of page names according to the hierarchical order of the pages. Changing the Name will result in a different URL. Consider the following hypothetical page hierarchy (names are in parentheses):

--->My Site (my-site)
----->English (en)
----->Products (products)
----->Products (products0)

In this case, sibling pages are created with the same title. AEM will automatically create a new unique name for the latter page. This ensures that each page has a unique URL. If a third Products page is created, the name would be **Products1**.

6. Click **Done**, as shown:



AEM takes you back to the We.Retail page. You have successfully created a webpage, as shown:

The screenshot shows the AEM navigation interface with the 'We.Retail' site selected. The left sidebar lists 'Campaigns', 'Community Sites', 'Screens', and the 'We.Retail' node, which is highlighted. The main content area shows a tree view of language masters: 'Language Masters' (language-masters), 'United States' (us), 'Canada' (ca), 'Switzerland' (ch), 'Germany' (de), 'France' (fr), 'Spain' (es), 'Italy' (it), and 'User001' (user001). A red box highlights the 'User001' node.

To create a page attached to the **User0XX** page:

7. Navigate to the newly created page (User0XX) page, click **Create** from the actions bar and select **Page** from the drop-down menu. The **Create Page** wizard appears.
8. Select the **Hero Page** template and click **Next**, as shown:

The screenshot shows the 'Create Page' wizard with the 'Template' tab selected. It displays four template options: 'Content Page', 'Experience Fragment - Screens We.Retail Variation' (highlighted with a red box), 'Experience Fragment Facebook Variation', and 'Experience Page'. The 'Next' button is also highlighted with a red box.

The **Properties** wizard appears.

9. In the **Titles and Tags** section, type the following information:
 - a. **Title: English**
 - b. **Name: en**

Create Page

Template Properties

Back Create

Basic Advanced Social Media

Title and Tags

Title * English

Name en

Tags

10. Click **Create** as shown:

Create Page

Template Properties

Back Create

Basic Advanced Social Media

Title and Tags

Title * English

Name en

Tags

The Success dialog box displays.

11. Click **Done**. The **English** page is added as a subpage of the User0XX page.

You have successfully created a page that is a child page of the redirect page in the website hierarchy, as shown:

The screenshot shows the AEM navigation tree under the user 'User001'. The hierarchy is as follows:

- Campaigns (campaigns)
- Community Sites (sites)
- Screens (screens)
- We.Retail (we-retail) - This node is selected.
- Language Masters (language-masters)
 - United States (us)
 - Canada (ca)
 - Switzerland (ch)
 - Germany (de)
 - France (fr)
 - Spain (es)
 - Italy (it)
 - User001 (user001)
- English (en) - This node is highlighted with a red box.

To create a further set of pages that extend the page hierarchy beyond the **English** page, perform the following steps:

12. Navigate to the **English** page, click **Create** from the actions bar and select **Page** from the drop-down menu as shown:

The screenshot shows the AEM navigation tree on the 'English' page. The 'Create' button in the top right corner is highlighted. A dropdown menu is open, showing the following options:

- Page** - This option is highlighted with a red box.
- Site
- Live Copy
- Launch
- Language Copy
- CSV Report
- Catalog

The **Create Page** wizard appears.

13. Select the **Product Page** template and click **Next**.

14. In the **Titles and Tags** section, type the following information:

- a. **Titles:** Products
- b. **Name:** products



Note: You may not enter a name because you entered a title. The name (for example, products) is derived automatically from the page title.

15. Click **Create**. The **Success** dialog box displays.

16. Click **Done**. The **Products** page is added as a subpage of the **English** page.

Level 1	Level 2	Level 3	Level 4	Level 5
Campaigns	Language Masters	English		Products
Community Sites	United States			
Screens	Canada			
We.Retail	Switzerland			
	Germany			
	France			
	Spain			
	Italy			
	User001			

17. Similarly, create the **Experience** page as a subpage of the English page. Ensure to select the **Experience Page** template and add **Experience** as the title and **experience** as the name.

18. Similarly, create the **About Us** page. Ensure to select the **Content Page** template and add **About Us** as the title and **about** as the name.

The page structure should look similar to the one shown below:

The screenshot shows the AEM navigation tree interface. The top bar includes a dropdown for 'English', a 'Select All' checkbox, and a 'Create' button. The tree structure is as follows:

- Campaigns (campaigns)
- Community Sites (sites)
- Screens (screens)
- We.Retail (we-retail) - This node is selected and highlighted in blue.
 - Language Masters (language-masters)
 - English (en) - This node is selected and highlighted in blue.
 - Products (products)
 - Experience (experience)
 - About Us (about)
 - United States (us)
 - Canada (ca)
 - Switzerland (ch)
 - Germany (de)
 - France (fr)
 - Spain (es)
 - Italy (it)
 - User001 (user001)

Interface Elements of a Page

The page editor tool enables you to edit and add content to the page layout by using a wide range of tools. You can add text, multi-media content, and optimize content for search engines and different screen sizes.

The page editor consists of the Page Toolbar and the Content Frame.

Page Toolbar

The Page Toolbar is available at the top the page. The various options available in the toolbar are displayed in the following screenshot:

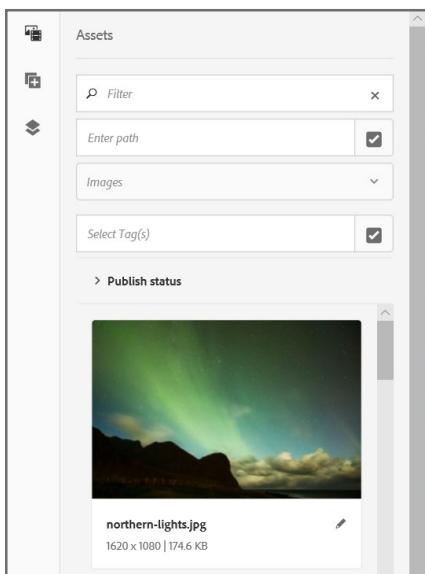


Side Panel

The **Side Panel** toggles. When you click the **Side Panel**, a menu consisting of **Assets**, **Components**, and **Content Tree** appears to the left side of the page editor.

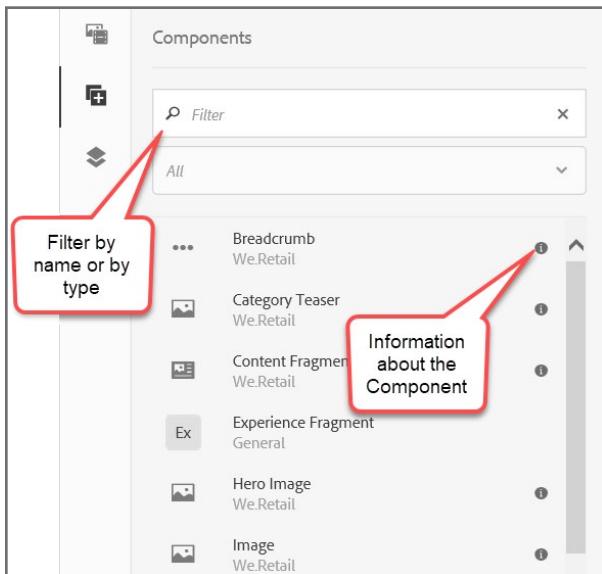
Assets

The **Assets** panel, as shown in the below screenshot, contains assets such as images, videos, audio, and documents. You can add assets to a page by dragging the assets onto the page. Each asset has an edit icon that helps edit the assets directly in the Assets console:



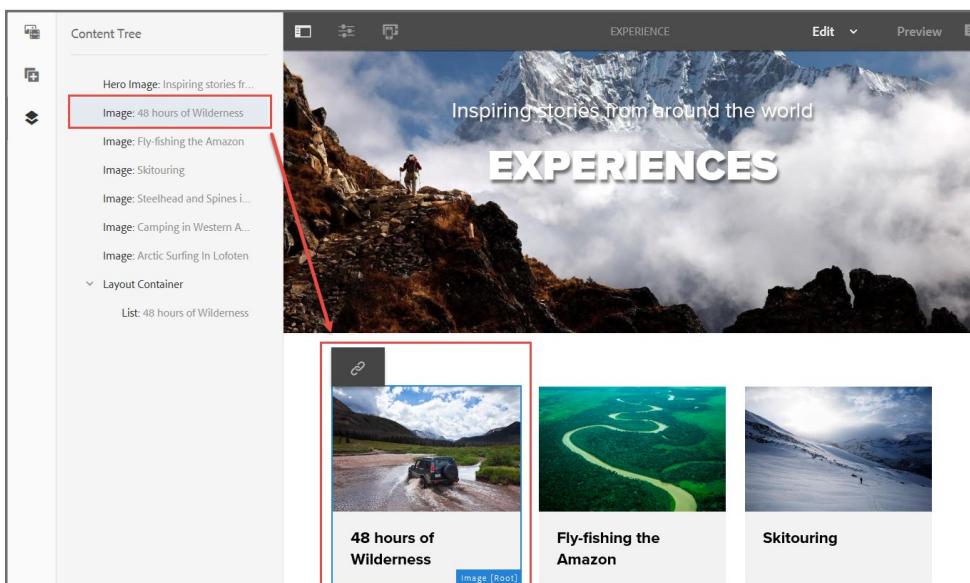
Components

The **Components** panel, as shown in the below screenshot, contains the components enabled for a page. You can drag the components from the side panel on to the page when editing. Each component is represented in the side panel with an icon and description. The component description appears when you click the **Information** icon. You may also filter the list of components by name or by other attributes.



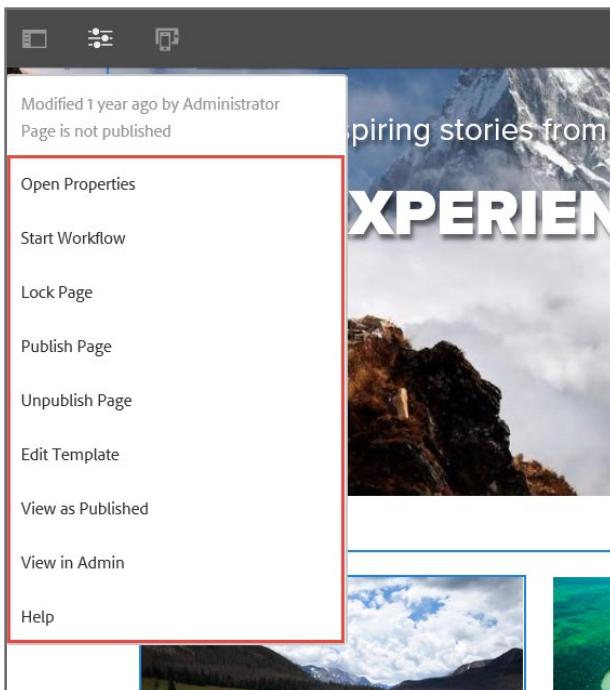
Content Tree

The **Content Tree** panel, as shown in the below screenshot, provides a hierarchical view of all the components added to the page. In the **Content Tree**, the components are arranged according to their placement within different sections of a page. You can click an item in the **Content Tree** to view the component on the page and display a toolbar for working with the object in the page editor.



Page Information

The **Page Information**, as shown in the below screenshot, provides access to the page property view, actions that can be performed on the page and options to navigate to different consoles.

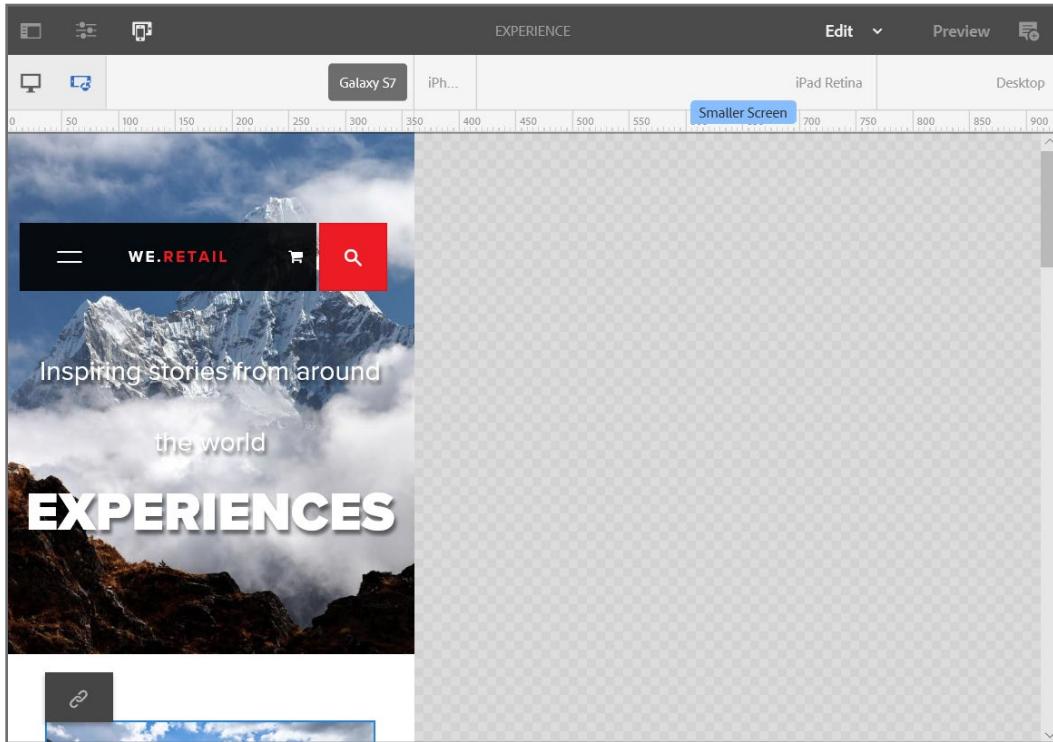


The following table describes the various options available in the **Page Information** panel:

Action	Purpose
Open Properties	Displays page properties
Start Workflow	Adds the current page to a workflow
Lock Page	Locks a page to prevent others from editing
Publish Page	Publishes a page
Unpublish Page	Deletes a published page from the publish instance
Edit Template	Opens the template used to create the page in the editor
View as Published	Removes the page editor toolbar from the views
View in Admin	Directs you to the Sites console
Help	Displays a page authoring quick tour

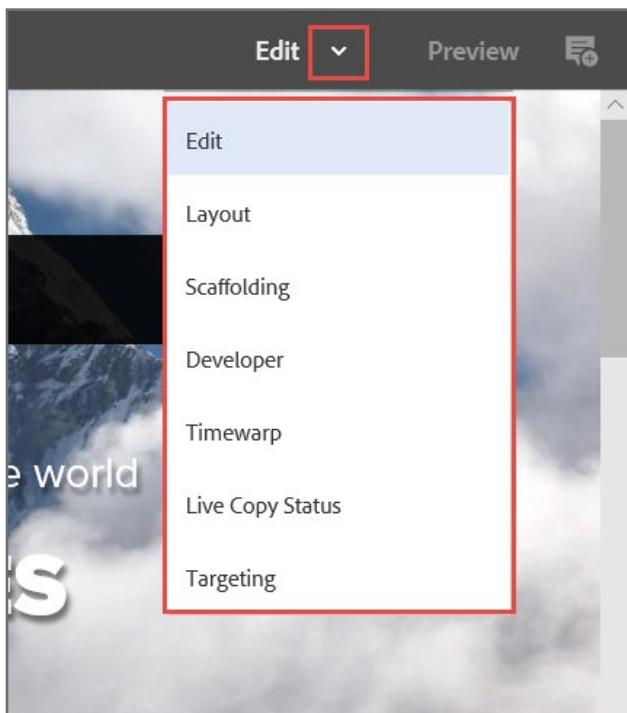
Emulator

The **Emulator** enables you to view a page in different display sizes. For example, you can view how the content of a webpage will look on a mobile browser. The mobile view of a page is shown in the below screenshot:



Modes

The page editor has several modes that enables you to switch the context in the page editor to focus on different aspects in the editing process. You can click the **Down Arrow** icon between the **Edit** and **Preview** buttons in the page toolbar to change between modes. The different modes available in AEM are shown in the below screenshot:

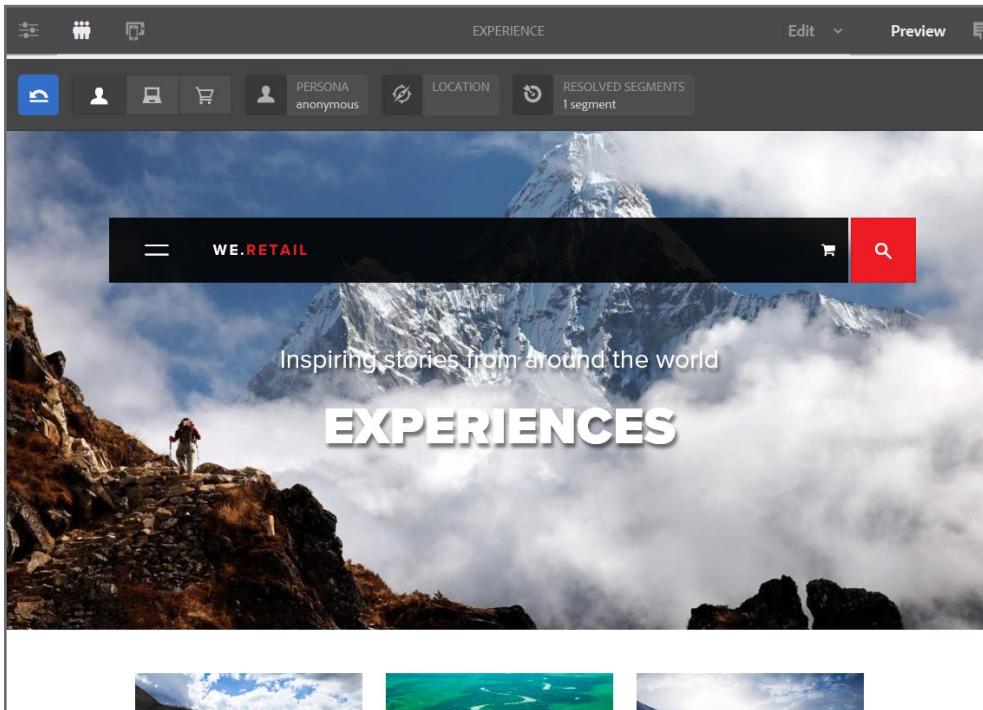


The following table describes the different modes of AEM:

Modes	Description
Edit	Enables you to edit the page
Layout	Enables you to position the page content within the Layout Container
Scaffolding	Enables you to define the structure of the page with the help of a form
Developer	Enables you to inspect the technical details of a page and its components
Timewarp	Enables you to quickly review prior page versions by date
Live Copy Status	Provides a quick overview of components that are or are not inherited from the parent
Targeting	Enables you to increase the content relevance through targeting across all channels

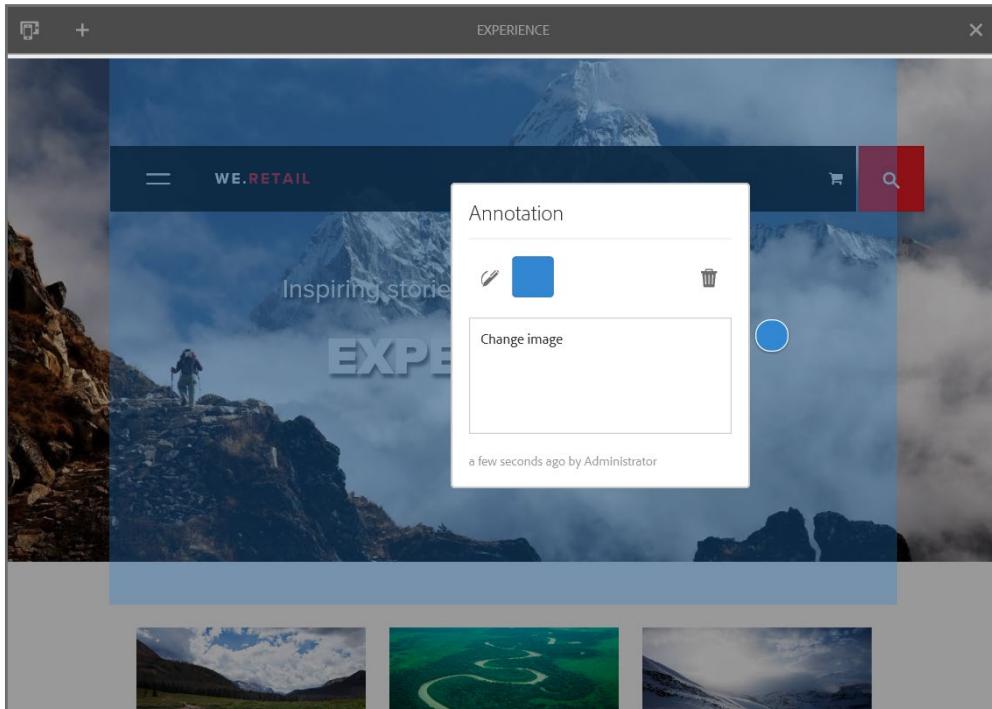
Preview

The **Preview** option displays the page as it will appear when published, as shown:



Annotate Mode

Annotations enable other authors to provide feedback on the content you create. Annotations are useful for review and validation purposes. The below screenshot is an example of an annotation added to a page:



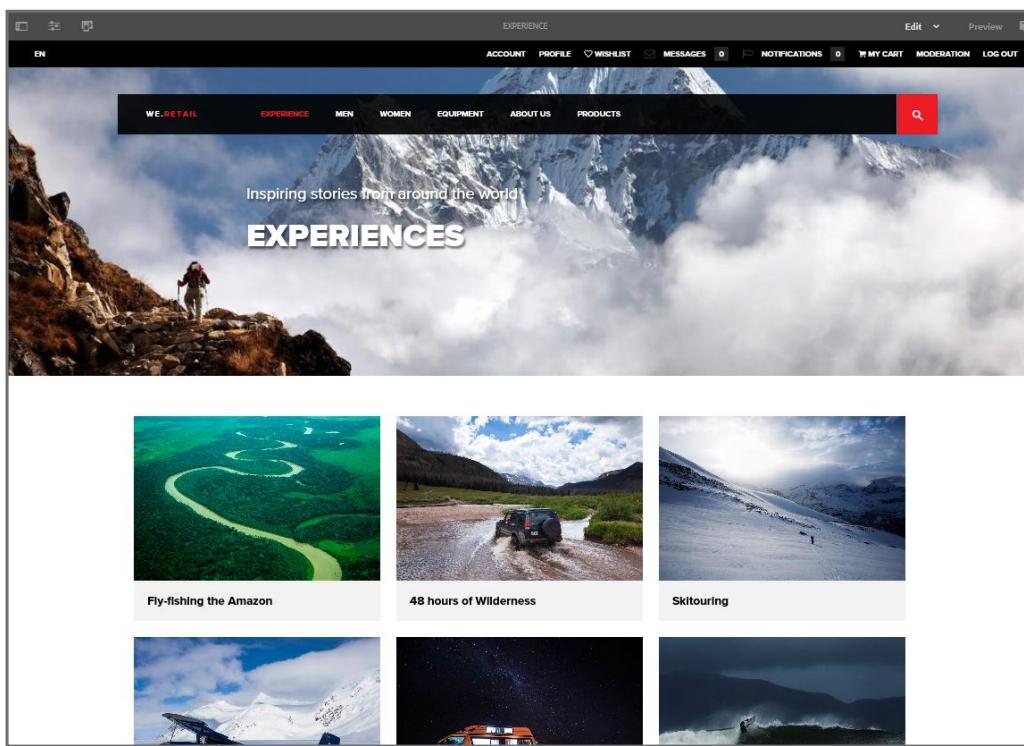
Content Area

The content area of the page editor enables you to add content to the layout of a page. The content area consists of:

- Content frame
- Layout container
- Component toolbar

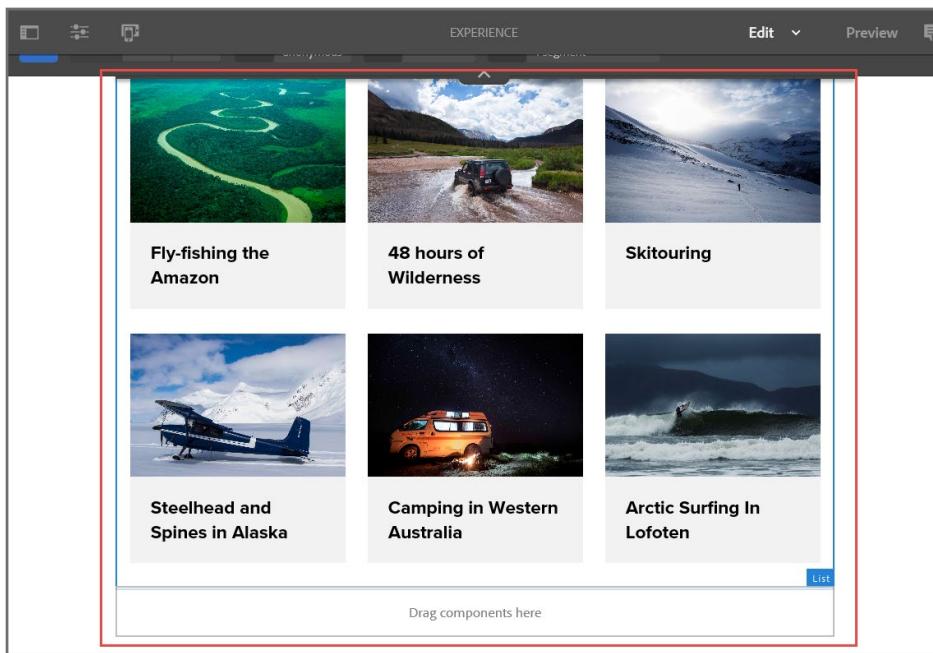
Content Frame

The content frame is similar to a canvas where the page layout and the specific content of a page resides. The following screenshot is an example of a content frame:



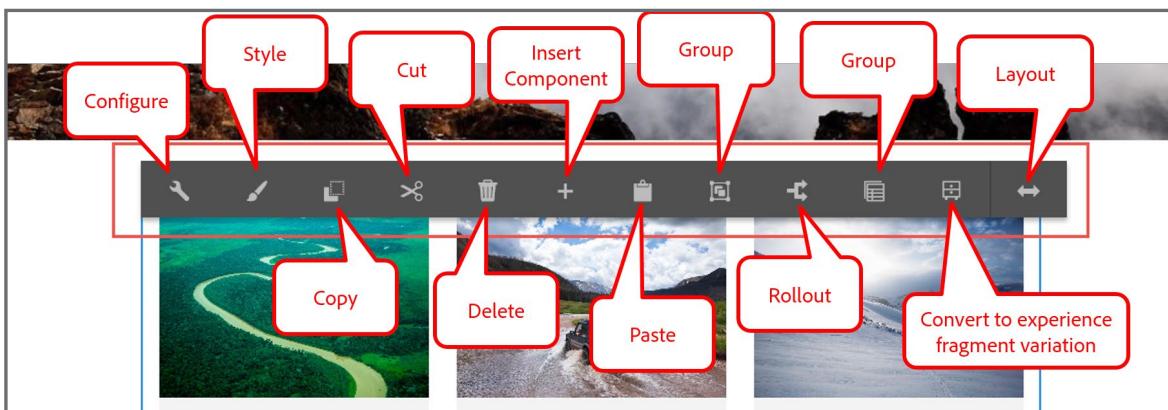
Layout Container

The layout container is an area on the page that enables you to add additional components to the page. The layout container is shown as below:



Component Toolbar

The component toolbar contains options such as configure (edit), copy, cut, delete, add, and so on, as shown. These options on the component toolbar vary based on the type of the selected component.



Exercise 2: Edit a page by using components

Scenario:

After you create a webpage, you must add content by adding new components such as titles, text, and images to the page or edit the content provided by default in the existing components.

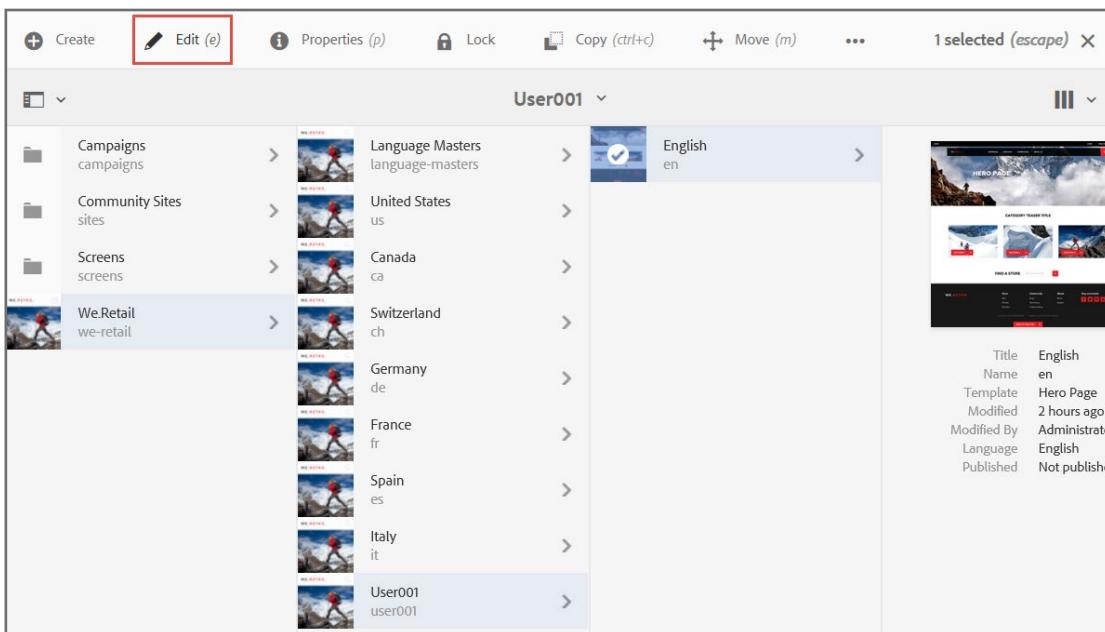
In this exercise, you will perform the following tasks:

1. Edit a page
2. Add new components to the page

Task 1: Edit a page

To edit a page:

1. From the **Sites** console, navigate to **We.Retail > User0XX** (where 0XX is the user number assigned to you for this training), and select the **English** page.
2. Click **Edit** from the Actions bar (or press 'e'), as shown:

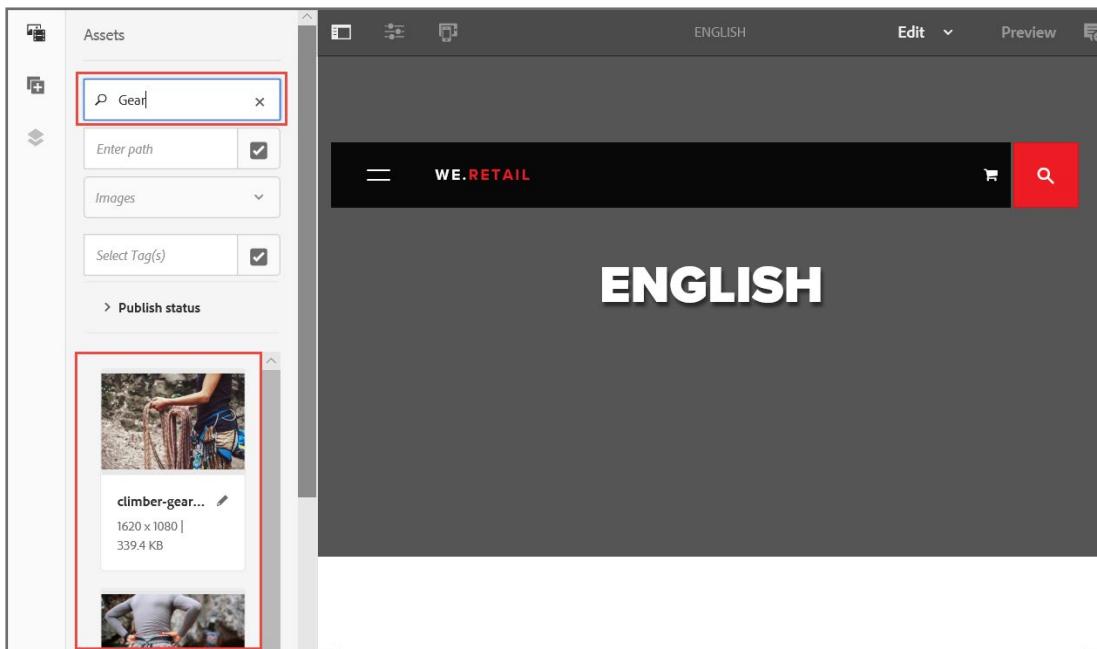


The screenshot shows the AEM Sites console interface. At the top, there's a toolbar with 'Create', 'Edit (e)', 'Properties (p)', 'Lock', 'Copy (ctrl+c)', 'Move (m)', and a three-dot menu. Below the toolbar, the navigation tree shows 'User001' selected. Under 'User001', the structure is: Campaigns (campaigns) > Language Masters (language-masters) > English (en). To the right of the tree, there's a preview of the 'Hero Page' and detailed properties for the 'English' page. The properties include:

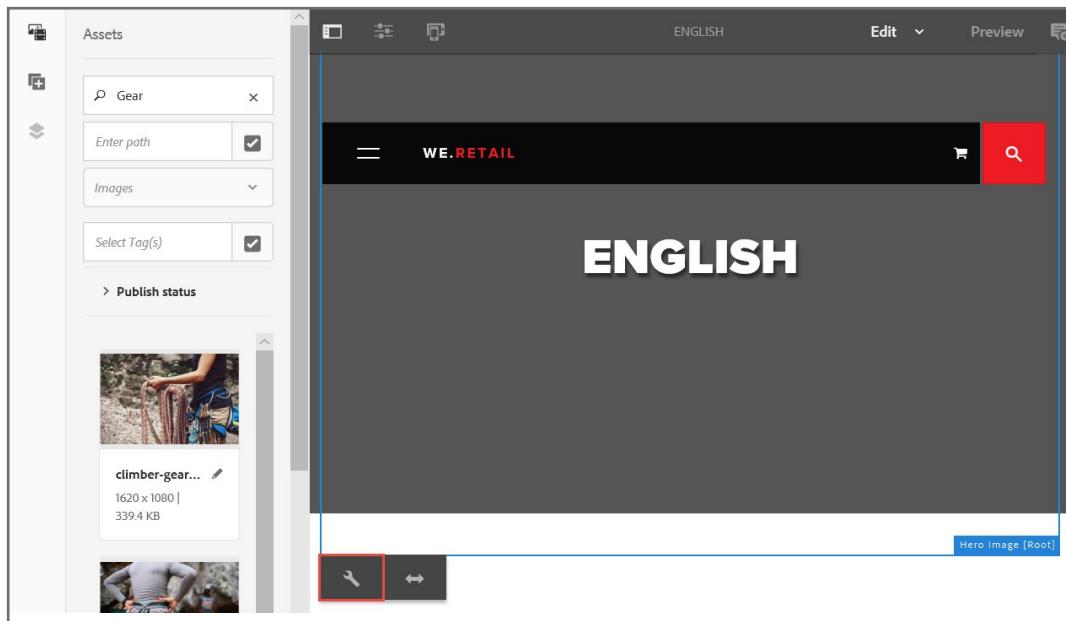
Title	English
Name	en
Template	Hero Page
Modified	2 hours ago
Modified By	Administrator
Language	English
Published	Not published

The **English** page opens in a new tab of the browser in Edit mode.

3. Edit the existing hero image component by adding an image and title to it. To edit the component of a page:
- Click the **Toggle Side Panel** icon, if the side panel is not open already.
 - Type the appropriate keyword in the **Filter** field. For example, type **Gear** and press Enter to search for the assets related to gear in the **Assets** panel, as shown:

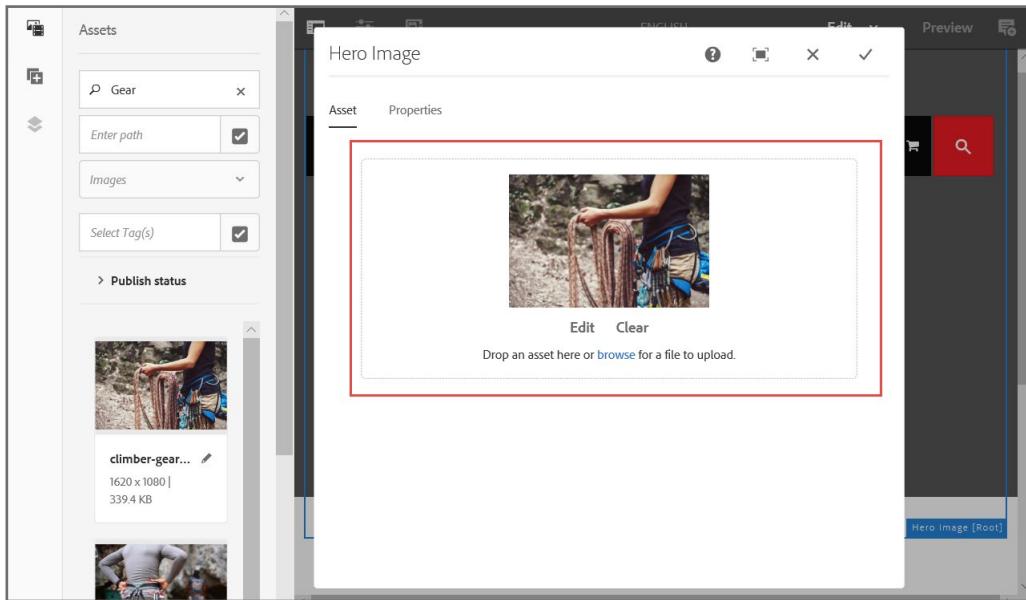


- On the page, select the hero image component. The component toolbar appears.
- Click the **Configure** icon as shown from the component toolbar, as shown:



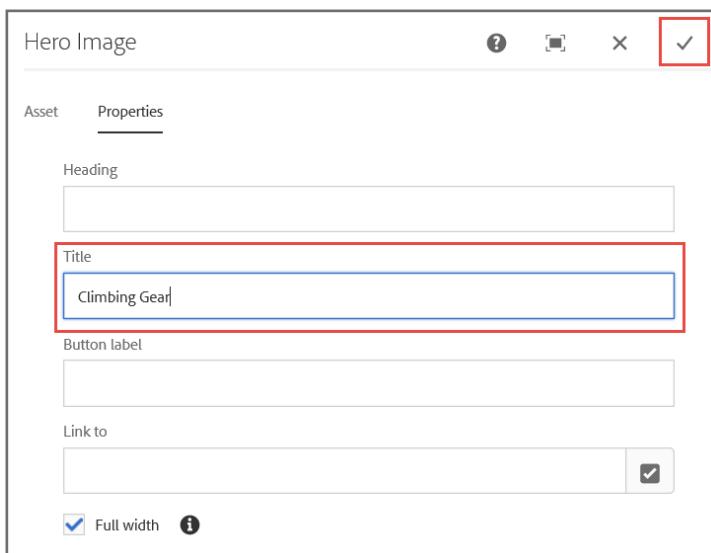
The **Hero Image** dialog box appears.

- e. Ensure you are on the **Assets** tab.
- f. Drag an image from the **Assets** panel to the dropzone, as shown:

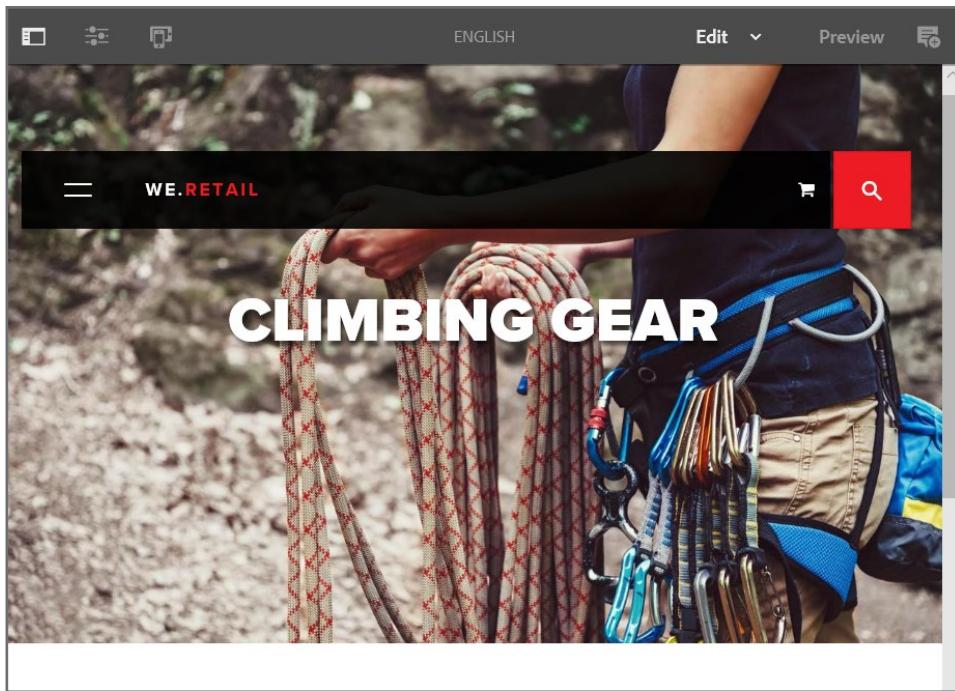


The image appears in the dropzone.

- g. Click the **Properties** tab.
- h. In the **Title** field, type the appropriate title (for example, **Climbing Gear**), and click the **Done** icon, as shown:



4. Notice the image and title are added to the hero image component, as shown:



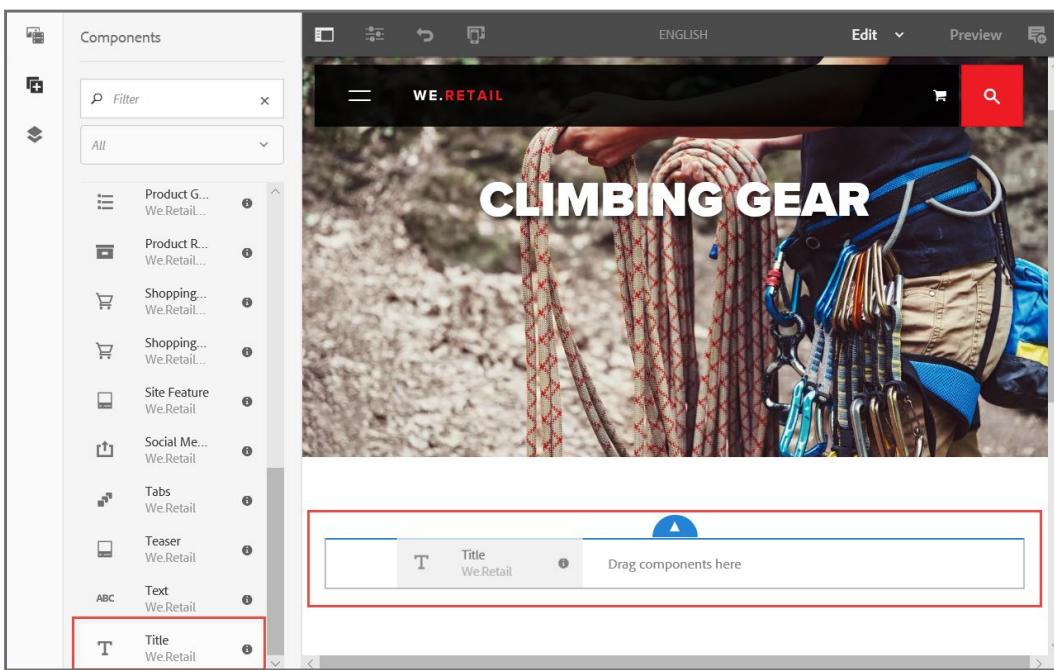
You will use this page in the next task.

Task 2: Add new components to the page

To add new components to the page:

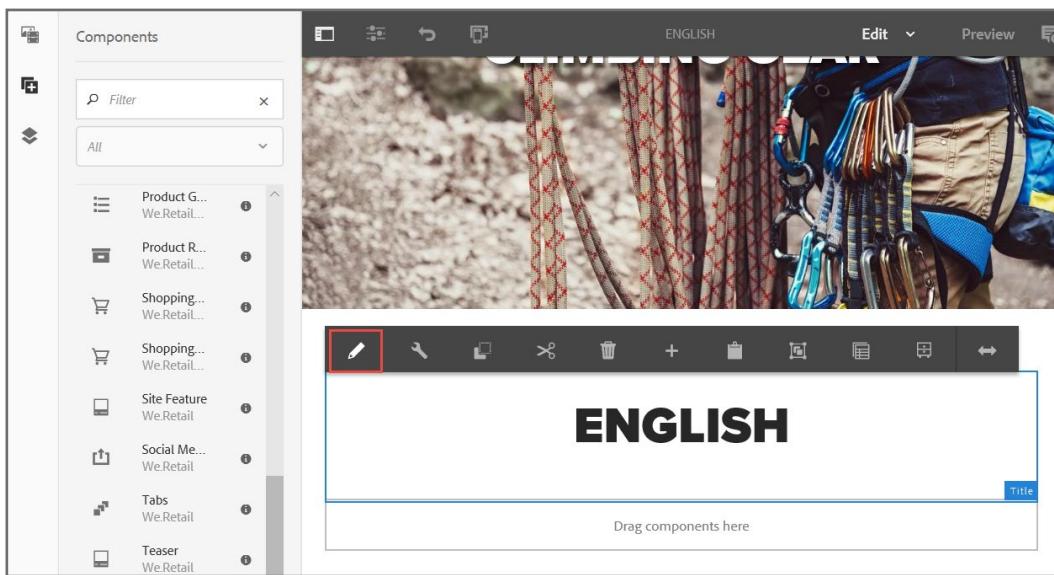
1. Ensure you are in the English page that you edited in previous task.
2. Click the **Components** icon below the **Assets** icon. The **Components** panel appears.

3. Drag the **Title** component to the **Drag components here** area, as shown:

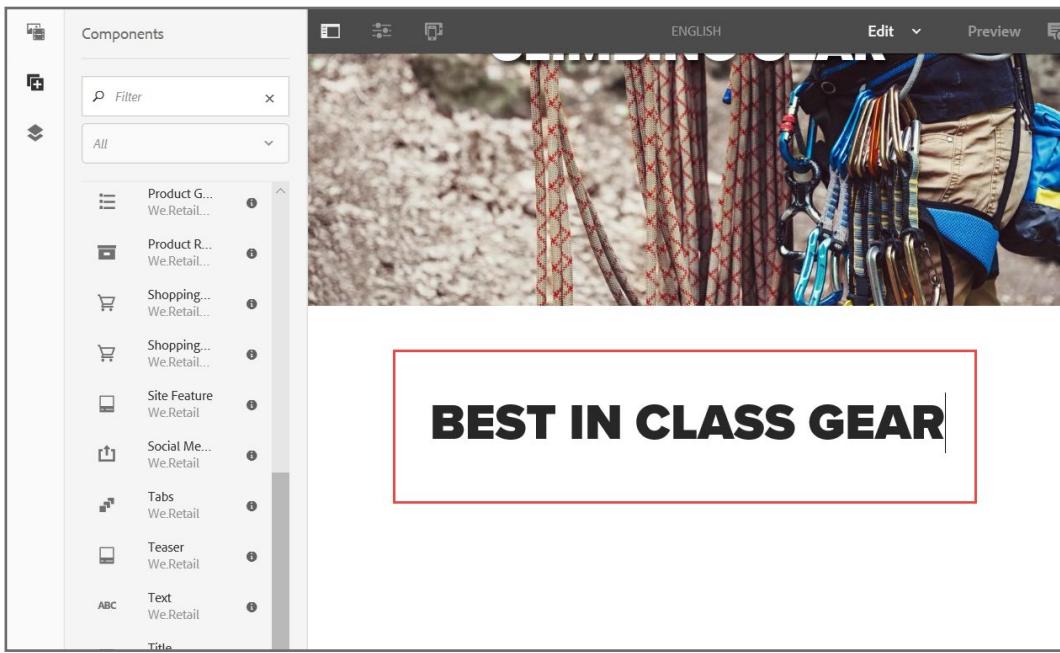


The **Title** component appears below the hero image.

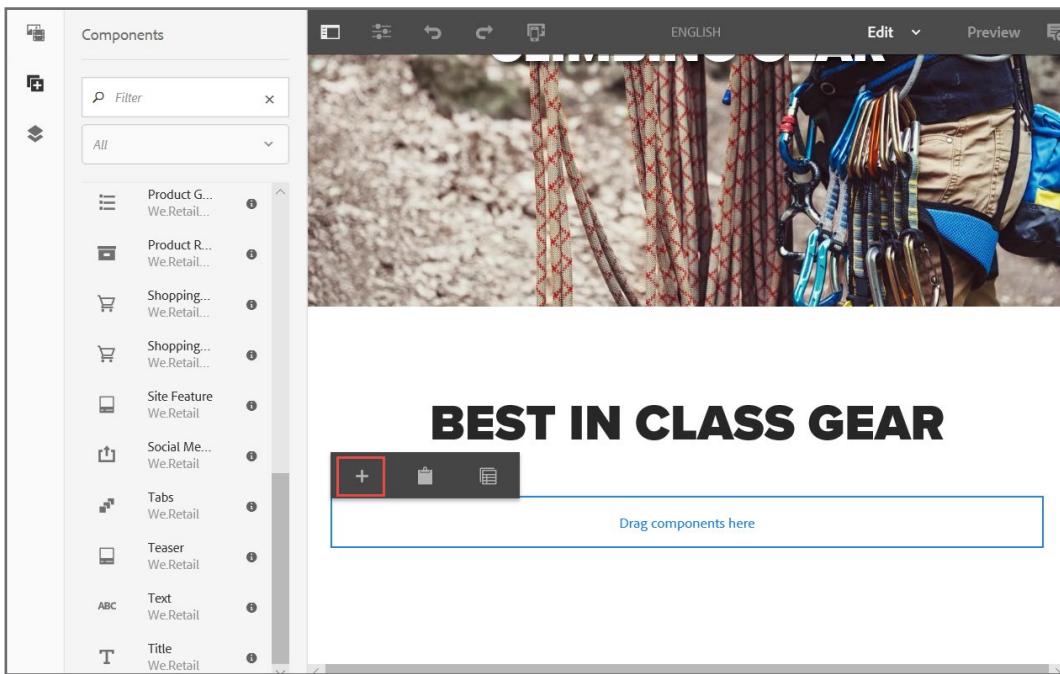
4. Select the **Title** component. The component toolbar appears.
 5. Click the **Edit** (pencil) icon, as shown, to edit the title.



6. Type the new title, as shown. The new title is added to the page.

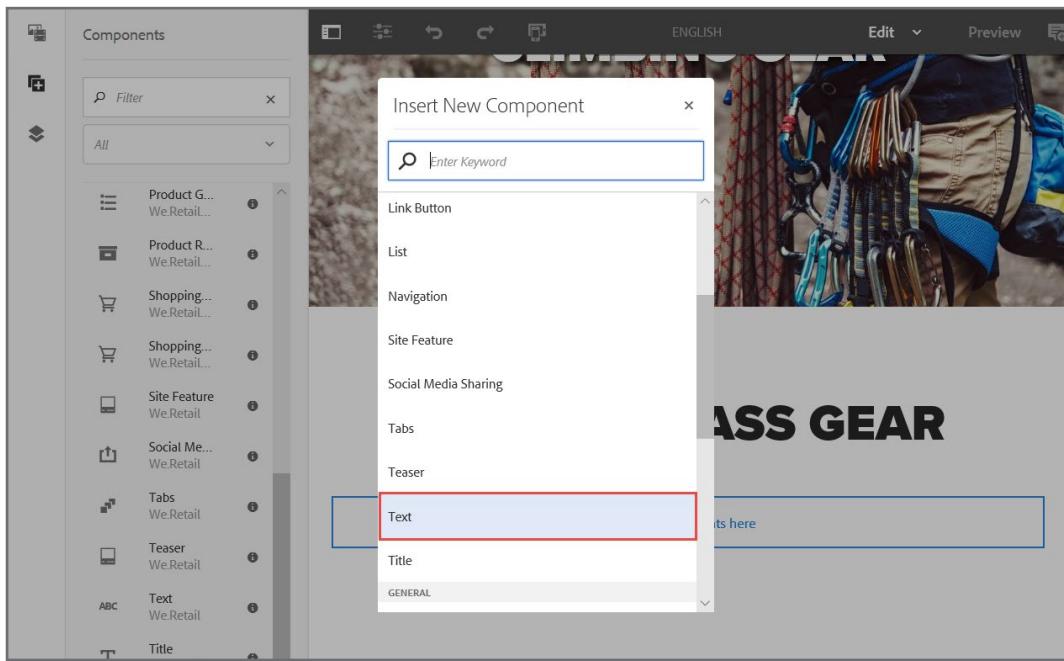


7. Select the **Drag components here** field and click the **Insert Component (+)** icon from the component toolbar, as shown:



The **Insert New Component** dialog box appears.

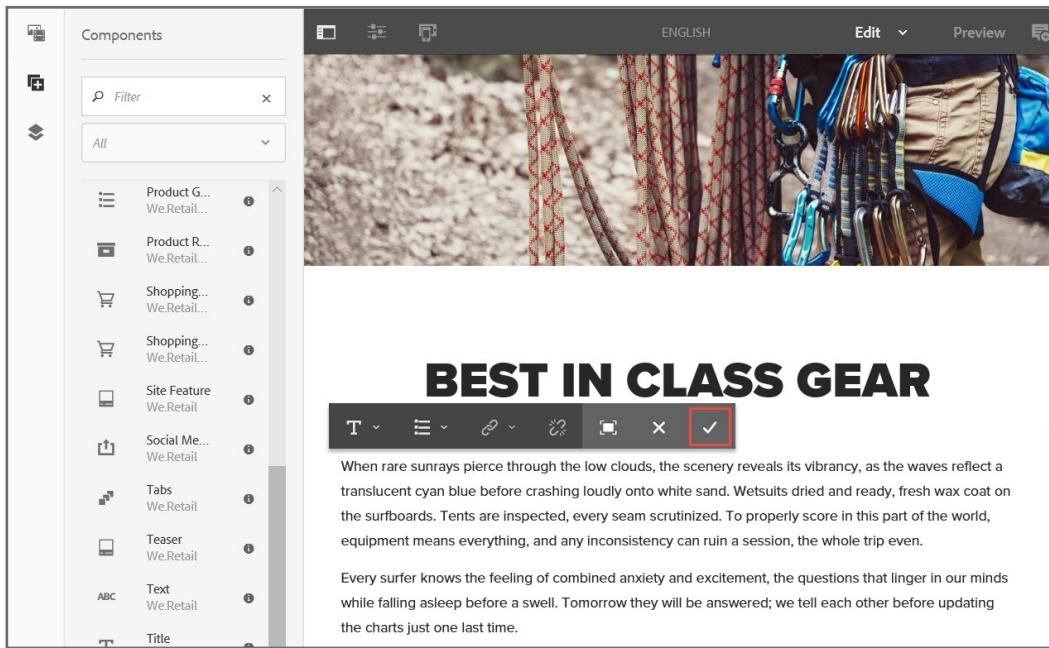
8. Select the **Text** component, as shown:



The **Text** component is added to the page.

9. Select the **Text** component field and click the **Edit** icon from the component toolbar to add text.

10. Add a paragraph of sample text (type or copy the sample text from the Sample.txt file available in the **Basic Authoring Skills** folder of the **Exercise Files** folder that you downloaded on your file system) to the **Text** component and click the **Save** icon, as shown:



Alternatively, to edit text component, you can use a dialog box.

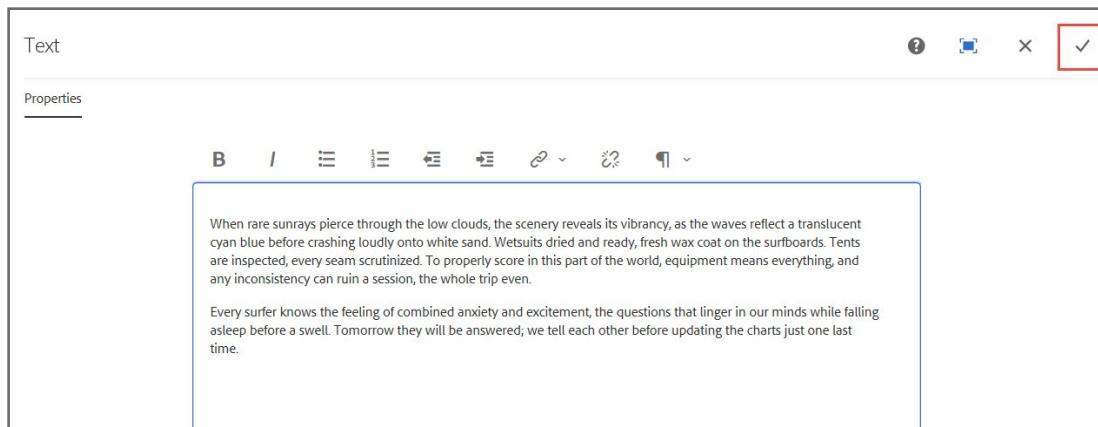
To add new content to the text component by using a dialog box:

- Click the **Configure** icon from the component toolbar, and then click **Toggle Fullscreen**, as shown:

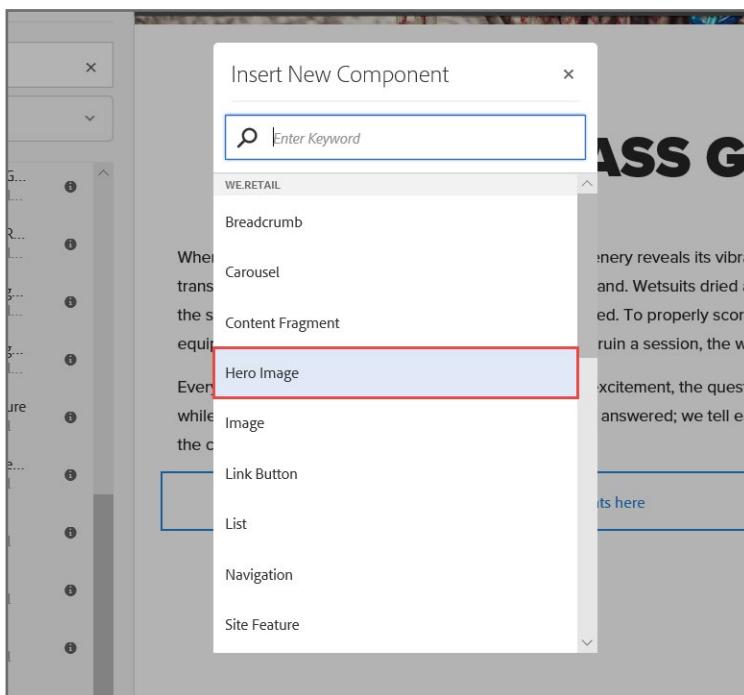
Two screenshots of the AEM configuration dialog for a Text component. The top screenshot shows the main configuration dialog with the title 'BEST IN CLASS GEAR'. The toolbar has several icons, and the 'Text' icon is highlighted with a red rectangle. Below the toolbar is a text input field with the placeholder 'Text' and a note 'Drag components here'. The bottom screenshot shows the properties dialog for the Text component. It has a 'Properties' section and a preview area where the text component is shown as a blue-bordered box. The 'Configure' icon (a wrench inside a red-bordered box) is highlighted with a red rectangle.

The text component opens in a full screen mode.

The full-screen mode enables the full rich text editor that includes additional features and editing tools such as adding links, paragraph formatting, and indentation.

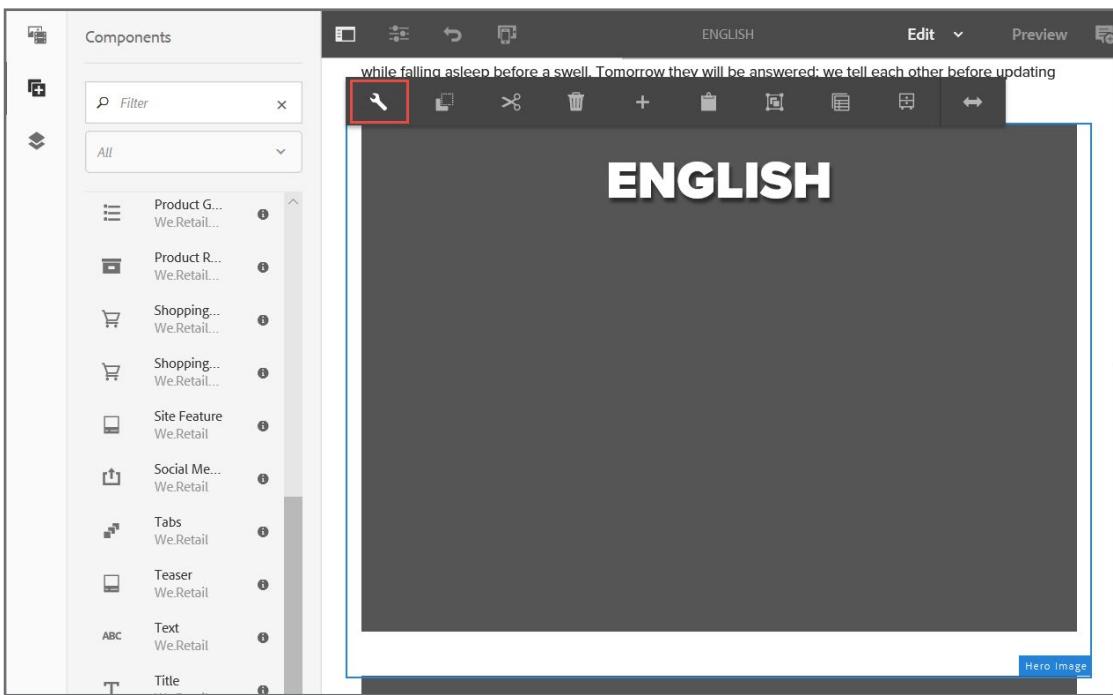


11. Select the **Drag components here** field and click the **Insert component** icon from the component toolbar. The **Insert New Component** dialog box opens.
12. Select the **Hero Image** component, as shown:



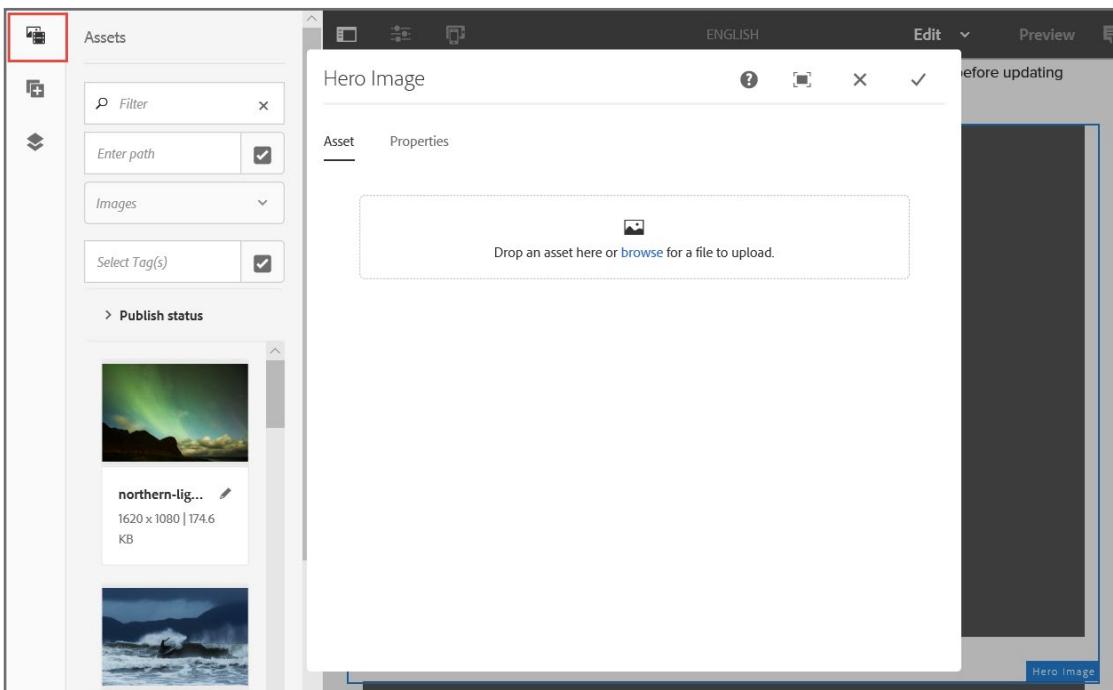
13. Similarly, add two more **Hero Image** components below the first hero image component.

14. Select the first hero image component, which is below the text component, and then click the **Configure** (wrench) icon, as shown:



The **Hero Image** dialog box appears.

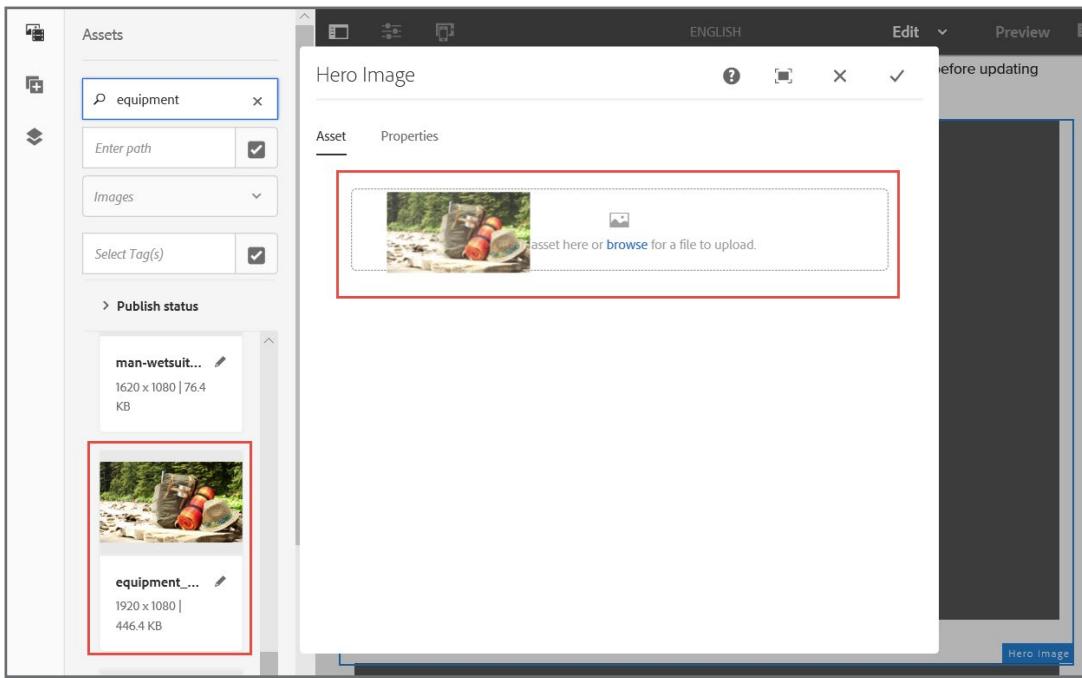
15. Click the **Assets** icon from the side panel, as shown:



The **Asset** panel opens.

16. Type the appropriate keyword in the **Filter** field. For example, type **equipment** and press Enter to search for the assets related to equipment in the **Assets** panel. The assets related to the keyword appears.

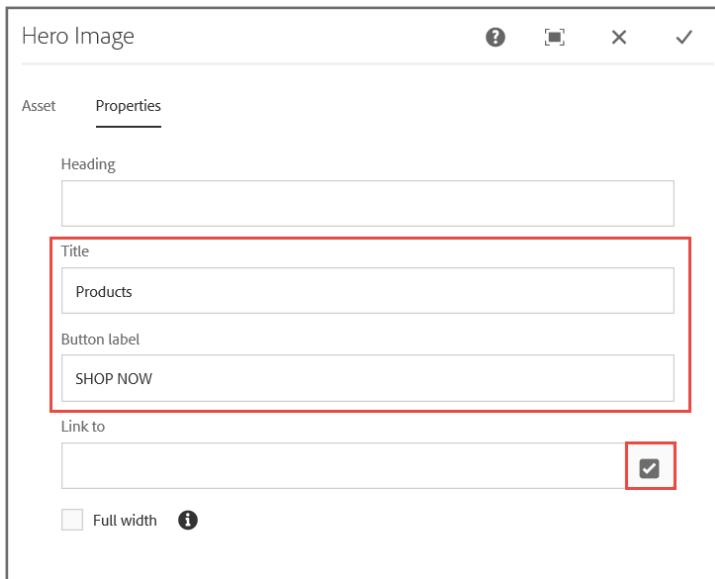
17. Drag an image from the **Assets** panel to the dropzone, as shown:



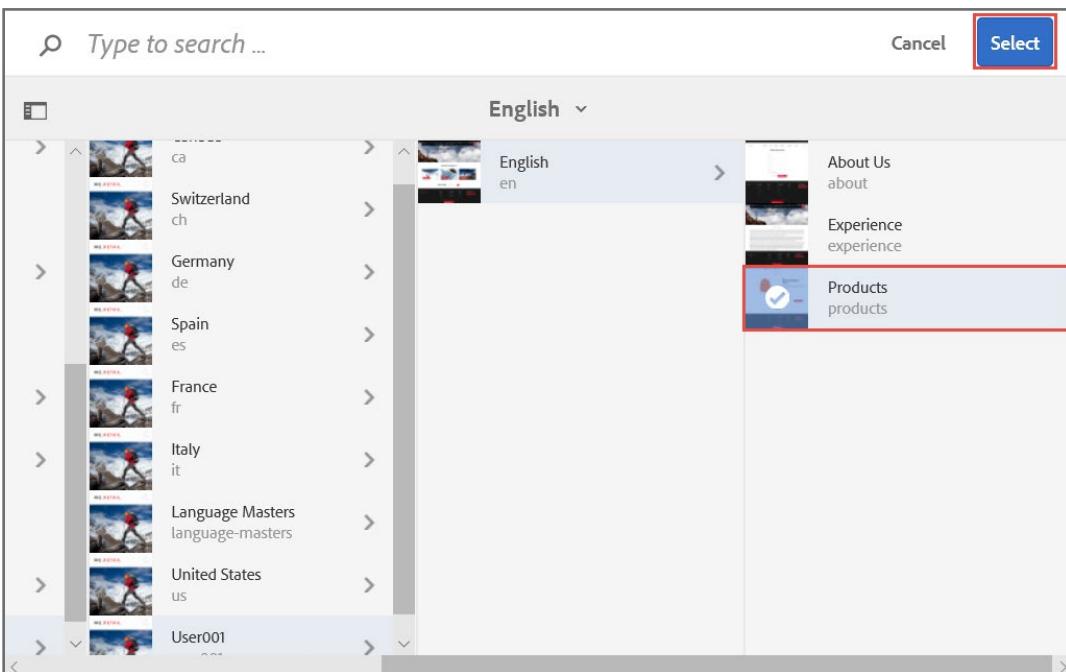
The image is added to the dropzone.

18. Click the **Properties** tab.

19. In the **Title** and **Button label** fields, type the appropriate details, as shown, and click the **Open Selection Dialog** icon next to the **Link to** field:

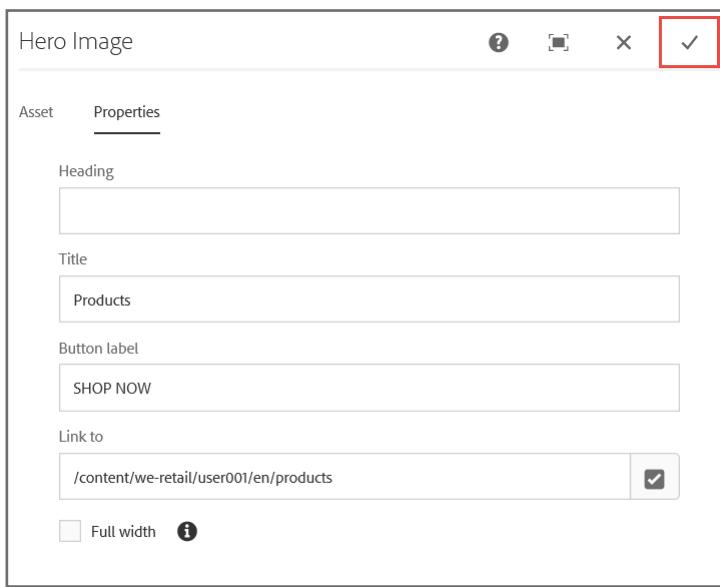


20. Navigate to **We.Retail > User0XX > English**, select the **Products** page, and then click **Select**, as shown:



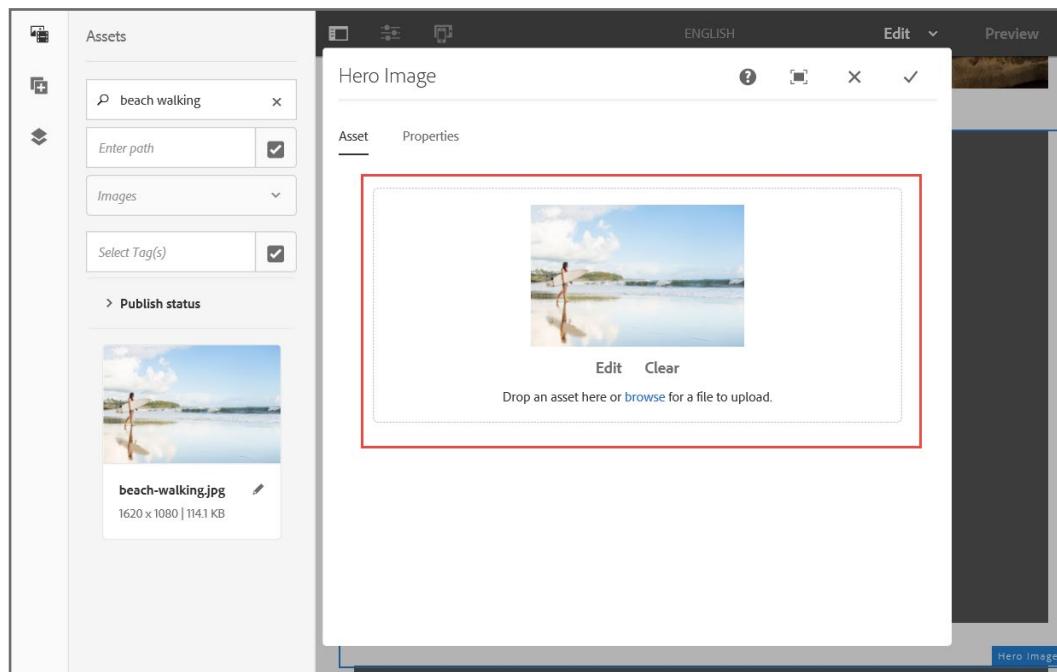
The **Link to** field is linked to the **Products** page within the **We.Retail** site.

21. Click the **Done (checkmark)** icon, as shown:



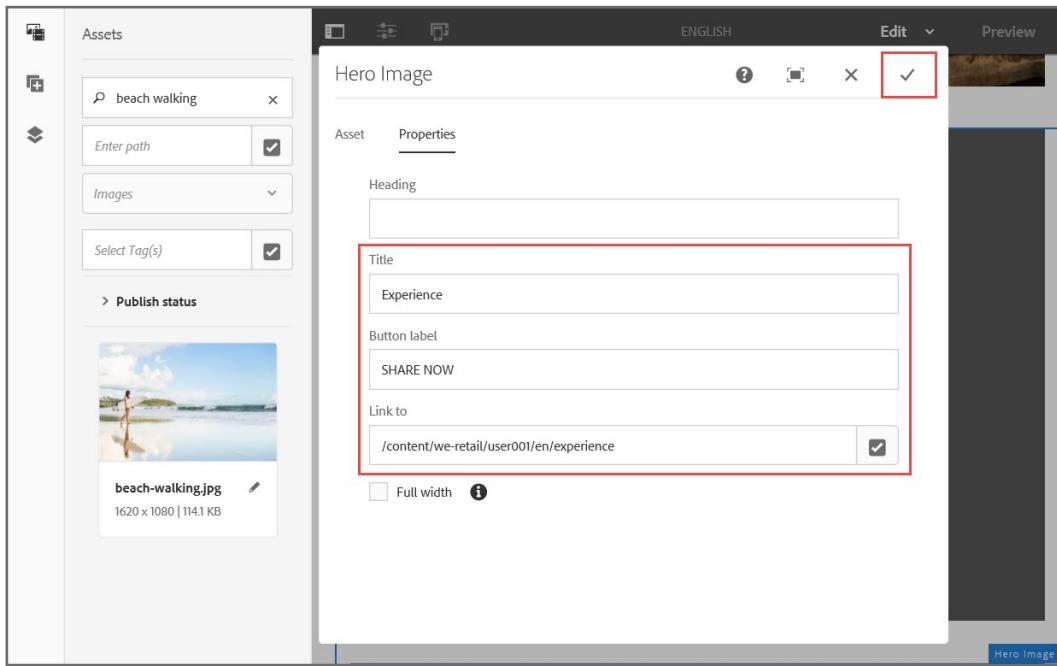
The **Hero Image** appears in the page editor.

22. Similarly, select the second hero image component, drag the beach-walking.jpg image to the dropzone, as shown. Ensure to search for beach walking to locate this image:

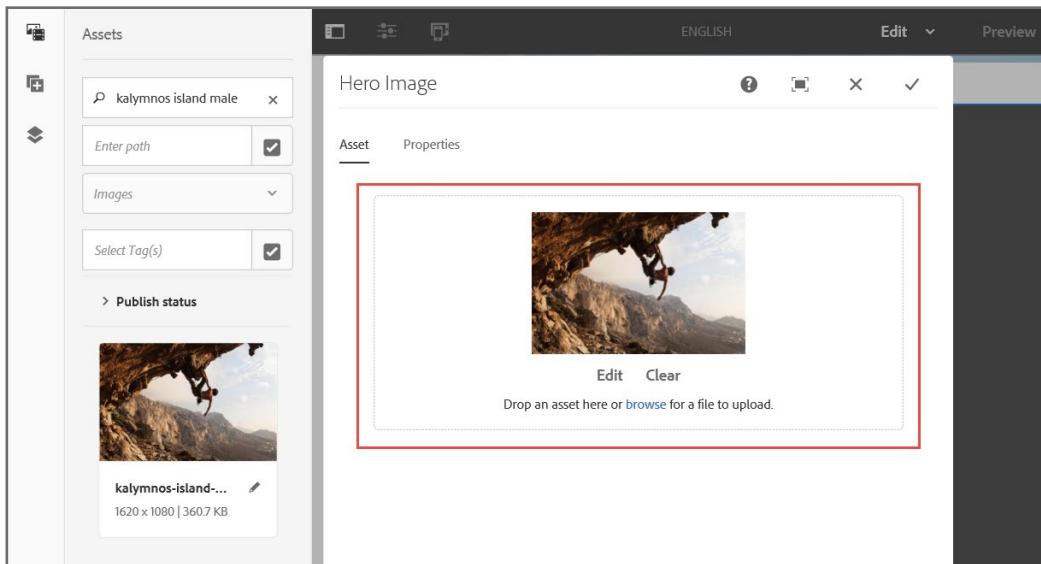


23. Click the **Properties** tab and type the appropriate details in the **Title** and **Button label** fields, as shown in the screenshot.

24. In the **Link to** field, link the **Experience** page, and then, click **Done** (checkmark), as shown:

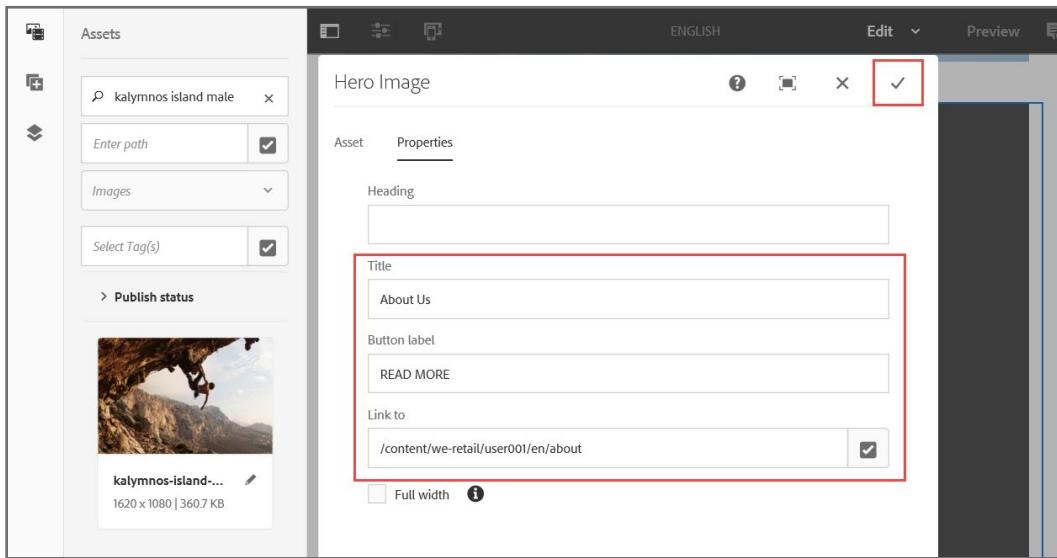


25. Similarly, select the third hero image component, drag the kalymnos-island-male.jpg image to the dropzone, as shown. The image is added to the component.



26. Click the **Properties** tab and type the appropriate details in the **Title** and **Button label** fields, as shown in the screenshot.

27. In the **Link to** field, link the **About Us** page and click **Done**, as shown:



Scroll down the page editor and observe that the English page displays a text component with three hero image components in a singular column, as shown:

CLIMBING GEAR

When rare sunrises pierce through the low clouds, the scenery reveals its vibrancy, as the waves reflect a translucent cyan blue before crashing loudly onto white sand. Wet suits dried and ready, fresh wax coat on the surfboards. Tents are inspected, every seam scrutinized. To properly score in this part of the world, equipment means everything, and any inconsistency can ruin a session, the whole trip even.

Every surfer knows the feeling of combined anxiety and excitement, the questions that linger in our minds while lying asleep before a swell. Tomorrow they will be answered; we tell each other before updating the charts just one last time.

BEST IN CLASS GEAR

When rare sunrises pierce through the low clouds, the scenery reveals its vibrancy, as the waves reflect a translucent cyan blue before crashing loudly onto white sand. Wet suits dried and ready, fresh wax coat on the surfboards. Tents are inspected, every seam scrutinized. To properly score in this part of the world, equipment means everything, and any inconsistency can ruin a session, the whole trip even.

Every surfer knows the feeling of combined anxiety and excitement, the questions that linger in our minds while lying asleep before a swell. Tomorrow they will be answered; we tell each other before updating the charts just one last time.

PRODUCTS

SHARE NOW

EXPERIENCE

ABOUT US

WE.RETAIL

Products Experience About Us

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TERMS OF USE & PRIVACY POLICY

RIDE TO THE TOP

You will use this page in the next exercise.

Exercise 3: Edit the page layout

In this exercise, you will edit the responsive layout and preview the page on the emulator.

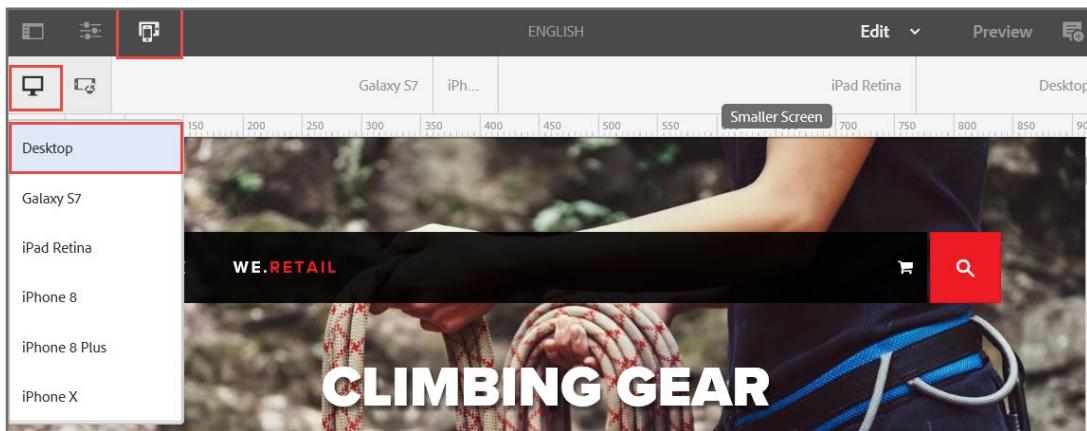
In this exercise, you will perform the following tasks:

1. Edit the page layout
2. Change layout to display images in a single column
3. Move, hide, restore components, and rotate the emulator preview

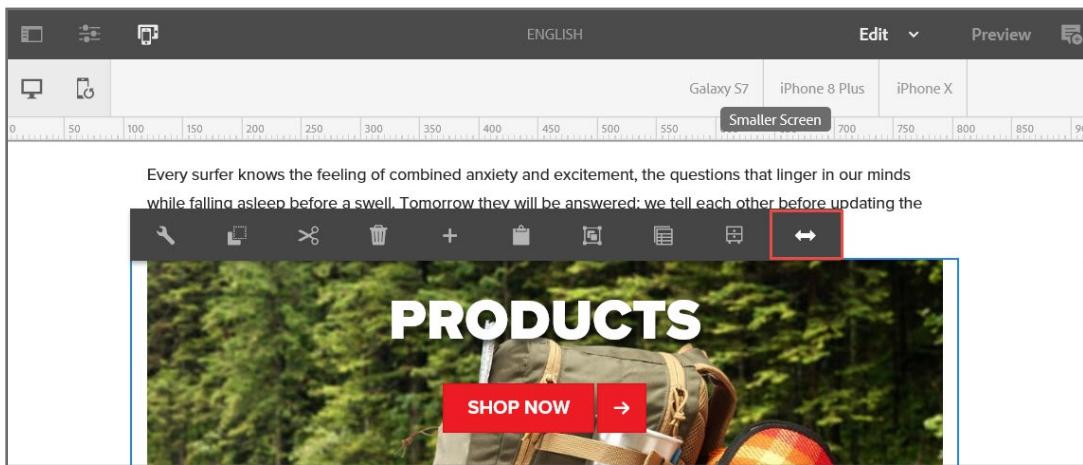
Task 1: Edit the page layout

To edit the page layout:

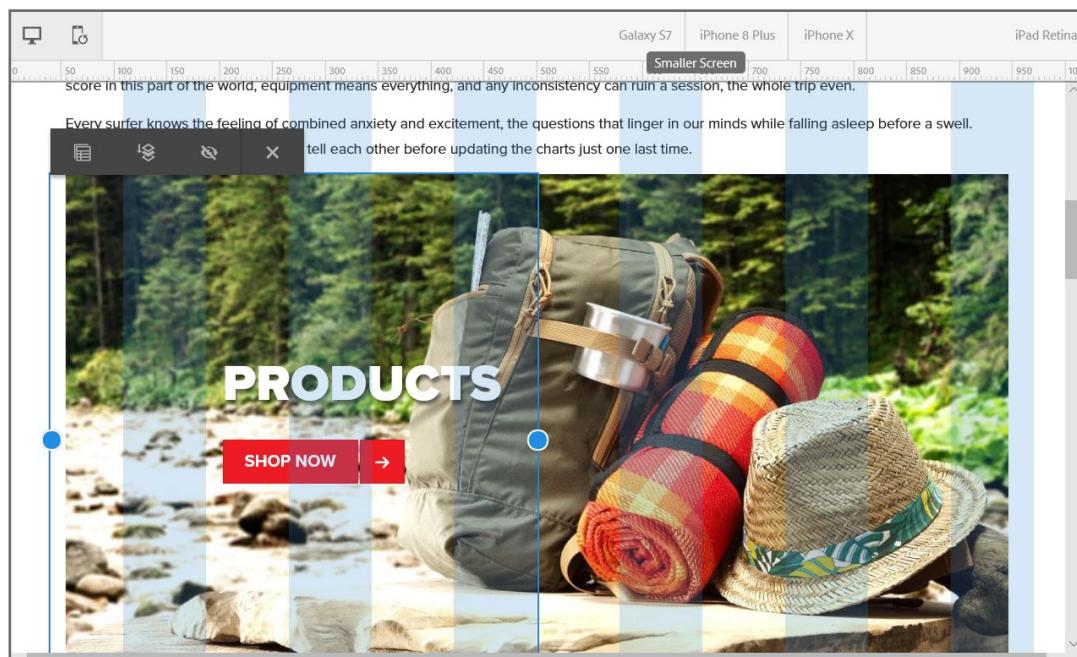
1. Ensure you are on the page editor of the English page from the previous exercise.
2. Click **Emulator > Select Device > Desktop**, as shown:



3. Select the **PRODUCTS** component and click the **Layout** icon from the component toolbar. (You can also select the Layout mode from the Edit drop-down menu).

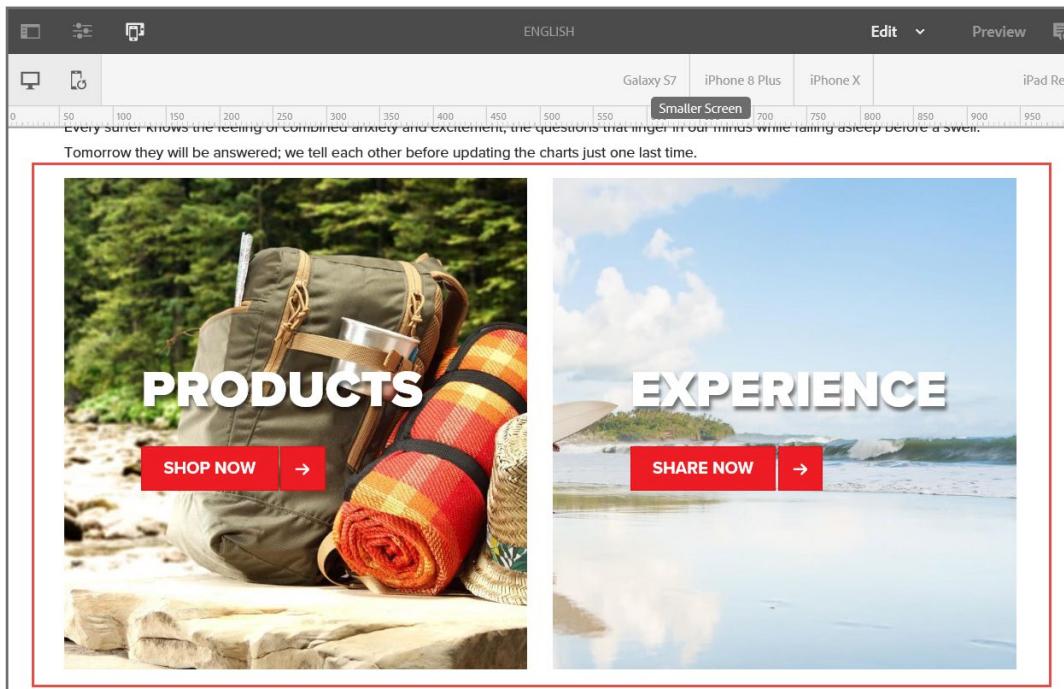


4. Drag the blue dot towards the left to resize the component. Span the blue dots to occupy six columns, as shown:



 **Note:** Please note that the columns are counted as the blue bars and the transparent bars beside the blue bars.

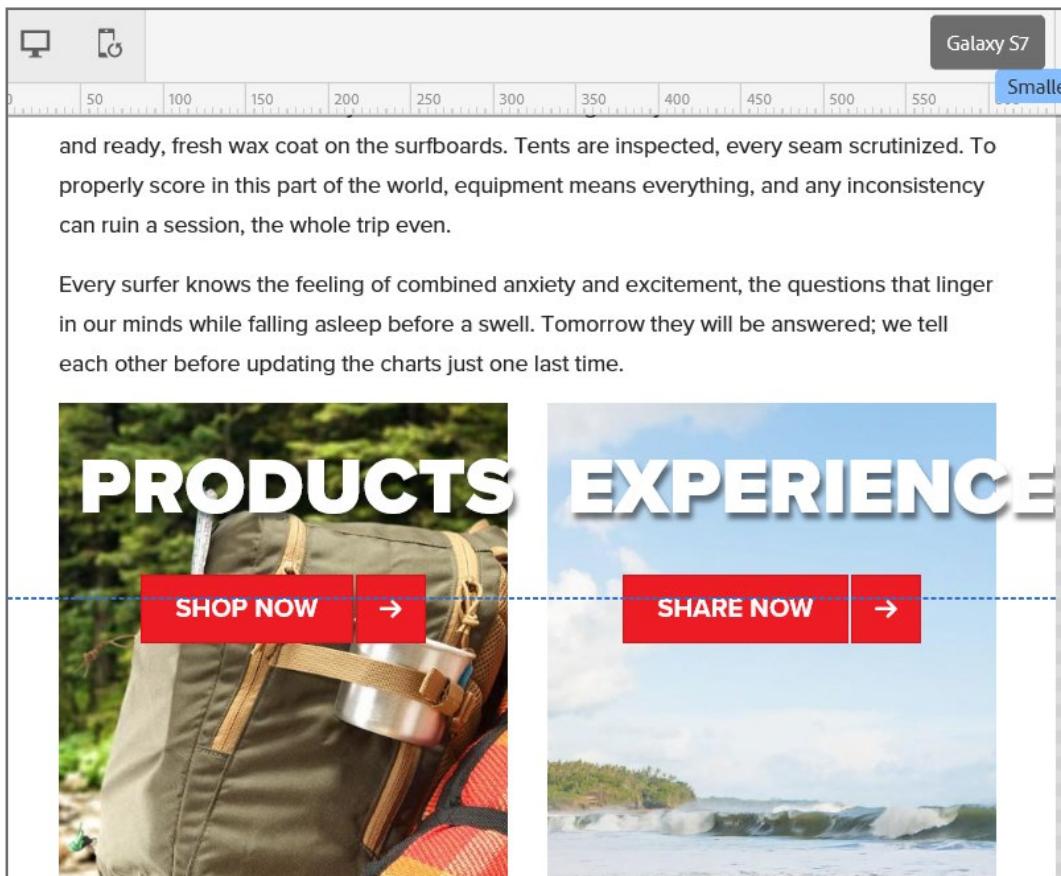
5. Similarly, repeat steps 3 and 4 for the **EXPERIENCE** component. However, drag the handler to the right of the component. The two images will rearrange themselves in the layout. The page will look similar to the one shown in the below screenshot:



Do not make the changes to the **About Us** component.

You can also view the page in other devices. To view the page display in other devices:

6. Click the **Emulator** icon and select **Galaxy S7** from the emulator to view how the page looks on Galaxy S7.



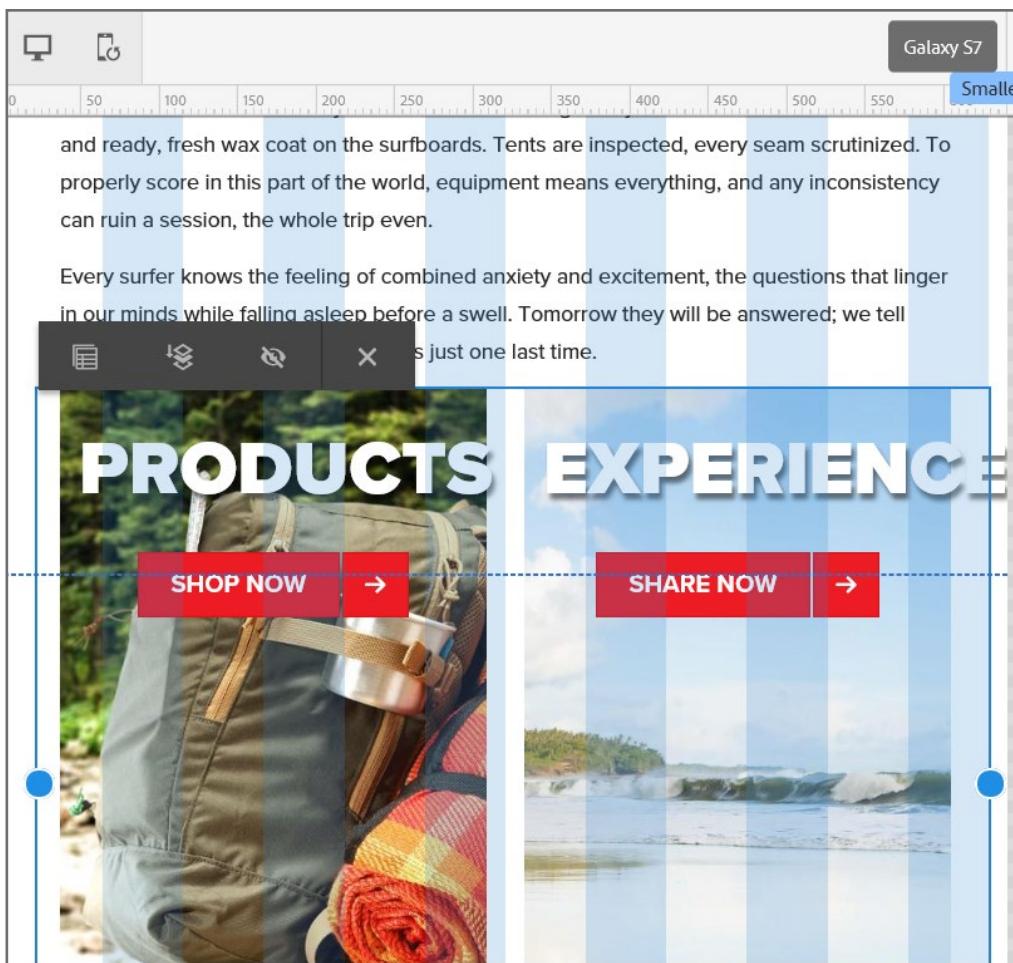
7. Notice on the Galaxy S7 view, the text on the hero image components overlap the images.
You will use this page for the next task.

Task 2: Change the layout to display images in a single column

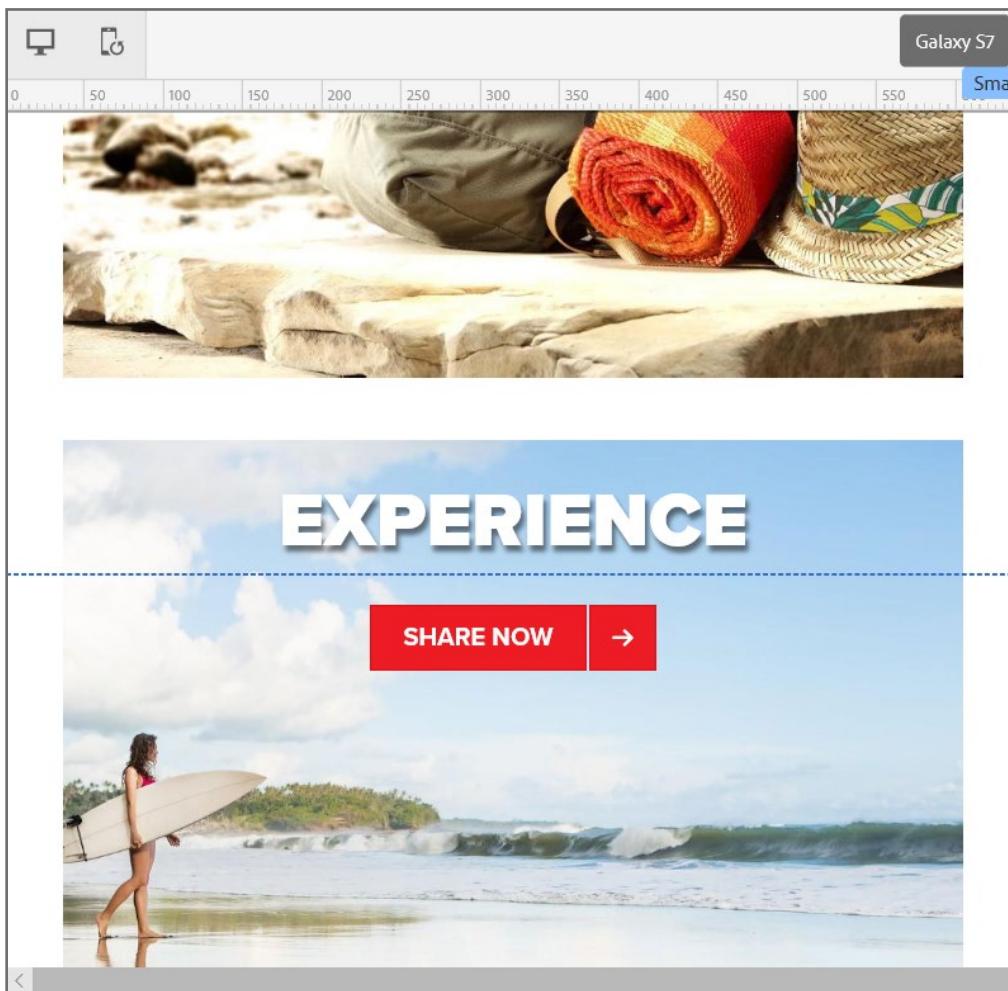
In the previous task, notice that the text on the hero image components overlapped the images when you viewed the page on Galaxy S7. You must change the layout to a single column to make the components flow freely in the layout.

In this task, you will change the layout of the components to a single column.

1. Select the **PRODUCTS** component and then select the **Layout** icon from the component toolbar.
2. Drag the blue dot to resize the component. Span the blue dots to include 12 columns, as shown:



3. Repeat step 2 for the **EXPERIENCE** component. Notice that the second hero component aligns below the **PRODUCTS** component, as shown:



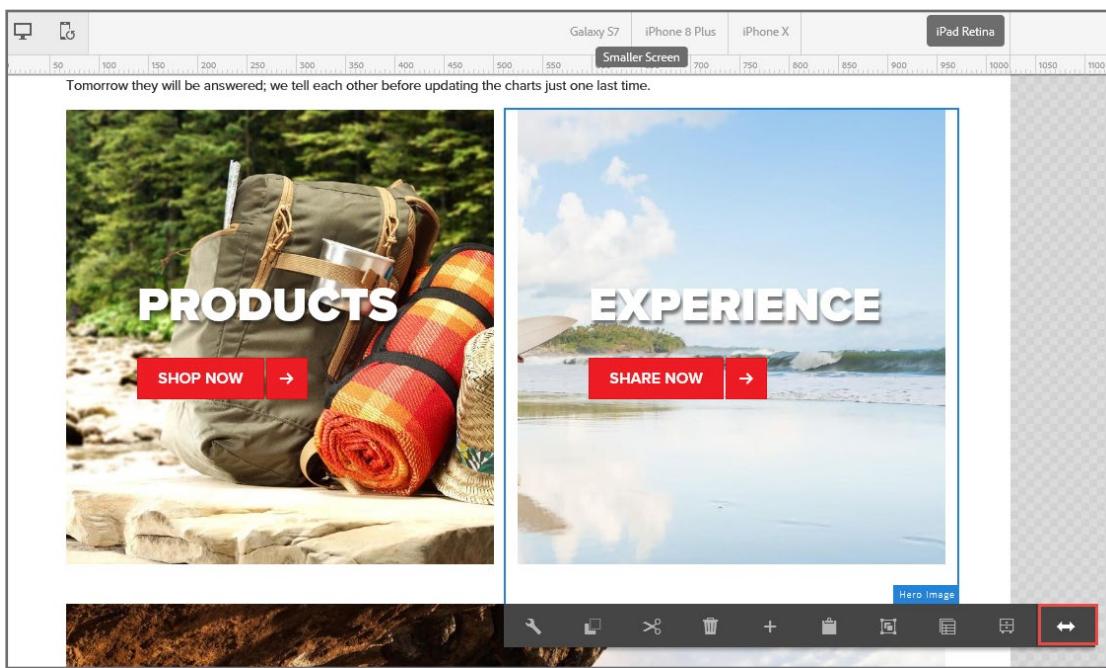
Task 3: Move, hide, restore components, and rotate the emulator preview

In this task, you will explore the other controls available in the components toolbar from the Layout mode. You will use the move component to float to a new line, hide and restore a component, and rotate the emulator preview.

To move the component to a new line:

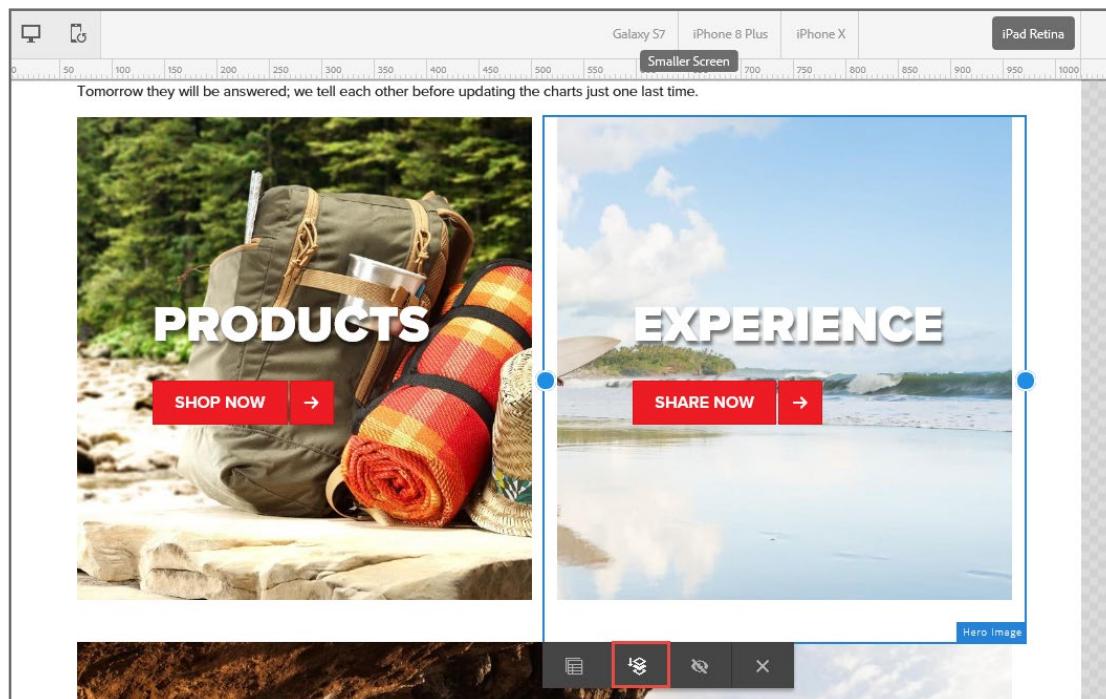
1. Select iPad Retina from the emulator.

2. Select the **EXPERIENCE** component and click the **Layout** icon, as shown:

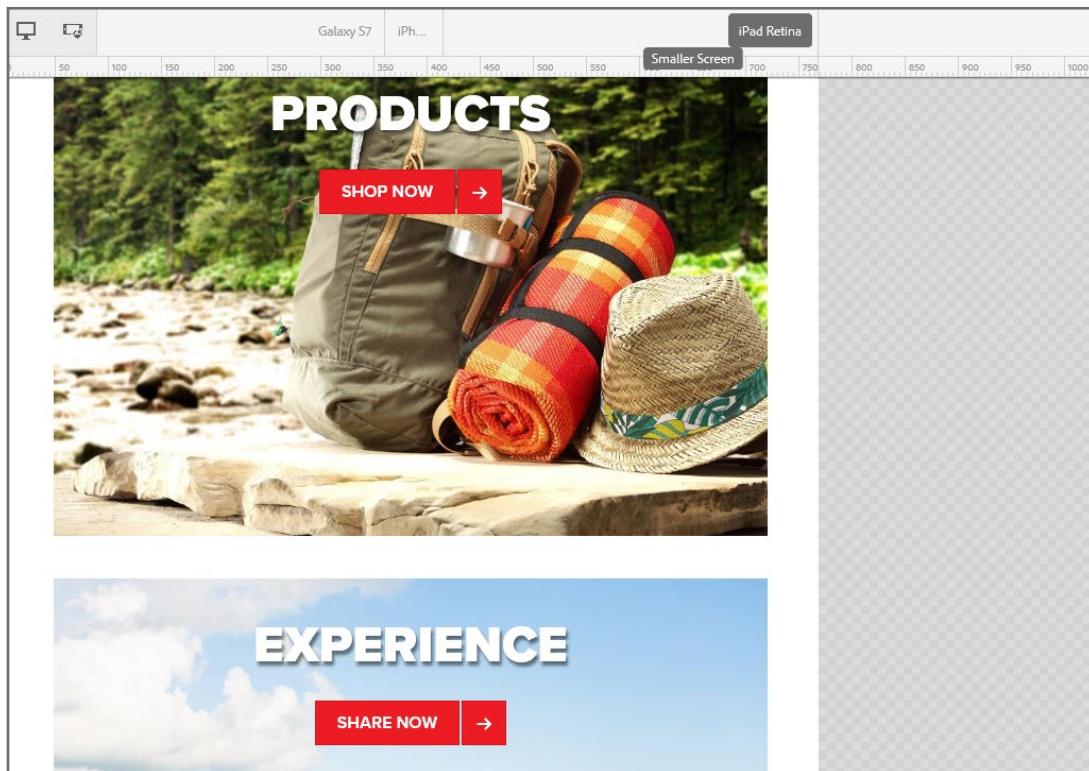


The layout options appear.

3. Click the **Float to new line** icon from the component toolbar, as shown:

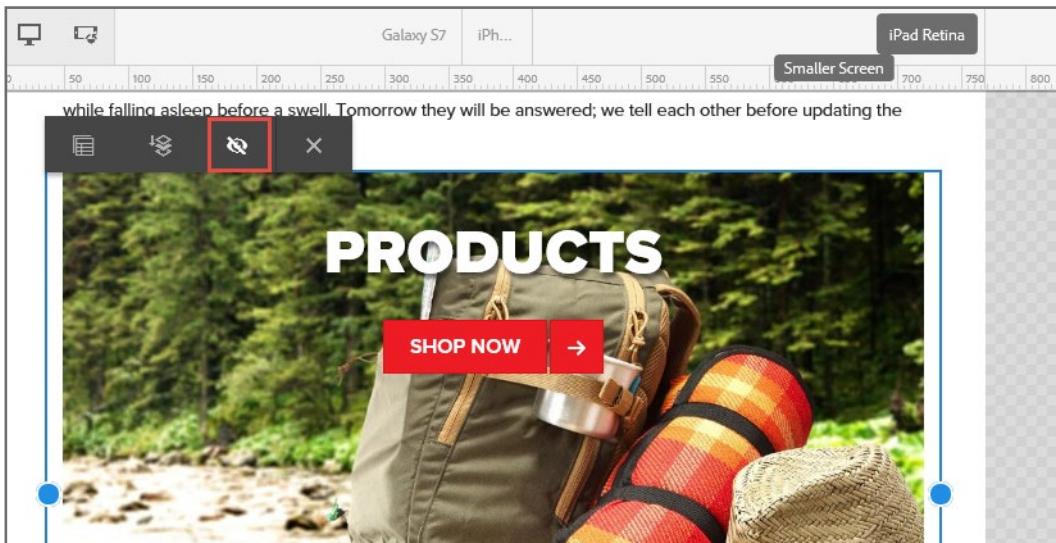


4. Notice the component moves to a new line within the layout, which prevents the haphazard content flow, as shown:

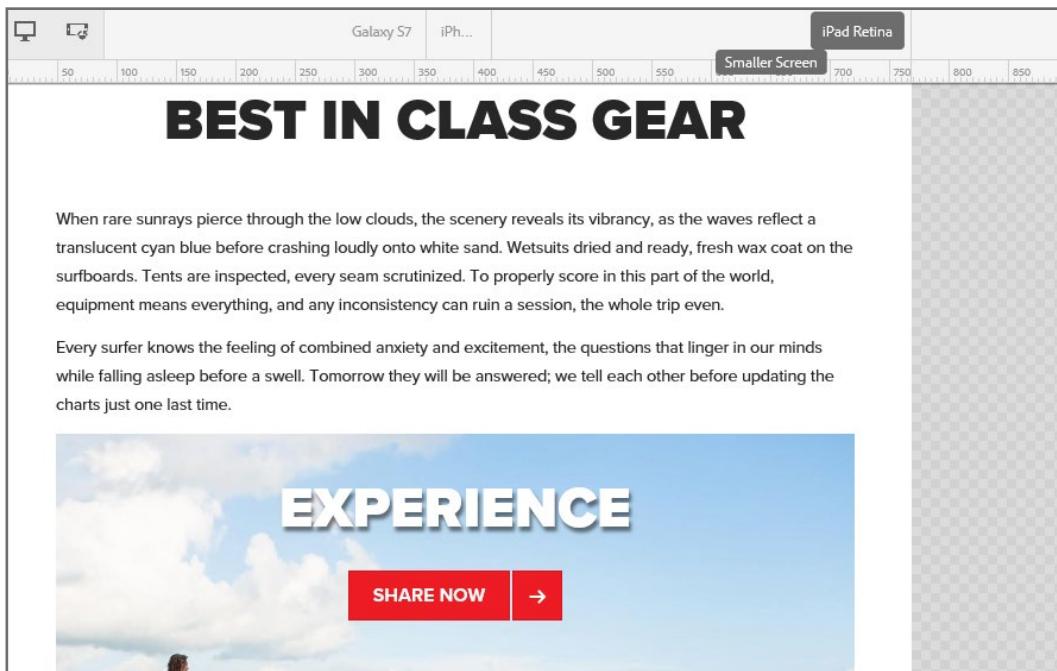


To hide a component from the layout:

5. Select the first **PRODUCTS** component and click the **Layout** icon. The layout options appear.
6. Click the **Hide component** icon from the component toolbar, as shown:

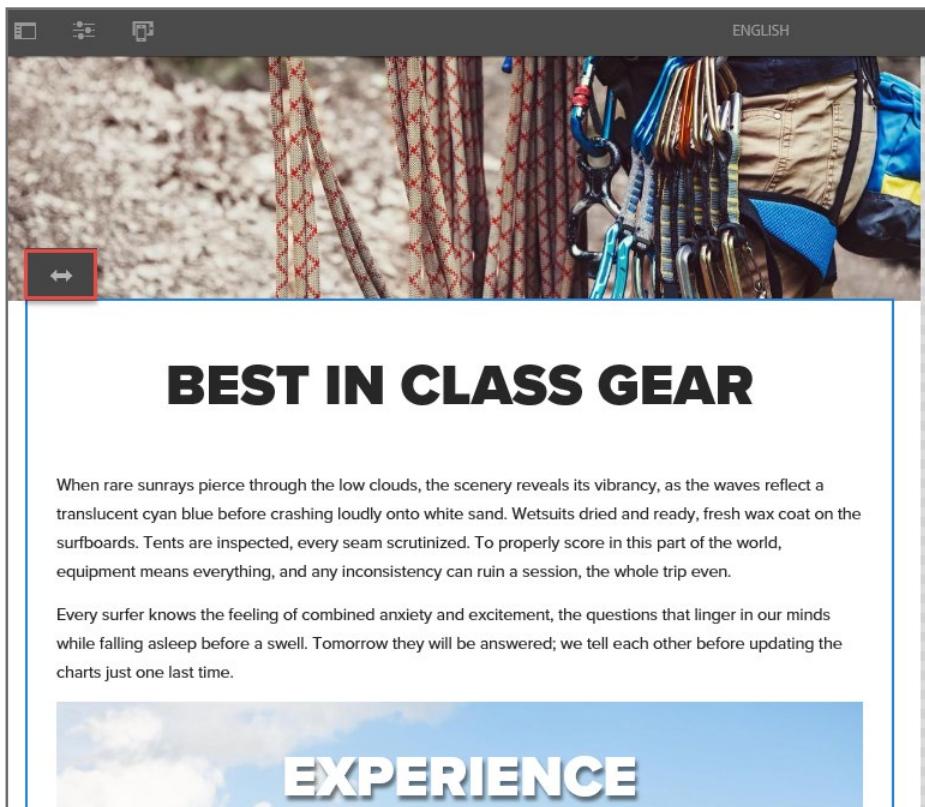


7. The **PRODUCTS** component is hidden from the layout, as shown:

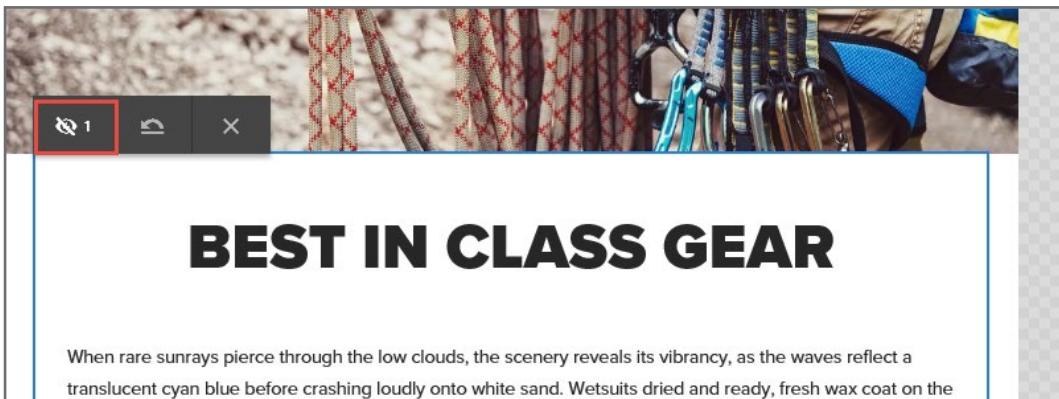


To restore the hidden components:

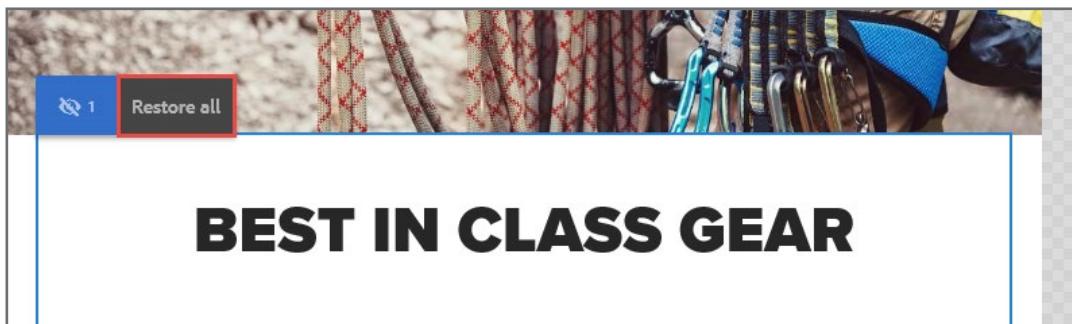
8. Select the **Layout Container** and click the **Layout** icon, as shown:



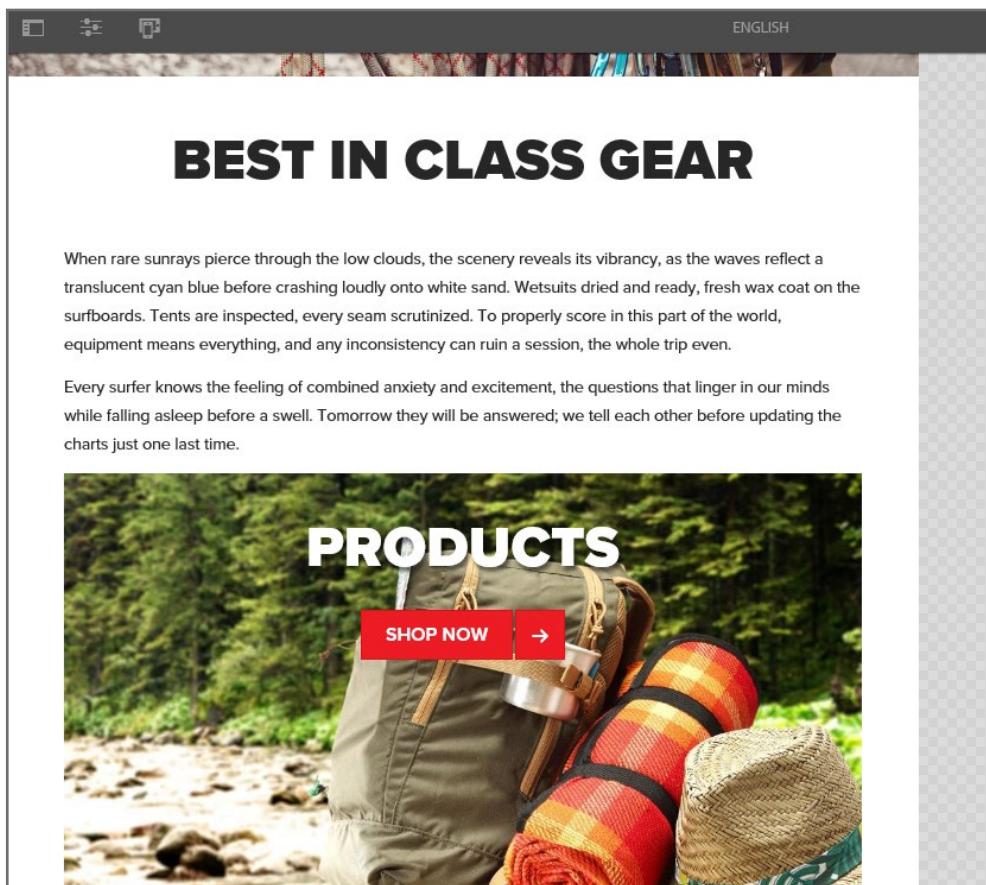
9. Click the **Show hidden components** icon, as shown. (Prior to clicking the icon, you will notice the eyeball icon with a slash through it has a number next to it. This number indicates the number of hidden components).



10. Click **Restore all** to view the hidden component in the layout, as shown:

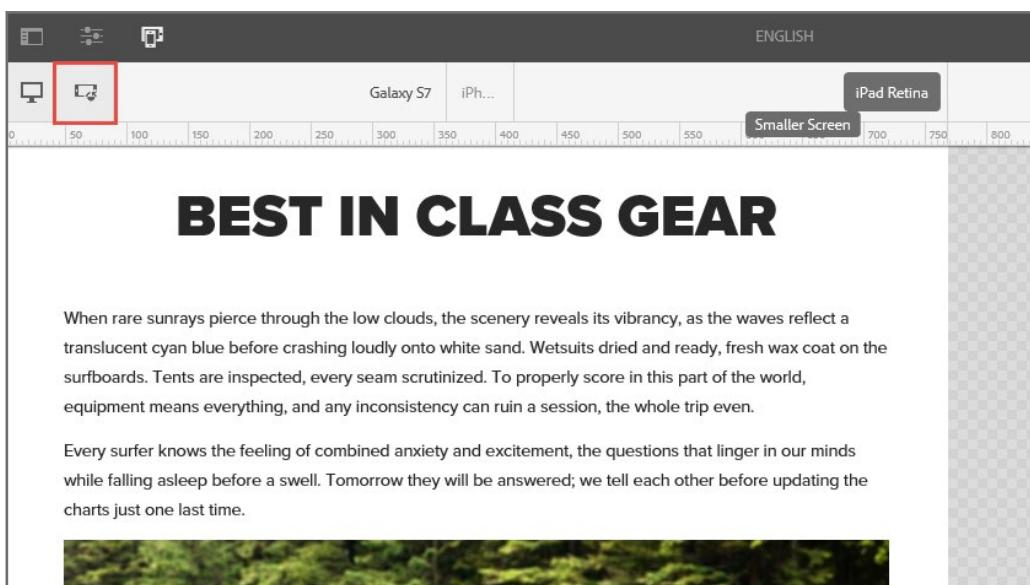


Notice the hidden image component is now visible within the layout, as shown:

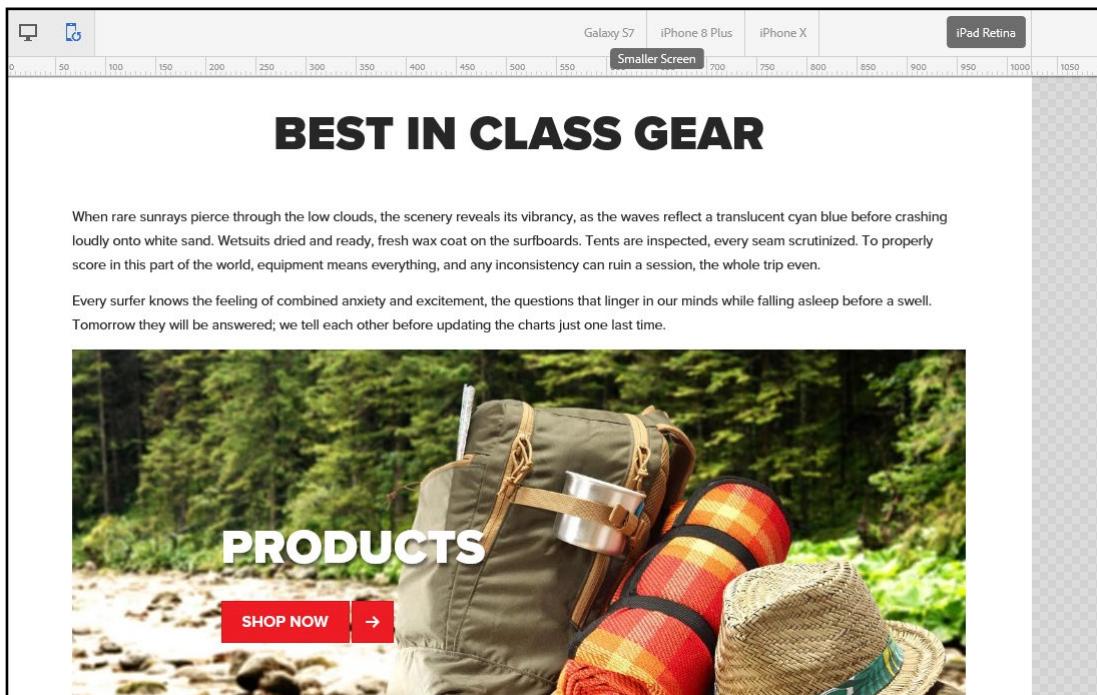


To rotate the emulator preview:

11. Click the **Rotate device** icon from the **Emulator** toolbar, as shown:

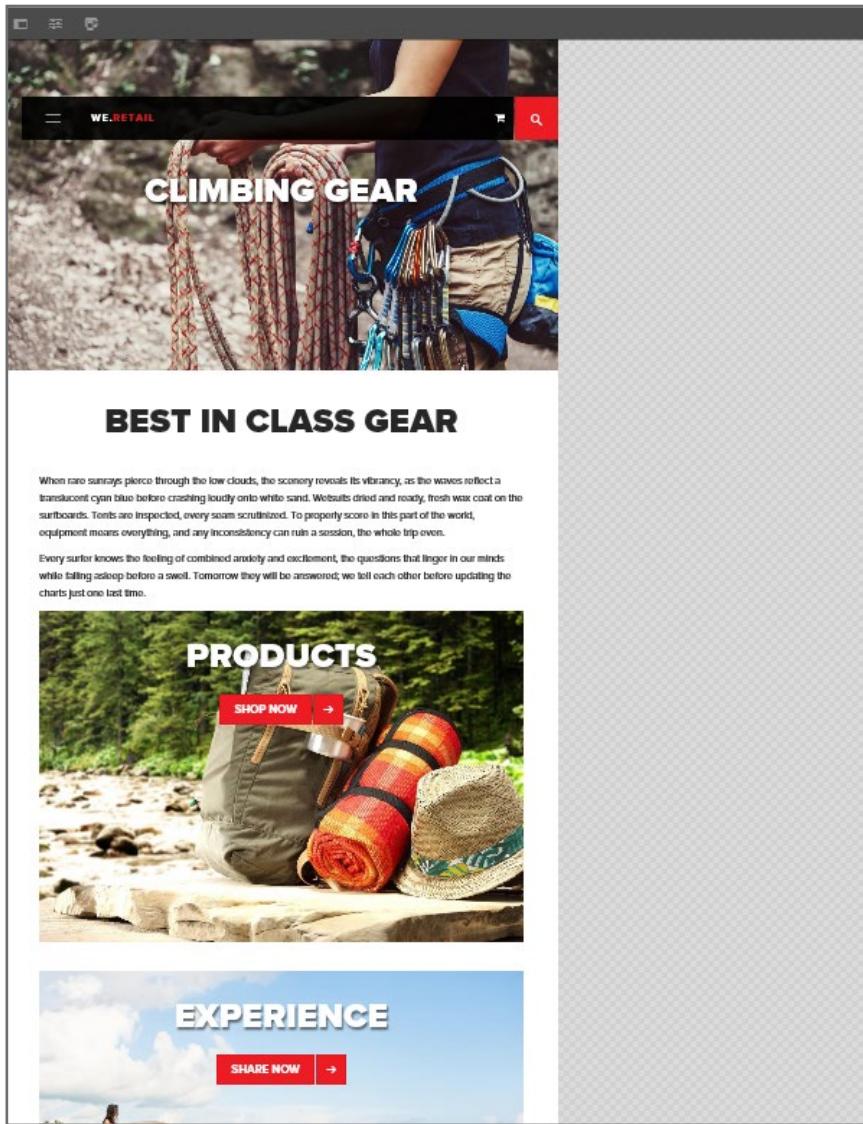


Notice the page appears in horizontal view, as shown. By default, the page displays vertically.



12. Click the **Rotate device** icon again to view the page in vertical view.

13. Click the **Emulator** icon to close the Emulator toolbar. The page should look similar to the one shown in the below screenshot:



Component Styles

The Style System in AEM enables authors to create visual variations of components without backend development. The Style System, when used in conjunction with the core components of AEM, template editor, and responsive layout, makes better reuse of AEM components. It helps compose rich experiences quickly and makes content authoring more versatile and efficient.

Exercise 4: Apply component styles in a page

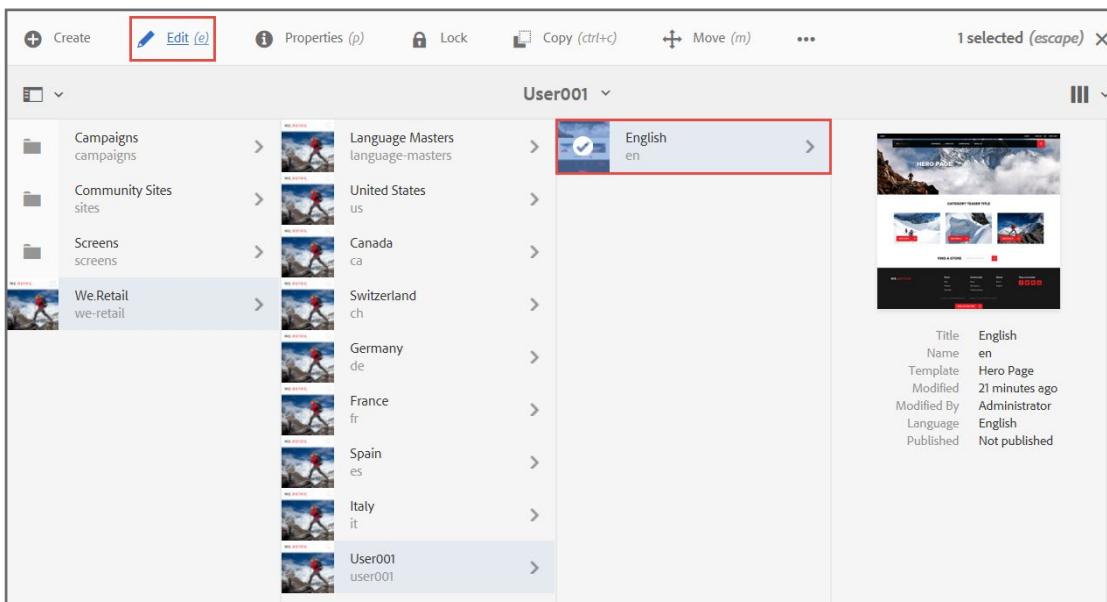
Scenario:

As an author, you need to display different styles for components that can be selected during authoring. To successfully add different styles for components, you must add a list component to a page and configure the component.

In this exercise, you will add and configure a list component for a page.

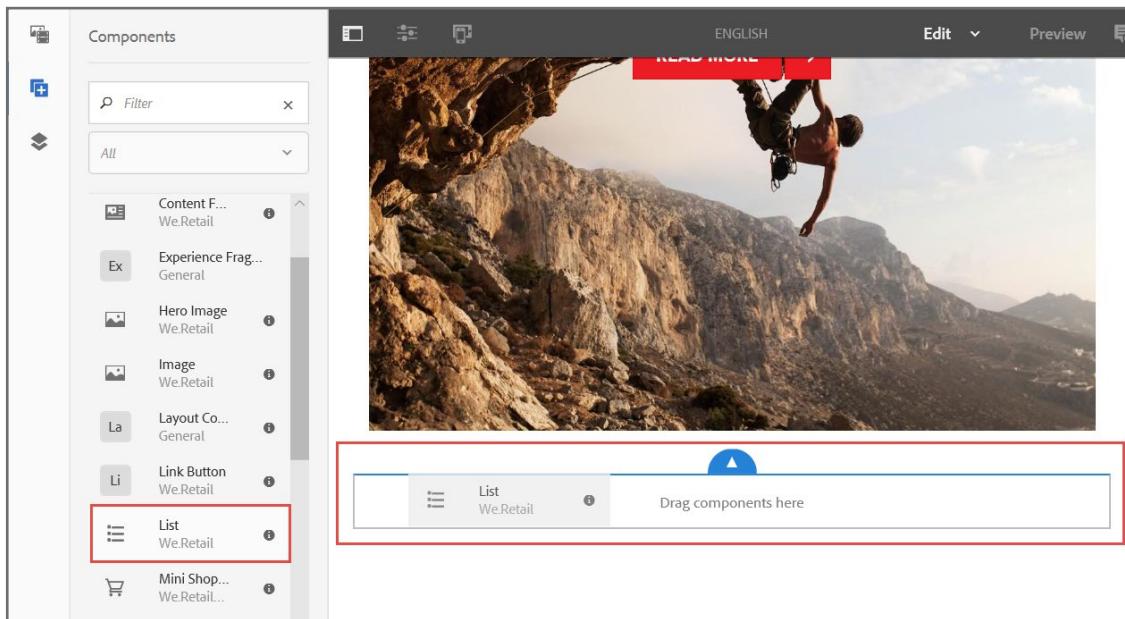
To add and configure a list component for a page:

1. From the **Sites** console, navigate to **We.Retail > User0XX** (where 0XX is the user number assigned to you for this training), and select the **English** page. The actions toolbar appears.
2. Click **Edit**, as shown:



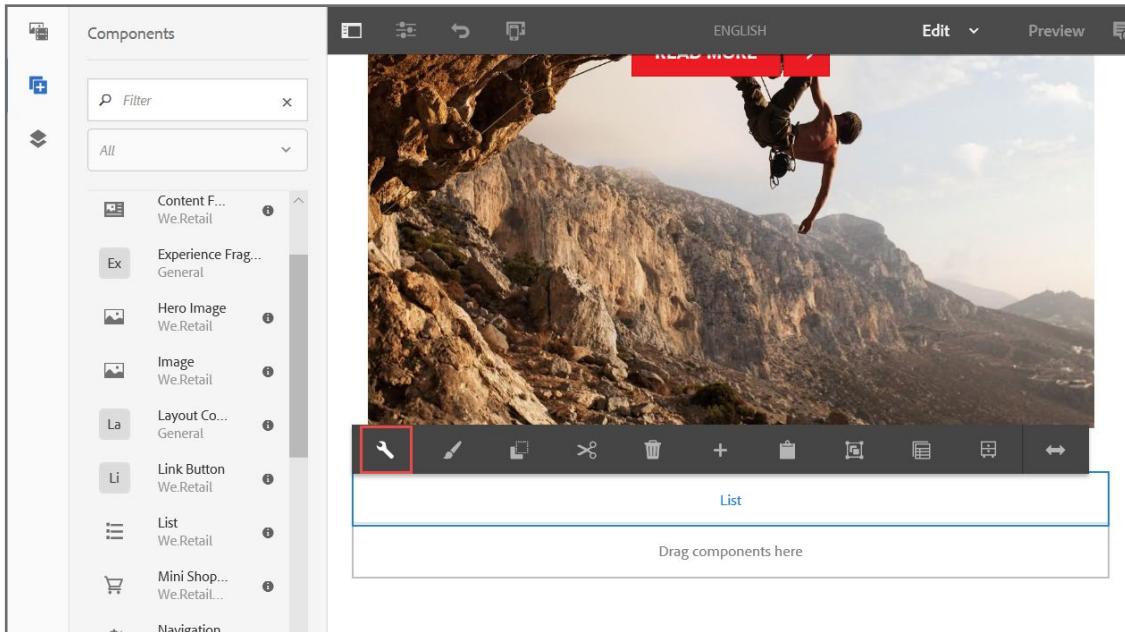
The **English** page opens in a new tab of the browser in the Edit mode.

3. Click the **Components** icon. The **Components** panel opens.
4. Drag the **List** component to the **Drag components here** area, as shown:



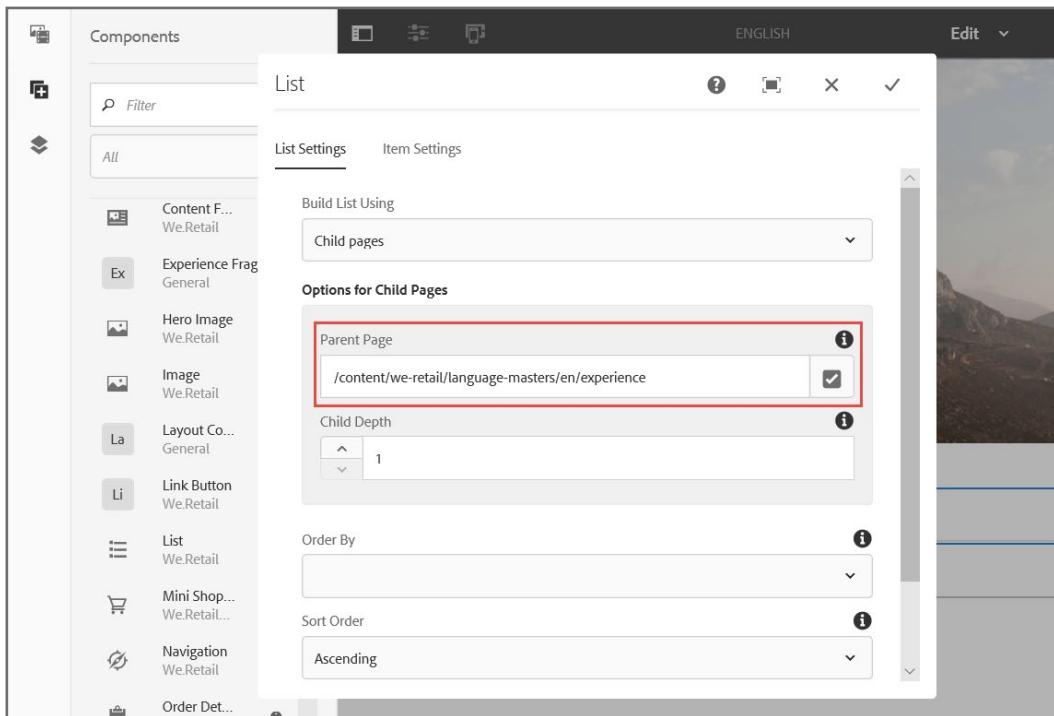
The **List** component is added to the page.

5. Select the **List** component and then click the **Configure** (wrench) icon from the component toolbar, as shown:

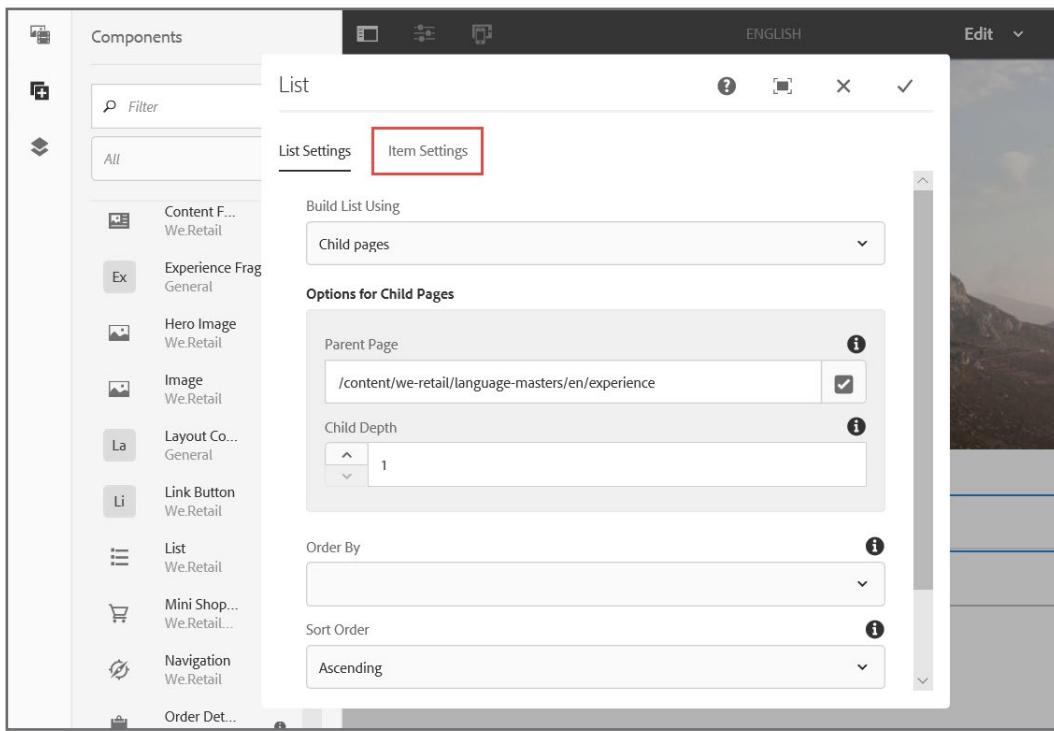


The **List** dialog box opens.

6. You must provide data for the list component:
 - a. Ensure you are on the **List Settings** tab.
 - b. In the **Parent Page** field, add **/content/we-retail/language-masters/en/experience** either by typing the path in, or by clicking the **Selection Dialog** and navigating to that path, as shown:

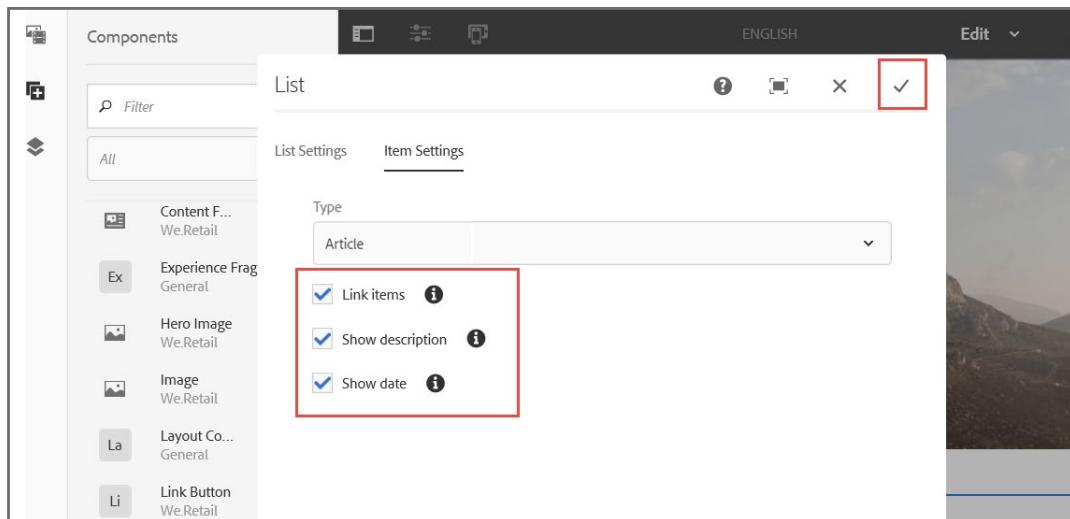


7. Click the **Item Settings** tab, as shown:



Different options in the **Item Settings** tab appear.

8. Select all the check boxes and click the **Done** (checkmark) icon, as shown:



9. You are taken back to the English page.

Notice, a list with the titles of the We.Retail Experience subpages appear on the page, as shown:

The screenshot shows the AEM富媒体编辑器界面。左侧是“Components”面板，显示了各种可用组件的图标和名称，如Content Frag., Experience Fragment, Hero Image, Image, Layout Component, Link Button, List, Mini Shop, 和 Navigation。右侧是正在编辑的“ENGLISH”页面。该页面上方有一张宏伟的山景背景图，下方有一个红色边框包围的列表组件，内含以下项目：

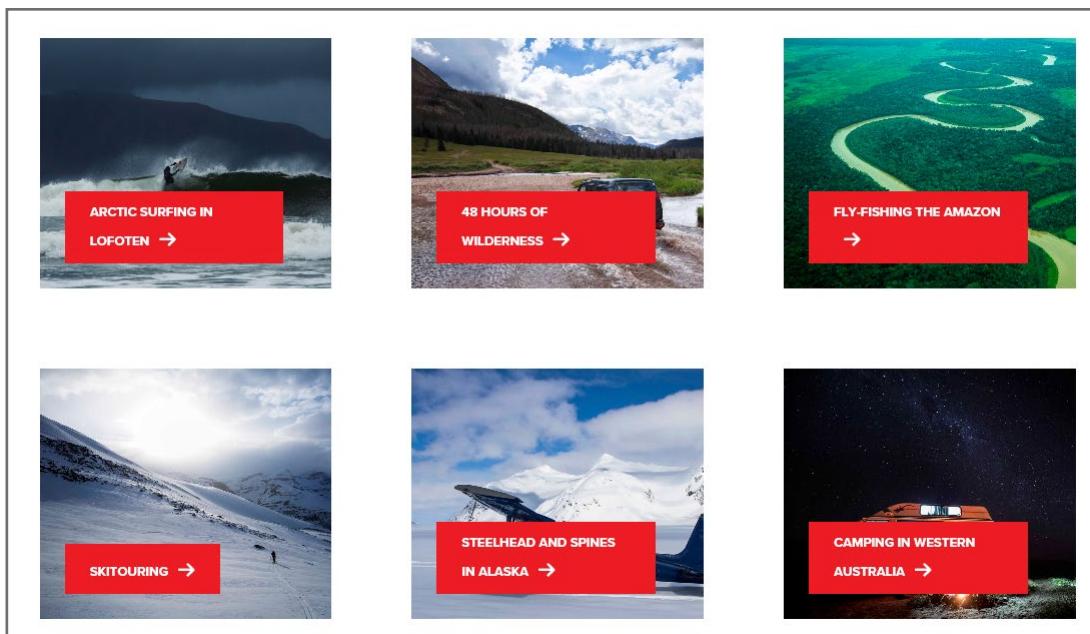
- Arctic Surfing In Lofoten
- 48 hours of Wilderness
- Fly-fishing the Amazon
- Skitouring
- Steelhead and Spines in Alaska
- Camping in Western Australia

下方还有一个空的拖放区，提示“Drag components here”。

10. Select the List component, and click the **Styles** icon, as shown:

This screenshot shows the same AEM富媒体编辑器界面，但这次选中了“List”组件。在右侧编辑器的底部，通常用于文本格式化的风格化工具栏（如字体、大小、颜色等）被替换为专门为List组件设计的图标。这些图标包括剪刀（修剪）、铅笔（编辑）、矩形（设置）、X（删除）、垃圾桶（删除）、加号（插入）、收藏夹（收藏）、表格（表）、箭头（排序）和双箭头（刷新）。其中，铅笔图标被一个红色方框高亮显示，表示当前处于编辑模式。

The **Styles** drop-down menu appears with the available styles, from which you can select the appropriate style. You can experiment by choosing different styles for the list component. For example, if you select the **Action** style, the list component will appear as shown:



Note: The style applied might not reflect immediately. To see the style, please refresh the page.

You have successfully added and configured a **List** component for a page.

Page Properties

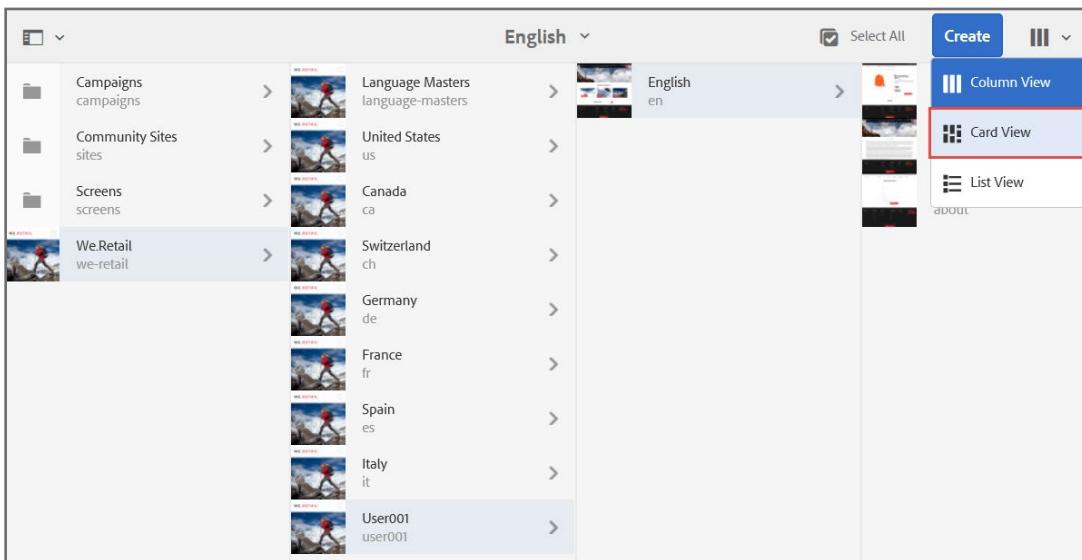
Each page has its properties. There are fields in the property dialog box that can be used to set property values.

You can view page properties by using the following options:

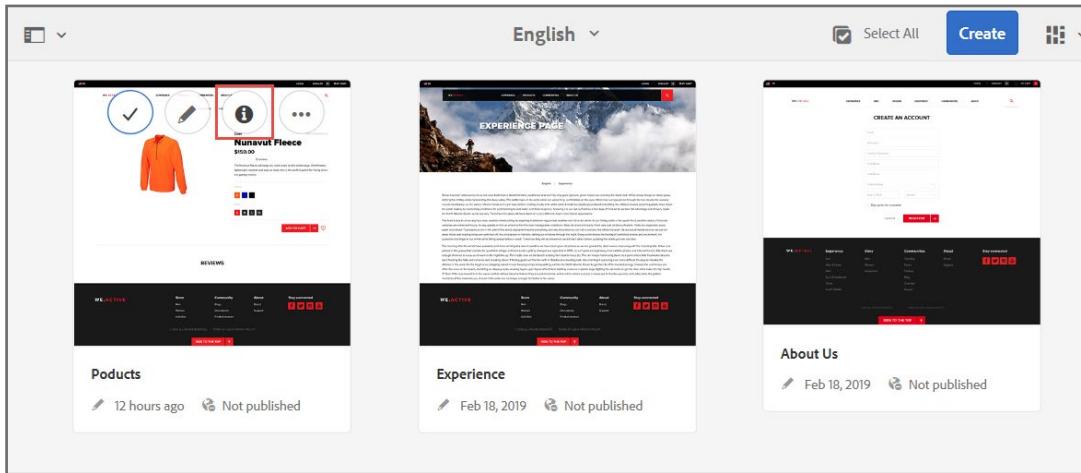
- Quick actions bar
- Selection mode
- Page Information

Viewing Page Properties by Using Quick Actions Bar

You can navigate to the required page in the Sites console and select **Card View** from the drop-down menu, as shown:



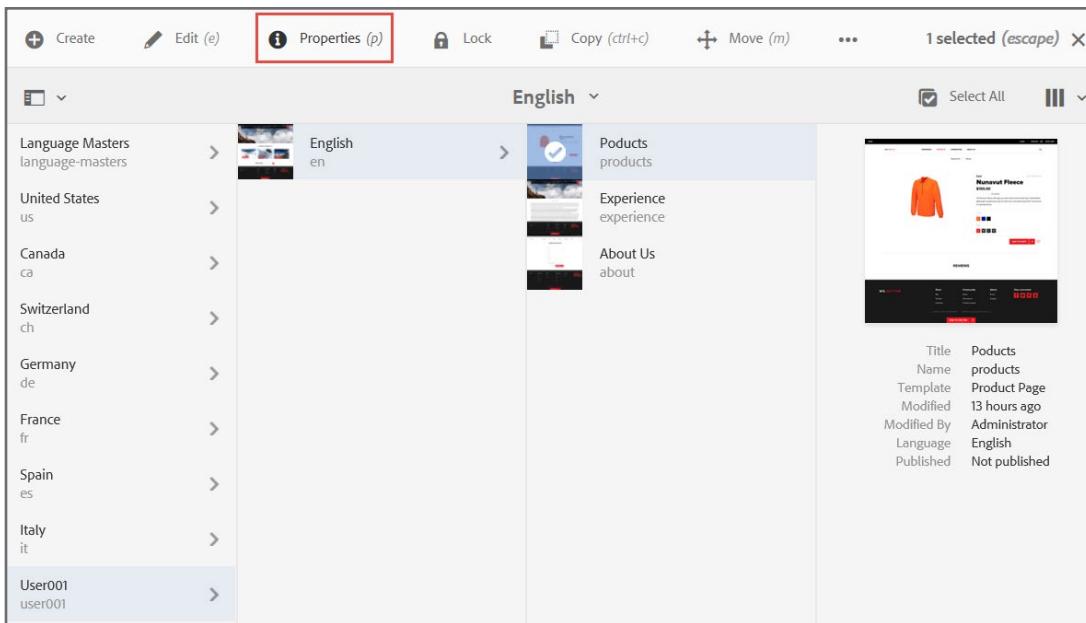
The pages are displayed in the card view. Hover over a page and click the **Properties** icon from quick actions bar.



The Properties dialog box appears.

Viewing Page Properties by Using the Selection Mode

You can select a page from the **Sites** console and then click **Properties** from the actions bar, as shown. The Properties dialog box appears. Notice that the selection mode is available in all the views.



Viewing Page Properties by Using Page Information

You can select a page from the **Sites** console and click the **Edit** button from the actions bar.

The screenshot shows the AEM Sites console interface. At the top, there's a toolbar with buttons for Create, Edit (e), Properties (p), Lock, Copy (ctrl+c), Move (m), and a dropdown showing "1 selected (escape)". Below the toolbar is a navigation tree under the "English" language. The tree structure is as follows:

- Campaigns
 - Campaigns
- Community Sites
 - sites
- Screens
 - screens
- We.Retail
 - we-retail
- Language Masters
 - language-masters
- United States
 - us
- Canada
 - ca
- Switzerland
 - ch
- Germany
 - de
- France
 - fr
- English
 - en
- Deutsch
 - de
- Français
 - fr
- Español
 - es
- Italiano
 - it
- Experience
 - experience**
- Men
 - men
- Women
 - women
- Equipment
 - equipment
- About Us
 - about-us
- Products
 - products

The page opens in a new tab of the browser in the Edit mode. Next, click the **Page Information** icon and select **Open Properties** from the drop-down menu.

The screenshot shows the AEM page edit mode. At the top, there are icons for Page Information (highlighted with a red box), Preview, and Edit. The main area displays a page with a mountain background and the text "Inspiring stories from around the world" and "EXPERIENCES". On the left, a sidebar lists various actions:

- Open Properties (highlighted with a red box)
- Rollout Page
- Start Workflow
- Lock Page
- Publish Page
- Unpublish Page
- Edit Template
- View as Published
- View in Admin
- Help

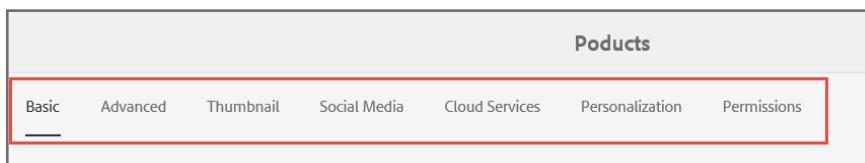
Page Properties Options

Page properties are grouped by topics in the property dialog box. The Property dialog box consists of the following tabs:

- Basic
- Advanced
- Thumbnail
- Social media
- Cloud services
- Personalization
- Permissions

Pages have additional page properties depending on the nature of the page. The following are the properties:

- Blueprint
- Live Copy



Basic

The following table describes the properties available on the **Basic** tab:

Properties	Description
Title and Tags	
Title	Displays the title of the page seen in the Sites Card and other views
Tags	Adds or removes tags from the page
Hide in Navigation	Indicates whether the page is shown or hidden in the page navigation
More Titles and Description	
Page Title	Sets the page title to be used on the page if the title differs from the title property. The page title will be displayed in the title component on the page instead of the title property used for the title tag in the page's HTML.
Navigation Title	Specifies a separate title for use in navigation menus and if the title property does not fit the format requirements of the navigation layout
Subtitle	Specifies a subtitle for use on the page
Description	Describes the purpose of the page
On/Off Time	
On Time	Set time as to when the page must be published. Not relevant to already published pages
Off Time	Displays the time at which the published page must be deactivated
Vanity URL	
Add	Helps add shorter and more memorable URLs
Redirect Vanity URL	Indicates whether the vanity URL stays in the address bar visible or the URL of the referred page will be displayed

Advanced

The following table describes the properties available in the **Advanced** tab:

Properties	Description
Settings	
Language	Set the language of the page if it differs from the language of the website or no language property is inherited
Language Root	Makes the page the root of a language copy
Design	Changes the design of the page by setting the path to a different design
Alias	Specifies a second name under which the page can be addressed. It is used for international websites to localize page names
Configuration	
Inherited from /<path>	Specifies where the configuration is inherited from. Available only when you have set the cloud configuration
Cloud Configuration	Helps search for and select the configuration path*
Templates Settings	
Allowed Templates	Defines the set of templates available for authors to create child pages at a location in the website
Add	Enables you to add templates
Authentication Requirement	
Enable	Enables the use of Closed User Groups (CUGs)
Login Page	Enables you to set the authentication by using a designated login page
Export	
Export Configuration	Specifies the page export configuration

Thumbnail Tab

The following table describes the properties available on the **Thumbnail** tab:

Properties	Description
Generate Preview	Generates a preview of the page used as a thumbnail
Upload Image	Enables you to upload an image to use as thumbnail
From Assets	Choose an asset from the Asset manager to be used as thumbnail

Social Media

The following table describes the properties available on the **Social Media** tab:

Properties	Description
Enable user sharing for Facebook, Pinterest	Defines the sharing options available on the page and exposes the options available to the Sharing core component
Preferred XF variation	Defines experience fragment variation used for generating metadata for page

Cloud Services

The following table describes the property available on the **Cloud Services** tab:

Properties	Description
Inherited from /<path>	Specifies where the configuration is inherited from and displays only when you have configured the Cloud Services
Add Configuration	Helps add the logic and structure for storing service configurations. * This option is not available if the Inherited from /<path> is specified

Personalization

The following table describes the properties available on the **Personalization** tab:

Properties	Description
ContextHub Configurations	
ContextHub Path	Specifies the path to ContextHub
Segments Path	Specifies the path to segments associated with the page
Targeting Configurations	
Brand	Helps select a Brand to specify the scope of Targeting

Permissions

The following table describes the properties available on the **Permissions** tab:

Properties	Description
Closed User Group	Helps edit the Closed User Group (CUG) configurations
User or group	Helps add users and groups to the page

You can view the **Blueprint** and **Live Copy** tabs only if a site contains blueprint or live copy pages. In AEM, Multi Site Manager (MSM) helps create a site called live copy based on another site called blueprint when you want multinational sites, multilingual sites, and sites with different output channels.

Blueprint

The following table describes the properties available on the **Blueprint** tab:

Properties	Description
Current Live Copies	Specifies the path of live copies associated with the blueprint
Rollout Configuration	Specifies the rollout configurations for the blueprint

 **Note:** Blueprints help push content changes to Live Copies. It provides a central location for administering the sites that use it as a source.

Live Copy

The following table describes the properties available on the **Live Copy** tab:

Properties	Description
Source	Displays the source page of the live copy page
Status	Indicates the synchronization status of the live copy
Configuration	Indicates whether the page is still subject to live copy inheritance, the rollout configuration the live copy uses, and whether the configuration is inherited from the parent page

 **Note:** The Live Copy status indicates whether the live copy is up to date with the source, when the last synchronization occurred, and who performed the synchronization.

Editing Bulk Page Properties

AEM enables you to edit properties of multiple pages by using a special feature called Bulk editing. This is most commonly used to apply tag(s) to multiple pages at once.

In Bulk editing, you can do the following tasks:

- Select multiple pages and add common properties to all the pages.
- Update values in the fields available. The new values will be applied to all the selected pages.
- Add a new value or remove a common value. The fields that are common but have different values across various pages are marked with a special value such as the text <Mixed Entries>.



Warning: You can edit only those bulk pages that share the same resource type and are not part of a live copy.

Exercise 5: Edit page properties

Scenario

As an author, you need to apply certain criteria to a page of your website to ensure the page displays according to the business need(s) of your organization. An important aspect of applying specified criteria is to apply common properties to different pages and to ensure a uniform display of different pages within the website.

In this exercise, you will perform the following tasks:

1. Edit page properties
2. Apply a common property to multiple pages

Task 1: Edit page properties

In this task, you will redirect a page request to another page within a site from page properties. You will add the **English** page as the redirect link for the **User0XX** page. This will redirect all the requests of the **User0XX** page to the **English** page.

1. From the **Sites** console, navigate to **We.Retail** and select the **User0XX** (where 0XX is the user number assigned to you for this training) page.

2. Click **Properties** from the actions bar, as shown:

The screenshot shows the AEM navigation bar with several options: Create, Edit (e), Properties (p) (which is highlighted with a red box), Lock, Copy (ctrl+c), Move (m), and three dots. Below the bar is a tree view of site structures under 'We.Retail'. On the right, there's a preview image of a person climbing a mountain and a detailed properties panel for the 'User001' page. The properties panel includes fields for Title, Name, Template, Modified, Modified By, Language, and Published.

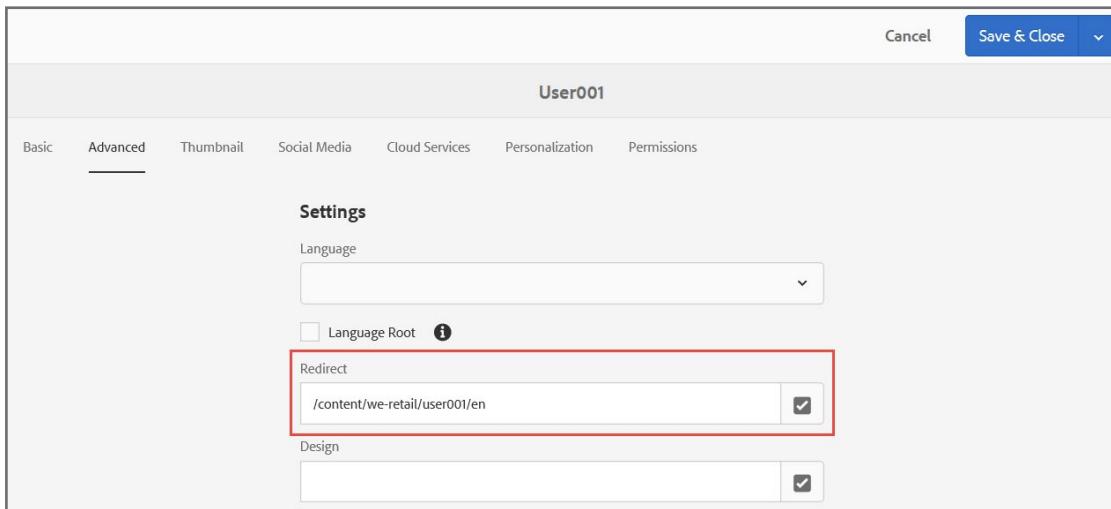
Field	Value
Title	User001
Name	user001
Template	Redirect Page
Modified	a day ago
Modified By	Administrador
Language	English
Published	Not published
Un-publication Pending #1 in the queue.	

The **User0XX** page opens on the **Basic** tab by default.

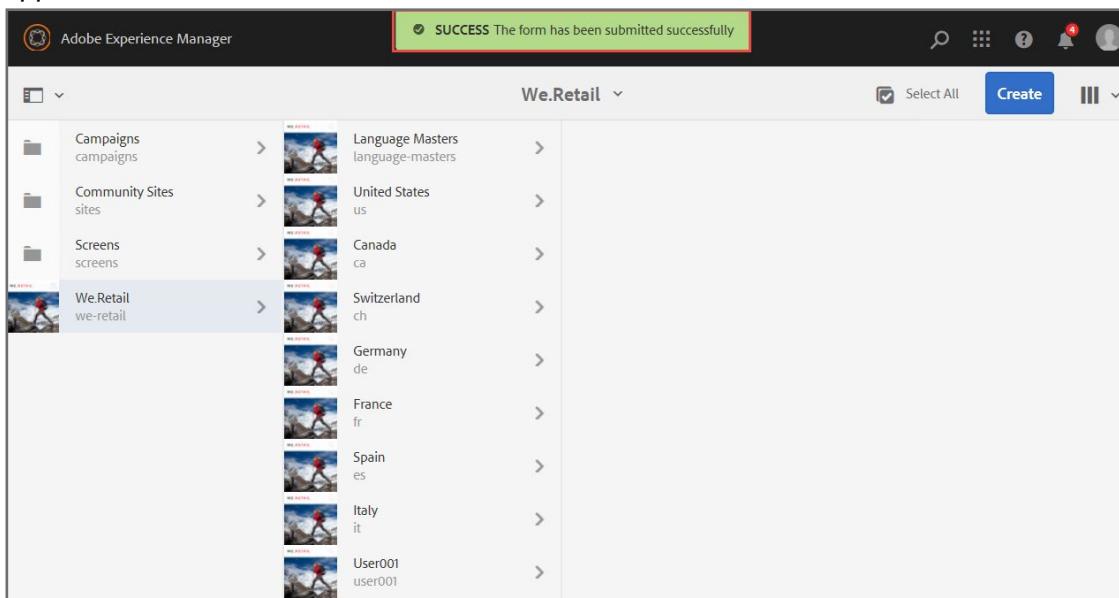
3. Click the **Advanced** tab to configure the advanced settings.
 4. Click the **Open Selection Dialog** (tick mark) icon in the **Redirect** field to set the redirect value, as shown:

The screenshot shows the 'User001' configuration dialog with the 'Advanced' tab selected. The 'Settings' section contains fields for Language (a dropdown menu), Language Root (an unchecked checkbox), Redirect (a text input field with a checked checkbox icon), Design (a text input field with a checked checkbox icon), and Alias (an empty text input field). At the top right are 'Cancel' and 'Save & Close' buttons.

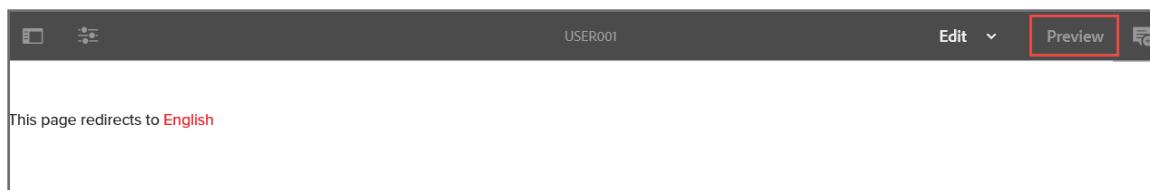
5. Navigate to **We.Retail > User0XX**, select the **English** page, and click **Select**. The redirect link is displayed in the **Redirect** field, as shown:



6. Click **Save & Close**. A success message indicating the form has been submitted successfully appears, as shown:



7. From the **Sites** console, navigate to **We.Retail** and select the **User0XX** page.
 8. Click **Edit** from the actions bar. The **User0XX** page opens in a new tab in the edit mode.
 9. Click **Preview** from the page toolbar.





Note: The English page is added as the redirect link of the User0XX page.

The User0XX page opens in the preview mode.

10. Click the English link to open the English page in the same tab.

This screenshot shows the AEM preview interface for a page titled "USER001". The top navigation bar includes icons for back, forward, search, and user profile, along with "PERSONA anonymous", "LOCATION 95113 San Jose, CA", and "RESOLVED SEGMENTS". The main content area displays a message: "This page redirects to [English](#)".

11. The User0XX page is redirected to the English page, as shown:

This screenshot shows the English page content. The top navigation bar is identical to the previous one, with the title "ENGLISH". The main content features a large image of climbing gear with the text "CLIMBING GEAR" overlaid. Below this is another section with the text "BEST IN CLASS GEAR". A paragraph of descriptive text follows, and at the bottom is a smaller image of a backpack.

Task 2: Add a common property to multiple pages

In this task, you will add a property value that is common to multiple pages by editing the properties in bulk. You will use the property named description as a common property to different pages when performing this task.

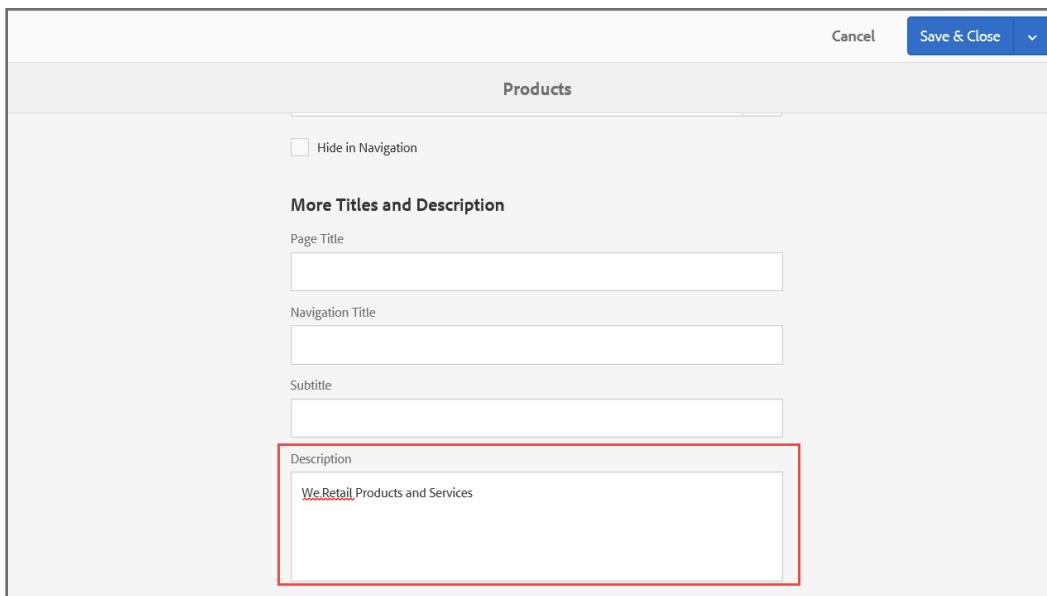
- From the **Sites** console, navigate to **We.Retail > User0XX > English**, and select the **Products**, **Experience**, and **About Us** pages.
- Click **Properties** from the actions bar, as shown:

The screenshot shows the AEM Sites console interface. The top navigation bar includes 'Create', 'Edit (e)', 'Properties (p)' (which is highlighted with a red box), 'Copy (ctrl+c)', 'Quick Publish', 'Manage Publication', and '3 selected (escape)'. Below the navigation is a tree view of the site structure under the 'English' language. The 'We.Retail' node has three children: 'Products', 'Experience', and 'About Us', all of which are selected, as indicated by checkmarks in their respective status bars.

The **Properties** dialog box opens with the subpages selected under the **Title** section, as shown:

The screenshot shows the 'Properties' dialog box for the 'Products' page. The 'Title' section is highlighted with a red box. It contains four items: 'Title' (checked), 'Products' (checked), 'Experience' (checked), and 'About Us' (checked). Below this section are tabs for 'Basic' and 'Social Media'. Under the 'Title and Tags' heading, there is a 'Tags' input field containing 'Products' with a checked checkbox next to it, and a 'Hide in Navigation' checkbox at the bottom.

3. To add a common property value to all the selected pages:
 - a. On the **Basic** tab, under the **More Titles and Description** section, type **We.Retail Products and Services** in the **Description** field.

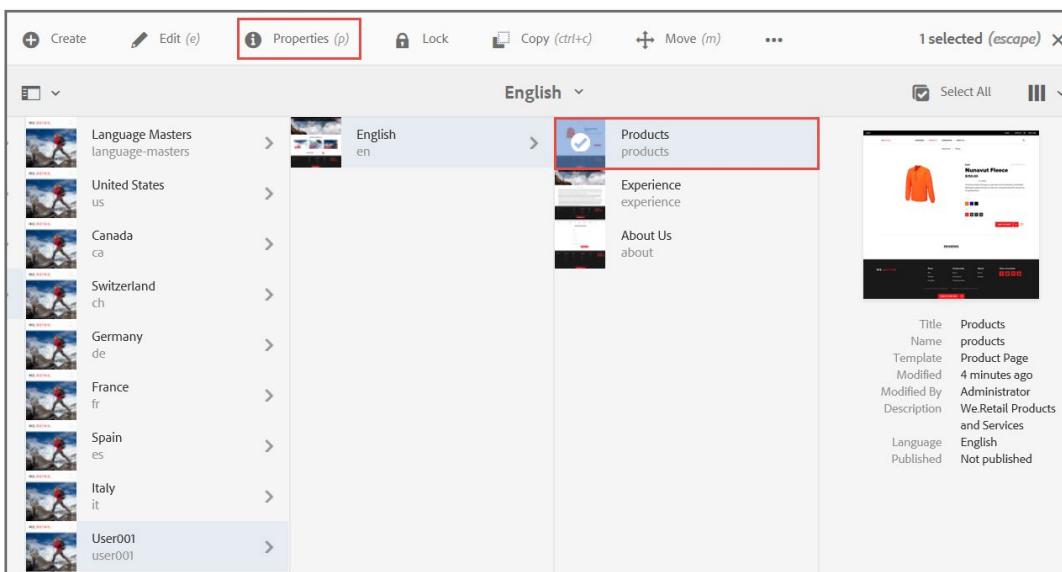


- b. Click **Save & Close**. The description is added to all three pages.

Tip: If nothing happens when you click Save & Close, click Cancel and proceed on to the next step. Your page properties are saved properly, and you can verify that in the next step.

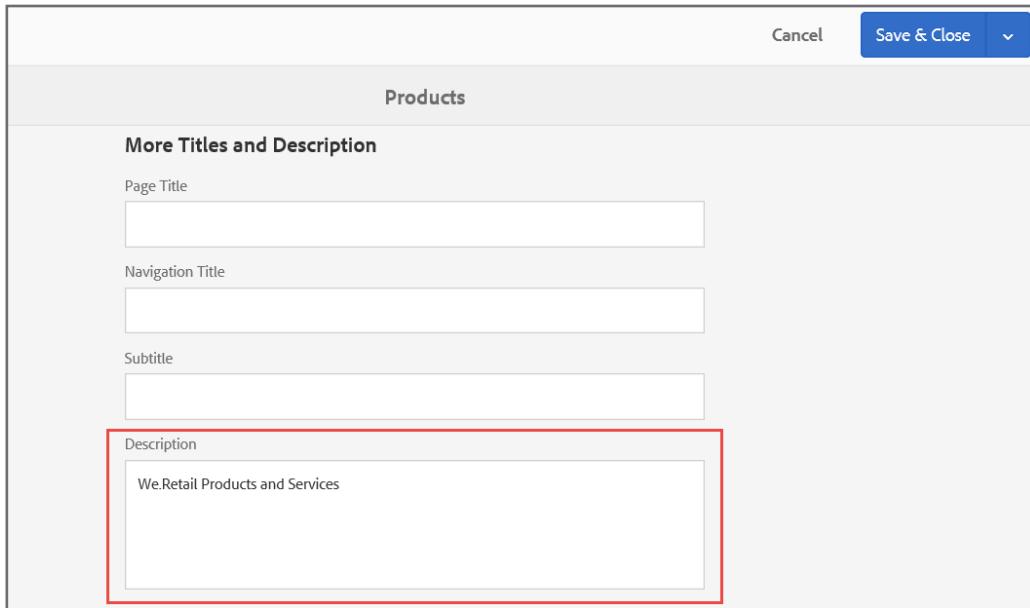
To verify if the description is added to all the three pages:

4. Select the **Products** subpage and click **Properties** from the actions bar, as shown:



The **Products** properties dialog box opens.

5. Scroll down and notice how the **We.Retail Products and Services** description is added under the **More Titles and Description** section to the **Products** page, as shown:



6. Similarly, view the properties of the **Experience** and **About Us** pages to ensure the description is added as a property.

References

Use the following links for more information on:

- [Authoring User Guide](#)
- [Creating & Organizing Pages](#)
- [Page Properties](#)

Organizing Assets

Introduction

Assets are the digital files that contain documents, images, videos, audios, or a combination of these files. Organizations mostly possess and use digital files for marketing, sales, internal processes, and online presence on web, mobile, and applications. Organizations need to manage huge number of digital assets to run business these days. Adobe Experience Manager (AEM) provides tools to organize and manage the multitude of assets effectively and efficiently.

Objectives

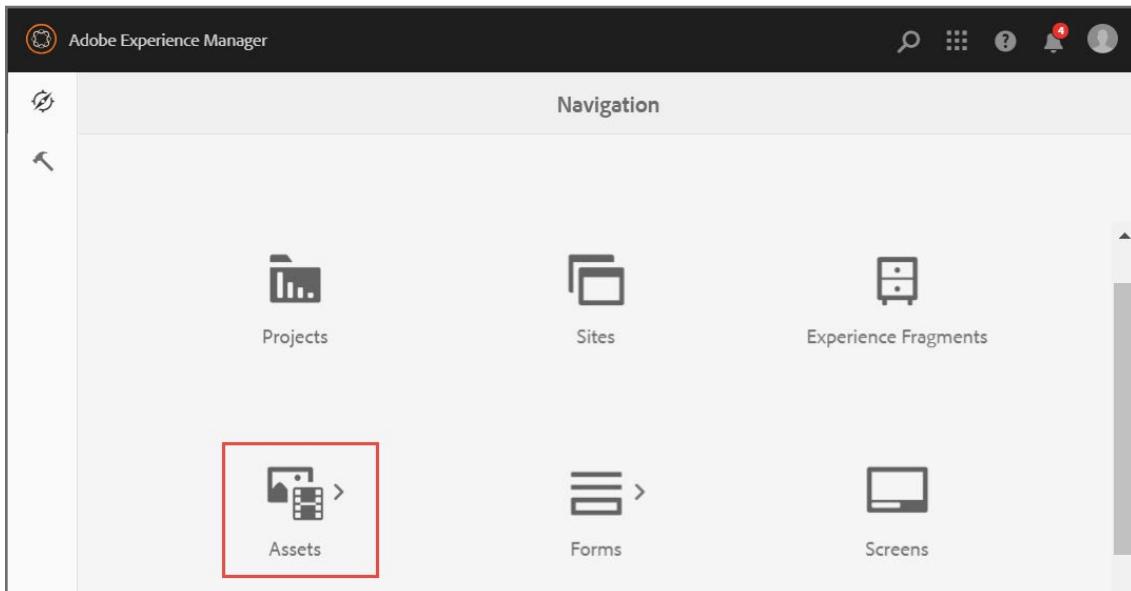
After completing this module, you will be able to:

- Explain assets in AEM
- Describe the methods of organizing assets
- Explain editing assets and asset properties
- Add assets to a page

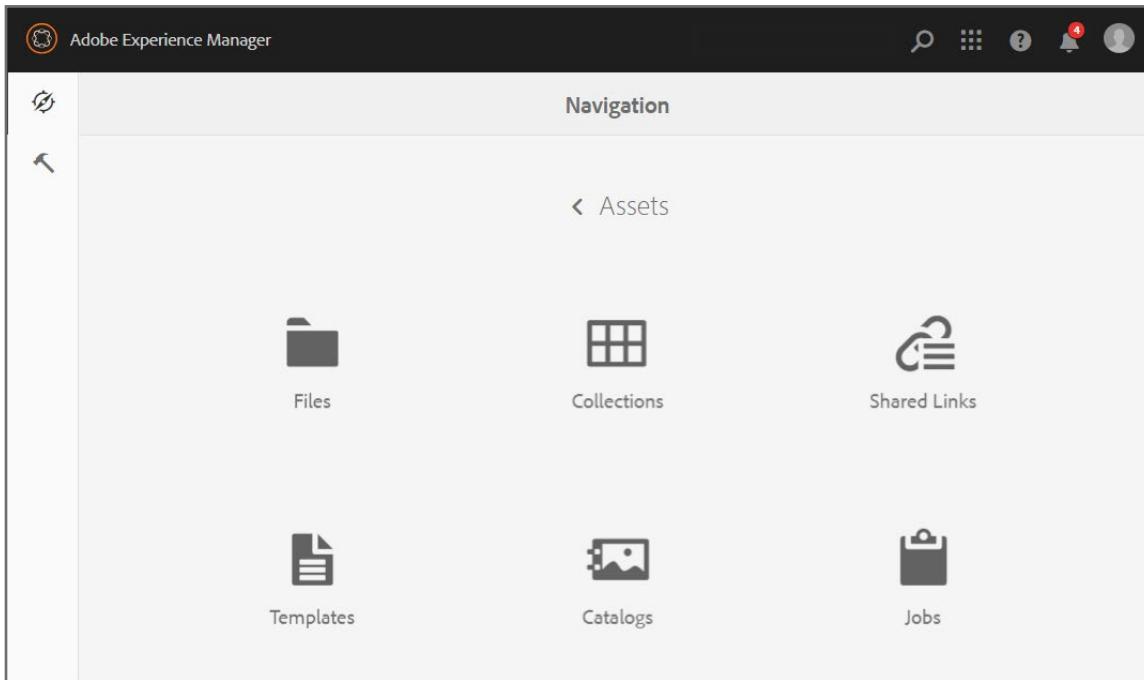
Assets in AEM

The **Assets** console of AEM helps import, manage, and share digital assets, such as images, videos, documents, audio files, and content fragments across different channels. From the **Assets** console, you can create a collection of assets and catalogs and use them on any websites running on the AEM author instance. AEM supports asset formats such as JPEG, GIF, PNG image formats, MP4, MP3, AVI and other audio and video formats, and PDF, Microsoft Word, Microsoft PowerPoint document formats.

You can access the **Assets** console from the **Navigation** panel as shown in the below screenshot:



The **Assets** console contains different subconsoles such as Files, Collections, Shared Links, Templates, Catalogs, and Jobs, as shown:



The following table describes various subconsoles in the **Assets** console:

Sub-console	Purpose
Files	Contains different asset folders and helps organize the assets as per websites
Collections	Contains different types of collections (sets of assets) such as Lightbox and Smart collection
Shared Links	Provides details such as users and expiry date of a shared asset
Templates	Contains the templates of different print media, such as brochures, flyers, and post cards
Catalogs	Provides a quick overview of components that are/ are not inherited from the parent
Jobs	Helps monitor the status of asynchronous operations on assets

Organizing Assets in AEM

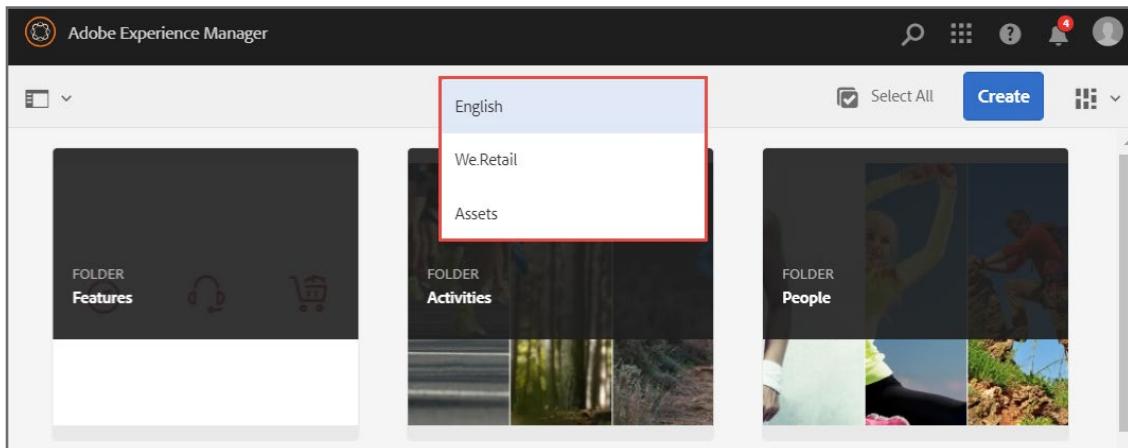
You can organize assets from the **Files** subconsole under the **Assets** console. AEM supports two methods to organize assets:

- Hierarchical
- Ad-hoc

Hierarchical Method

You can save assets in files and folders in a hierarchical structure. In the hierarchical structure, each asset is stored in a directory and each directory is stored in another directory. The exact location of an asset is a path through all the nested directories to the top location of the hierarchy.

The hierarchical view of folders is shown in the below screenshot:



Only AEM users and the groups of users who have the necessary privileges to view, edit, publish or share the assets in a specific folder can access the hierarchy of assets.

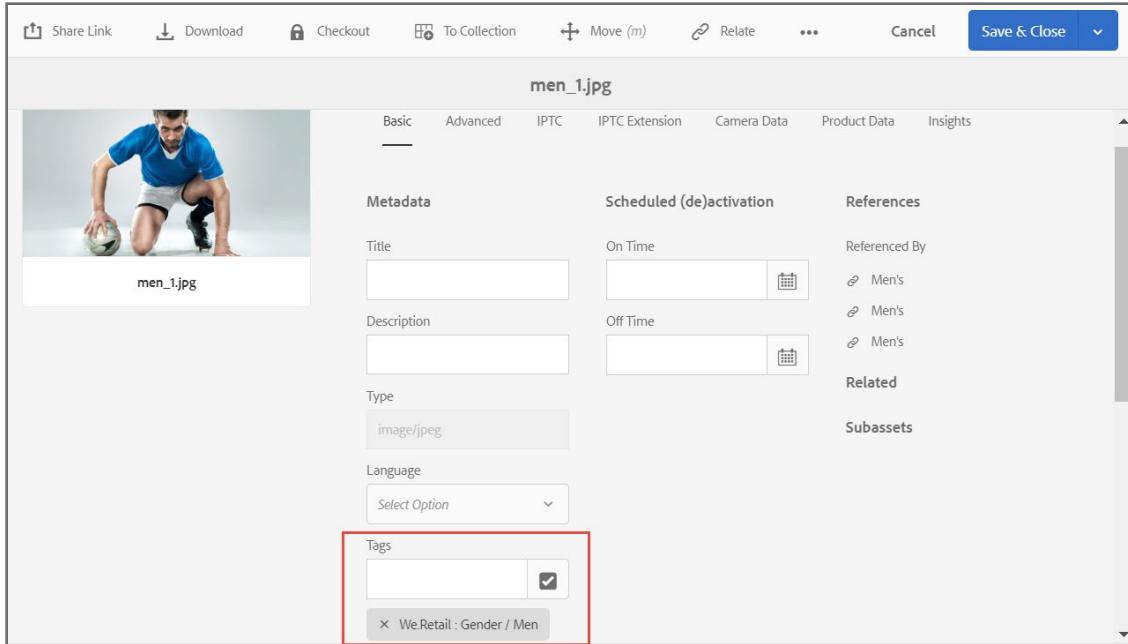
Tip: You can assign privilege to an individual asset, but to keep the complexity of permissions management low, it is recommended to allocate permissions to folders and not to individual assets. The privileges given to a folder are inherited to the nested folders.

In AEM, directories are referred as folders. You can create a folder as public or private. A system for permission management ensures that only the person who created the folder can view the assets placed in the folder. You can make the folder and its content public for all other users to view by selecting the **Private/Public** options on the asset **Properties** menu.

Ad-hoc Method

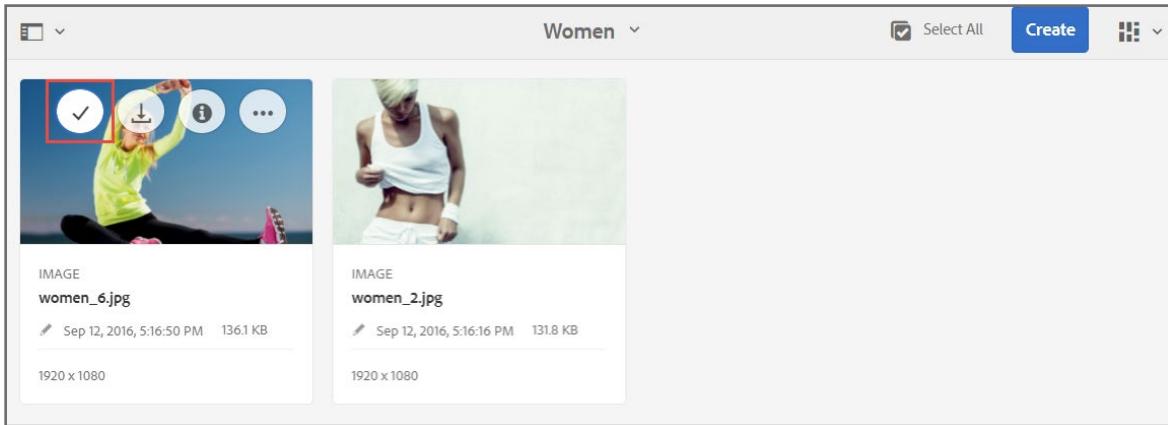
The folder structure and the naming convention of folders are often not sufficient to support all use cases for the asset management system. AEM provides a way to label assets with words and expressions, which can be added ad-hoc to the asset properties as a tag. You can choose a suitable tag for the content or the use case. Tags help classify assets that belong to the same category and help search for assets easily.

A possible tag of the image **men_1.jpg** is **Men**, as shown:

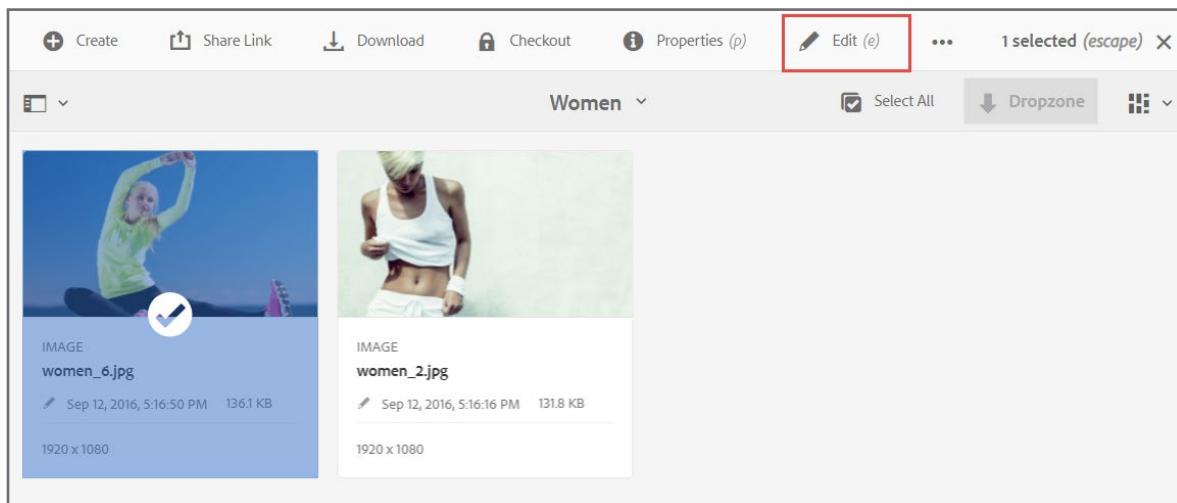


Editing Assets

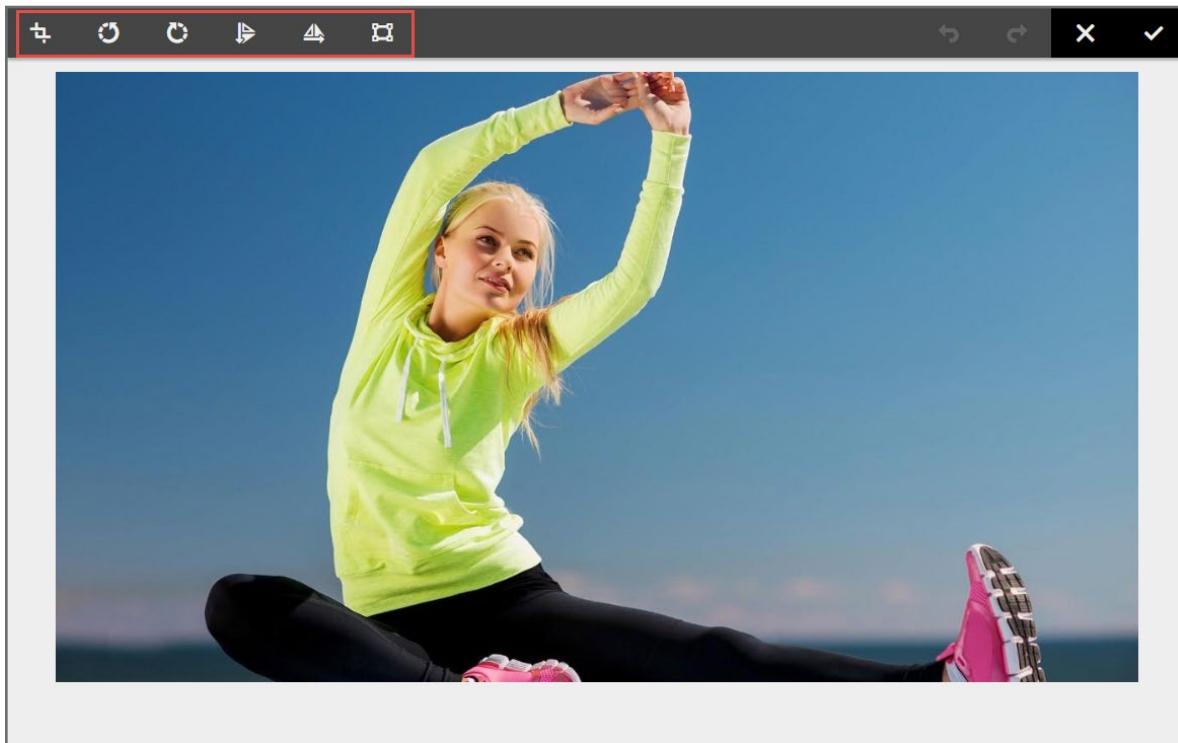
To view or edit an asset, hover the cursor over the asset, and click the **Select** icon, as shown:



When the actions bar displays on top of the page, click **Edit**, as shown. The asset editor page is displayed.



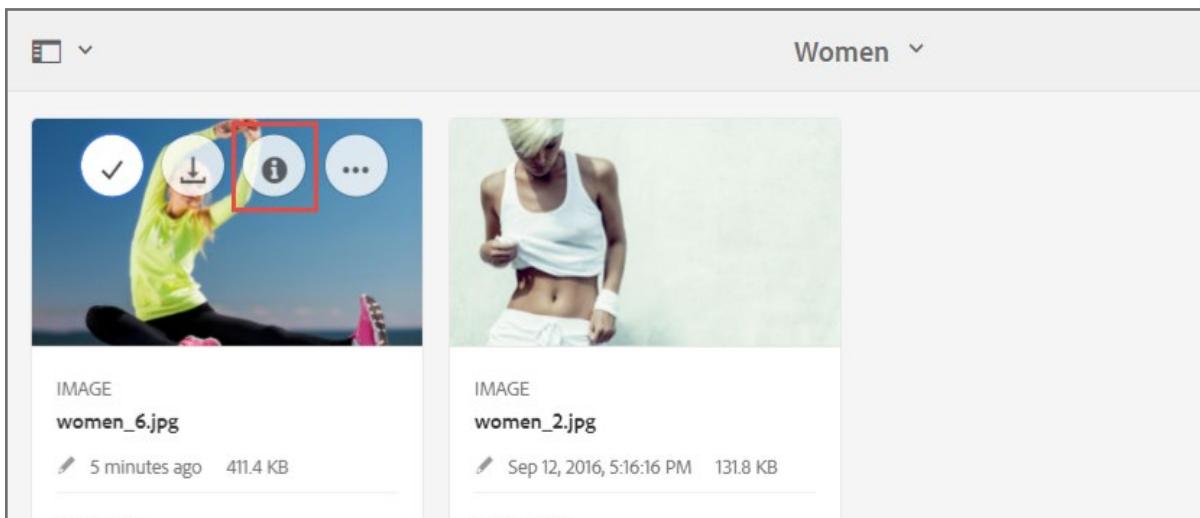
In the asset editor, you can crop, rotate, flip assets, and launch map as per your requirement.



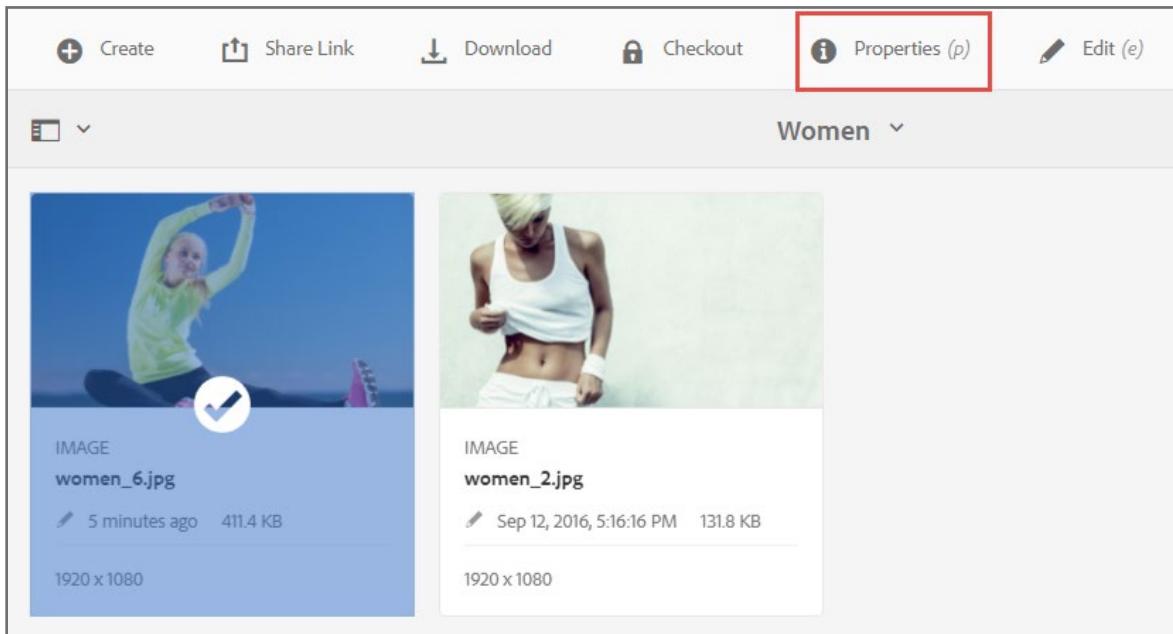
You can also copy, delete, move, and rename assets in the asset editor.

Editing Asset Properties on a Page

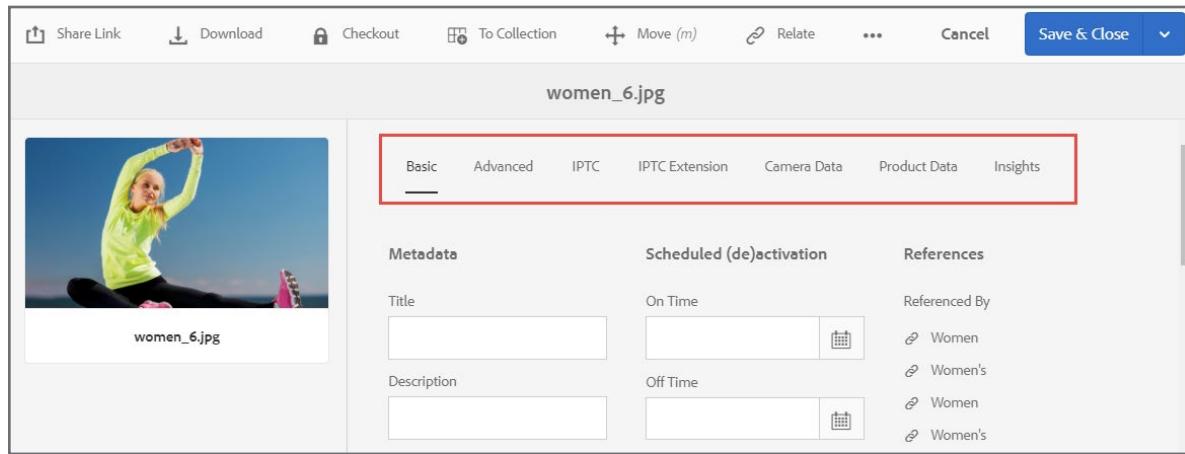
To view and edit asset properties, you can hover the cursor over an asset and click the **Properties** icon from the quick actions bar, as shown:



Alternatively, to edit asset properties, you can select an asset and click **Properties** from the actions bar, as shown:



The options on the **Properties** page are shown in the below screenshot:



The following table describes the properties on the **Asset Properties** page:

Properties	Purpose
Basic	Provides data on assets, such as title, description, tags, type, scheduled activation date, and links to resources using the asset
Advanced	Provides details on the creator, contributor, copyright, expiry date, and the rating assigned to an asset
IPTC and IPTC Extension	Exposes the asset properties to marketers. Marketers can view, edit IPTC fields, and their corresponding values
Camera Data	Displays the camera information by which the image was clicked
Product Data	Specifies the product data details if the asset is associated with any product
Insights	Displays rating scores for assets to indicate their popularity

Exercise 1: Add Assets to a page

Scenario

As an AEM author, you need to add assets to a webpage. To use an asset as part of a webpage, you need to create a folder, upload assets to the folder, and add the assets by using an appropriate component to the webpage.

In this exercise, you will perform the following tasks:

1. Create a folder and upload assets to the folder
2. Add an asset to a page

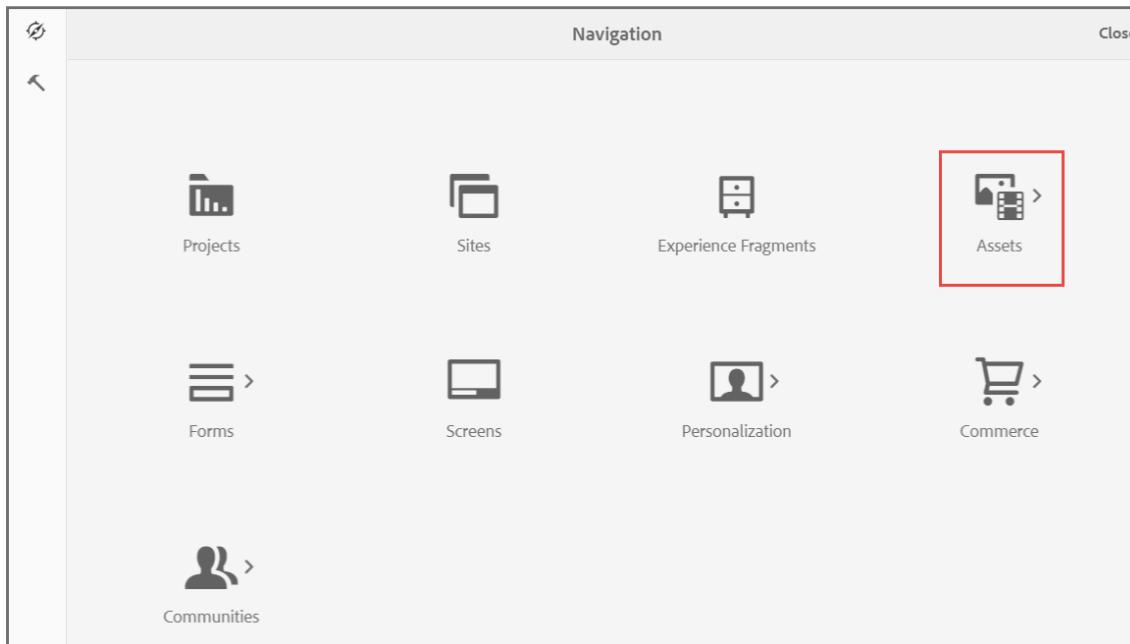
Prerequisite:

You must download the **Exercise_Files** folder to your local system for this exercise. You will need the **Organizing Assets** folder for Task 1.

Task 1: Create a folder and upload assets to the folder

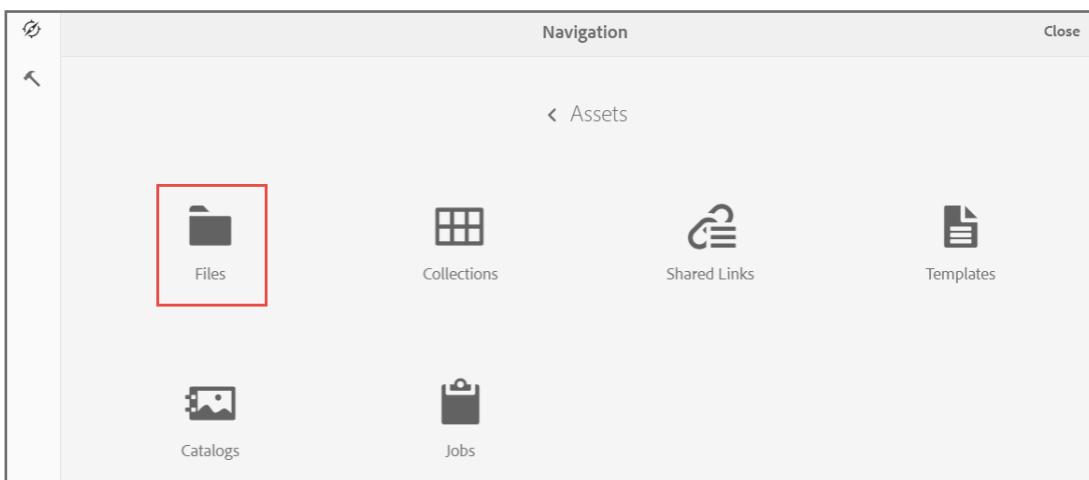
To create an asset folder:

1. In the **Navigation** console, click **Assets**, as shown:

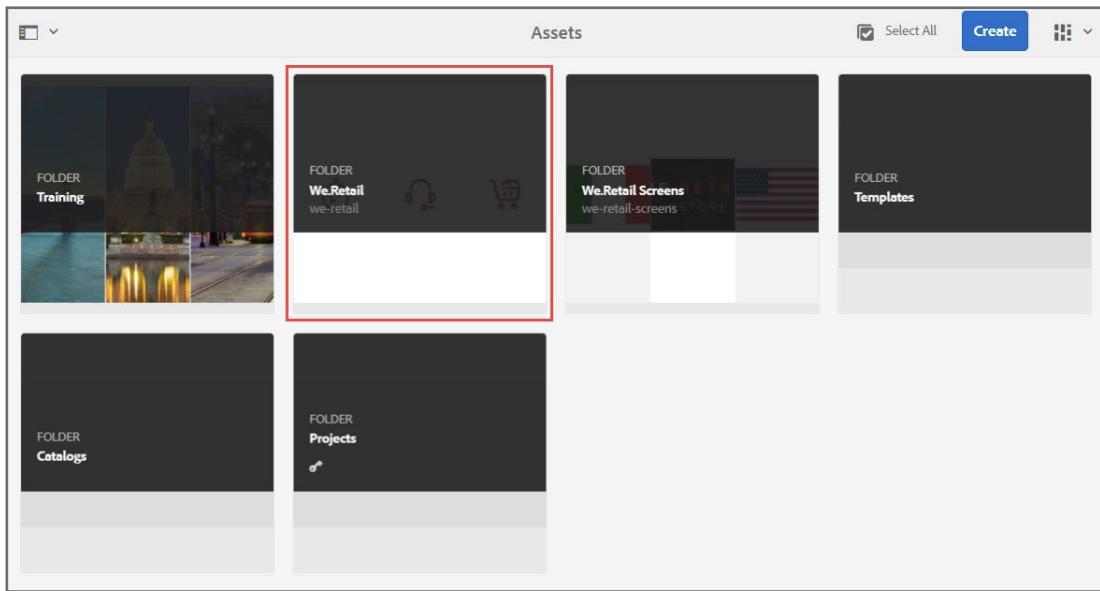


The **Assets** console is displayed.

2. Click **Files**, as shown. The available asset folders are displayed.

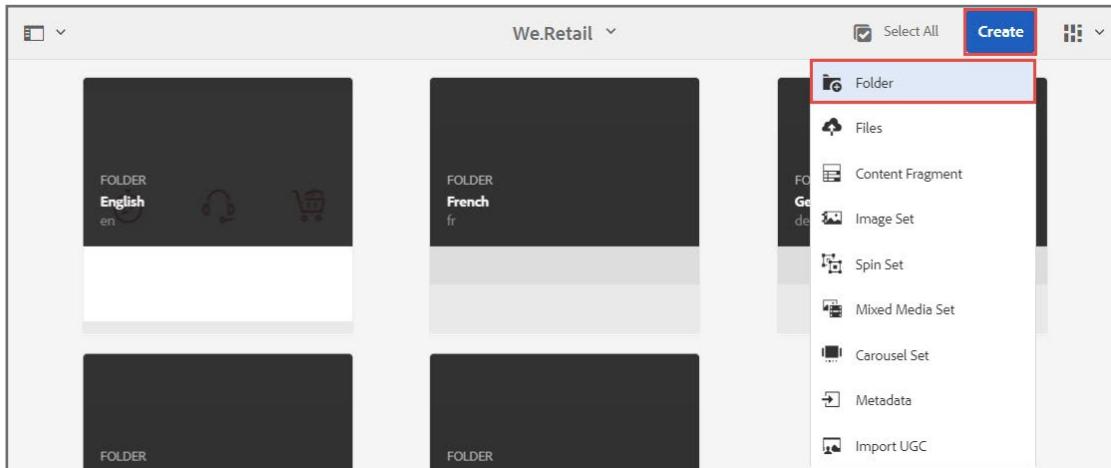


3. Click the **We.Retail** folder to open it, as shown:



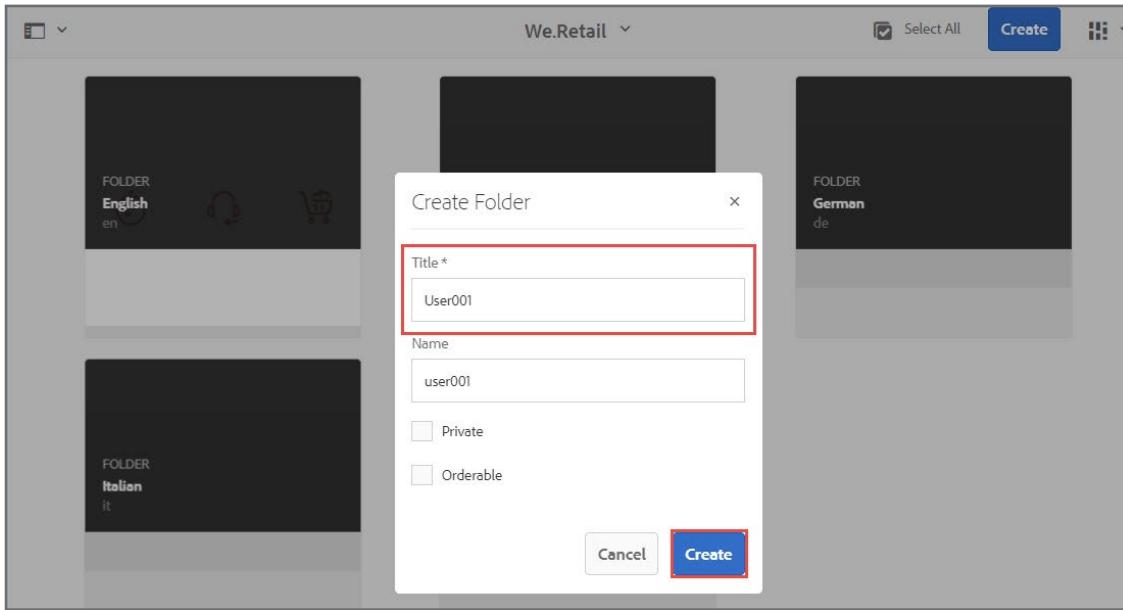
The **We.Retail** folder displays the precreated folders.

4. Click **Create > Folder** to create a new folder, as shown:



The **Create Folder** dialog box appears.

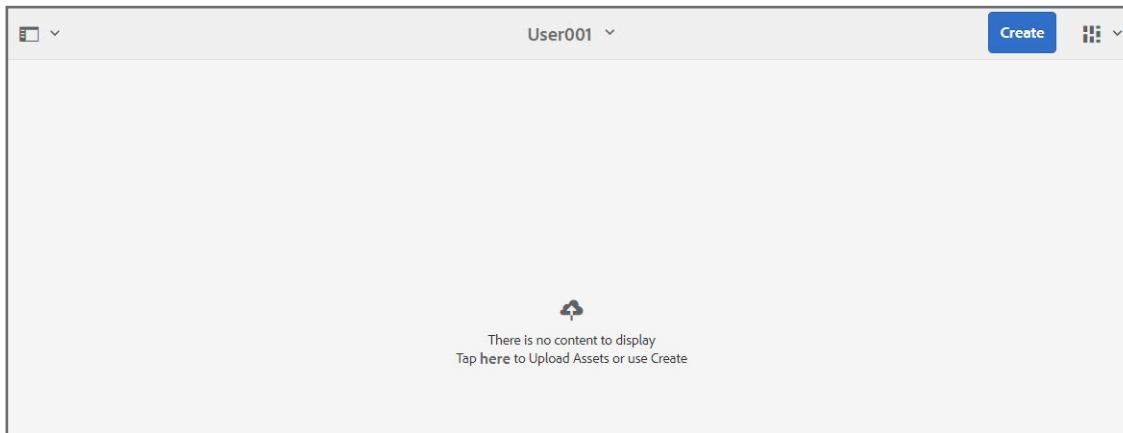
5. Enter **User0XX** in the **Title** field and click **Create**, as shown:



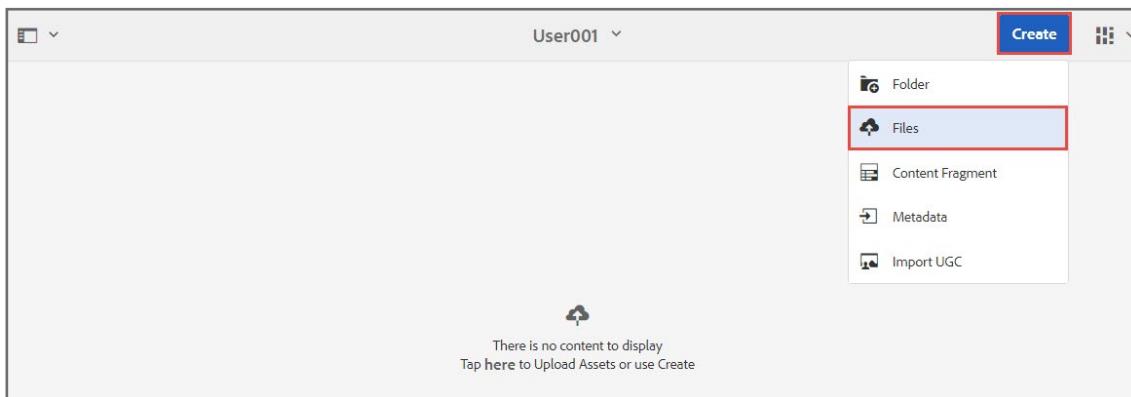
The **User0XX** asset folder is created in the **We.Retail** folder.

To upload assets from your file system to the folder:

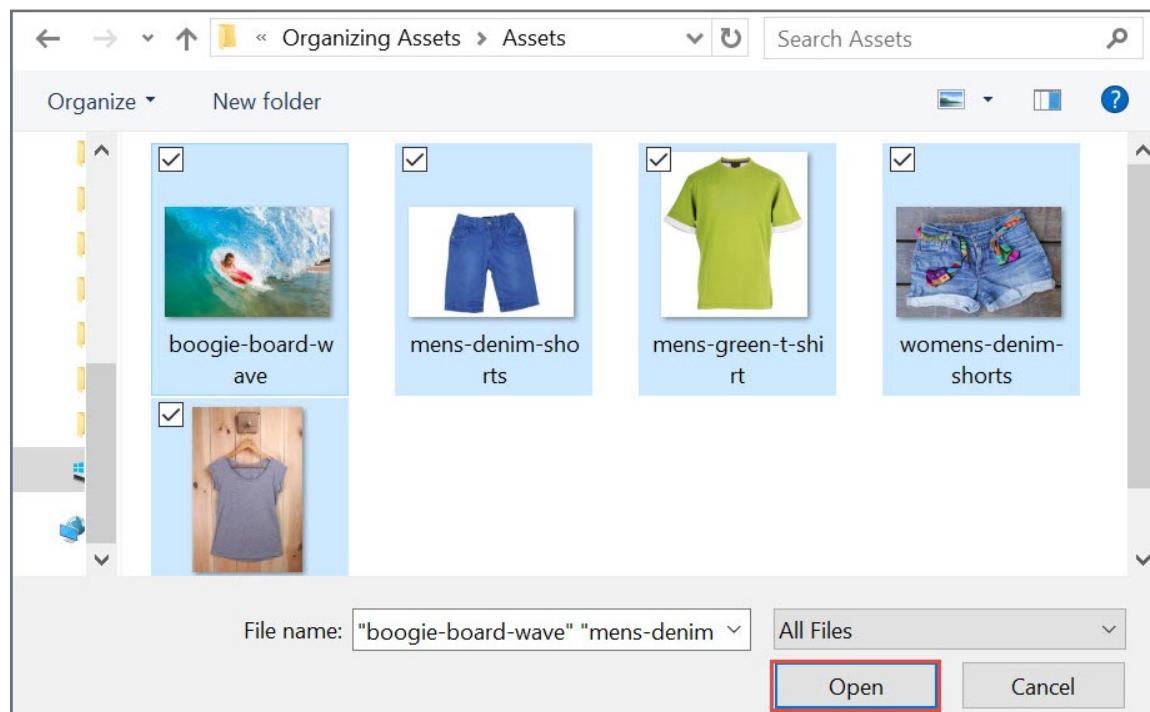
6. Click the **User0XX** folder to open it. The **User0XX** folder opens with the message that there is no content to display, as shown:



7. Click **Create > Files**, as shown, from the actions bar.

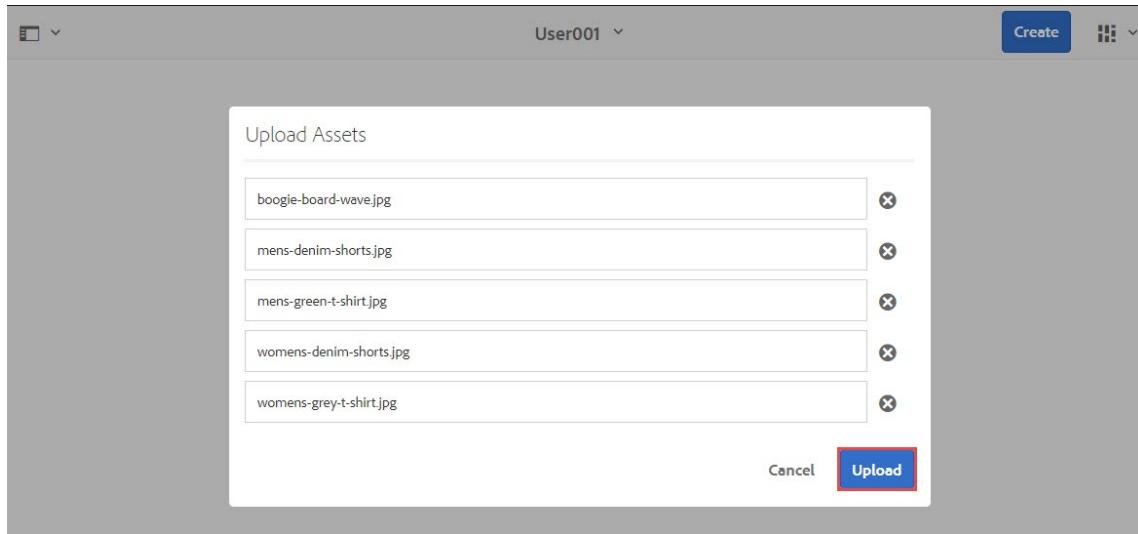


8. Select all the images from the **Exercise_Files > Organizing Assets > Assets** folder, which you have downloaded on your local file system and click **Open** to upload the images, as shown:

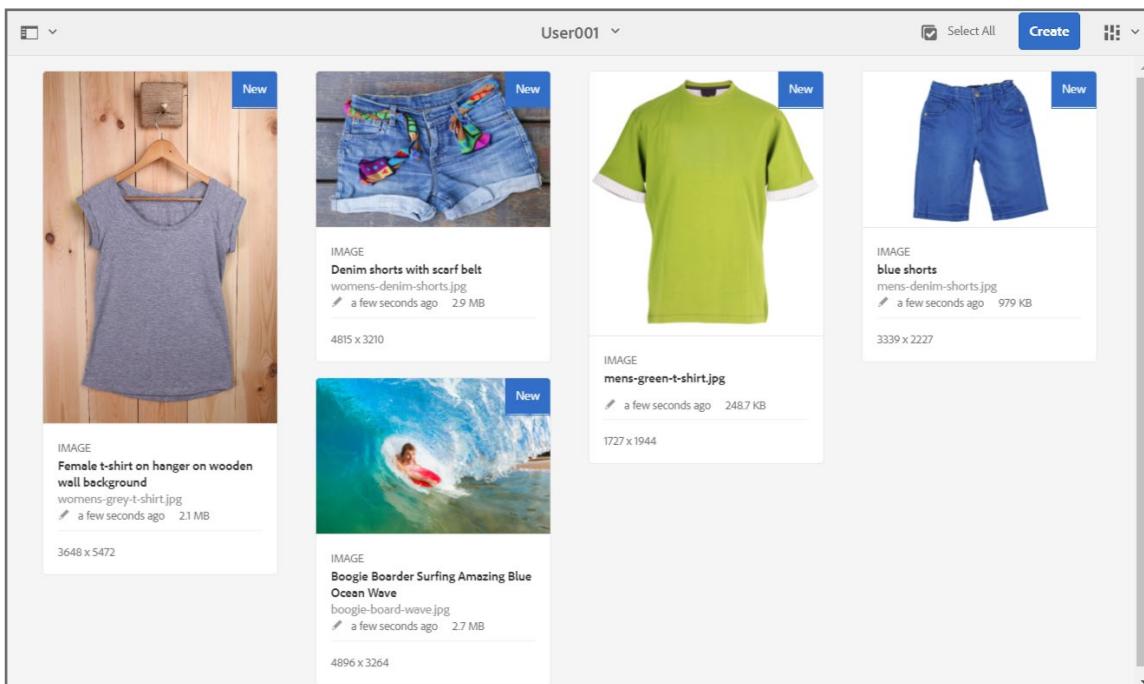


The **Upload Assets** dialog box displays the selected assets.

9. Click **Upload** to upload the selected assets to the **User0XX** folder, as shown:



You have successfully created a folder and uploaded assets to the folder. It may take a minute or two for all the files to finish processing. After the upload, image thumbnails should be visible in the folder, as shown:



Task 2: Add an asset to a page

To add an asset to a page:

1. Navigate to **Sites > We.Retail > User0XX > English** and select the **Experience** page.
2. Click **Edit** from the actions bar, as shown, to open the **Experience** page in a new tab in Edit mode.

The screenshot shows the AEM navigation tree under the 'English' language. The 'Experience' page is selected and highlighted with a red box. The actions bar at the top has an 'Edit (e)' button also highlighted with a red box. To the right of the tree, there's a preview of the 'Experience' page and its details table.

Title	Name	Template	Modified	Modified By	Language	Published
Experience	experience	Experience Page	4 days ago	Administrator	English	Not published

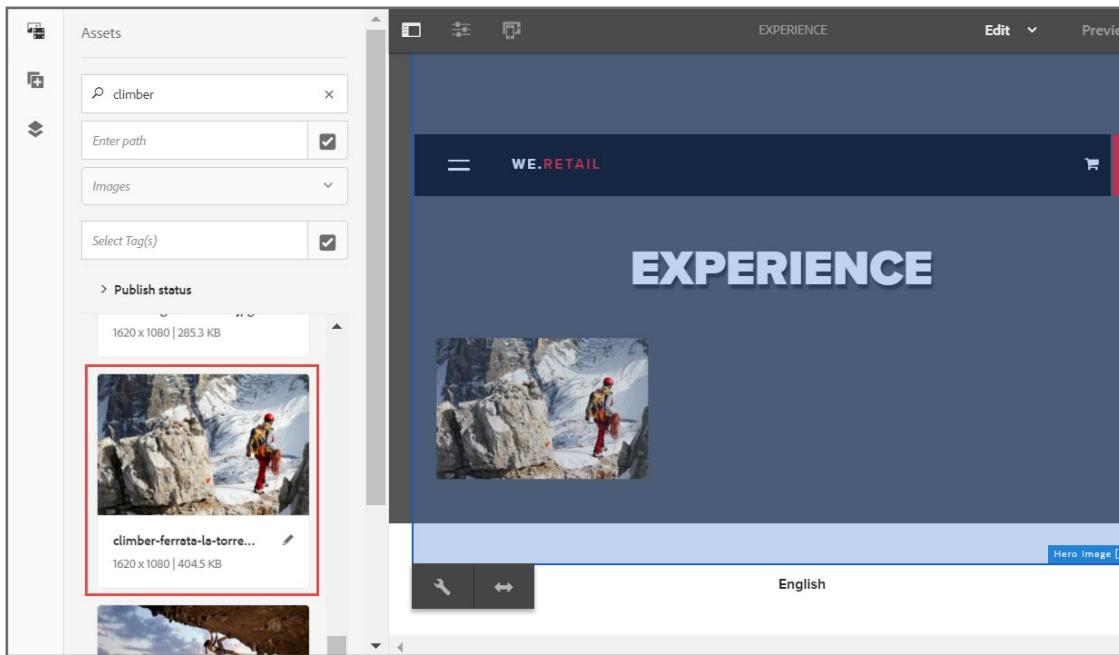
The page editor opens.

3. Type the appropriate keyword in the **Filter** field. In this example, type **climber**, as shown, and press **Enter** to search for it from the **Assets** panel.

The screenshot shows the AEM Assets panel on the left with a filter field containing 'climber' (highlighted with a red box). Below the filter, there are sections for 'Enter path', 'Images', and 'Select Tag(s)'. On the right, the 'Experience' page is displayed in edit mode. A preview of the page shows a large image of a climber. At the bottom of the Assets panel, there are two images: one labeled 'climber-ferrata-la-torre...' and another partially visible below it.

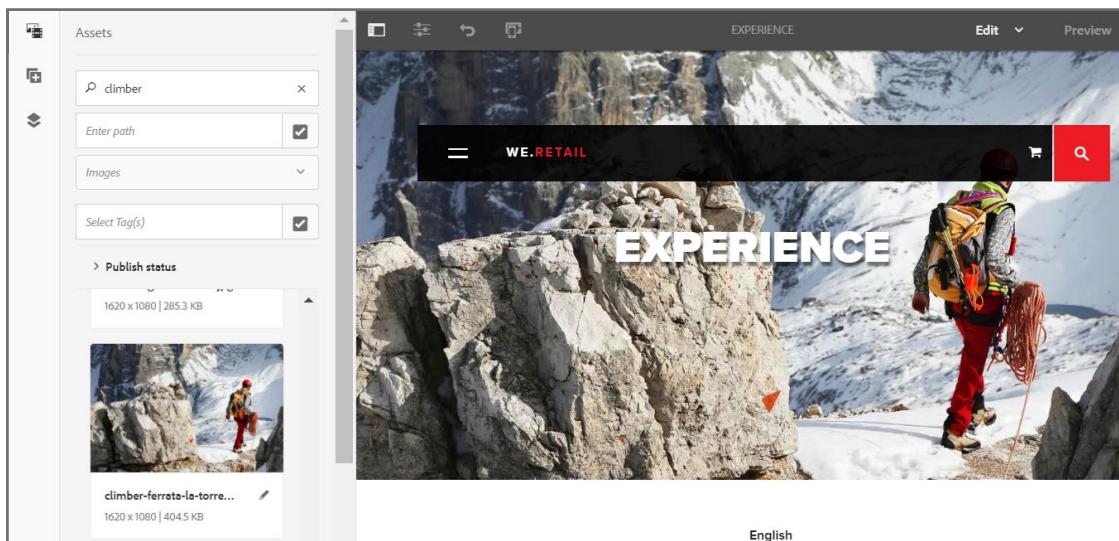
The assets matching the search term appear in the **Assets** panel.

4. Drag an image into the **Drag components here** area. In this exercise, drag the image **climber-ferrata-la-torre-di-toblin.jpg**.



Tip: You may need to scroll down on your **Experience** page to see the **Drag components here** container.

The image is added to the page, as shown:



References

Use the following links for more information on:

- [Organizing Assets](#)
- [List of supported asset formats](#)

Site Management

Introduction

When authoring a website in AEM, you need to manage several aspects beyond creating webpages, such as when to publish and unpublish pages, organize the website structure, and the structure of the navigation menus on the pages, and save the webpage versions after an update. AEM offers several options to manage the website efficiently.

Objectives

After completing this module, you will be able to:

- Explain publishing and unpublishing a page in AEM
- Publish and unpublish pages
- Reorganize a site structure
- Reorganize site navigation and menus
- Explain the options to manage page versions
- Manage page versions
- Explain the utility of tagging pages
- Tag a page

Publishing and Unpublishing a Page

After the content is ready and vetted for quality, it is copied from the author server to one or more publish servers. It is from the publish servers that the intended audience can access the website content. The audience can be the public, registered website users, or the employees of a company. In the context of AEM, publishing signifies that the content created on the AEM author instance is made accessible to a wider audience.

Publishing a Page

You can initiate the publish process from several locations in the AEM user interface (UI).

You can perform the publishing process by clicking the **Quick Publish** button or by using the **Manage Publication** wizard from the **Sites** console, as shown:

Title	Name	Template	Modified	Modified By	Language	Published
English	en	Hero Page	5 days ago	Administrator	English	Not published



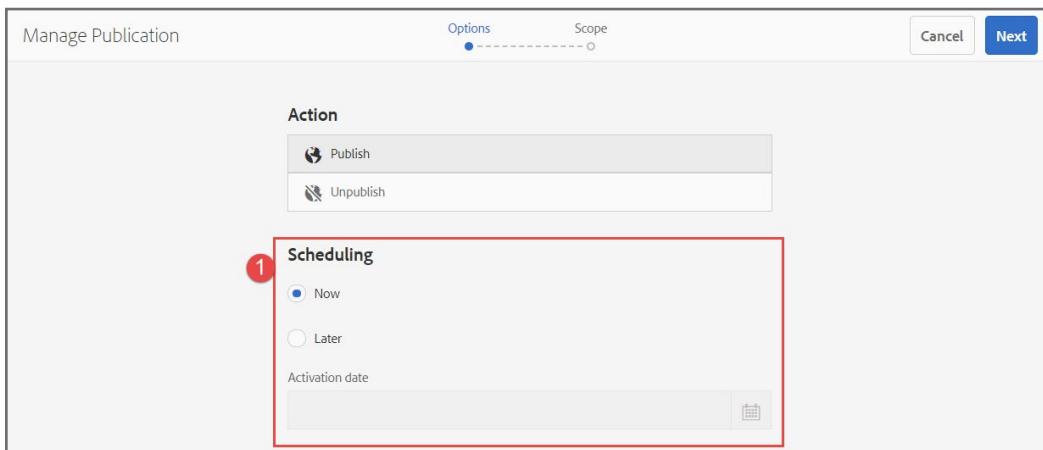
Note: To start the publishing process on your training instance, you must start the AEM Publish instance.

Quick Publish

The **Quick Publish** option enables you to publish pages and all the assets and referenced content on it immediately. You can select one or several pages with the same parent page and click **Quick Publish** from the actions bar to publish a page.

Manage Publications

The **Manage Publication** option enables you to specify the time of publication of the pages, the duration of the page to remain published, as shown in Screenshot 1, and the set of pages that should be published, as shown in screenshot 2. When you choose to schedule the publish action for a later time, a process is started in the background that ensures publication happens at that time.



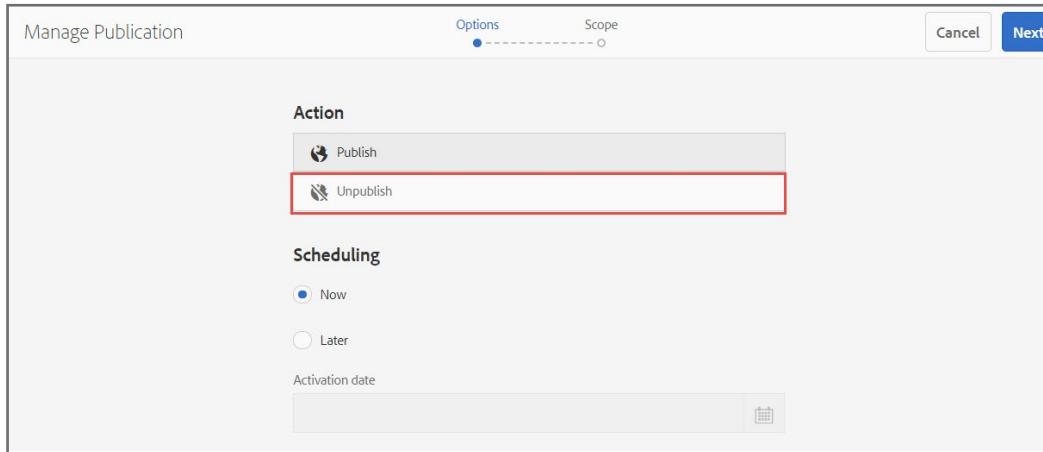
This screenshot shows the 'Manage Publication' dialog with a list of pages. At the top, there are 'Options' and 'Scope' buttons, and 'Back' and 'Publish' buttons. The 'Scope' button is selected. Below this is a table header with columns: Title, Modified, Published, and References. A red circle with the number '2' is placed over the 'Title' column. The table body contains one row for an English page, which is highlighted with a red border. The page details are: Title: English /content/we-retail/user001/en, Modified: 5 days ago Administrator, Published: Not published, References: all.

Title	Modified	Published	References
English /content/we-retail/user001/en	5 days ago Administrator	Not published	all

When you need to publish several pages, you can add the pages individually to the list of pages to be published. Alternatively, you can specify a hierarchy of pages, that should be published. To reduce the load on the server, you can also specify if only the modified or new pages must be published.

Unpublish a Page

Unpublishing a page deletes the specific content on the publish environment, and website visitors can no longer access the page. You can also use the **Manage Publication** wizard, as shown, to specify when the page should be unpublished.



Note: You can also publish or unpublish assets.

Exercise 1: Publish and unpublish pages

Scenario: As an author, you have created and reviewed the content in the author instance. Now, you need to publish the content on the publish instance to make the content available on the public website.

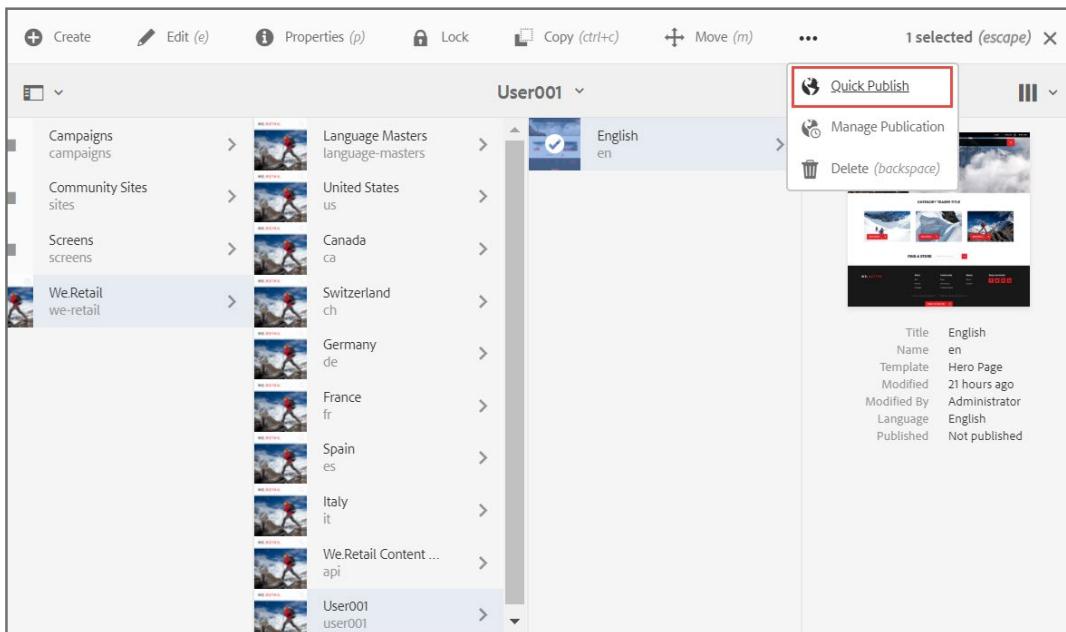
In this exercise, you will perform the following tasks:

1. Perform quick publish
2. Publish child pages
3. Schedule publication
4. Unpublish a page

Task 1: Perform quick publish

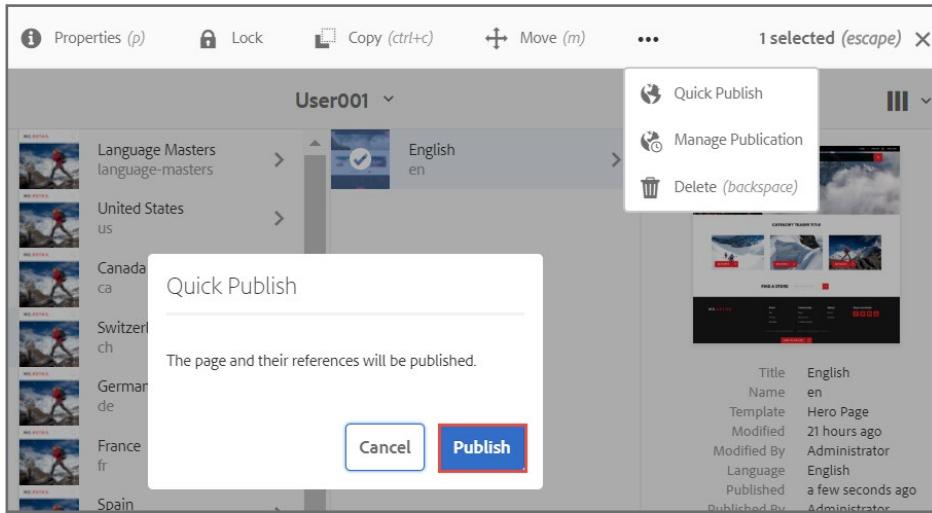
To perform a quick publish of a page:

1. From the **Sites** console, navigate to **We.Retail > User0XX**, and select the **English** page.
2. Click **Quick Publish** from the actions bar, as shown:



The **Quick Publish** pop-up window appears.

3. Click **Publish**, as shown:



The publication details appear, as shown:

Title	Name	Template	Modified	Modified By	Language	Published	Published By
English	en	Hero Page	21 hours ago	Administrator	English	a few seconds ago	Administrator

Publication Pending.
#10 in the queue.

 **Note:** If you are not using a cloud instance for this training, refer to the Installation section in the Appendix to learn how to start the AEM publish instance. Your instructor will provide the publish instance URL if you are using an AEM Cloud instance.

To view the published English page, ensure the publish instance is running on your computer, and follow the below steps:

4. Open a browser, and add the following URL in the address bar:

<http://<host name>:<port number>/content/we-retail/<user name>/en.html>

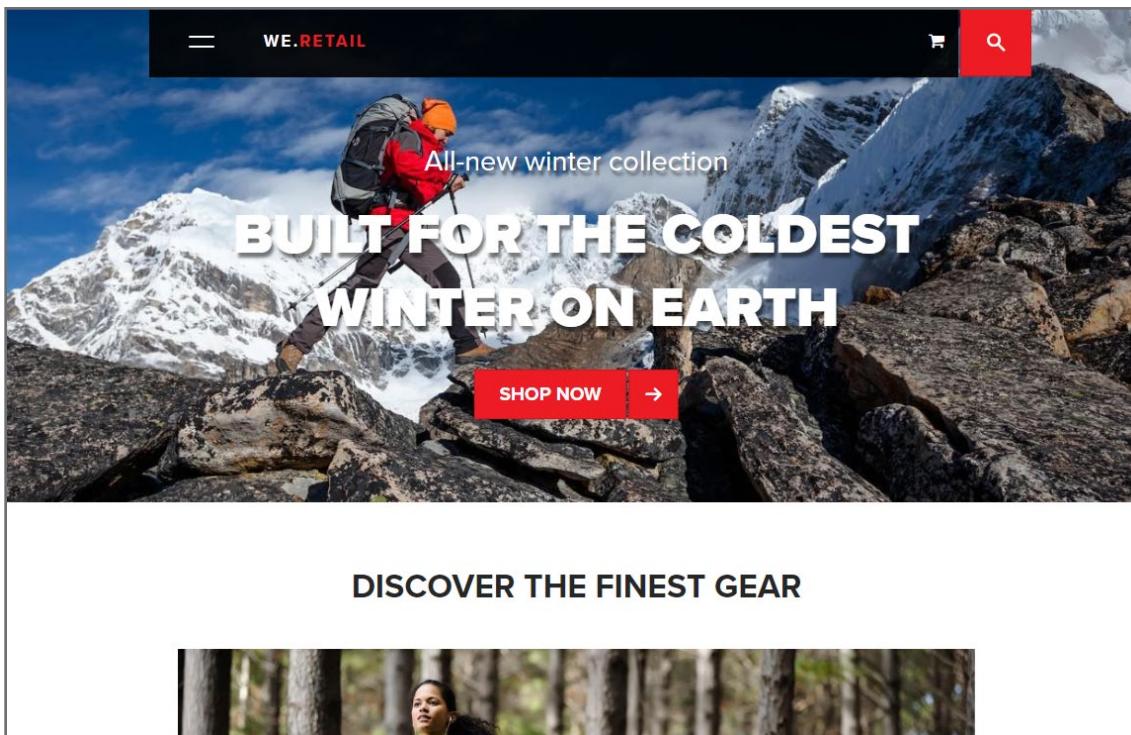


Note: If you are using the AEM cloud instance, use the publish instance URL, which your instructor has provided to you.



Note: The <username> is case-sensitive. Depending on how you named your root page under We.Retail, you must use the exact name. If you named your page User007, user007 will not work, but User007 will work.

5. Press Enter on your keyboard. If the page is published successfully, it will appear on the browser.



Task 2: Publish child pages

To publish the child pages of the English page:

1. From the **Sites** console, navigate to **We.Retail > User0XX** and select the **English** page.
2. From the actions bar, click **Manage Publication**, as shown:

The screenshot shows the AEM Sites console interface. At the top, there's a toolbar with options like 'Create', 'Edit (e)', 'Properties (p)', 'Copy (ctrl+c)', 'Quick Publish', and '...'. Below the toolbar, a navigation tree lists categories: 'Campaigns campaigns', 'Community Sites sites', 'Screens screens', and 'We.Retail we-retail'. Under 'We.Retail', several language variants are listed: 'language-masters' (selected), 'United States us', 'Canada ca', 'Switzerland ch', 'Germany de', 'France fr', 'Spain es', 'Italy it', 'We.Retail Content Servi... api', and 'User001 user001'. On the right side, a context menu is open over the 'English en' item. The menu has a red border around the 'Manage Publication' option. Other visible options include 'Delete (backspace)' and a list of items: 'Products products', 'Experience experience', and 'About Us about', each with a checkmark icon.

The **Manage Publication** wizard opens and displays the **Options** page, as shown:

The screenshot shows the 'Manage Publication' Options page. At the top, there are tabs for 'Options' (selected) and 'Scope'. In the center, there are two sections: 'Action' and 'Scheduling'. The 'Action' section contains two buttons: 'Publish' (with a globe icon) and 'Unpublish' (with a crossed-out globe icon). The 'Scheduling' section contains a radio button for 'Now' (selected) and another for 'Later'. Below the scheduling section is a field labeled 'Activation date' with a calendar icon.

3. Ensure that the following fields are selected, as shown:

› **Actions: Publish**

› **Scheduling: Now**

Manage Publication

Action

Publish

Unpublish

Scheduling

Now

Later

Activation date

Cancel Next

4. Click **Next**. The **Scope** page opens.
5. Select the **English** page icon and click **Include Children**, as shown:

Manage Publication

Options Scope

+ Include Children Remove Selection 1 page(s)

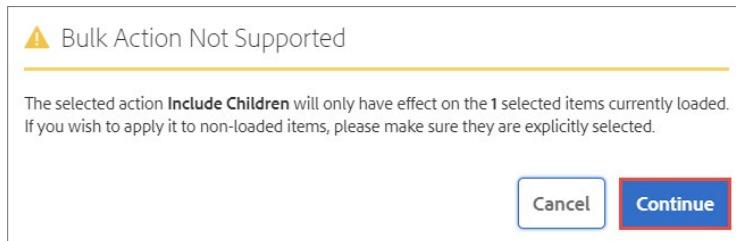
Title	Modified	Published	References
<input checked="" type="checkbox"/> English /content/we-retail/user001/en	a day ago Administrator	8 minutes ago Administrator	No references to publish

Back Publish

The **Include Children** dialog box appears.

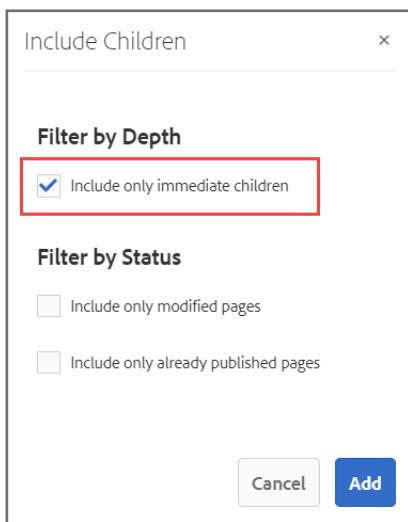


Note: After performing step 5, a warning pop-up window might appear. Click **Continue** to proceed to the next step, as shown:



6. By default, all the check boxes in the **Include Children** dialog box are selected.
Retain the selection for **Include only immediate children** check box under **Filter by Depth**

section, and cancel the selection for the **Include only modified pages** and **Include only already published pages** check boxes under the **Filter by Status** section, as shown:



7. Click Add.

All the child pages are added to the **Scope** page in the **Manage Publication** wizard, as shown:

Title	Modified	Published	References
English /content/we-retail/user001/en	a day ago Administrator	8 minutes ago Administrator	No references to publish
Products /content/we-retail/user001/en/products	a day ago Administrator	Not published	all
Experience /content/we-retail/user001/en/experience	4 days ago Administrator	Not published	all
About Us /content/we-retail/user001/en/about	Mar 4, 2019 Administrator	Not published	all

8. Click Publish, as shown:

Title	Modified	Published	References
English /content/we-retail/user001/en	a day ago Administrator	8 minutes ago Administrator	No references to publish
Products /content/we-retail/user001/en/products	a day ago Administrator	Not published	all
Experience /content/we-retail/user001/en/experience	4 days ago Administrator	Not published	all
About Us /content/we-retail/user001/en/about	Mar 4, 2019 Administrator	Not published	all

A success message appears that the English page is published to the publish instance.

To view the published child pages, ensure the publish instance is running on your system and:

9. Open a browser and add the following URL in the address bar:

`http://<host name>:<port number>/content/we-retail/<user name>/en.html`

10. Verify if the page is published.

Task 3: Schedule publication

To schedule the page publishing process:

1. From the **Sites** console, navigate to **We.Retail > User0XX > English**, and select the **Experience** page.

2. Click **Manage Publication** from the actions bar, as shown:

The screenshot shows the AEM navigation tree on the left with various language masters listed. In the center, the 'English en' node is selected. On the right, a context menu is open over a page titled 'Experience'. The 'Manage Publication' option is highlighted with a red box. Below the menu, there is a preview of the page and some metadata details.

Title	Experience
Name	experience
Template	Experience Page
Modified	4 days ago
Modified By	Administrator
Language	English
Published	4 hours ago
Published By	Administrator

The **Manage Publication** wizard opens.

3. Ensure the **Publish** option is selected in the **Action** section.
4. Select the **Later** option in the **Scheduling** section.
5. Click the **Calendar** icon next to the **Activation date** field and select the date and time at which you want to publish the **Experience** page. For example, select the next day's date.

The screenshot shows the 'Manage Publication' wizard. The 'Action' section has 'Publish' selected. The 'Scheduling' section has 'Later' selected. The 'Activation date' field is highlighted with a red box and contains the value '13 March 2019 04:46 pm'. There is a calendar icon to the right of the date input field.

6. Click **Next**. The **Scope** page is displayed.
7. Select the **Title** check box to select the **Experience** page, and click **Next**, as shown:

Manage Publication

Title	Modified	Published	References
<input checked="" type="checkbox"/> Experience /content/we-retail/user001/en/experience	4 days ago Administrator	4 hours ago Administrator	No references to publish

Back **Next**

8. The **Workflows** page is displayed. Type the appropriate title in the **Workflow title** field. For example, type **Publish Experience page**.
9. Click **Publish later**, as shown:

Manage Publication

Some of the published pages must run through specific workflows.

1 resource(s) will run through the workflow **Scheduled Page/Asset Activation**.

Workflow title *

Publish Experience page

Keep workflow package

Package title *

Back **Publish later**

A message, **Resource(s) have been scheduled for publication** appears, as shown:

Adobe Experience Manager

SUCCESS Resource(s) have been scheduled for publication

English

10. Select the **Experience** page and view the page details. The Published field displays the published status and the scheduled time when the page will be published.

Title	Experience
Name	experience
Template	Experience Page
Modified	4 days ago
Modified By	Administrator
Language	English
Published	4 hours ago
Published By	Administrator
Publication Pending	
Version	null
Scheduled:	3/13/19 4:46 PM (Administrator)
Publication Pending	
Version	null
Scheduled:	3/13/19 4:46 PM (Administrator)

To view the published **Experience** page:

11. Open a browser and type the following URL in the address bar:
`http://<host name>:<port number>/content/we-retail/<user name>/experience.html`
12. Press Enter. You cannot view the page on the Publish instance, as shown in the below screenshot, because the Experience page is scheduled to publish at a specified time.

Resource at '/content/we-retail/User001/experience.html' not found: No resource found

Cannot serve request to /content/we-retail/User001/experience.html on this server

ApacheSling/2.6 (jetty/9.4.12.v20180830, Java HotSpot(TM) 64-Bit Server VM 1.8.0_201, Windows 10 10.0 amd64)

Task 4: Unpublish a page

To unpublish a page:

- Select the published English page, and click **Manage Publication** from the actions bar, as shown:

The screenshot shows the AEM navigation bar with various actions like Create, Edit, Properties, Lock, Copy, Move, and a three-dot menu. Below the navigation bar is a tree view of site structures under 'User001'. One node, 'We.Retail (en)', is selected. A context menu is open over this node, with the 'Manage Publication' option highlighted by a red box. To the right of the menu, a preview window shows a landing page with a hero header and some content blocks.

Title	Name	Template	Modified	Modified By	Language	Published	Published By
English	en	Hero Page	a day ago	Administrator	English	5 hours ago	Administrator

The **Manage Publication** wizard appears.

- Select the **Unpublish** option in the **Action** section and click **Next**, as shown:

The screenshot shows the 'Manage Publication' wizard. At the top, there are 'Options' and 'Scope' tabs, with 'Scope' selected. In the main area, the 'Action' section contains two options: 'Publish' and 'Unpublish', with 'Unpublish' highlighted by a red box. Below the action section is the 'Scheduling' section, which includes radio buttons for 'Now' and 'Later', and a date input field for 'Activation date'.

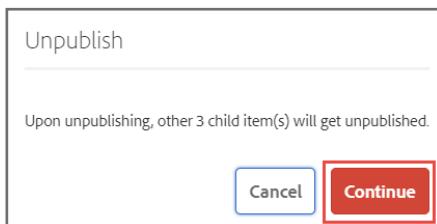
The Scope of the publication schedule is displayed.

3. Select the **Title** check box to select the **English** page, and click **Unpublish**, as shown:

The screenshot shows the 'Manage Publication' interface. At the top right, there is a red box around the 'Unpublish' button. Below it, there are two tabs: 'Options' and 'Scope'. Under 'Options', there is a checkbox labeled 'Title' which is checked. The table below lists one item: 'English /content/we-retail/user001/en'. The 'Modified' column shows 'a day ago' and 'Administrator'. The 'Published' column shows '5 hours ago' and 'Administrator'. There are also 'Include Children' and 'Remove Selection' buttons at the top left.

The **Unpublish** pop-up window appears.

4. Click **Continue**, as shown:



A message, **Resource(s) have been unpublished** appears, as shown:

The screenshot shows the Adobe Experience Manager interface. At the top, there is a green success message box containing the text 'SUCCESS Resource(s) have been unpublished.' Below the message, the navigation bar includes 'Adobe Experience Manager', 'Beta Feedback', and user information 'User001'. The main content area shows a tree view of site structures under 'User001' with various items like 'Campaigns', 'Community Sites', 'Screens', and 'We.Retail'. On the right, there is a preview of a website page and a detailed view of the selected 'English' page's properties, which are also highlighted with a red box. The properties include Title: English, Name: en, Template: Hero Page, Modified: a day ago, Modified By: Administrator, Language: English, and Published: Not published.

5. Select the **English** page and view the page details. The **Published** field has the status **Not published**, as shown:

The screenshot shows the AEM interface with the 'User001' navigation bar. The main content area displays the 'We.Retail' site structure. On the right, a detailed view of the 'English' page is shown, with its properties listed. The 'Published' field is explicitly highlighted with a red box and labeled 'Not published'. Other properties shown include Title: English, Name: en, Template: Hero Page, Modified: a day ago, Modified By: Administrator, Language: English, and Published: Not published.

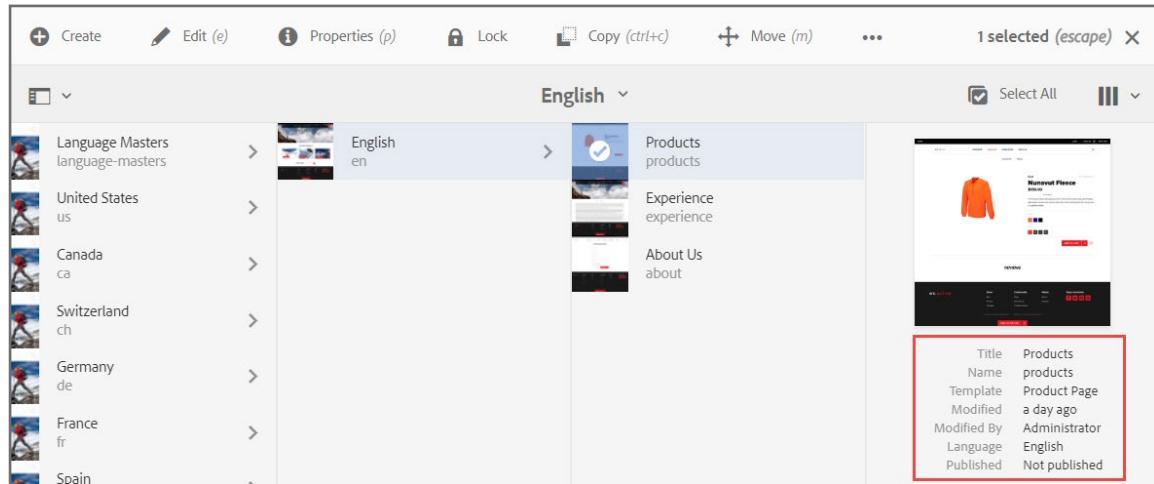
To view if the English page is unpublished:

6. Open a browser, and type the following URL: `http://<host name>: <port number>/content/we-retail/<user name>/en.html` in the address bar.
7. Press Enter. You cannot view the page on the Publish instance because the English page is unpublished.

Resource at '/content/we-retail/User001/en.html' not found: No resource found

Cannot serve request to /content/we-retail/User001/en.html on this server
ApacheSling/2.6 (jetty/9.4.12.v20180830, Java HotSpot(TM) 64-Bit Server VM 1.8.0_201, Windows 10 10.0 amd64)

Also, observe that the child pages of the English page are unpublished. For example, if you notice the details of the **Products** page, the **Published** status has changed to **Not published**, as shown:



The screenshot shows the AEM authoring interface with the following details:

- Page Tree:** On the left, a tree view shows the site structure: Language Masters > English > Products.
- Properties View:** On the right, the properties for the "Products" page are displayed in a table. A red box highlights the "Published" field, which is set to "Not published".

Title	Products
Name	products
Template	Product Page
Modified	a day ago
Modified By	Administrator
Language	English
Published	Not published

Exercise 2: Reorganize a site structure

Scenario: As an author, you need to adjust the website structure so that the webpages are ordered as required using the AEM author instance.

In this exercise, you will perform the following tasks:

1. Reorder the pages of a site
2. Copy a page from one location to another location
3. Move a page from one location to another location
4. Delete a page

Task 1: Reorder pages of a site

1. From the **Sites** console, navigate to **We.Retail > User0XX > English** and notice the order of the subpages, as shown. The **Products** page is at the top followed by the **Experience** and **About Us** pages, respectively.

The screenshot shows the AEM Sites console under the English language. The tree structure is as follows:

- English
- Products
- Experience
- About Us

The 'Products' page is highlighted with a red box. The 'Create' button is visible in the top right corner.

To reorder **Experience**, **Products**, and **About Us** subpages:

2. Select **List View** from the view switcher drop-down menu, as shown:

The screenshot shows the AEM Sites console under the English language with the view switcher set to 'List View'. The tree structure is the same as the previous screenshot:

- English
- Products
- Experience
- About Us

The 'List View' option in the view switcher is highlighted with a red box. The 'Create' button is visible in the top right corner.

The pages are displayed in the form of a list.

Title	Name	Modified	Published	Template	Workflow
Products	products	2 days ago Administrator	Apr 16, 2019 Administrator	Product Page	
Experience	experience	2 days ago Administrator	Apr 16, 2019 Administrator	Experience Page	
About Us	about	Apr 16, 2019 Administrator	Apr 16, 2019 Administrator	Content Page	

- Click and hold the right handles, and drag the **Experience** page above the **Products** page, as shown:

Title	Name	Modified	Published	Template	Workflow
Experience	experience	4 days ago Administrator	Not published	Experience Page	Multiple Workflows (2) Administrator
Products	products	a day ago Administrator	Not published	Product Page	
About Us	about	Mar 4, 2019 Administrator	Not published	Content Page	

The **Experience** page is now above the **Products** page.

- Click **English** from the breadcrumb drop-down menu and select **Sites**, as shown:

Title	Name	Template	Workflow
User001			
We.Retail			
Sites			
Products	products	process-service	Product Page
About Us	about		Content Page

5. Select **Column View** from the view switcher drop-down menu, as shown:

The screenshot shows the AEM 'Sites' list interface. At the top right, there is a 'Create' button and a 'Select All' checkbox. Below these are four view switcher options: 'Column View' (highlighted with a red box), 'Card View', 'List View', and 'View Settings'. The main area displays a list of sites with columns for Title, Name, Modified, Published, Template, and Work. The 'We.Retail' site is selected, showing its details: we-retail, Feb 9, 2016, Administrator, Not published.

6. The subpages are now in the order of **Experience, Products, and About Us**.

The screenshot shows the AEM English page structure. The 'English' page has three children: 'Experience', 'Products', and 'About Us'. The 'Experience' subpage is highlighted with a red box. The 'Products' and 'About Us' pages are also visible in the list.

You will use this page in the next task.

Task 2: Copy a page from one location to another location

- Select the subpage you want to copy. For example, select the **Experience** subpage from the **English** page and click **Copy** from the actions bar, as shown:

The screenshot shows the AEM English page structure. The 'Experience' subpage is selected and highlighted with a red box. The actions bar at the top has several buttons: 'Create', 'Edit (e)', 'Properties (p)', 'Lock', 'Copy (ctrl+c)' (highlighted with a red box), 'Move (m)', '...', '1 selected (escape)', and 'X'. To the right of the list, a preview of the 'Experience' page is shown.

2. Navigate to **We.Retail > User0XX** and click **Paste** from the Actions bar, as shown:

The screenshot shows the AEM navigation tree under the 'User001' node. The 'User001' node is highlighted with a red box. In the Actions bar at the top right, the 'Paste' button is also highlighted with a red box.

- Campaigns campaigns
- Community Sites sites
- Screens screens
- We.Retail we-retail
- Language Masters language-masters
 - United States us
 - Canada ca
 - Switzerland ch
 - Germany de
 - France fr
 - Spain es
 - Italy it
 - We.Retail Content Servi... api
 - User001 user001

The **Experience** page appears as a subpage of the **User0XX** page, as shown:

The screenshot shows the AEM navigation tree under the 'User001' node. The 'User001' node is highlighted with a red box. In the Actions bar at the top right, the 'Paste' button is highlighted with a red box. The 'Experience' page is visible as a subpage under the 'User001' node, also highlighted with a red box.

- Campaigns campaigns
- Community Sites sites
- Screens screens
- We.Retail we-retail
- Language Masters language-masters
 - United States us
 - Canada ca
 - Switzerland ch
 - Germany de
 - France fr
 - Spain es
 - Italy it
 - We.Retail Content Servi... api
 - User001 user001
 - Experience experience

You will use this page in the next task.

Task 3: Move and rename a page from one location to another location

To move a page from one location to another location:

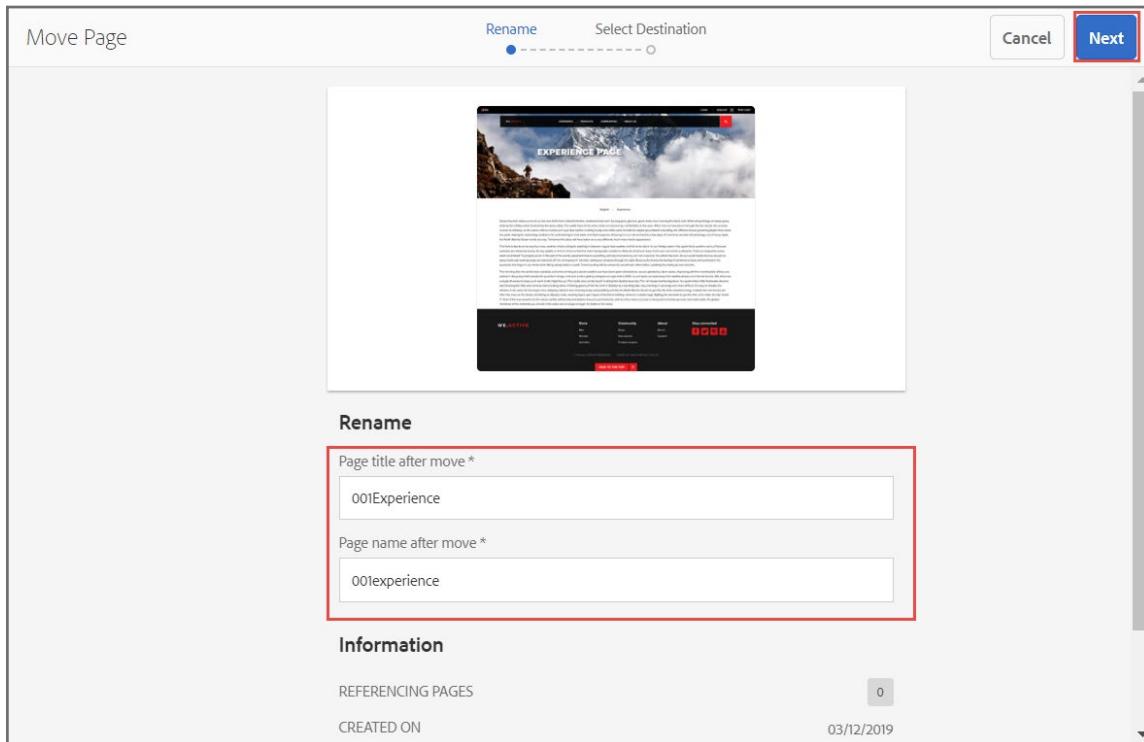
1. Select the **Experience** subpage of the **User001** page and click **Move** from the actions bar, as shown:

The screenshot shows the AEM navigation tree under the 'User001' site. The 'Experience' page, located at 'User001 > English > Experience', is selected and highlighted with a red box. The 'Move (m)' button in the top right corner of the actions bar is also highlighted with a red box.

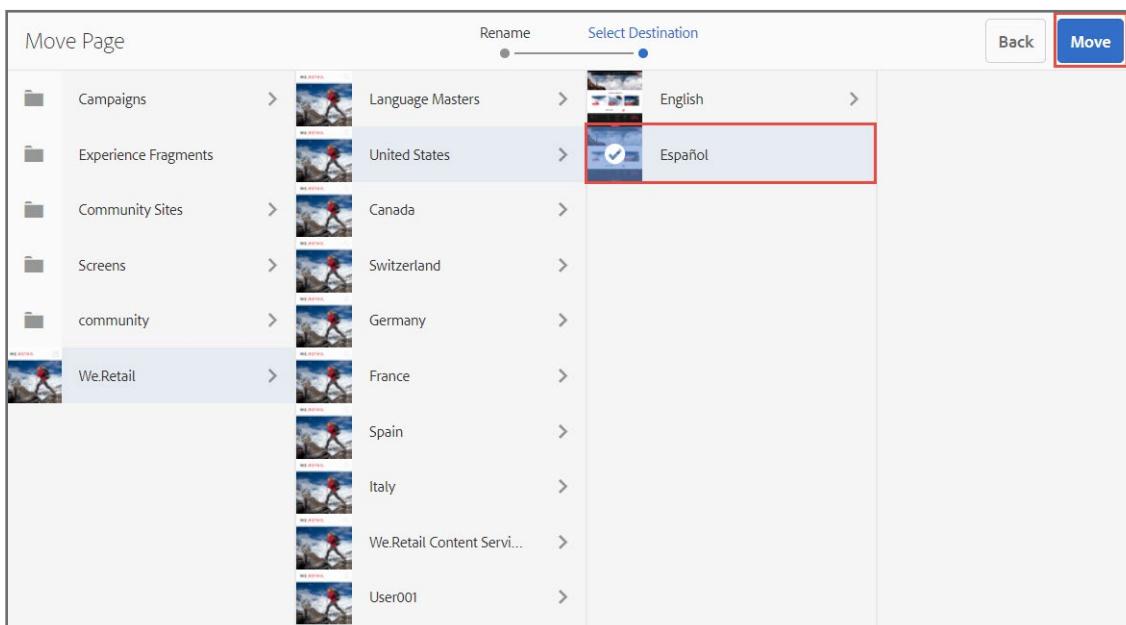
The **Move Page** wizard opens, as shown:

The screenshot shows the 'Move Page' wizard. The 'Rename' tab is selected. It displays the current page title 'Experience' and page name 'experience'. The 'Select Destination' tab is visible at the top right. The 'Information' section at the bottom shows 'REFERENCING PAGES' (0) and 'CREATED ON' (03/12/2019).

2. To rename the title and the name of the page that you move, type **0XXExperience** (where, 0XX is the user code assigned to you) in the **Page title after move** and **Page name after move** fields, and click **Next**, as shown:



3. In the **Select Destination** page, click the arrows beside the pages within which you want to move the page and select a page. For example, navigate to **We.Retail > United States > Español**, and click **Move**, as shown:



The page moves to the new location, as shown:

The screenshot shows the AEM navigation tree under the 'Español' dropdown. The path is: We.Retail > United States > Español > 001Experience. The '001Experience' page is highlighted with a red border.

You will use this page in the next task.

Task 4: Delete a page

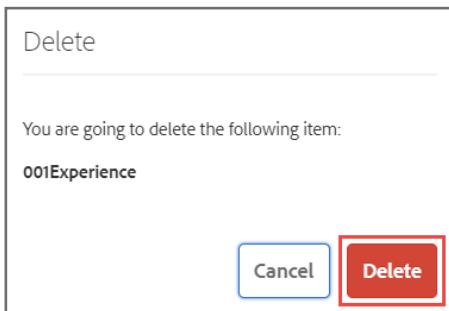
To delete a page:

1. Ensure you are on the **We.Retail > United States > Español** page and select the **0XXExperience** subpage.
2. Click **Delete** from the Actions bar, as shown:

The screenshot shows the AEM navigation tree under the 'Español' dropdown. The path is: Language Masters > English > 001Experience. The '001Experience' page is selected. In the Actions bar, the 'Delete (backspace)' option is highlighted with a red border. A tooltip shows the page details: Title: 001Experience, Name: 001experience, Template: Experience Page, Modified: 9 minutes ago, Modified By: Administrator, Language: Spanish, Published: Not published.

The **Delete** pop-up window opens.

3. Click Delete.



The **Experience** subpage is deleted from the **Español** page.

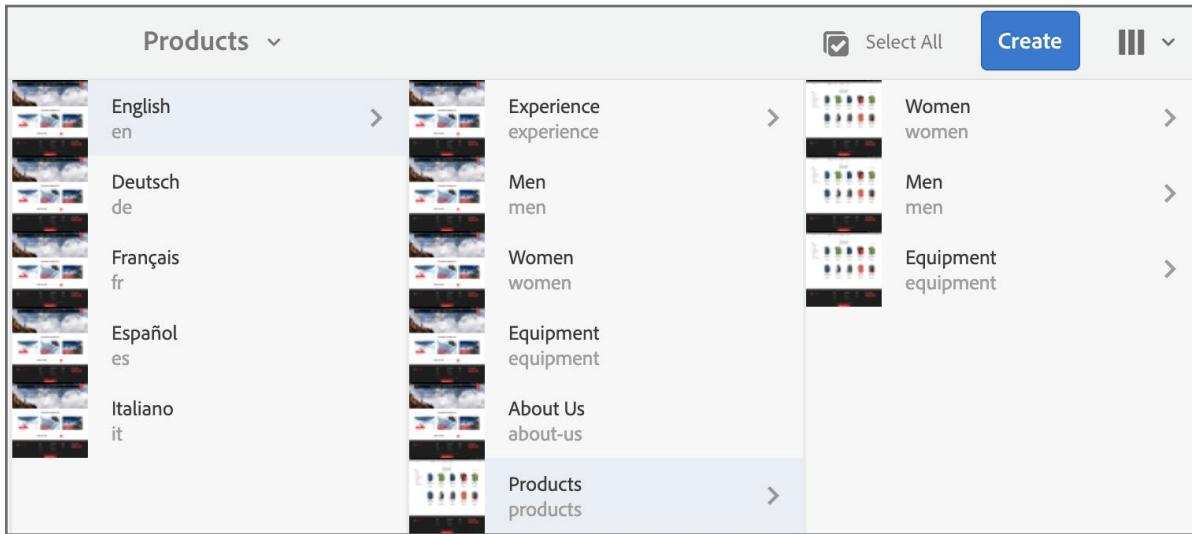
A screenshot of the AEM Site Structure interface. The navigation path is: Campaigns > Language Masters language-masters > English en > Español es. The 'Español' subpage is selected. On the right, a preview of the page shows a hero image of a person on a mountain. Below the preview, the page details are listed:

Title	Español
Name	es
Template	Hero Page
Modified	Aug 21, 2018
Modified By	Administrator
Language	Spanish
Published	Not published

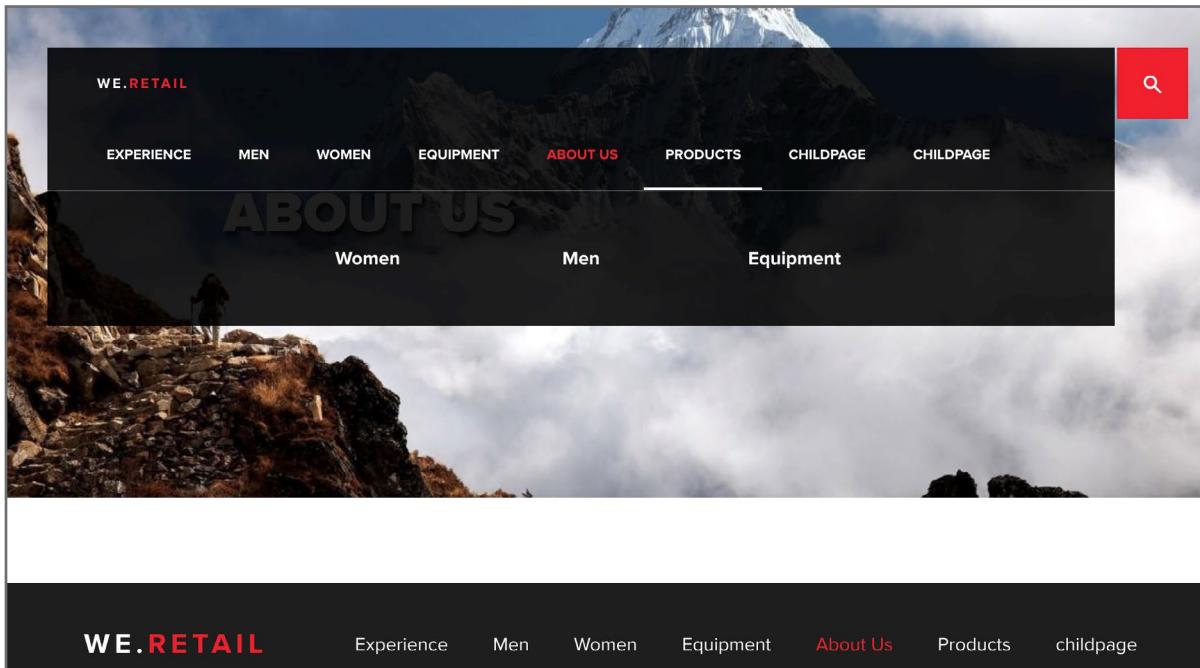
Reorganizing Site Navigation and Menus

AEM enables you to easily create and manage navigation items and menus in the UI. If you add, move, or delete a page, AEM automatically tracks all the links and updates the links on the menus.

The site structure of the **Products** page is shown in the below screenshot:



The **We Retail** top and bottom menu on a second level page displays the menu and site structure in a similar format, as shown:



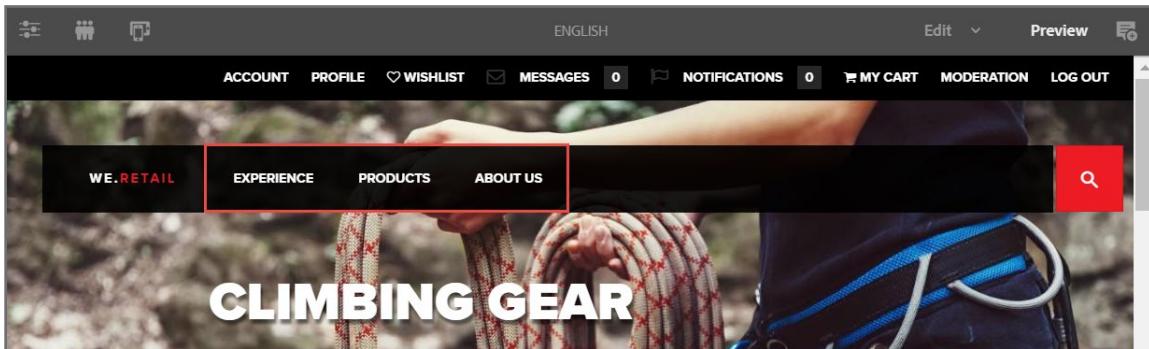
Exercise 3: Change order of items on a menu

Scenario: Your marketing team requires you, as an author, to change the order of items in the navigation to display the most relevant items at the extreme ends of the navigation bar.

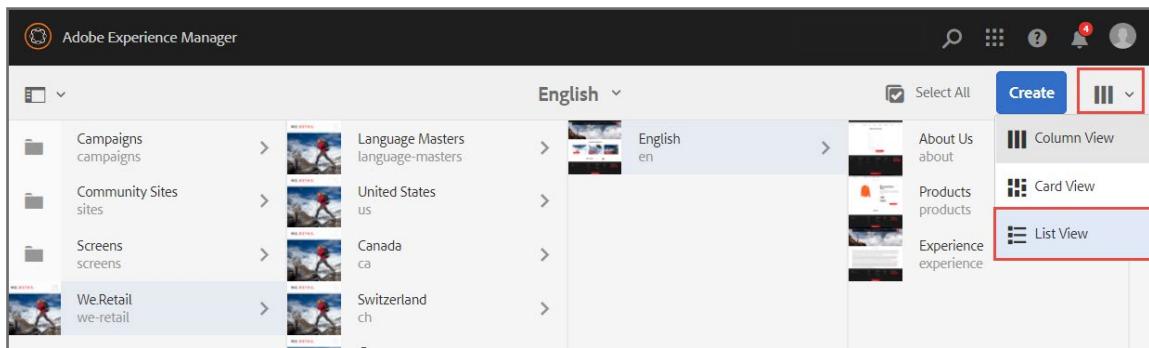
You want to display the **About Us** page link at the leftmost and the **Experience** page link at the rightmost of the navigation menu.

1. From the **Sites** console, navigate to **We.Retail > User0XX** and select the **English** page. The actions bar is displayed at the top of the page.
2. Click **Edit**. The **English** page opens in the preview mode in the page editor.

Observe the order of items in the navigation menu, as shown:



3. Navigate to the **Sites** console > **We.Retail > User0XX > English** and click **List View** from the dropdown, as shown:



The page changes to List view.

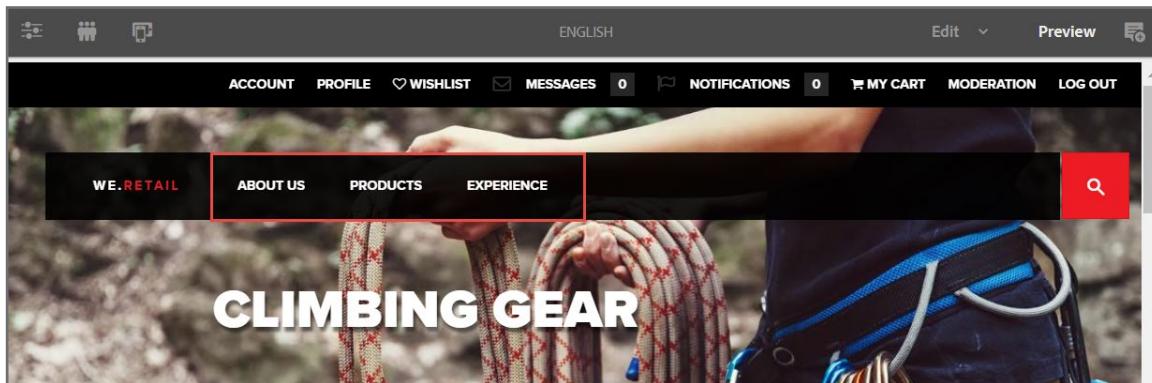
- Click **English** below the **Title** field.

All subpages of English appear in List View.

- Click the vertical selection bar and drag the **Experience** page to the bottom of the list.
- Click the vertical selection bar and drag the **About Us** page to the top of the list, as shown:

	Title	Name	Modified	Published	Template	Workflow	
<input type="checkbox"/>	About Us	about	8 hours ago Administrator	8 hours ago workflow-process-service	Content Page	Multiple Workflows (2) Administrator	<input type="checkbox"/>
<input type="checkbox"/>	Products	products	16 minutes ago Administrator	8 hours ago workflow-process-service	Product Page	Publish Example Administrator	<input type="checkbox"/>
<input type="checkbox"/>	Experience	experience	13 minutes ago Administrator	5 days ago workflow-process-service	Experience Page	<input type="checkbox"/>	<input type="checkbox"/>

- Navigate to the page editor and refresh the page to observe the order of the items in the navigation menu, as shown:



- Change the view of the pages in the **Sites** console back to **Column View** for the next exercise.

Exercise 4: Hide a menu item

Scenario

You have created a navigation menu. However, you want to hide certain items on the menu to enhance the appearance of the navigation menu.

In this exercise, you will create a sample page and then hide the sample page from the navigation menu.

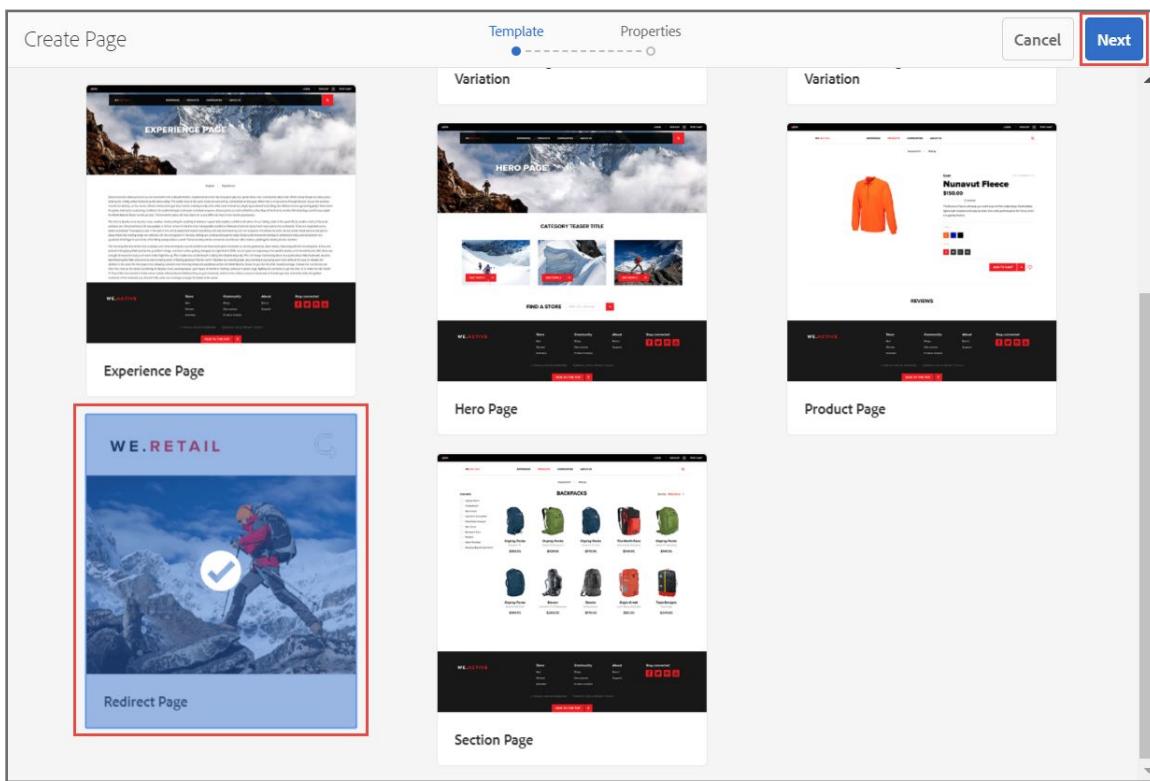
To create a sample page:

1. From the **Sites** console, navigate to **We.Retail > User0XX > English** and click **Create > Page**, as shown:



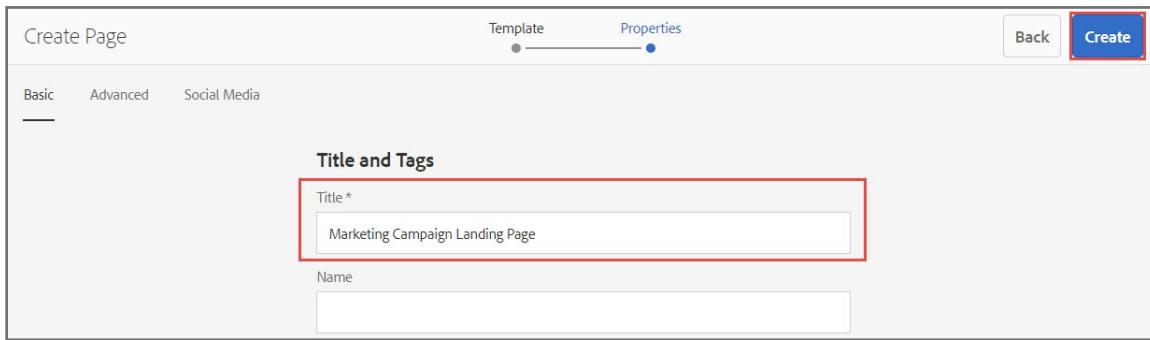
The **Create Page** wizard opens under the **Template** section.

2. Select the **Redirect Page** and click **Next**, as shown:



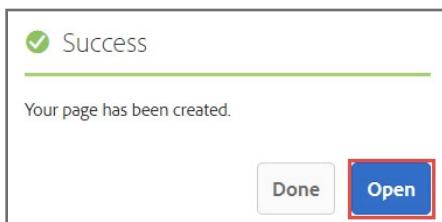
The **Create Page** wizard opens in the **Basic** tab under the **Properties** section.

3. In the **Title** field, type **Marketing Campaign Landing Page** and click **Create**, as shown:

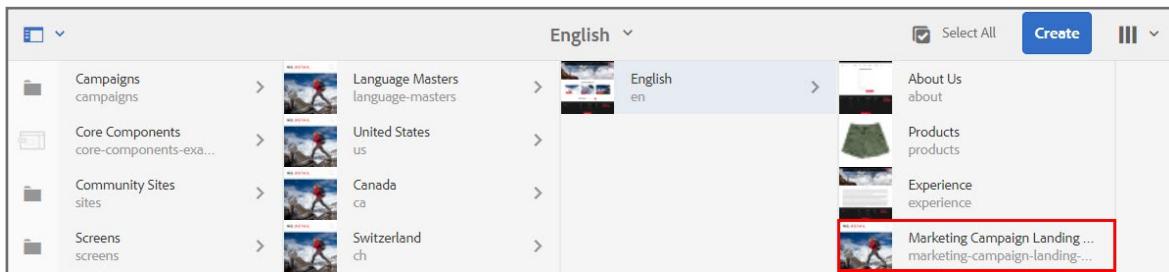


The **Success** pop-up window opens.

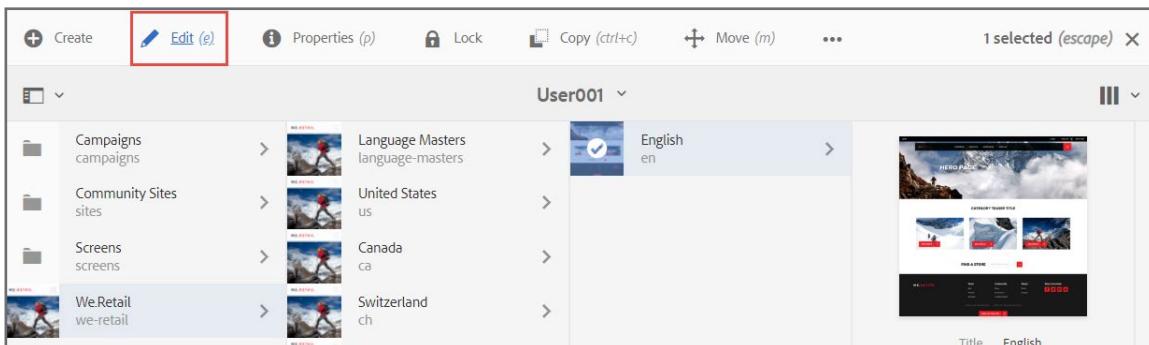
4. Click **Done**, as shown:



5. The **Marketing Campaign Landing Page** is added to the list of pages in the **English** page, as shown:



6. Select the **English** Page. The actions bar appears at the top of the page.
7. Click **Edit** to open the **English** page in the page editor, as shown:



8. Observe the **Marketing Campaign Landing Page** is added to the navigation menu.



9. Navigate back to the **Sites** console and select **Marketing Campaign Landing Page**. The actions bar appears at the top of the page.
10. Click **Properties**, as shown:

The **Marketing Campaign Landing Page** opens in the **Basic** tab of the **Properties** wizard.

11. Select the **Hide in Navigation** check box and click **Save & Close**, as shown:

12. Navigate back to the **English** page in the page editor and refresh the page.
13. Observe the **Marketing Campaign Landing Page** is hidden on the navigation menu, as shown:

Managing Page Versions

AEM maintains versions of pages to ensure that you can roll back content changes to an earlier version of the content. The version mechanism is useful for instances such as an audit, which can involve recreating the state of a webpage for review at a specific date and time.

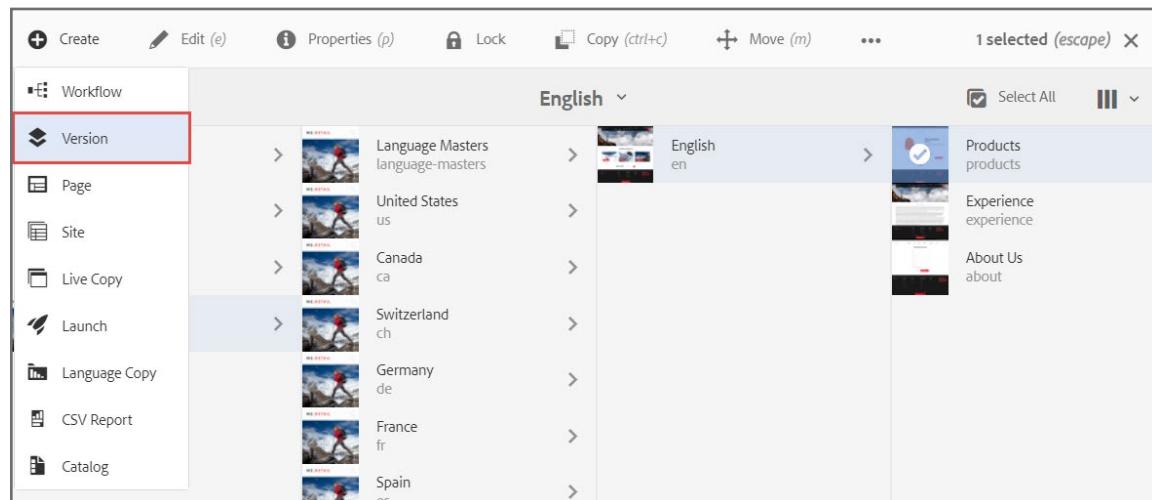
The system administrator can configure the new version of a page, assets, experience fragments, or other content types. AEM saves a content type with a version number and displays the new version in the UI only when you publish a page or click the **Create Version** button. AEM does not save every edit action as a new version.

When managing page versions, you can:

- Create a page version
- Restore the previous version of a page
- Compare the current page version with a previous page version
- Preview the page version

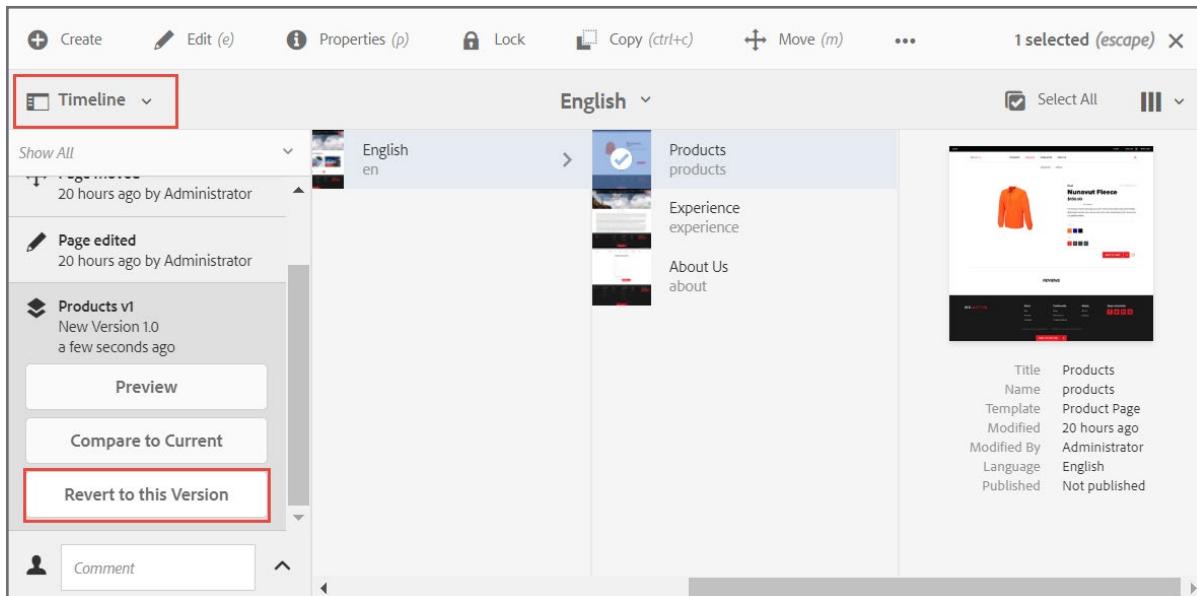
Creating Page Versions

You can create a version of a resource from the Create menu, as shown:



Restoring the Previous Version of a Page

After creating a page version, you can revert to an earlier version of the page by clicking the **Revert to this Version** option from the **Timeline** menu. However, you must first select the page, navigate to **Timeline** and select the page version.

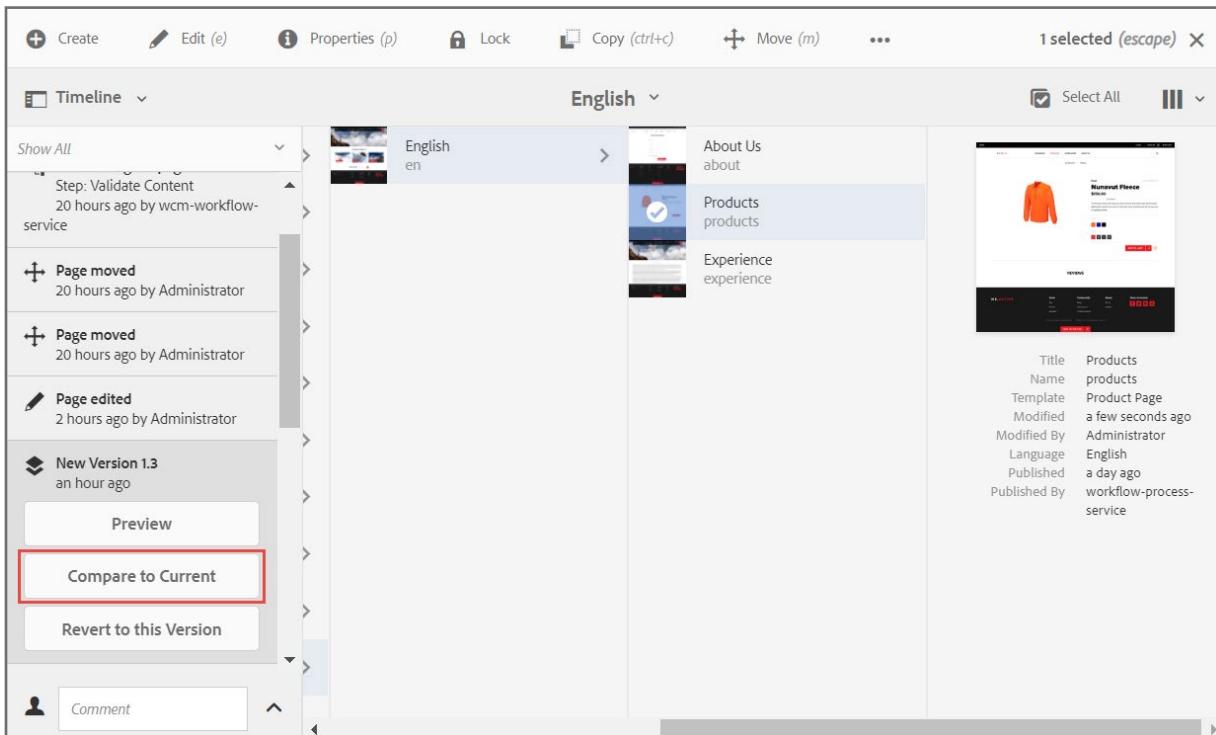


The screenshot shows the AEM Timeline interface. The top navigation bar includes options like Create, Edit (e), Properties (p), Lock, Copy (ctrl+c), Move (m), and a three-dot menu. The main area has tabs for English and French. On the left, a sidebar titled 'Timeline' lists recent actions: 'Show All', '20 hours ago by Administrator' (Page edited), 'Products v1' (New Version 1.0, a few seconds ago), 'Preview', 'Compare to Current', and 'Revert to this Version'. The right side displays a preview of the 'Products' page in English, showing a product listing for 'Hunnewell Fleece' shirts. Below the preview is a table of page properties:

Title	Products
Name	products
Template	Product Page
Modified	20 hours ago
Modified By	Administrator
Language	English
Published	Not published

Comparing the Current Page Version with a Previous Page Version

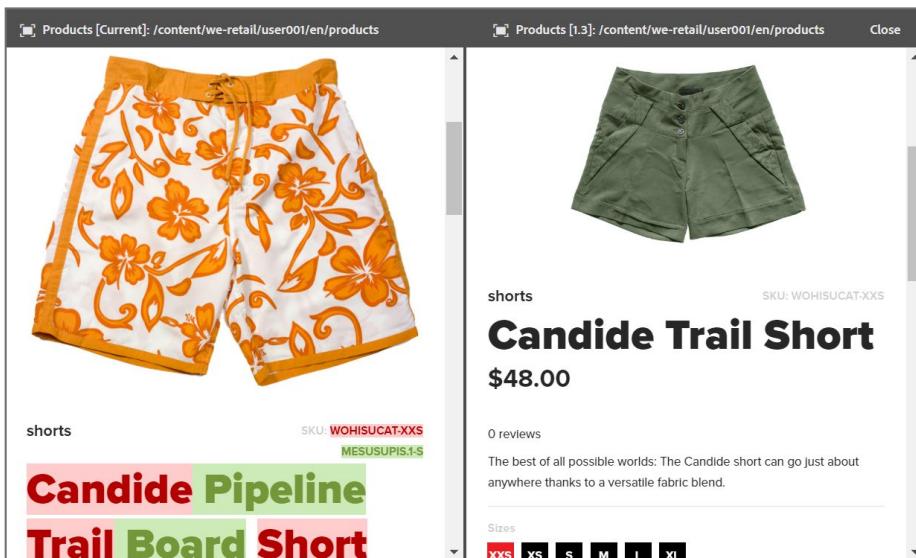
After creating multiple page versions, you can compare the current version of the page with a previous version by using the **Compare to Current** option from the **Timeline** menu, as shown.



This screenshot shows the AEM Timeline interface with a more detailed history of changes. The left sidebar lists actions: 'Show All', 'Step: Validate Content' (20 hours ago by wcm-workflow-service), 'Page moved' (20 hours ago by Administrator), 'Page moved' (20 hours ago by Administrator), 'Page edited' (2 hours ago by Administrator), and 'New Version 1.3' (an hour ago). The 'Compare to Current' button is highlighted with a red box. The right side shows a preview of the 'About Us' page in English and a table of page properties for the 'Products' page:

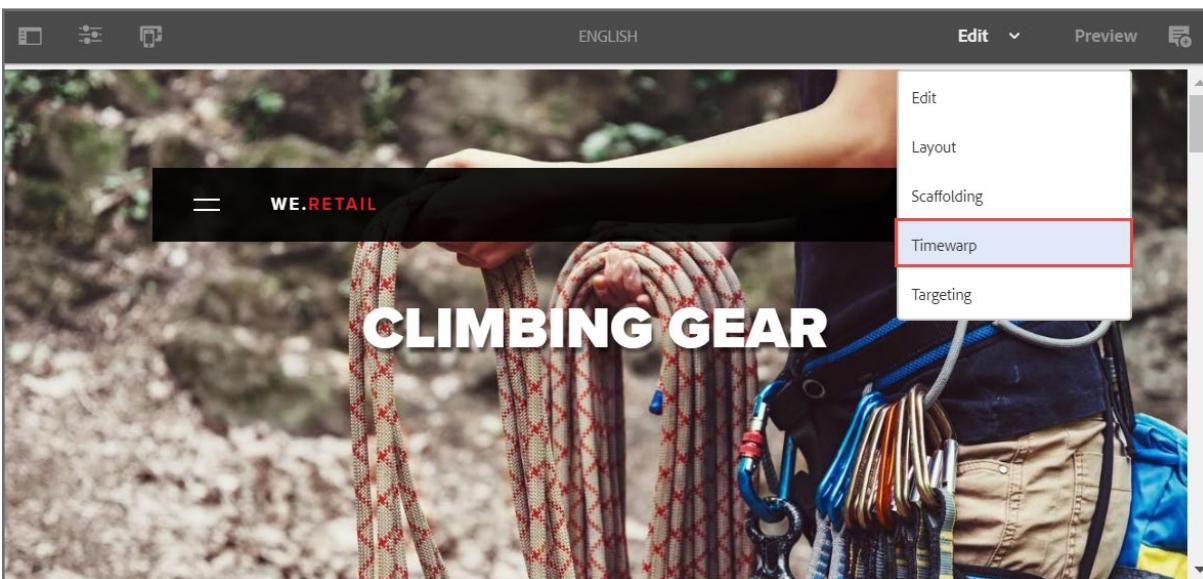
Title	Products
Name	products
Template	Product Page
Modified	a few seconds ago
Modified By	Administrator
Language	English
Published	a day ago
Published By	wcm-workflow-process-service

The **Compare to Current** option helps open the page in a single-pane side-by-side. It provides visual emphasis of content differences in different colors. The new content is highlighted in green, whereas the deleted content is highlighted in red.

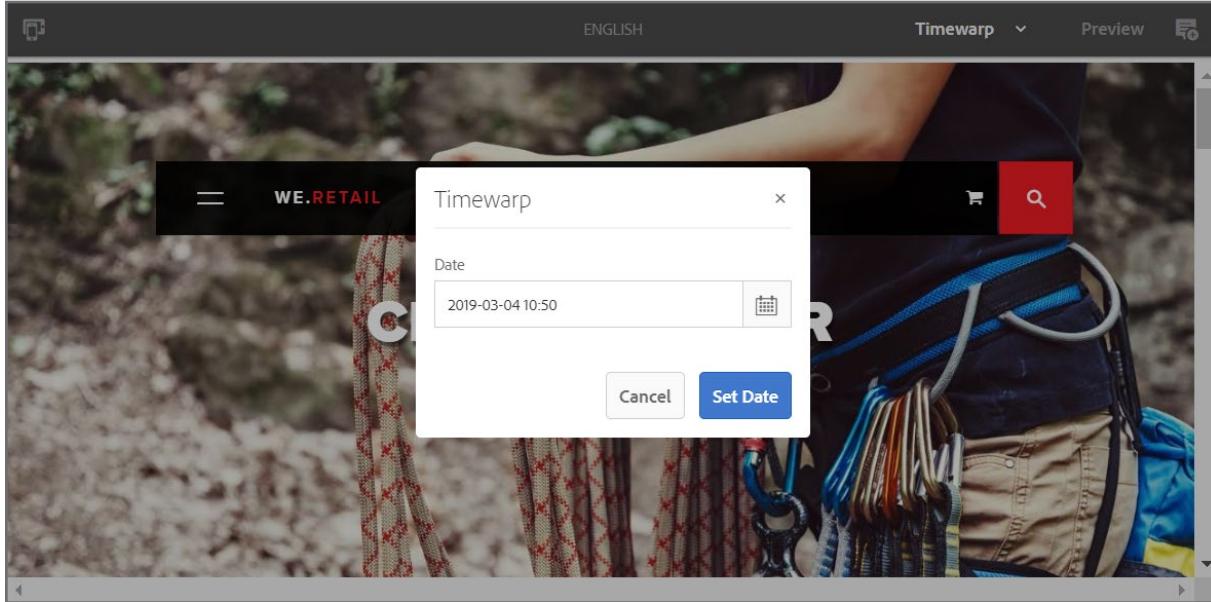


Timewarp

The Timewarp feature available in the mode switcher of the page editor, provides a quick way to review prior versions of a page by date, enabling you to view how a page looks at a specific point in time.



In Timewarp mode, the system looks for the page version that was the current one at the selected time. For example, suppose you have published a page two days ago, and you have made changes to the page today. Using Timewarp, you can review the page that was published two days ago by specifying the time of publication.



Previewing the Page Version

The **Preview** option displays the page version as it appears on the AEM publish instance.

A screenshot of the AEM Timeline interface. The top navigation bar includes 'Create', 'Edit (e)', 'Properties (p)', 'Lock', 'Copy (ctrl+c)', 'Move (m)', and a 'Select All' checkbox. The main area shows a timeline with several items: 'Show All', '20 hours ago by Administrator' (with a 'Page edited' note), and 'Products v1' (New Version 1.0, 22 minutes ago). The 'Products v1' item has a red box around its 'Preview' button. Other buttons include 'Compare to Current' and 'Revert to this Version'. On the right, a tree view shows various site structures like 'ca', 'ch', 'de', etc., under the 'English' node. The bottom left has a comment input field.

Exercise 5: Manage page versions

Scenario

As an author, you need to maintain multiple versions of certain pages of your website, so you can revert to the earlier pages as required at any time.

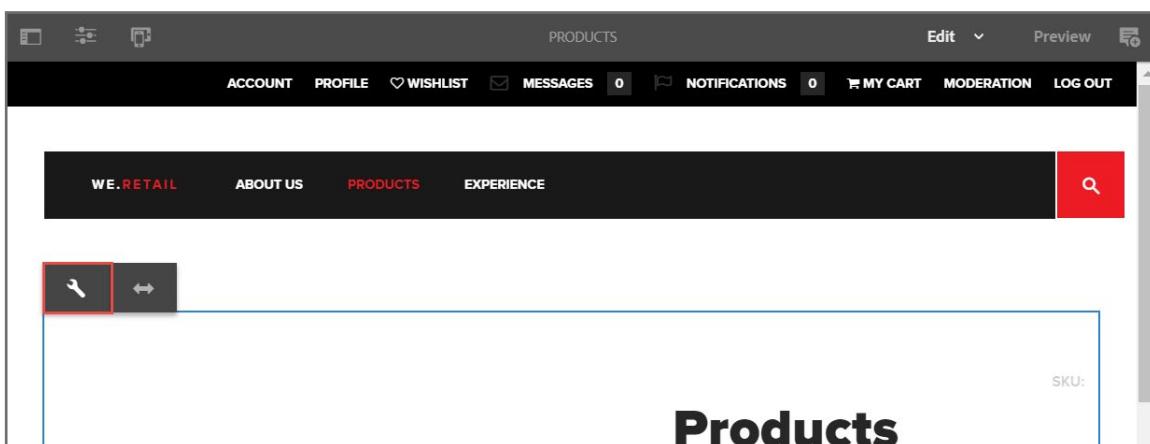
In this exercise, you will perform the following tasks:

1. Create a page version
2. Edit a page version
3. Preview a page version
4. Compare page versions
5. Restore a page version

Task 1: Create a page version

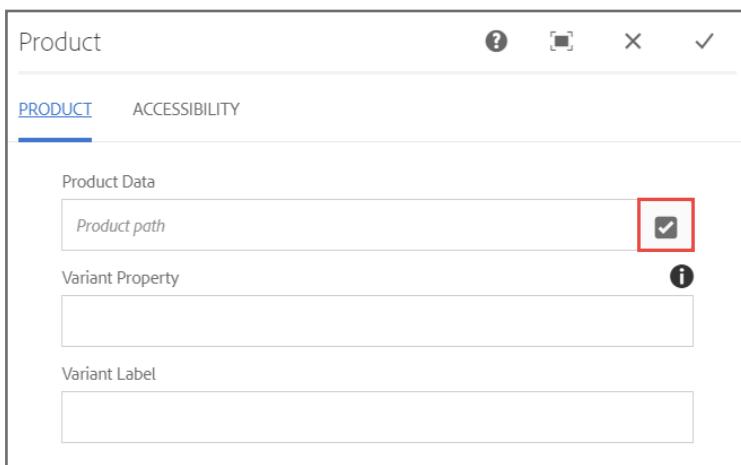
To create a page version:

1. From the **Sites** console, navigate to **We.Retail > User0XX > English**.
2. Select the **Products** page and click **Edit** from the actions bar. The **Products** page displays in the edit mode.
3. Select the **Products** component and click the **Configure** icon from the components toolbar, as shown:

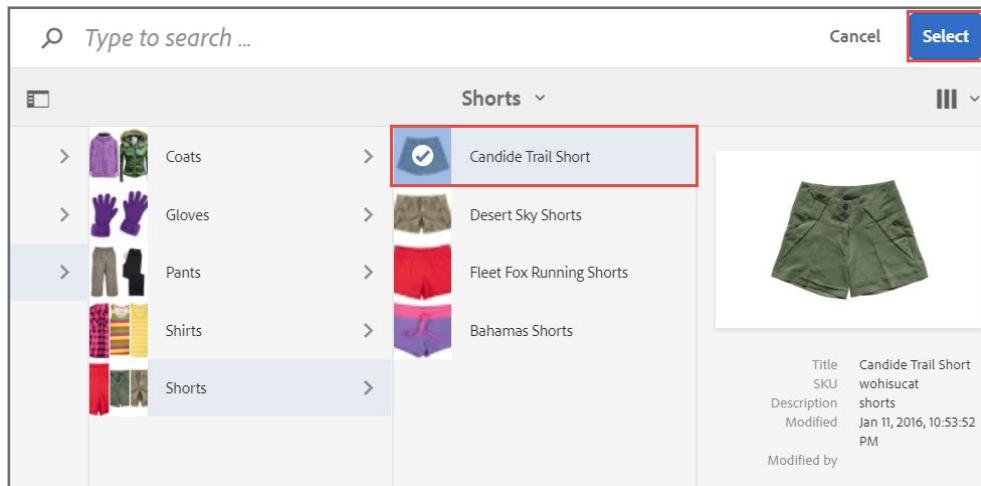


The **Product** window opens.

4. Click the **Open Selection Dialog** icon next to the **Product Data** field, as shown:

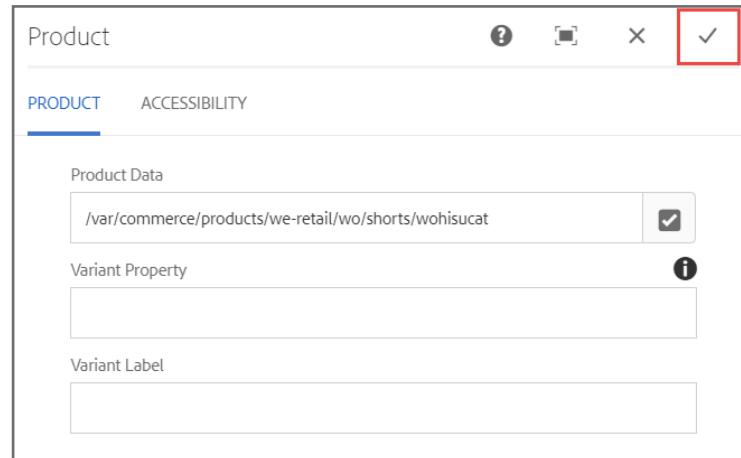


5. Navigate to **We.Retail > Women > Shorts**, select a shorts image, and click **Select**, as shown:

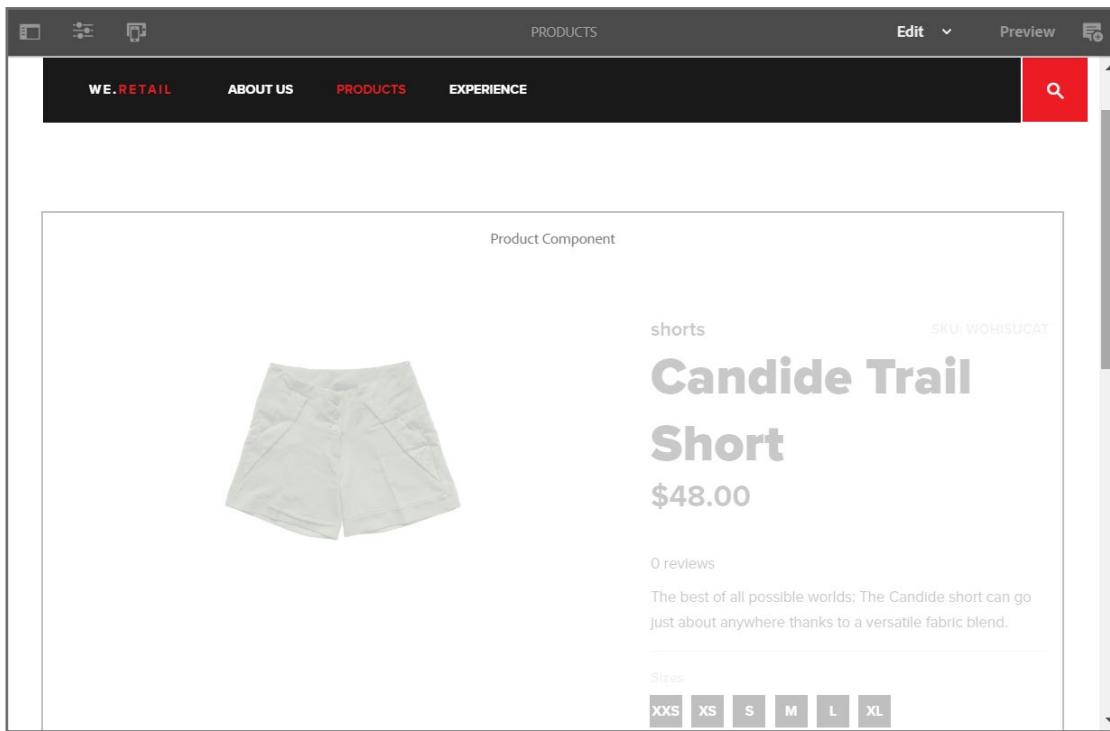


The product link and image are added in the **Product Data** field.

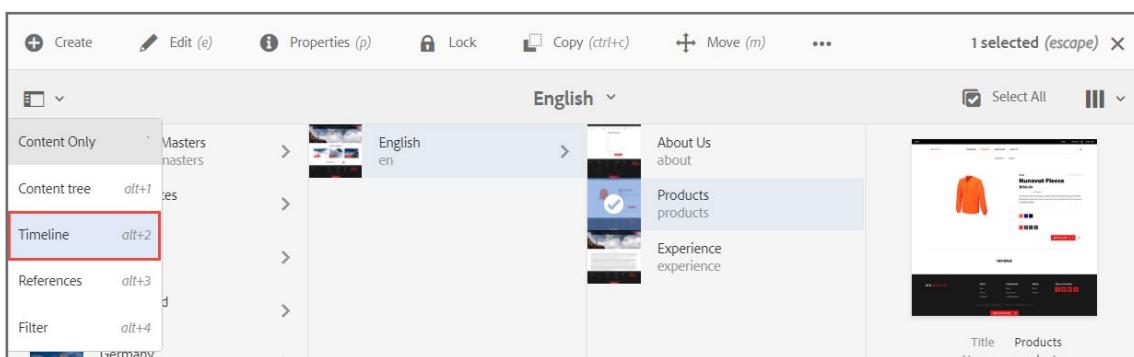
6. Click the **Done** icon, as shown:



The Product component looks similar to the below screenshot:



7. Navigate back to the **Sites** console > **We.Retail** > **User0XX** > **English**.
8. Select the **Products** page and click the **Content Only** icon to view the content display options:
9. Select **Timeline** from the drop-down menu, as shown:



The **Timeline** panel appears.

10. Click the arrowhead next to the **Comment** field to view the available options, as shown:

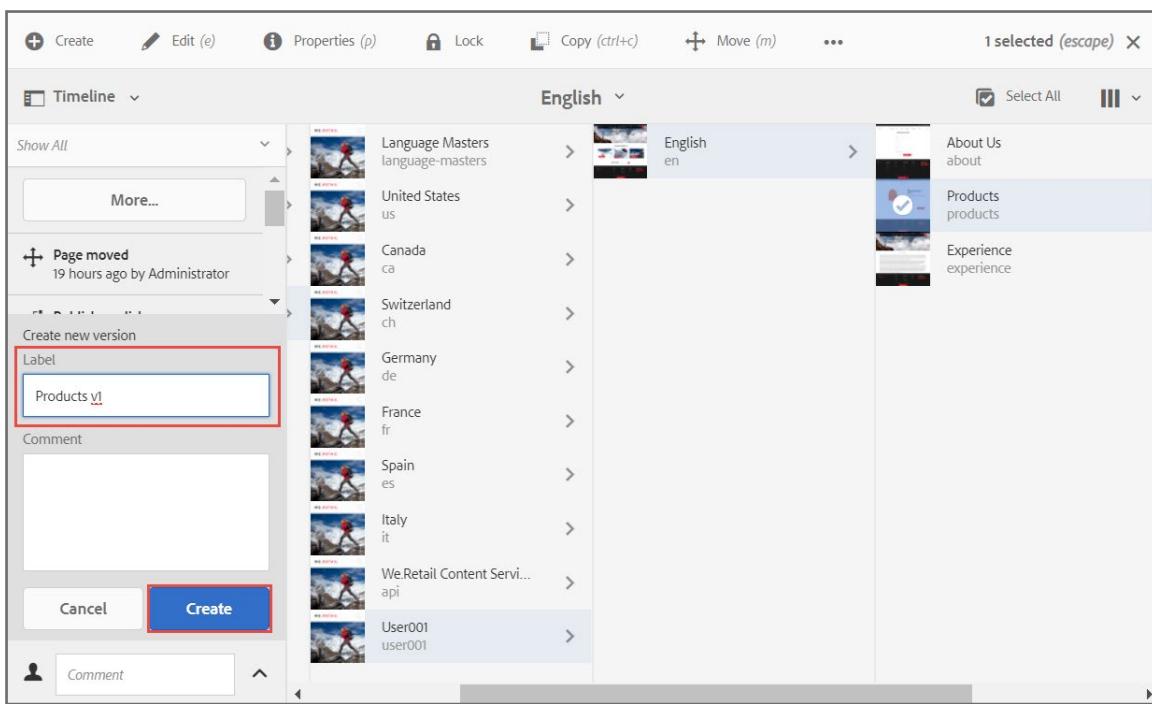
The screenshot shows the AEM interface with the 'English' language selected. On the left, there's a 'Timeline' sidebar with several recent actions listed. Below the timeline, there are buttons for 'Save as Version' and 'Start Workflow'. A red box highlights the 'Comment' button, which has a dropdown arrow pointing down. When the arrow is clicked, a list of comment options appears on the right side of the screen. The options include 'About Us', 'Products', and 'Experience', each with a small preview image and the corresponding label.

11. Click **Save as Version**, as shown:

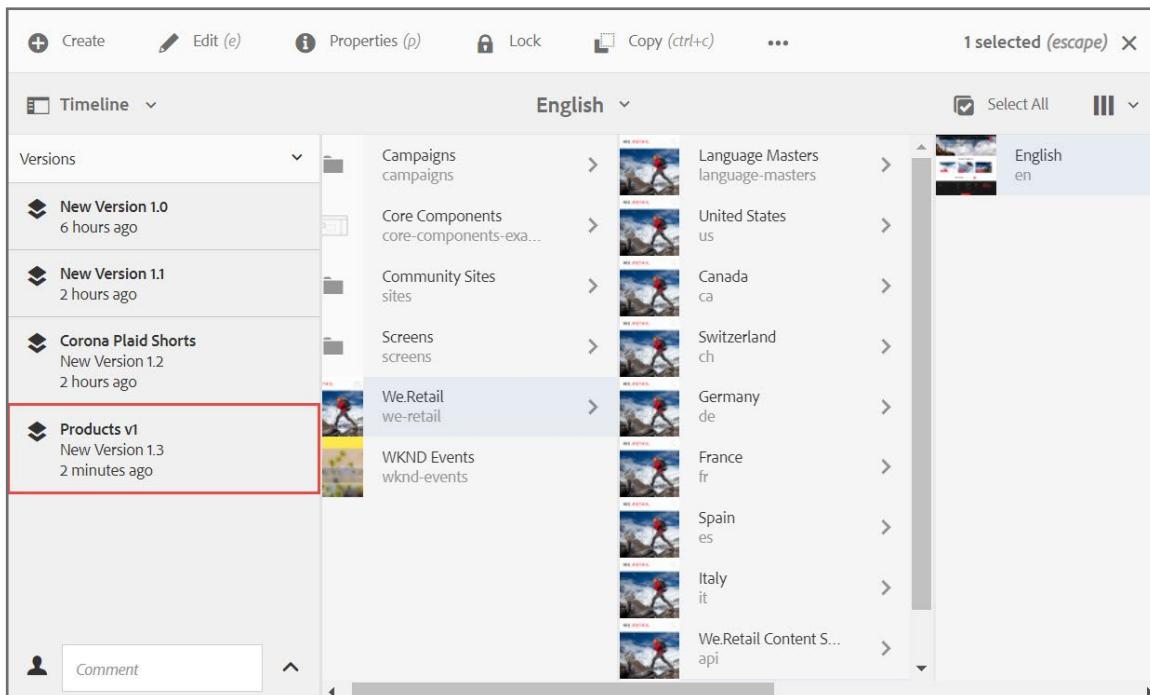
This screenshot is similar to the previous one, showing the AEM interface with the 'English' language selected. The 'Save as Version' button in the bottom-left corner of the main content area is highlighted with a red box. The rest of the interface, including the timeline, language switcher, and other buttons, is identical to the previous screenshot.

12. In the **Label** field, type an appropriate label. For example, type **Products v1**.

13. Click **Create**, as shown:



The newly created version details are displayed in the timeline, as shown:

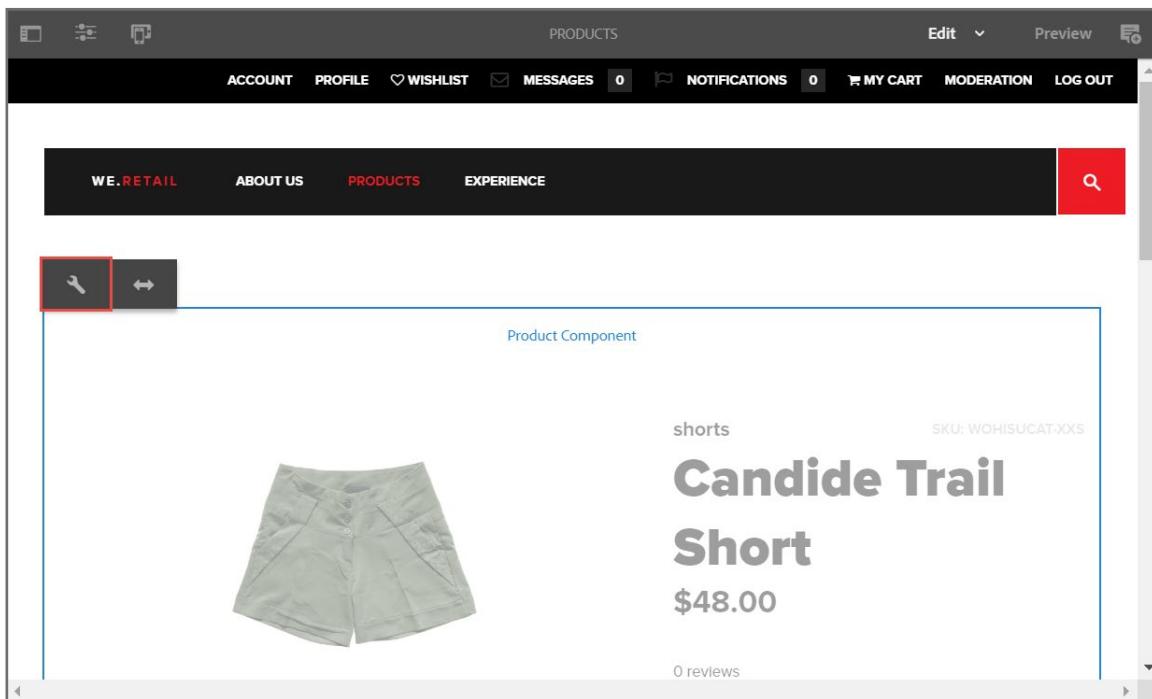


You will use this page in the next task.

Task 2: Edit a page version

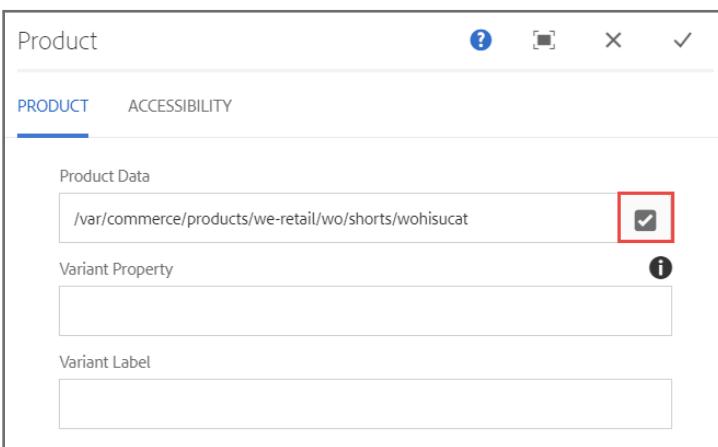
To edit a page version:

1. Ensure you are in the **Sites** console > **We.Retail** > **User0XX** > **English**.
2. Select the **Products** page and click **Edit** from the actions bar. The **Products** page is displayed in the edit mode.
3. Select the **Products** component and click the **Configure** icon from the components toolbar, as shown:

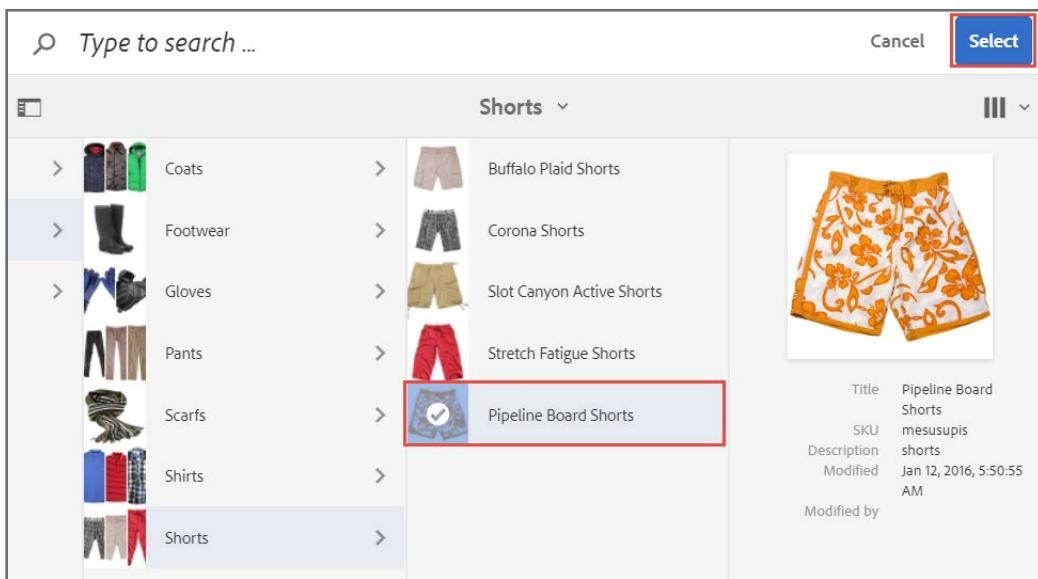


The **Product** window opens.

4. Click the **Open Selection Dialog** icon next to the **Product Data** field, as shown:

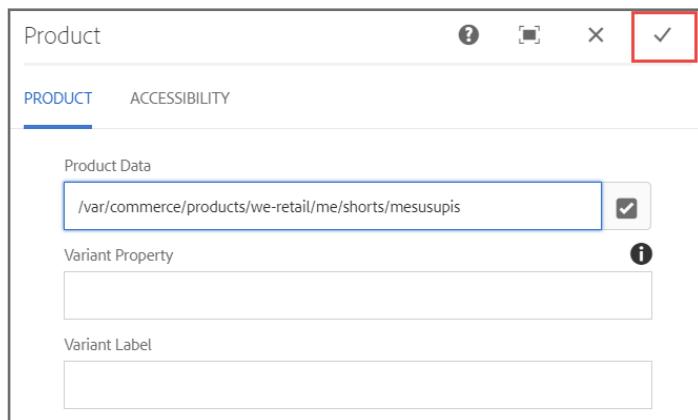


5. Navigate to **We.Retail > Men > Shorts**, select a shorts image, and click **Select**, as shown:



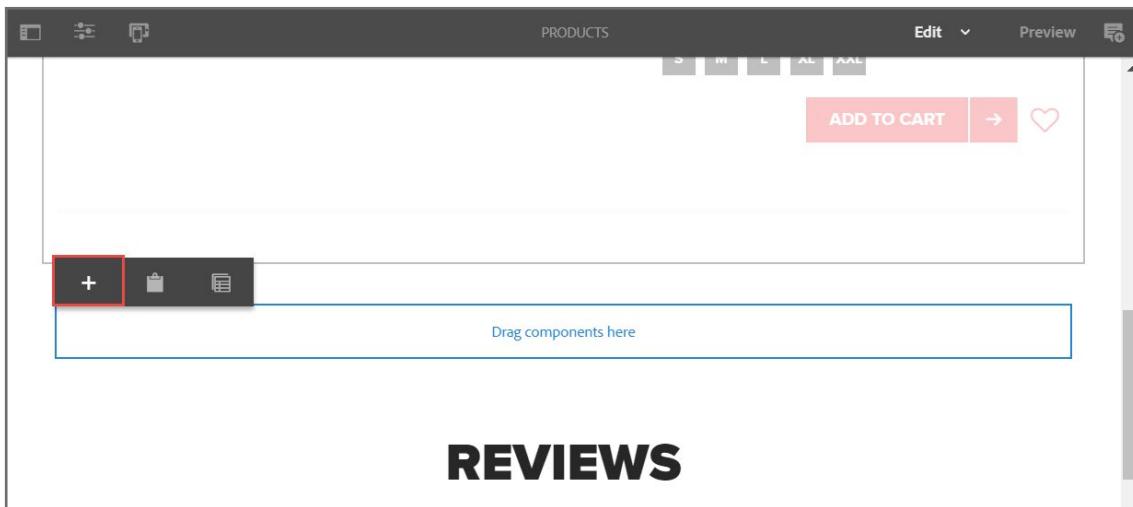
The product link is added in the **Product Data** field.

6. Click the **Done** icon, as shown:



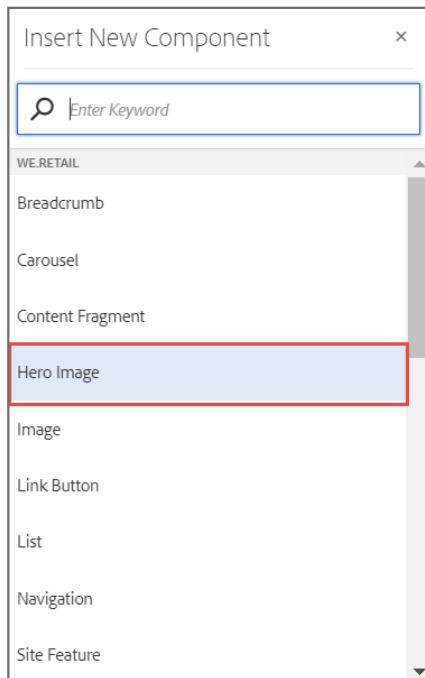
The **Product** component is displayed in the newly added product.

7. Click the **Drag components here** section and click the **Insert component** icon, as shown:



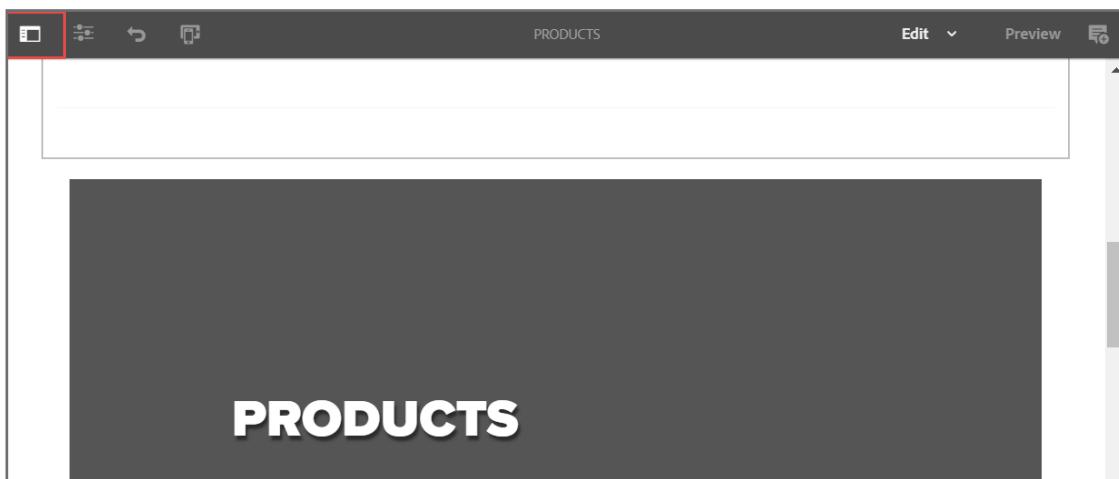
The **Insert New Component** window opens.

8. Select the **Hero Image** component, as shown:



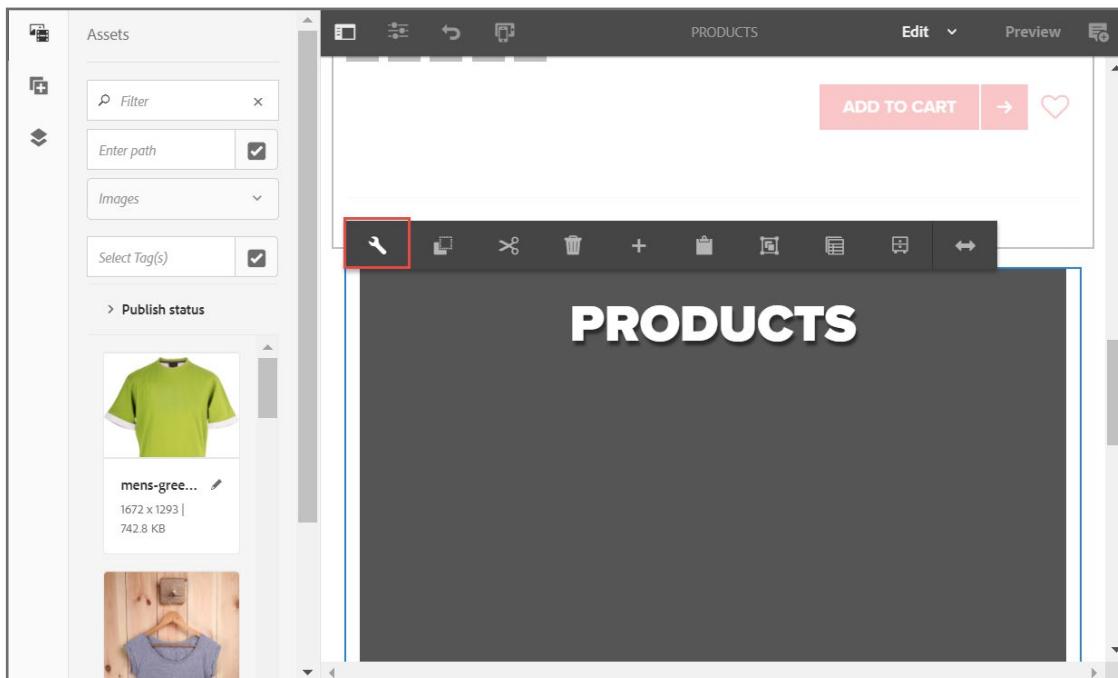
The **Hero Image** component is added to the page.

9. Click the **Toggle Side Panel** icon to open the **Assets** panel, as shown:



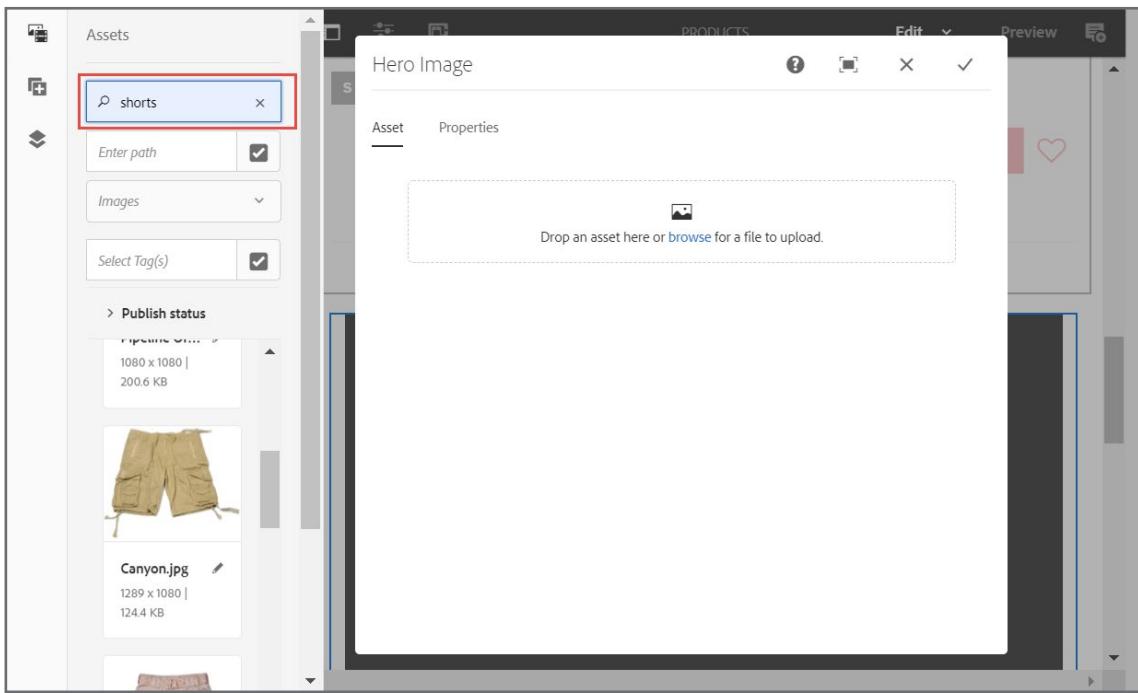
The **Assets** panel appears on the left of the page.

10. Select the **Hero Image** component and click the **Configure** icon from the component toolbar, as shown:



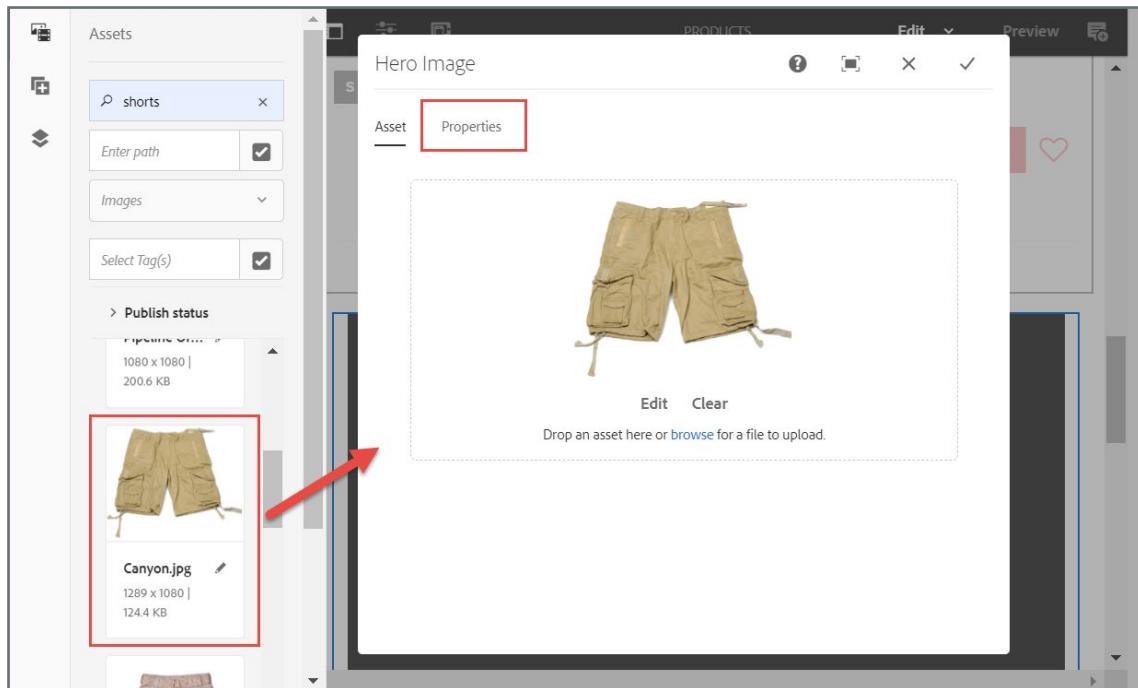
The **Hero Image** dialog box opens.

11. In the **Assets** field, search for shorts, as shown:

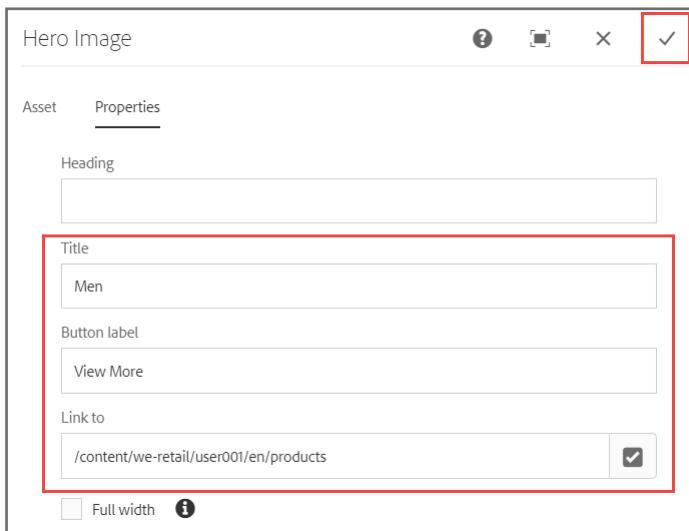


The available images for shorts are displayed.

12. Drag an image from the **Assets** panel to the dropzone and click the **Properties** tab, as shown:



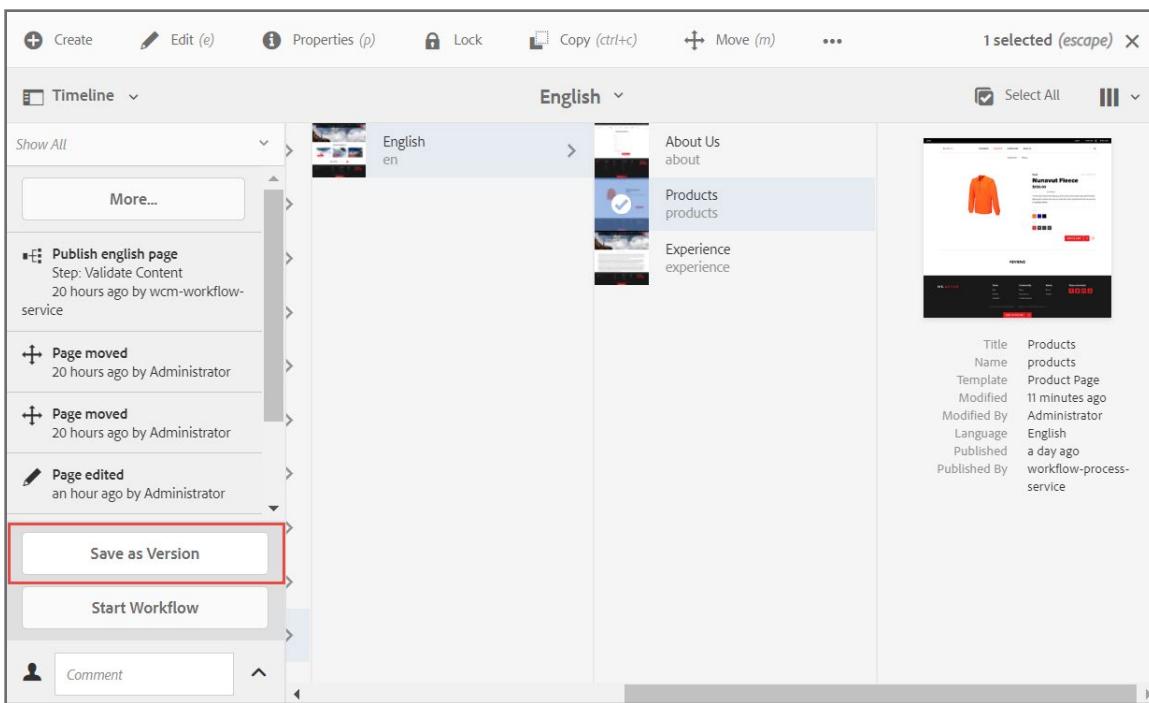
13. Type the appropriate details in the **Title** and **Button label** fields, provide the correct link in the **Link to** field, and click the **Done** icon, as shown:



The Hero Image component is added.

14. To create a new version (Products v2) of the page, navigate to the **Sites** console > **We.Retail > User0XX > English**.
15. Select the **Products** page and click the **Rail selector** icon.
16. Select **Timeline** from the drop-down menu. The timeline panel appears.
17. Click the arrowhead next to the **Comment** field to view the available options. The available options are displayed.

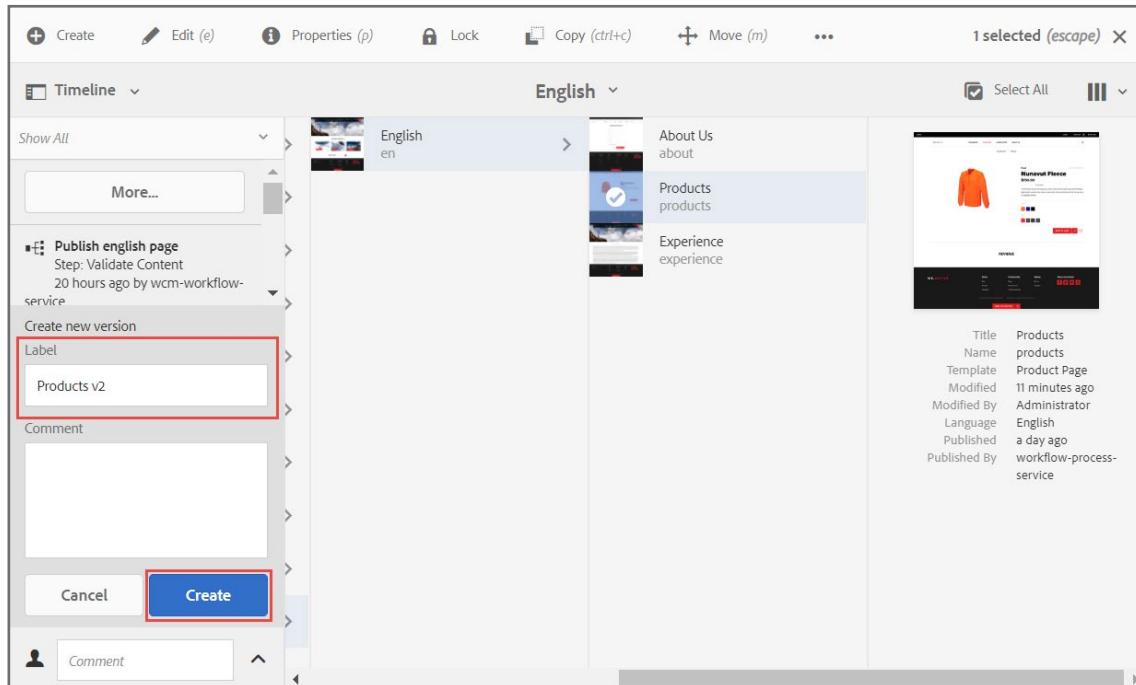
18. Click **Save as Version, as shown:**



The **Create new version** panel opens.

19. In the **Label field, type an appropriate label. For example, type **Products v2**.**

20. Click **Create, as shown:**



21. The newly created version details are displayed in the timeline, as shown:

The screenshot shows the AEM Sites console with the 'Timeline' panel selected. The left sidebar lists versions: 'New Version 1.0' (6 hours ago), 'New Version 1.1' (2 hours ago), 'Corona Plaid Shorts' (New Version 1.2, 2 hours ago), 'Products v1' (New Version 1.3, 10 minutes ago), and 'Products v2' (New Version 1.4, a few seconds ago). The 'Products v1' item is highlighted with a red box. The main panel displays the 'English' site structure under 'English'. It includes nodes like 'Campaigns', 'Core Components', 'Community Sites', 'Screens', 'We.Retail', and 'WKND Events', each with its own sub-nodes and preview icons.

Task 3: Preview a page version

To preview a page version:

1. From the **Sites** console, navigate to **We.Retail > User0XX > English**.
2. Select the **Products** page and click the **Rail selector** icon.
3. Select **Timeline** from the drop-down menu. The **Timeline** panel appears.
4. Select **Products v1** and click **Preview**, as shown:

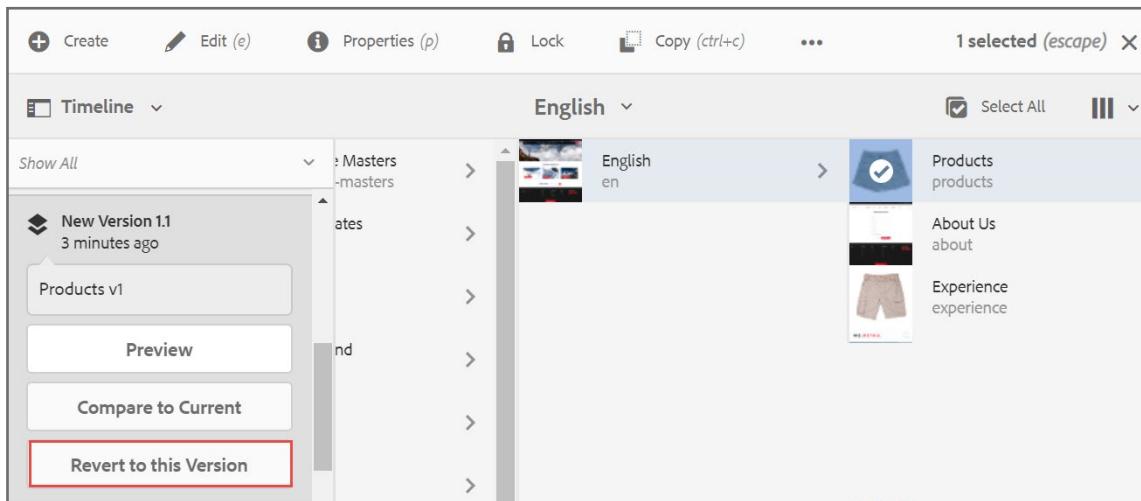
This screenshot is similar to the previous one, but the 'Preview' button for the 'Products v1' item in the Versions list is highlighted with a red box. The rest of the interface and site structure are identical to the first screenshot.

The **Products v1** page opens in a new tab in the browser. You cannot edit the **Products v1** page version.

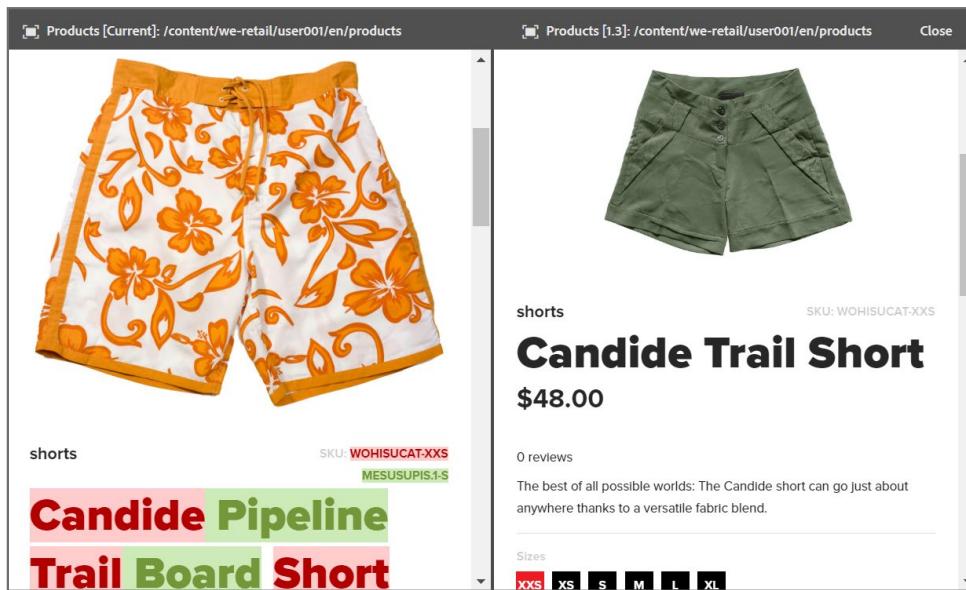
Task 4: Compare page versions

To compare page versions:

1. Navigate to the **Sites** console and ensure **Products v1** is still selected in the **Timeline** panel.
2. Click **Compare to Current**, as shown:



In the same tab of the browser, a different view of the current and previous page versions side-by-side, as shown. The differences between the two versions are highlighted. The new content added to the current version is highlighted in green and the deleted content is highlighted in red.



3. Click **Close**.

Task 5: Restore a page version

To restore a page version:

1. Ensure you are in the **Sites** console > **We.Retail > User0XX > English** and select the **Products** page.
2. From the **Timeline**, click **Products v1** and click **Revert to this Version** to retain the previous version of the **Products** page, as shown:

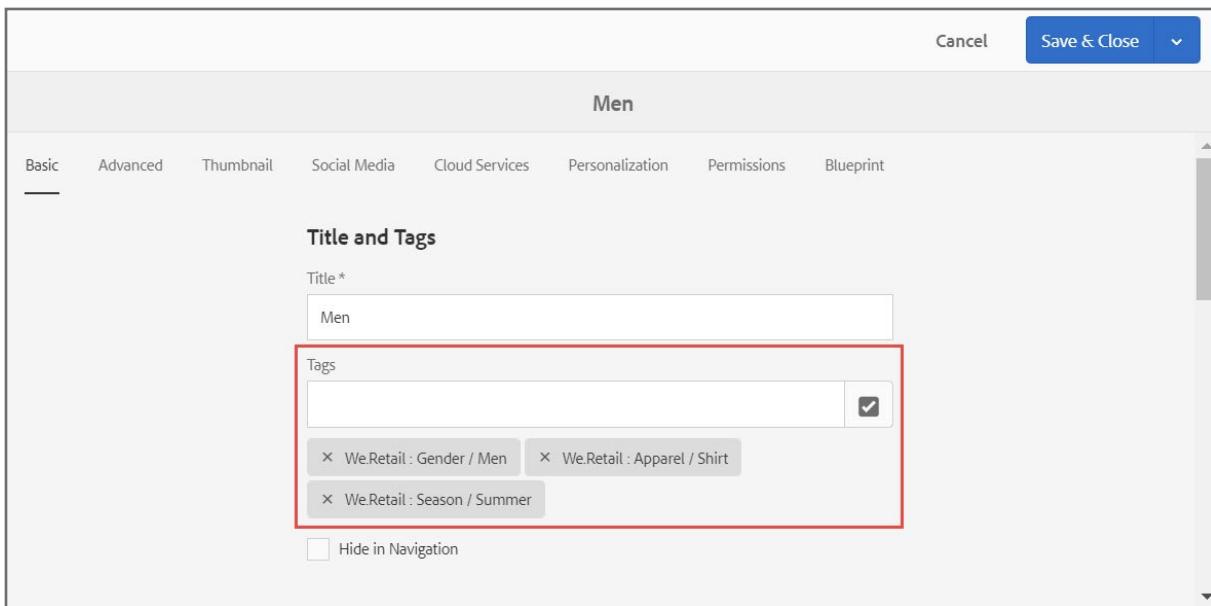
The screenshot shows the AEM Timeline interface. At the top, there are buttons for Create, Edit, Properties, Lock, Copy, and a selection tool. Below that, the Timeline dropdown is set to English. The main area shows a tree structure with 'Masters' and 'Pages'. Under 'Pages', 'Products' is selected. A context menu is open over the 'Products v1' item in the 'New Version 1.1' section. The menu items are: Products v1, Preview, Compare to Current, and Revert to this Version (which is highlighted with a red box). To the right of the timeline, there are preview cards for 'Products products', 'About Us about', and 'Experience experience'.

The changes made to the **Products v2** page is overridden and a success message is displayed.

3. To verify the changes, open the **Products** page in the page editor and ensure the page is reverted to the previous version.

Tags

You can use tags to classify and retrieve content in a website when needed. A tag is a piece of metadata assigned to a page, experience fragment, or an asset. You can add tags from the **Properties** window of a page.



Finding a Page by Using Tags

AEM provides a search functionality for tags with various filter options, such as keywords, path, tags, modified date, and publish status. You can save the search results and use them in the future. You can also edit the saved search and add additional filters to it, download it as a CSV Report, and delete any unwanted saved searches.

Exercise 6: Tag a page

Scenario: As an author, you need to implement a quick and easy method of classifying content within a website. You should use tags to classify content and use them as keywords or labels that can be attached to a page, an asset, or other content to enable search filtering by tags to simplify certain searches and identify the relevant content.

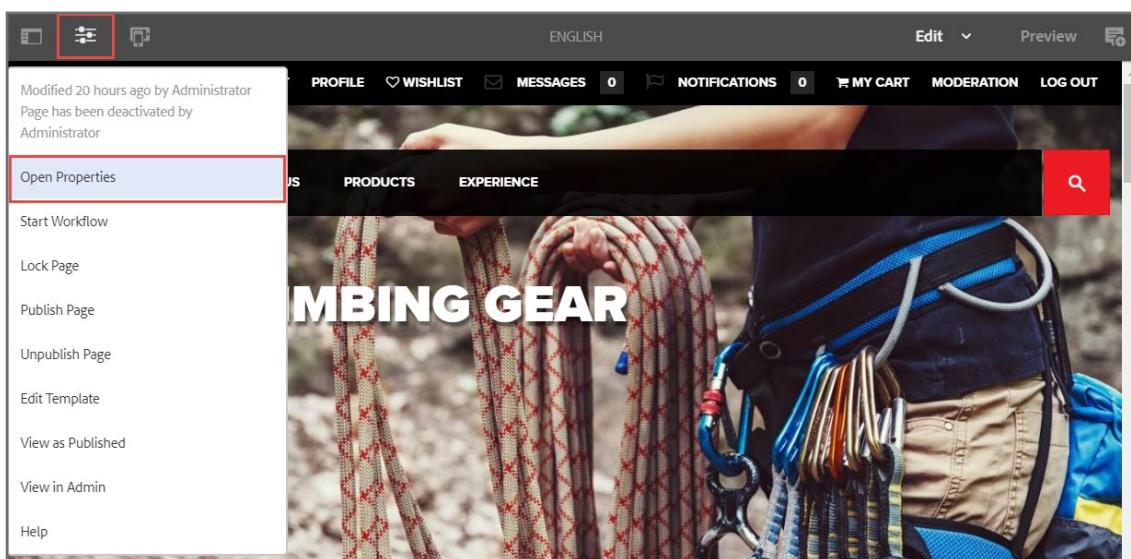
In this exercise, you will perform the following tasks:

1. Add tags to a page
2. Save search results based on tags

Task 1: Add tags to a page

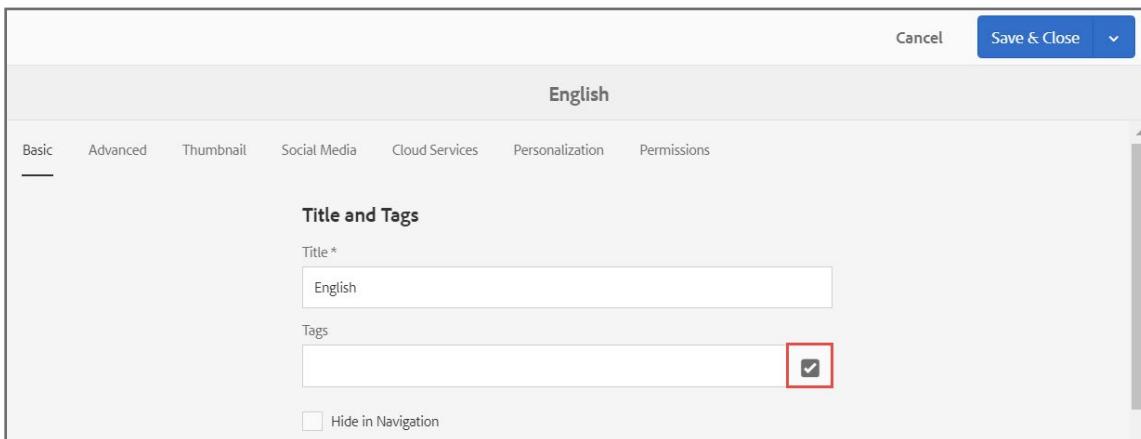
To add tags to a page:

1. From the **Sites** console, navigate to **We.Retail > User0XX** and select the **English** page. The actions bar appears at the top of the page.
2. Click **Edit** from the actions bar. The **English** page opens in the edit mode.
3. Click the **Page Information** icon from the page toolbar, and select **Open Properties** from the drop-down menu, as shown:

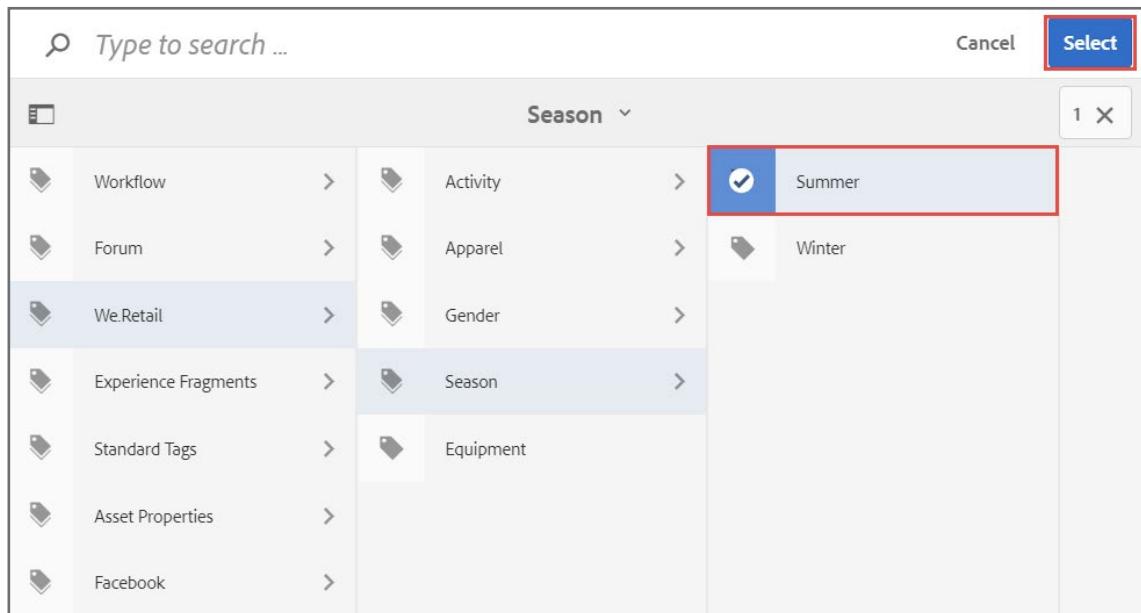


The Properties wizard opens on the **Basic** tab by default.

4. Click the **Open Selection Dialog** icon next to the **Tags** field, as shown:

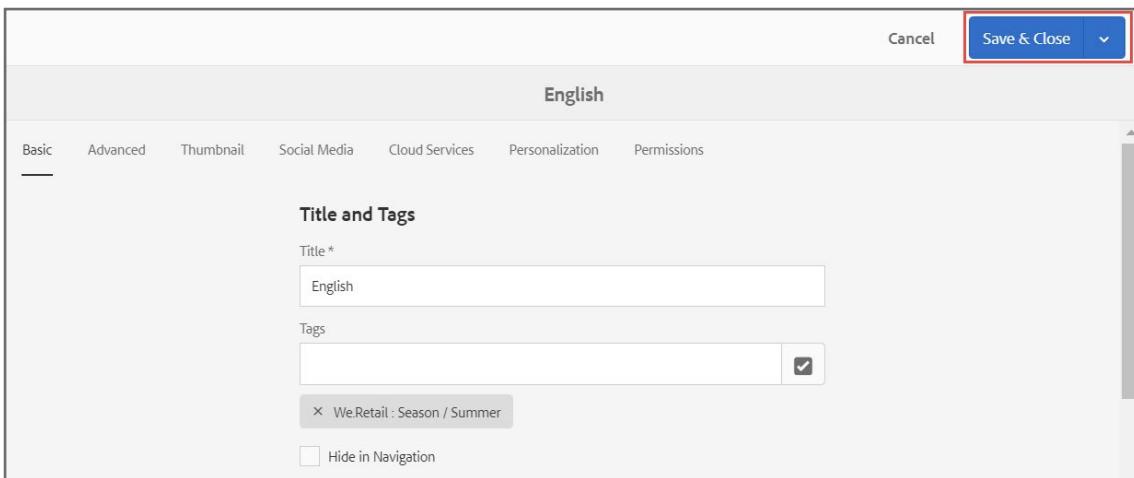


5. Navigate to **We.Retail > Season**, select **Summer**, and click **Select**, as shown:



The Summer tag is added to the page.

6. Click **Save & Close**, as shown:



A message, **The form has been submitted successfully** appears on the page, as shown:



Task 2: Save search results based on tags

To search for a tag and save the search results:

1. From the **Sites** console, click the **Search** (magnifying glass) icon from the actions bar, as shown:

The screenshot shows the Adobe Experience Manager (AEM) Sites console. At the top, there's a navigation bar with the AEM logo, the title "Adobe Experience Manager", a search icon (magnifying glass), a help icon, a notifications icon with a red notification count of 1, and a user profile icon. Below the navigation bar is a toolbar with icons for "Select All" (checkbox), "Create", and other site management functions. The main area is titled "User001". It displays a list of site structures under "Campaigns", "Community Sites", "Screens", and "We.Retail". To the right of each structure, there are preview thumbnails, names, and language codes (e.g., "language-masters", "en"). A red box highlights the magnifying glass search icon in the top right corner of the toolbar.

The search area opens.

2. Type **Summer** and press Enter, as shown:

The screenshot shows the search results for the term "Summer" in the AEM Sites console. The search bar at the top has "Location: Sites" and the query "Summer". The results list includes:

- Summer
- Summer male
- Summer female
- Summer male over 30
- Summer male under 30
- Summer female over 30
- Summer female under 30
- Men in summer
- Hiking summer clothing for women

Below the search results, the AEM navigation bar and site structure list are visible, identical to the one in the first screenshot.

The pages and assets that have the Summer tag appear.

- Click the left **Rail selector** icon to display the filters, as shown:

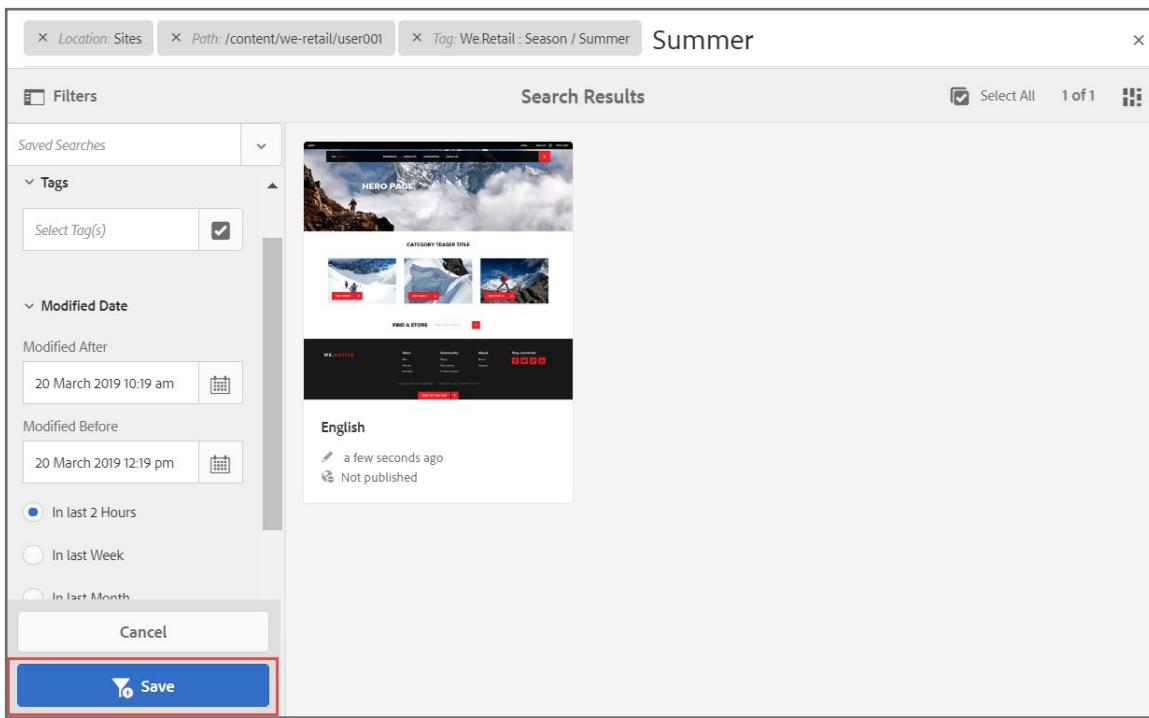
The screenshot shows the AEM search interface with the following details:

- Location:** Sites
- Title:** Summer
- Filters Panel:** The "Filters" button is highlighted with a red box. The panel contains:
 - Saved Searches
 - Select Search Directory (with a checked checkbox)
 - Tags (selected)
 - Modified Date
 - Publish Status
 - LiveCopy Status
- Search Results:** The results are displayed in a grid:
 - Men Running Category Teaser:** Published on May 9, 2016, Not published.
 - Hiking Summer Clothing for Women:** Published on May 9, 2016, Not published.
 - Men in Summer:** Published on May 16, 2016, Not published.
- Buttons:** Cancel and Save (Save has a blue background).

- In the fields within the **Filter** panel, perform the following steps:
 - In the **Select Search Directory** field, click the **Open Selection Dialog** icon, and specify the path as **/content/we-retail/user0XX**.
 - Expand the **Tags** drop-down menu, click the **Open Selection Dialog** icon, and select the **Summer** tag from **We-Retail/Season**.
 - Expand the **Modified Date** drop-down menu and select the **In Last 2 Hours** option.

The pages and assets matching the specified criteria appear.

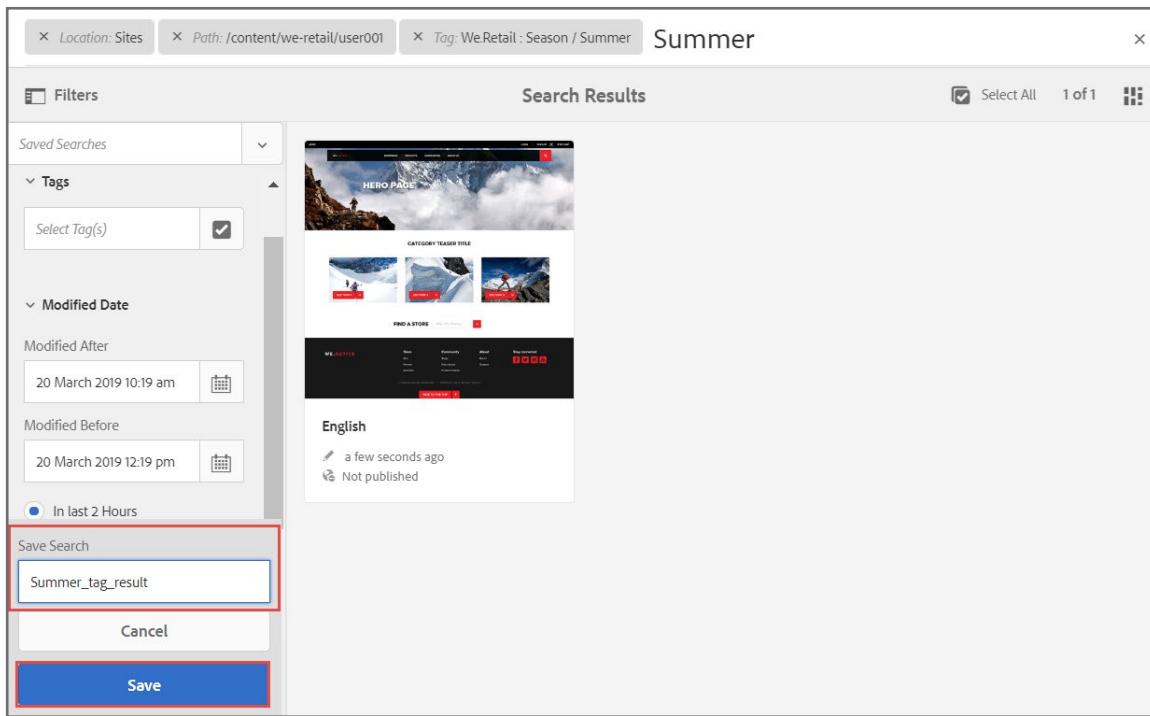
5. Click **Save**, as shown:



The **Save Search** field appears.

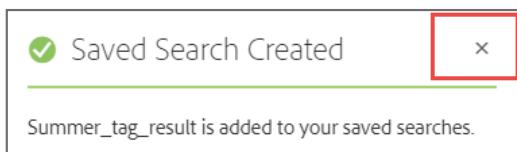
6. In the **Save Search** field, enter the appropriate search name. In this example, type **Summer_tag_result**.

7. Click **Save**, as shown:



The **Save Search Created** pop-up window appears.

8. Click **Close** icon at the upper right corner to close to close the pop-up window, as shown:



References

Use the following links for more information on:

- [Publishing Pages](#)
- [Page Versions](#)
- [Adding tags to a page](#)

Tools for Multi-User Collaboration

Introduction

When working in Adobe Experience Manager (AEM) to author content for websites, there can be instances when you need to collaborate with team members or other stakeholders to ensure that the content is accurate, and all the processes and standards of your organization are met. In those cases, AEM enables you to mark content for review, secure a page from editing by other users, synchronizing work between other users, and automatically assign review tasks by using workflows for approval of content to team members and stakeholders.

Objectives

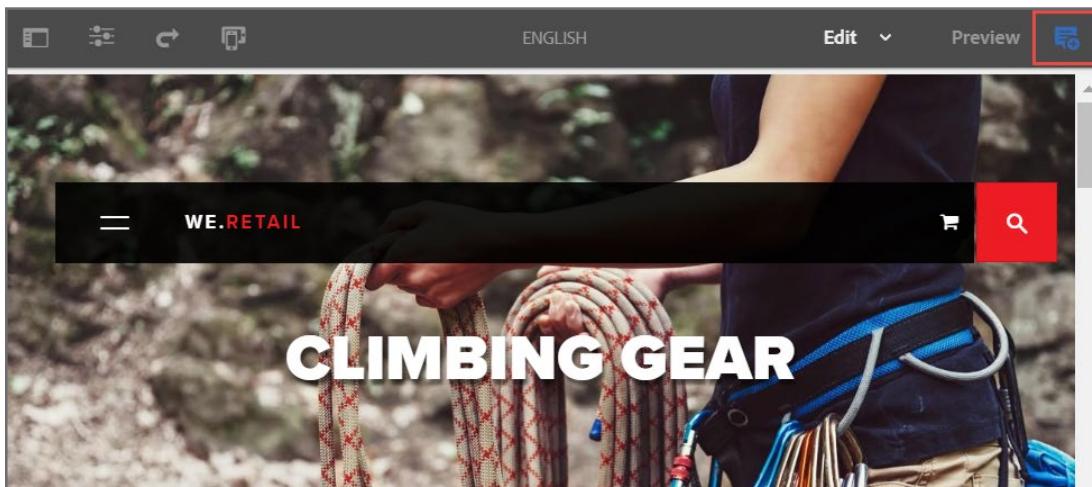
After completing this module, you will be able to:

- Annotate a page
- Explain securing a page by using the lock and unlock functions
- Lock and unlock a page
- Explain workflows in AEM
- Ensure quality of public content by using a workflow

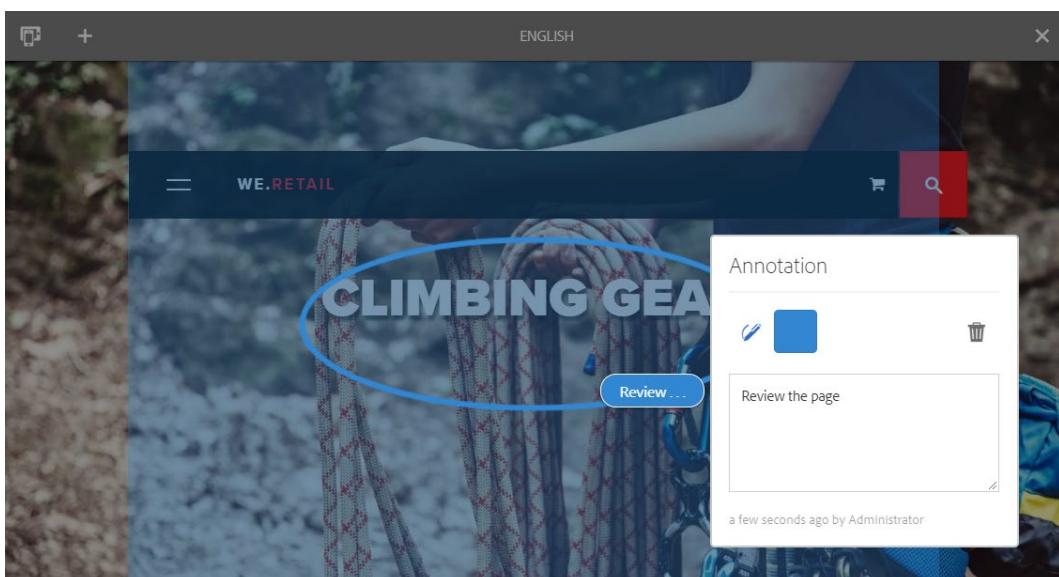
Annotating a Page

Annotations are visual indicators or text comments that you can add to a component. They are useful when you need to share and review the information about a page directly with your team members.

You can access the Annotation mode switcher, as shown, from the toolbar of the page editor.



You can add annotations to a component. The content of an annotation consists of texts and visual indicators that you can use to point to the element of a page to which the annotation is related.



Exercise 1: Add annotation to a page

Scenario: As an author, you must highlight content for review before publishing the website for a larger audience. You can use annotations to comment and highlight an area of concern on a page.

In this exercise, you will add an annotation to a page.

To add an annotation to a page:

- From the **Sites** console, navigate to **We.Retail > User0XX** (where 0XX is the user number assigned to you for this training) and select the **English** page, as shown:

The screenshot shows the AEM Sites console interface. At the top, there's a toolbar with actions like Create, Edit, Properties, Lock, Copy, Move, and a selection bar indicating "1 selected (escape)". Below the toolbar is a breadcrumb navigation path: "Campaigns > Language Masters > English". The "English" page is highlighted with a red box. To the right of the navigation path, there's a preview of the "Hero Page" with a snowy mountain scene. Further down, detailed page information is listed:

Title	English
Name	en
Template	Hero Page
Modified	15 minutes ago
Modified By	Administrator
Language	English
Published	Not published

The actions bar appears at the top of the page.

2. Click **Edit** from the actions bar, as shown:

The screenshot shows the AEM navigation interface. At the top, there is a toolbar with various icons: Create, Edit (e), Properties (p), Lock, Copy (ctrl+c), Move (m), and a three-dot menu. The 'Edit (e)' button is highlighted with a red box. Below the toolbar, the page title is 'User001'. The left sidebar lists several categories: Campaigns, Community Sites, Screens, and We.Retail. Under 'We.Retail', there are sub-items for various countries (Germany, France, Spain, Italy) and services (We.Retail Content Service, User001). On the right side, there is a preview of a website page titled 'HERO PAGE' with a 'FIND A RETAILER' button. Below the preview, there is a table with details: Title (English), Name (en), Template (Hero Page), Modified (18 minutes ago), Modified By (Administrator), Language (English), and Published (Not published).

The **English** page opens in the **Edit** mode.

3. Click the **Annotate** icon from the page toolbar, as shown:

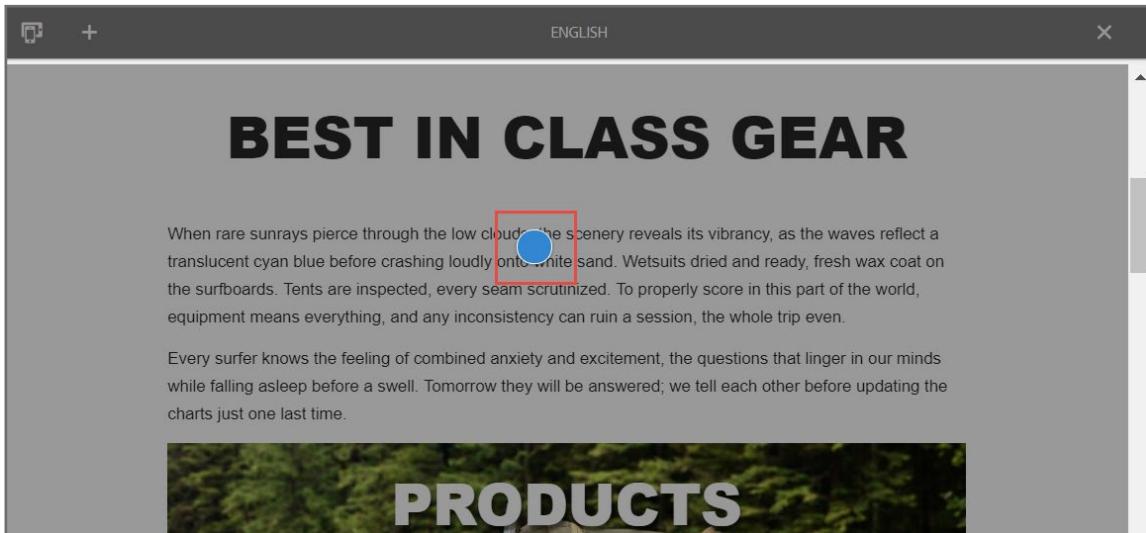
The screenshot shows the AEM page editor in annotation mode. The top toolbar includes icons for Create, Properties, Lock, Copy, Move, and a three-dot menu. The current view is 'ENGLISH'. The page content features a banner with the text 'WE.RETAIL' and 'CLIMBING GEAR'. The 'Annotate' icon, which looks like a pencil inside a square, is highlighted with a red box in the top right corner of the toolbar.

The annotate mode opens.

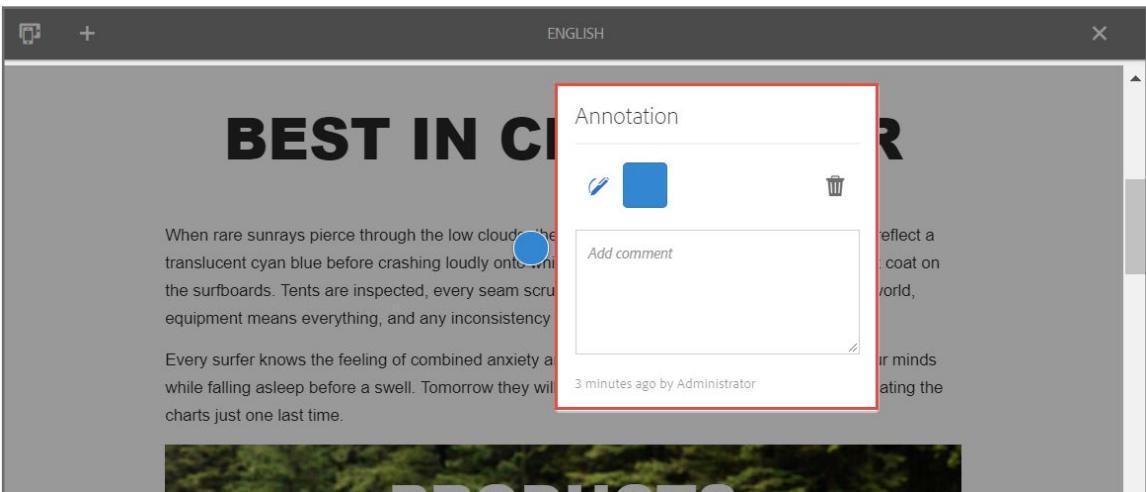
4. Click the **Add annotation** icon to annotate a component.



5. Click a component that you want to annotate. A blue dot appears on the component, as shown:



6. Click the blue dot. The **Annotation** dialog box appears, as shown:

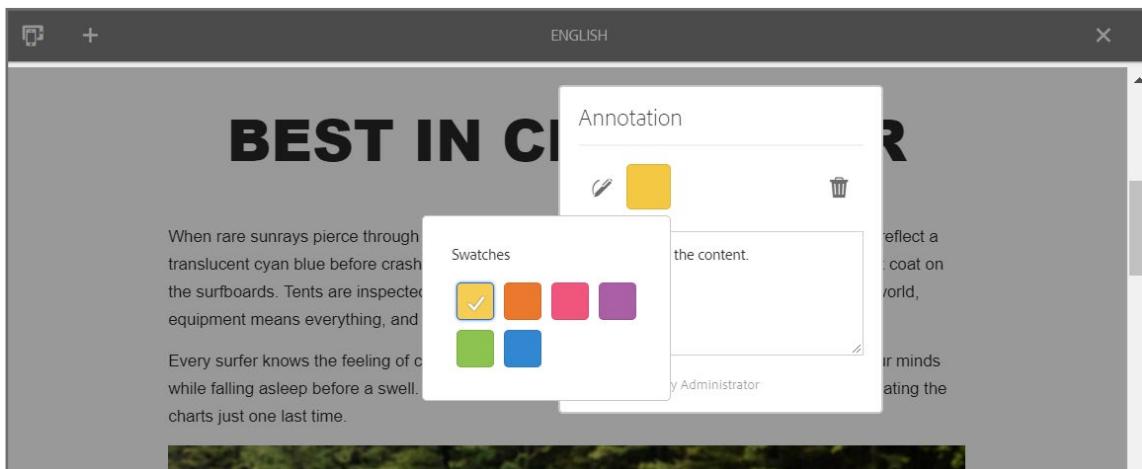


- Type appropriate details in the **Add comment** field. For example, type **Please verify the content**, and click the blue square icon to change the color of the annotation, as shown:



The **Swatches** color palette opens.

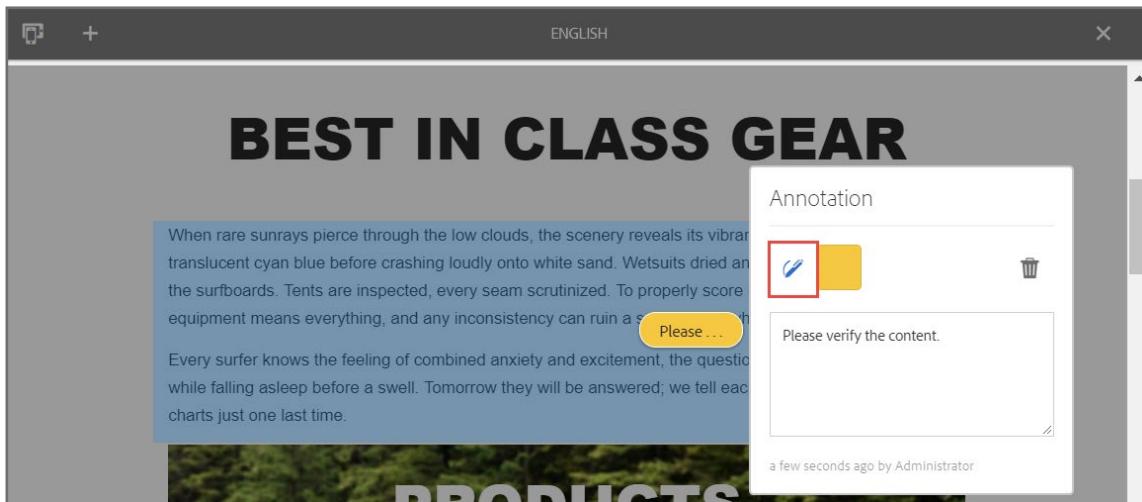
- Select a color to highlight the annotation, as shown:



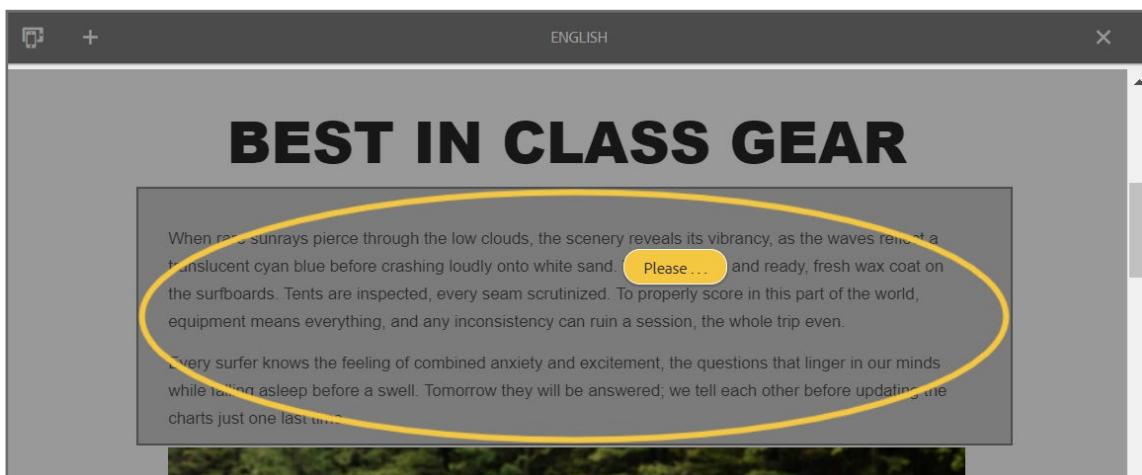
- After adding the annotation, click anywhere on the page.

The **Annotation** dialog box minimizes and turns to an oval-shaped button with the first few letters of the comment. You can click the oval button to maximize the **Annotation** dialog box again.

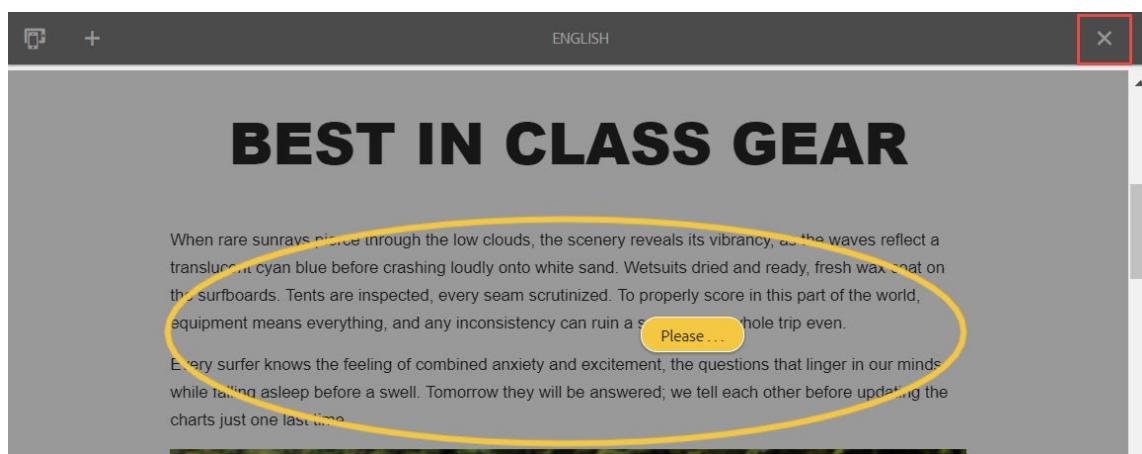
10. To highlight the component, maximize the **Annotation** dialog box again, as described in the previous step result, and click the **Add sketch** icon from the **Annotation** dialog box to reveal the sketch drawer, as shown:



11. Draw an oval shape above the text component, as shown.



12. Click **Close (X)** icon to exit from the annotate mode, as shown:

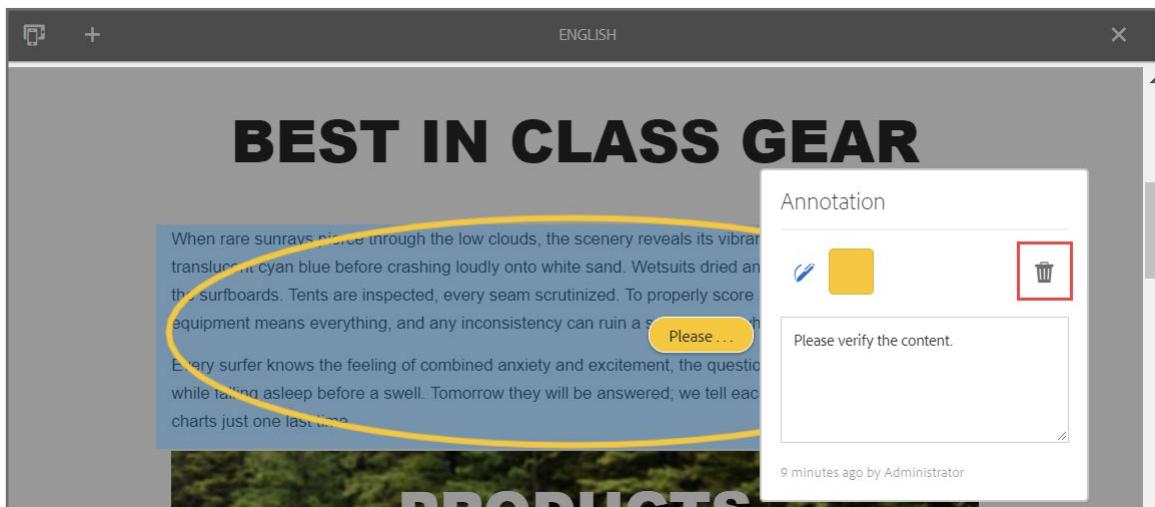


13. To count and view the annotations on a page, click 1 beside **Preview**, as shown, and take the appropriate action described in the comment field of the annotation:



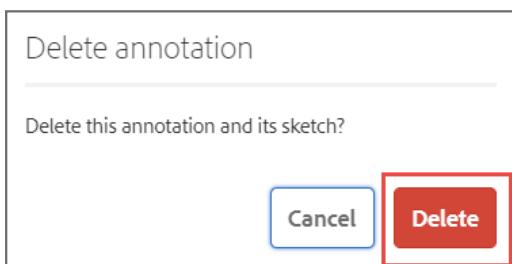
14. To delete annotations on a page:

- Click the number next to the **Preview** option. the page opens in annotate mode.
- Click the oval button. The **Annotation** dialog box opens.
- Click the **Delete annotation** icon from the **Annotation** dialog box, as shown:

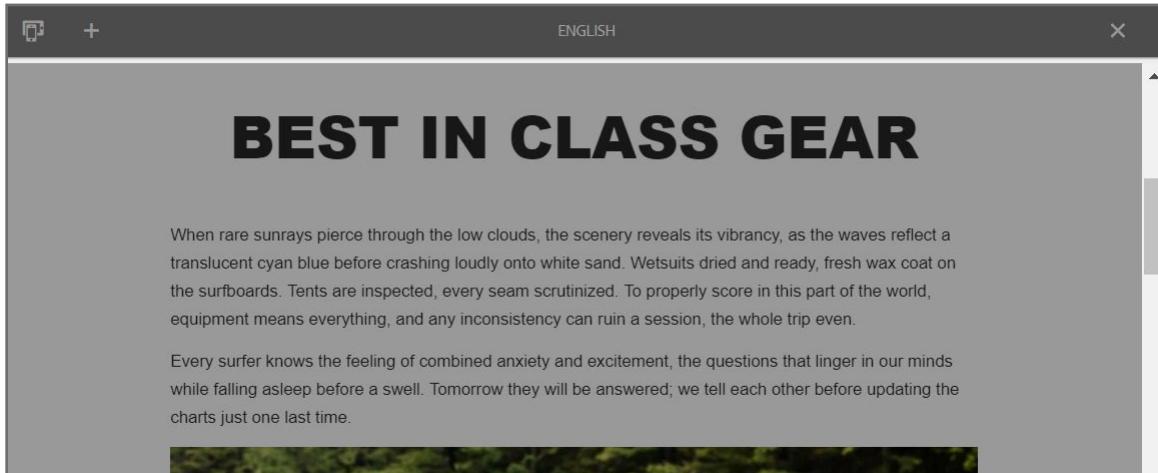


The **Delete annotation** pop-up window opens.

15. Click **Delete**, as shown:



The annotation is deleted, as shown:



Locking and Unlocking Pages

Lock a Page

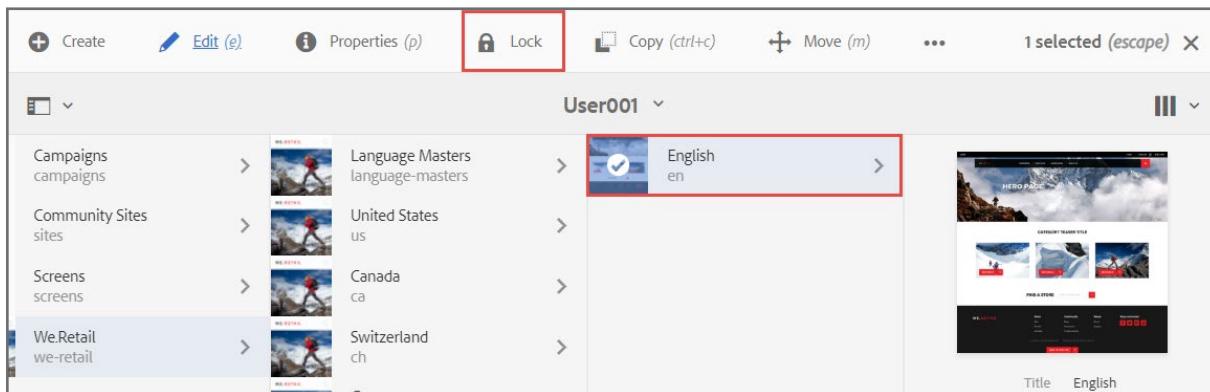
The Lock a page option restricts other users from modifying the content of a page. This option is useful when you work on a page over a long period of time or when you need to secure a specific state of the content on a page, so that no other users can make changes to the content. This helps synchronize the work done between various authors on a page.

You can lock a page from:

- Actions bar
- Page Information menu

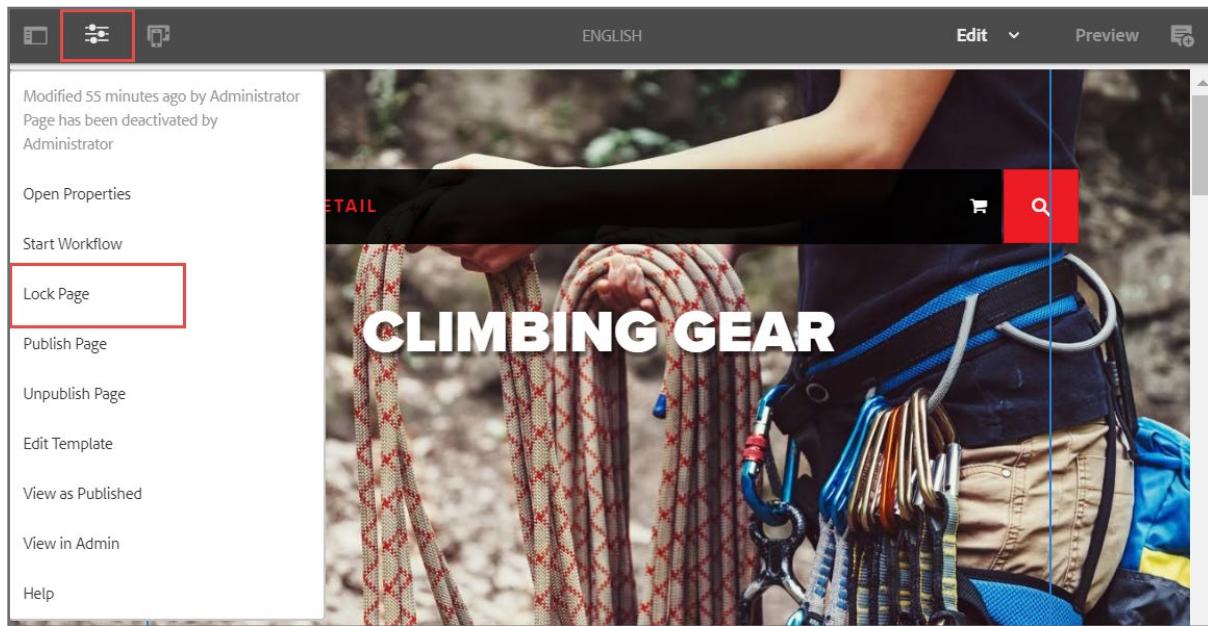
Lock a Page from the Actions Bar

You can select a page you want to lock, and click **Lock** from the actions bar, as shown. The page is locked.



Lock a Page from the Page Information Menu

You can open a page in the page editor and select **Lock Page** from the **Page Information** drop-down menu, as shown. The page is locked.



Note: The only person who can unlock the page is the user who locked it, has administrator access, or is granted impersonation rights.

Unlock a Page

After you lock a page, you must unlock the page for other users to edit or work on the page.

You can unlock a page from:

- Actions bar
- Page toolbar
- Page information menu

Unlock a Page from the Actions Bar

From the **Sites** console, you can select the page that you locked and click **Unlock** from the actions bar, as shown. The page is unlocked.

The screenshot shows the AEM Sites console interface. At the top, there is a navigation bar with icons for Create, Edit (e), Properties (p), and Unlock (which is highlighted with a red box). Below the navigation bar is a search bar labeled "User001". The main area displays a tree view of site structures under "User001". One item, "We.Retail", has its status changed to "Locked" (indicated by a lock icon) and its language set to "English en". To the right, a preview window shows a sample page with a hero header and three cards. At the bottom right of the preview window, it says "Title English".

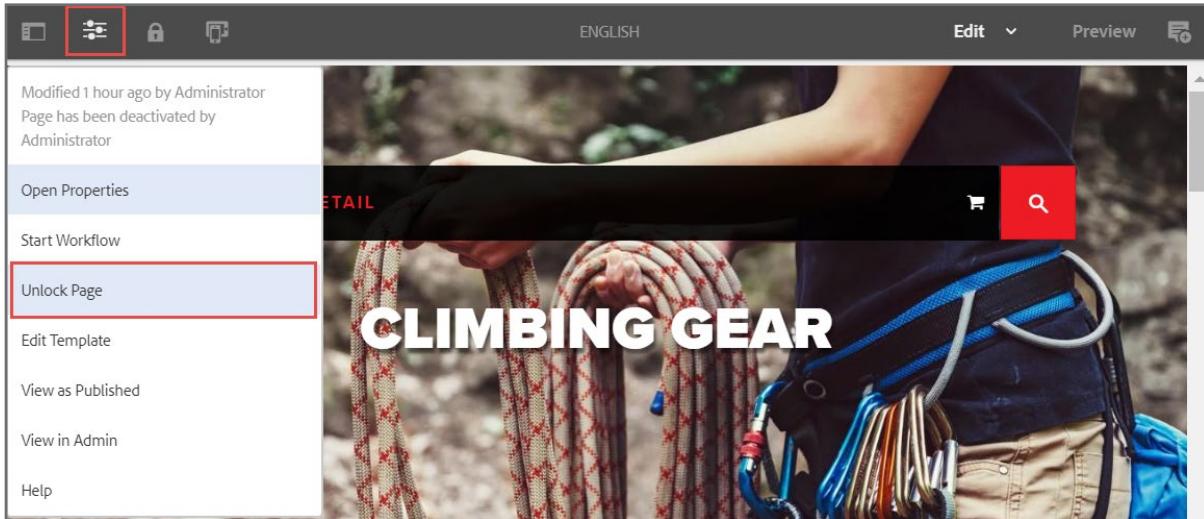
Unlock a Page from the Page Toolbar

You can open the page you locked in the page editor. From the page toolbar, click the **Locked page** icon, and then click **Unlock page** in the **Locked page** pop-up window, as shown. The page is unlocked.

The screenshot shows the AEM page editor interface. At the top, there is a toolbar with various icons, one of which is a lock icon (highlighted with a red box). The main content area shows a blurred preview of a website page. A modal dialog box is open in the center, titled "Locked page". It contains the message: "You currently locked this page, which prevents other users from editing it." At the bottom of the dialog are two buttons: "Cancel" and "Unlock page" (which is highlighted with a red box).

Unlock a Page from the Page Information Menu

You can open the page you locked in the page editor. Click the **Page information** icon and select **Unlock Page** from the **Page Information** drop-down menu. The page is unlocked.



Exercise 2: Lock and unlock a page

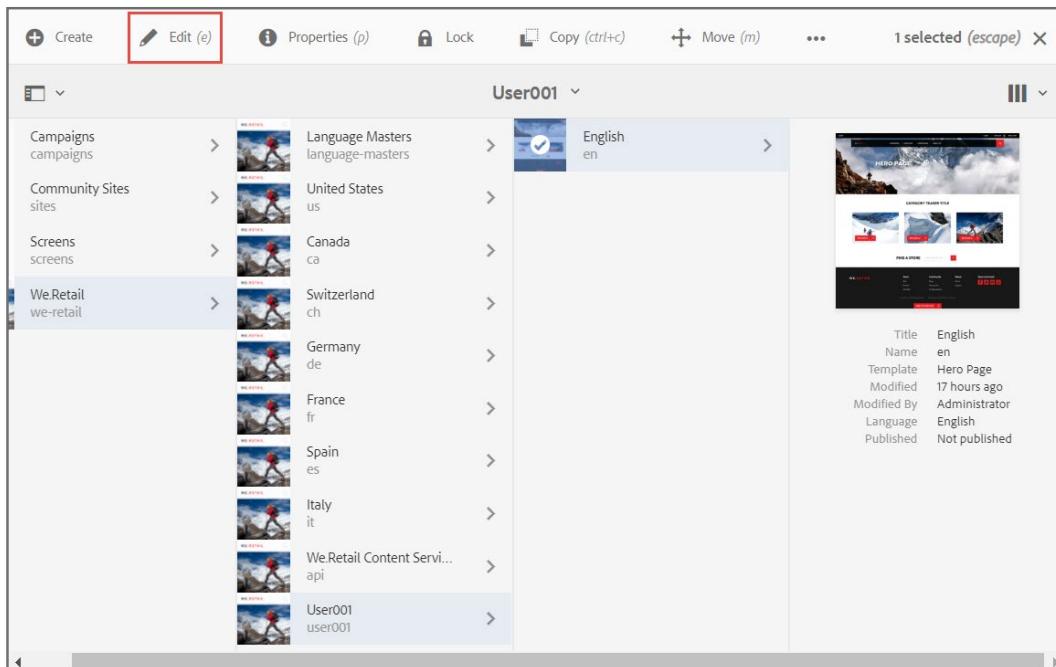
Scenario: As an author, you must restrict other users from modifying the page content you are working on. However, after authoring the content, you must also unlock the page for other users to make content modifications.

In this exercise, you will perform the following tasks:

1. Lock a page
2. Unlock the page

Task 1: Lock a page

1. From the **Sites** console, navigate to **We.Retail > User0XX** and select the **English** page. The actions bar appears at the top of the page.
2. Click **Edit**, as shown:

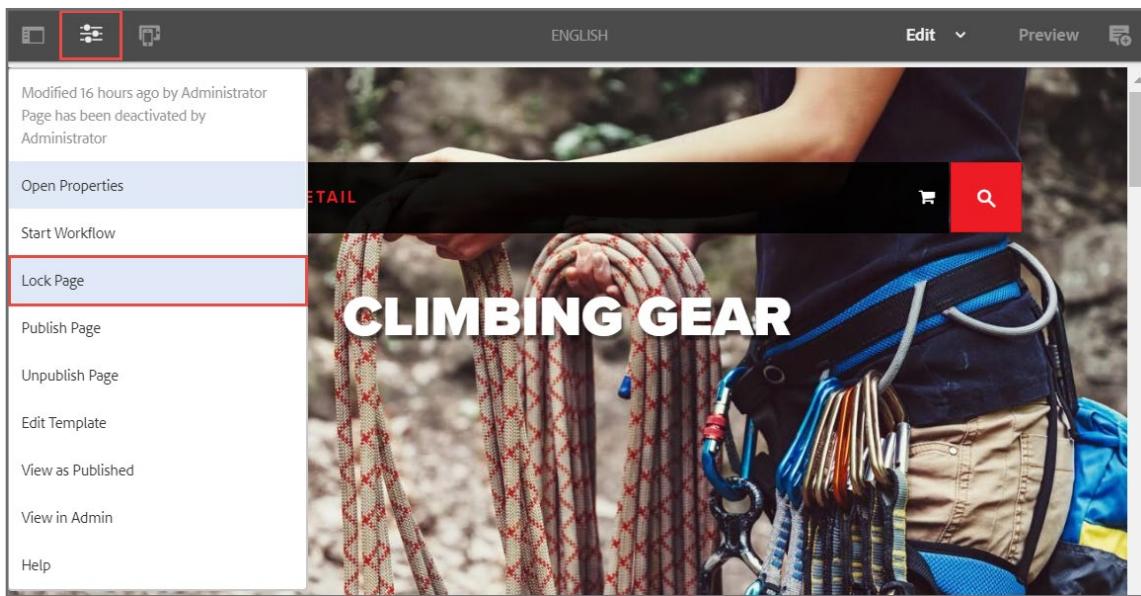


The screenshot shows the AEM Sites console interface. At the top, there's a navigation bar with 'Create', 'Edit (e)' (which is highlighted with a red box), 'Properties (p)', 'Lock' (with a lock icon), 'Copy (ctrl+c)', 'Move (m)', and a three-dot menu. Below the bar, a message says '1 selected (escape) X'. The main area is titled 'User001'. On the left, there's a tree view of site structures under 'We.Retail': 'Campaigns campaigns', 'Community Sites sites', 'Screens screens', and 'We.Retail we-retail'. Under 'We.Retail', there are nodes for 'Language Masters language-masters', 'United States us', 'Canada ca', 'Switzerland ch', 'Germany de', 'France fr', 'Spain es', 'Italy it', 'We.Retail Content Servi... api', and 'User001 user001'. To the right of the tree view, there's a preview of the 'English en' page, which features a hero image of a climber and some text. Below the preview, detailed information about the page is listed in a table:

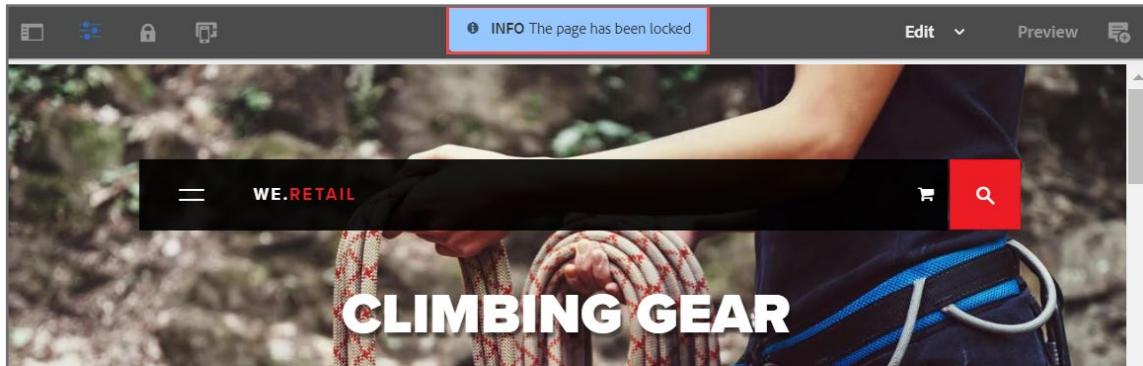
Title	English
Name	en
Template	Hero Page
Modified	17 hours ago
Modified By	Administrator
Language	English
Published	Not published

The **English** page opens in the edit mode.

3. Click the **Page Information** icon from the page toolbar and select **Lock Page** from the drop-down menu, as shown:



A blue information showing **The page has been locked** appears on the page, as shown:



Task 2: Unlock the page

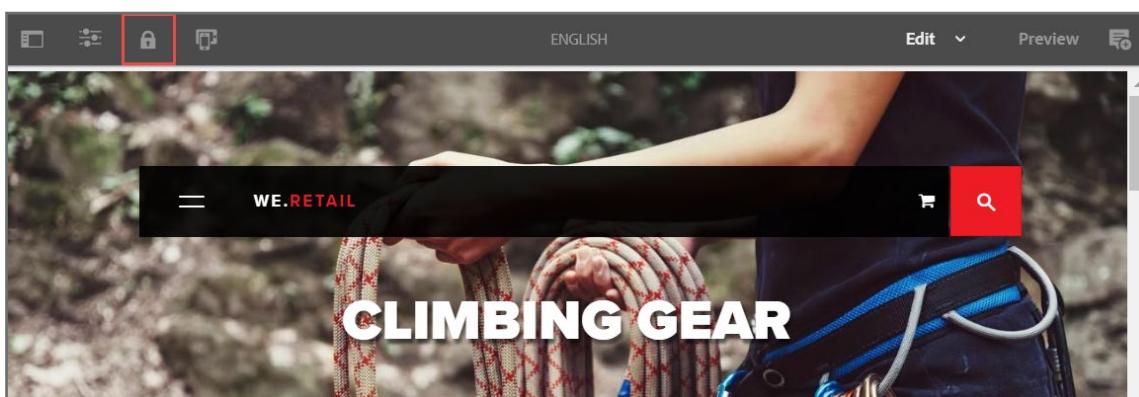
- From the **Sites** console, navigate to **We.Retail > User0XX** and select the **English** page. The actions bar appears at the top of the page.
- Click **Edit** from the actions bar, as shown:

The screenshot shows the AEM Sites console interface. In the top navigation bar, the 'Edit (e)' button is highlighted with a red box. Below the navigation bar, a tree view lists various site structures under 'User001'. On the right side of the screen, a preview of the 'English' page is displayed, showing a hero image of a climber and some menu items. Below the preview, detailed information about the page is listed in a table:

Title	English
Name	en
Template	Hero Page
Modified	17 hours ago
Modified By	Administrator
Language	English
Published	Not published

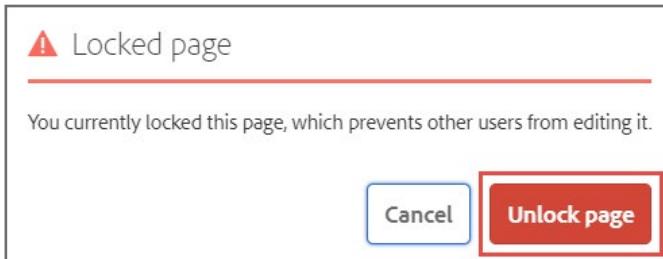
The **English** page opens in the edit mode.

- Click the **Locked page** icon from the page toolbar.

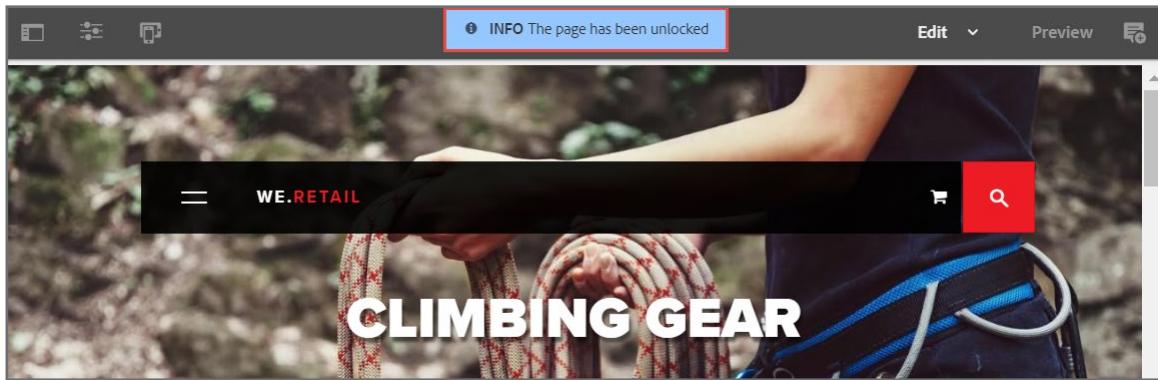


The **Locked page** pop-up window appears.

4. Click **Unlock page**, as shown:



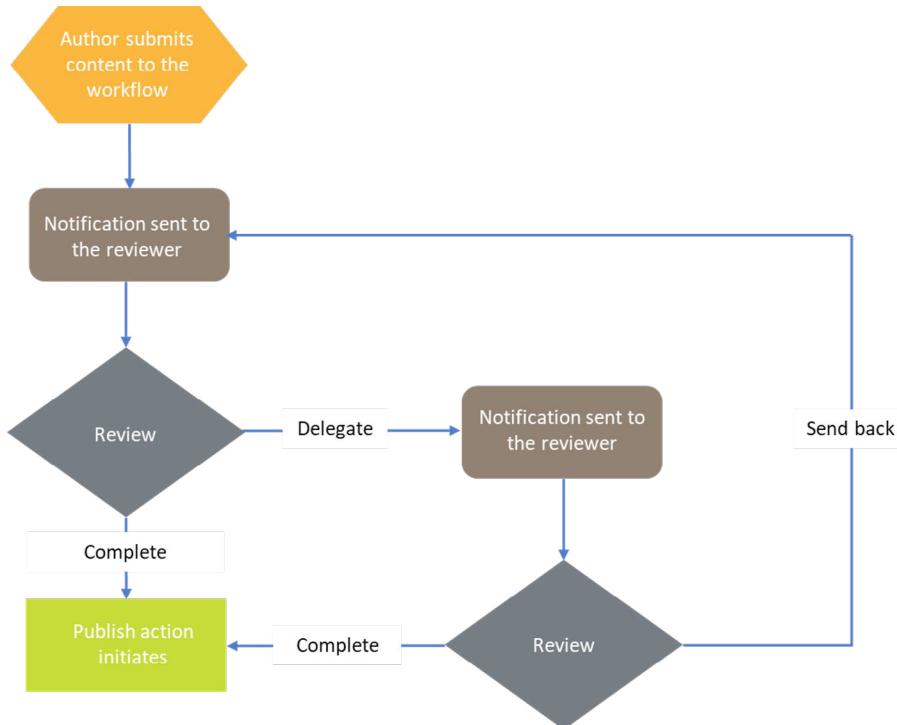
A blue information, showing **The page has been unlocked**, appears on the page, as shown:



Workflows in AEM

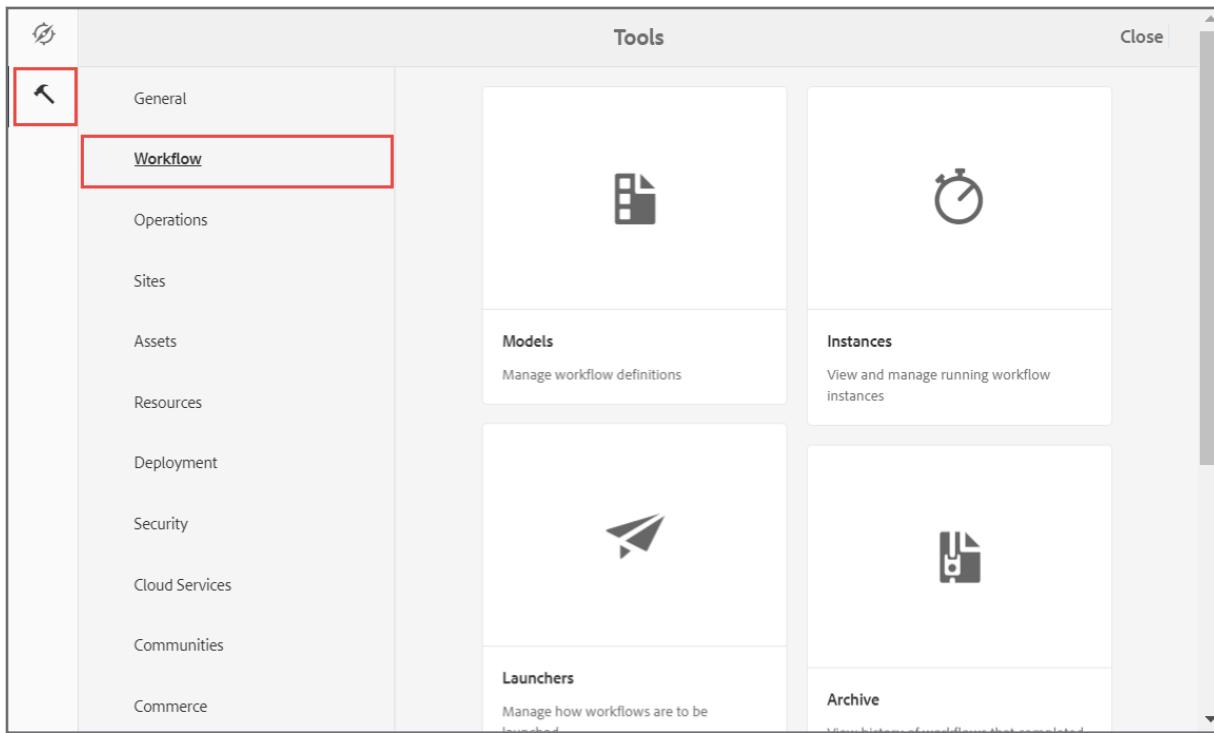
Workflows help automate tasks and coordinate user inputs in various stages of the website publishing process in AEM. For instance, in the process of creating and publishing websites, several stakeholders are involved in reviewing, approving, and signing-off the content. In such instances, workflows can automate tasks and collect necessary inputs from various stakeholders.

The below diagram shows the workflow process:

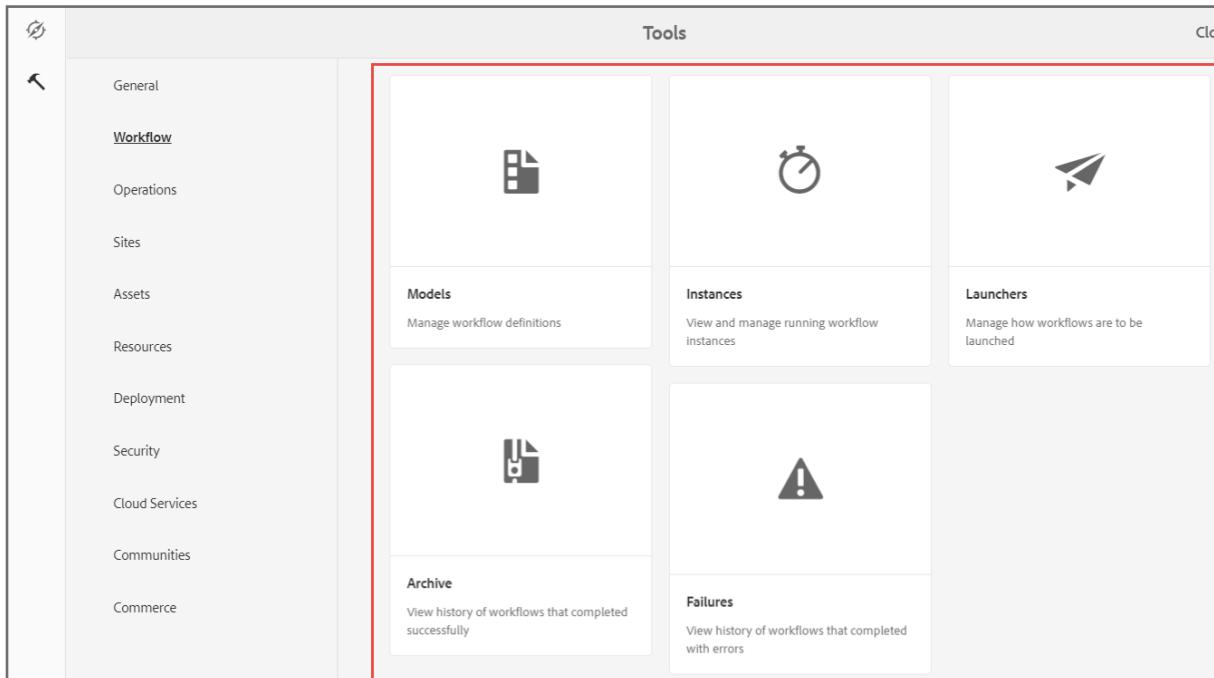


Workflow Console

The **Workflow** console is a centralized location for managing all AEM workflows. You can access the **Workflow** console from the **Tools** panel, as shown:



The **Workflow** console consists of the Models, Instances, Launchers, Archive, and Failures subconsoles, as shown:



The following table describes the functionality of the subconsoles in the **Workflow** console:

Sub-consoles	Functionality
Models	Help create, edit, or delete workflows.
Instances	Help display the details of the active workflow instances. These instances are version dependent. Instances also help terminate, suspend, rename, and open the history of workflow instances.

Launchers	Help define whether a workflow should be launched when a specific event occurs in AEM.
Archive	Helps display the workflow instances that are completed and terminated. You can view the history of the workflow instance by clicking Open History .
Failures	Help monitor and manage failed workflow instances. Failures provide the terminate, retry step, terminate, and retry options to complete workflow steps.

Workflow Steps

Each step in a workflow can contain any number of actions and associated conditions. For example, a step in a publish workflow can involve an approval task from an editor. Some steps in the workflow may require manual intervention and other steps can be automatic.

The following table describes the two most commonly used workflow steps:

Step	Description
Participant	Assigns a task to a user or a group of users
Process	Executes built-in processes such as asset versioning and creating thumbnails

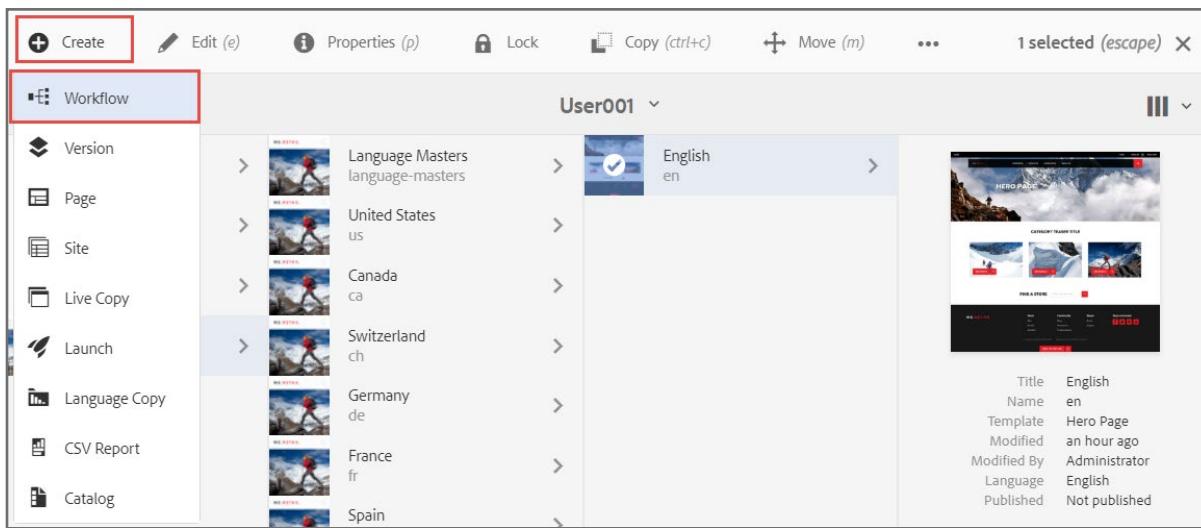
Starting a Workflow

You can start a workflow from:

- Create menu
- Timeline
- Page Information
- Workflow Models

Start a Workflow from the Create Menu

You can select the webpage, click **Create** from the actions bar, and click **Workflow**.

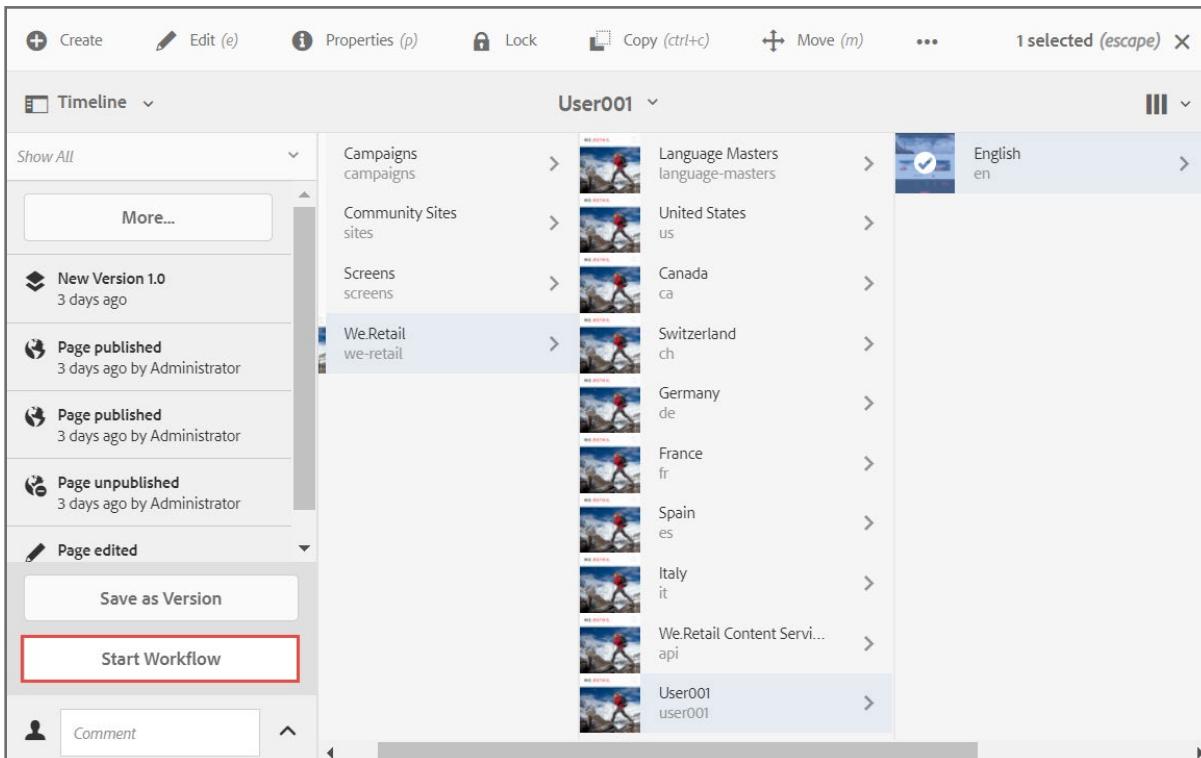


The screenshot shows the AEM interface with the 'Create' menu open. The 'Workflow' option is highlighted with a red box. The main content area displays a list of language variants for a page titled 'Language Masters'. The first variant, 'English en', is selected and shown in preview mode. To the right, detailed properties for this variant are listed.

Title	Name	Template	Modified	Modified By	Language	Published
English	en	Hero Page	an hour ago	Administrator	English	Not published

Start a Workflow from the Timeline

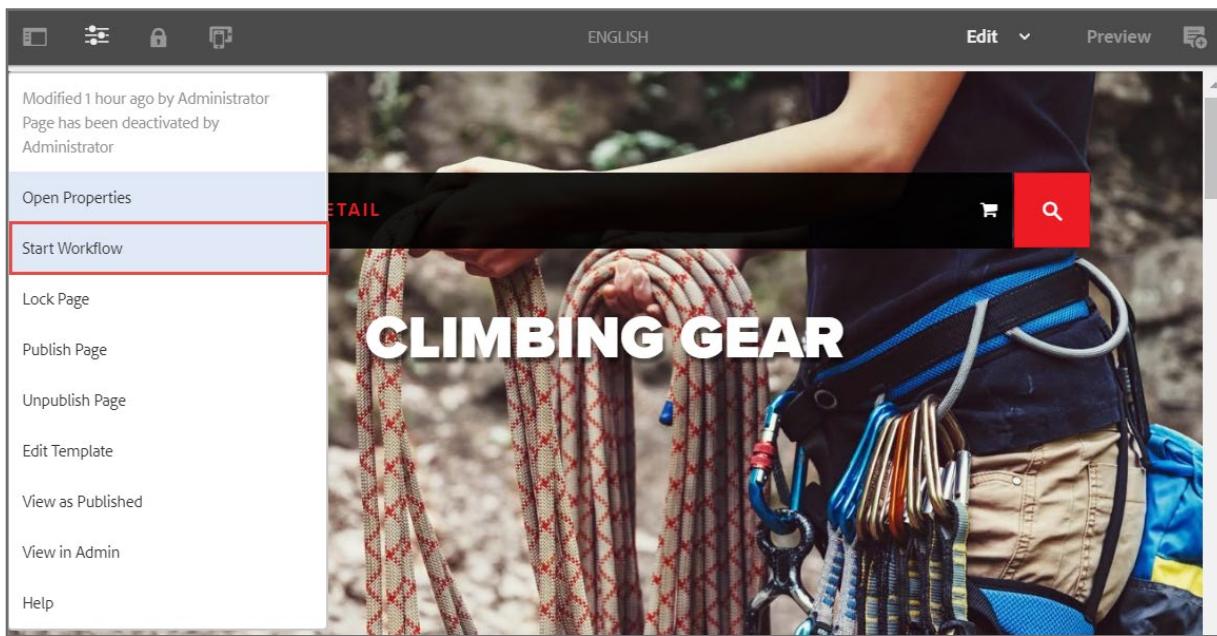
You can select a page and from the rail selector drop-down menu and select the **Timeline** option. You can then click the arrow next to the **Comment** field and click **Start Workflow**, as shown:



The screenshot shows the AEM interface with the 'Timeline' rail selector open. In the bottom left corner of the timeline panel, there is a red box around the 'Start Workflow' button. The main content area displays a list of recent page activities, including 'New Version 1.0', 'Page published', 'Page unpublished', and 'Page edited'. The 'Page edited' section includes a 'Save as Version' button and the 'Start Workflow' button, both of which are highlighted with red boxes.

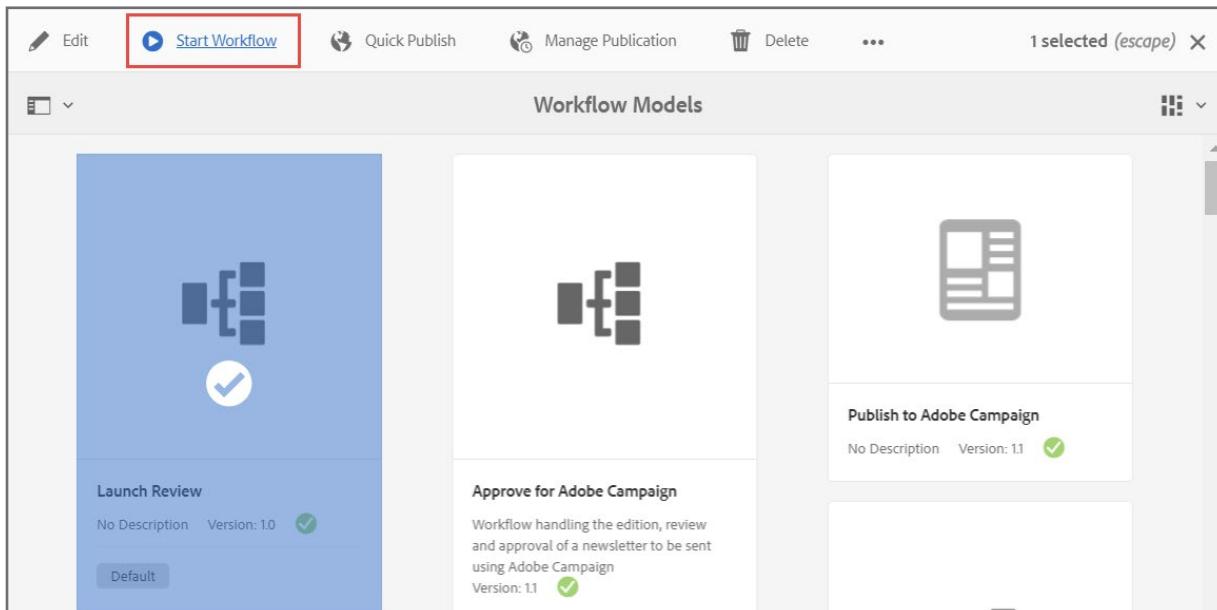
Start a Workflow from the Page Information

You can open a page in the page editor mode and click the **Page Information** icon. From the drop-down menu, select **Start Workflow**, as shown:



Start a Workflow from the Workflow Models

You can navigate to the **Workflow** console from the **Tools** panel. Click **Models**, select a model, and click **Start Workflow**, as shown:



Completing a Workflow

After you start a workflow, the steps are assigned to a specific user or group. The Inbox displays items such as **Complete**, **Step Back**, **Delegate**, **Open**, and view **Payload**, as shown:

The screenshot shows the AEM Inbox interface. At the top, there is a toolbar with five buttons: 'Complete' (marked with a checkmark), 'Step Back', 'Delegate', 'Open', and 'Payload'. To the right of the toolbar, it says '1 selected (escape) X'. Below the toolbar is a header row labeled 'Inbox'. The main area contains a table with the following columns: Title, Priority, Description, Assignee, Project, Workflow, Status, Start Date, and Due Date. There is one visible row for a task named 'Validate Content', which is marked as 'Medium' priority and assigned to 'training'. The 'Workflow' column shows 'Publish english page' and the 'Status' column shows a clock icon with the text 'a few seconds ago'.

The following table describes various actions that a user can perform when reviewing from the Inbox:

Action	Description
Complete	Mark the task as finished
Step Back	Send task back to the previous participant
Delegate	Assign the task to another user in the group
Open	Display the task and its details
View Payload	View the source on which the workflow acts upon

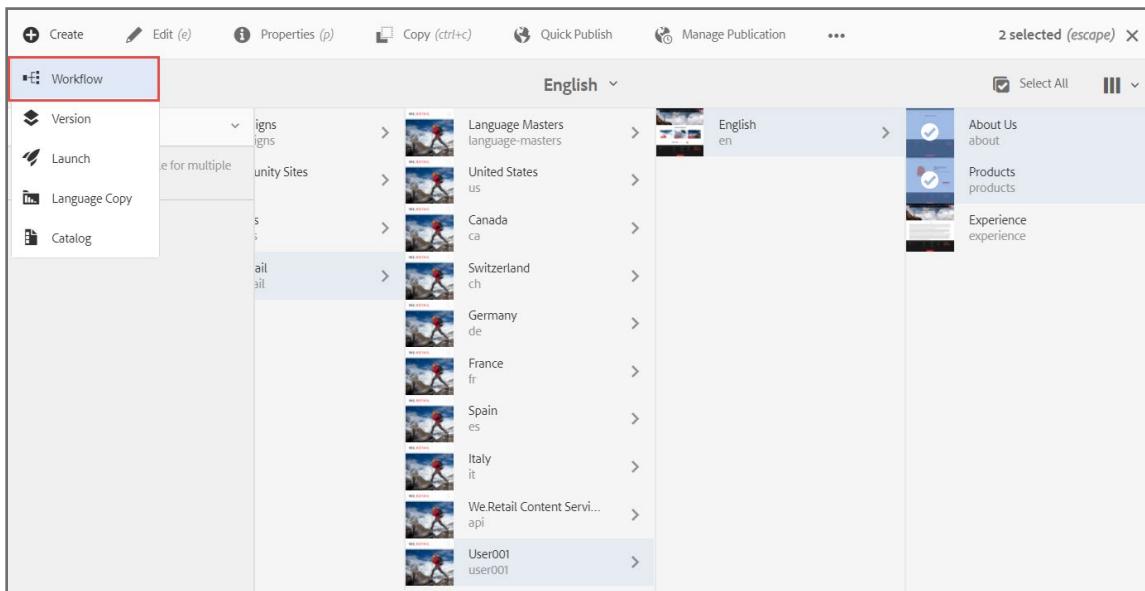
Exercise 3: Ensure quality of public content by using a workflow

Scenario: As an author, you must ensure that the web content you publish meets the quality standards of your organization. You can configure the workflow engine to support the goal. To ensure quality, your organization has implemented content policies. This implies that after you author the content, a reviewer must review the content before publishing.

In this exercise, you will create a workflow to review the content before publishing. You will validate the content and after the review is complete, the content will be published to the publish instance automatically.

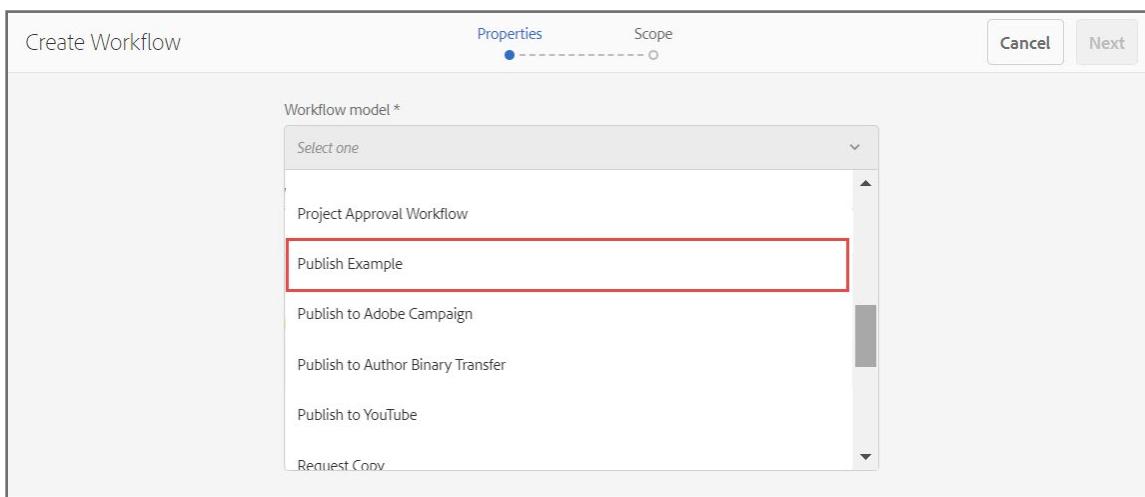
To create a workflow:

1. From the **Sites** console, navigate to **We.Retail > User0XX > English**.
2. Select the **Products** and **About Us** page and click **Create**. The **Create** drop-down menu opens.
3. Click **Workflow**, as shown:

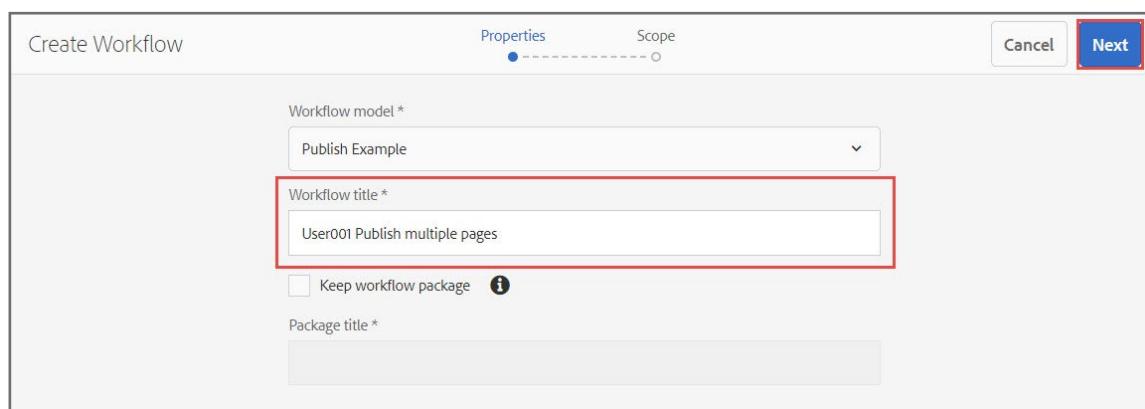


The **Create Workflow** wizard opens.

4. From the **Workflow model** drop-down menu, select **Publish Example**, as shown:



5. In the **Workflow title** field, type a title. For example, type **User0XX Publish multiple pages** as the title, and click **Next**, as shown:



The **Scope** field of the **Create Workflow** wizard opens.

6. Select the **Title** check box to select both the pages and click **Create**, as shown:

The screenshot shows the 'Create Workflow' interface with the 'Scope' section open. A table lists items with checkboxes in the first column. The 'Title' row has a checked checkbox. The 'Create' button at the bottom right is highlighted with a red box.

		Modified	Published
<input checked="" type="checkbox"/>	Title		
<input checked="" type="checkbox"/>	About Us /content/we-retail/user001/en/about	13 minutes ago Administrator	Not published
<input checked="" type="checkbox"/>	Products /content/we-retail/user001/en/products	13 minutes ago Administrator	Not published

The message, **Workflow has been created for selected resources** appears on the page, as shown:

The screenshot shows the Adobe Experience Manager interface. At the top, there's a header bar with the AEM logo, 'Adobe Experience Manager', and various navigation icons. A green success message box is prominently displayed in the center of the header, stating 'SUCCESS Workflow has been created for selected resources.' Below the header, the main content area shows a list of resources under the heading 'English'. The list includes 'Campaigns', 'Community Sites', 'Screens', and a selected item 'We.Retail'. To the right of each resource name is a small thumbnail image and a dropdown arrow. Further to the right, there are more details like 'Language Masters', 'United States', 'Canada', etc., followed by another dropdown arrow and a small thumbnail. At the top right of the content area, there are buttons for 'Select All', 'Create', and a three-dot menu. On the far left, there's a sidebar with 'Timeline' and 'Show All' options.

- Click the **Inbox** icon from the header bar and select the **Validate Content** task from the list.

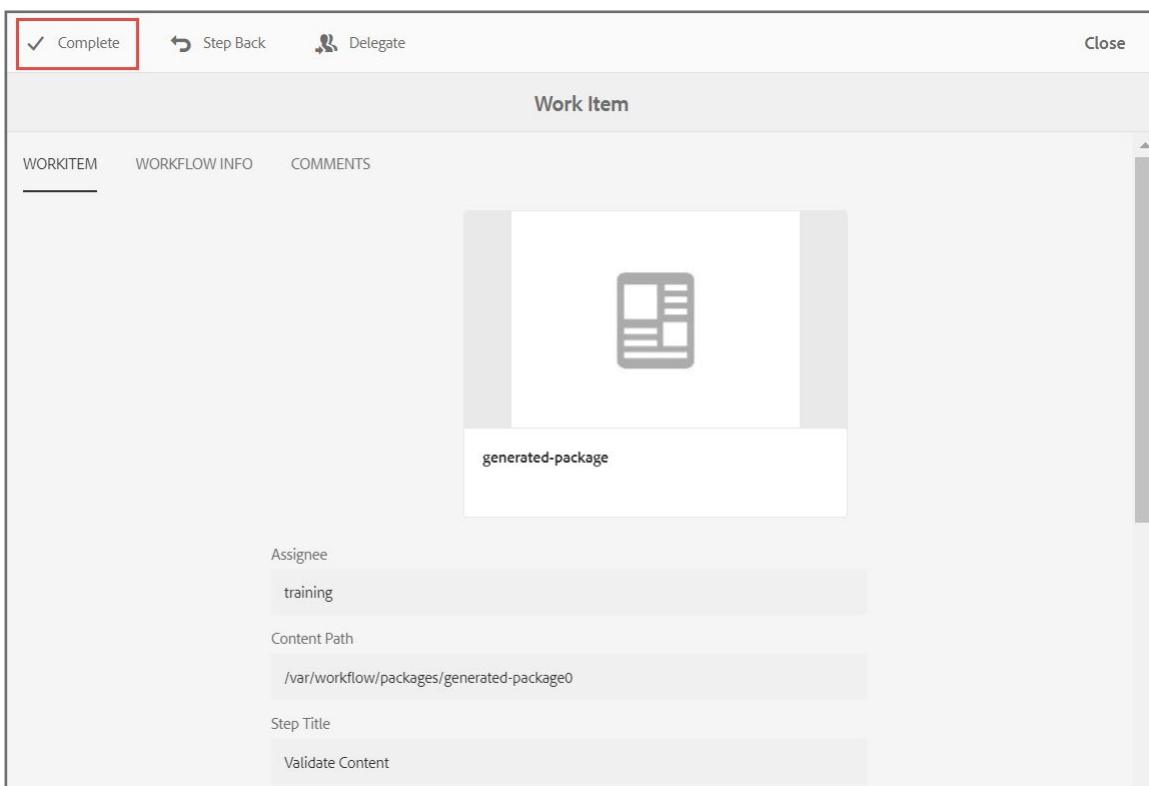
This screenshot shows the same AEM interface as above, but with a different focus. The 'Beta Feedback' button in the header has a red box around it. To its right, the 'Inbox' icon is highlighted with a red box. A dropdown menu is open next to the 'Inbox' icon, listing three tasks: 'Validate Content', 'Validate Content', and 'Configure Analytics & Targeting'. The first two items have a red box around them. The 'Validate Content' task is described as 'Validate the modified content.' The 'Configure Analytics & Targeting' task is described as 'You can opt in for Analytics and Targeting by selecting your configuration and then adding it to your pages.' At the bottom right of the dropdown, there's a link 'View All (6 New)'.



Tip: If you do not see the **Validate Content** option, refresh the browser.

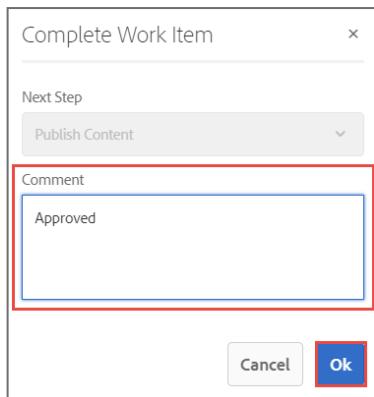
The **Work Item** screen opens.

8. Click **Complete**, as shown:



The **Complete Work Item** dialog box opens.

9. Enter the appropriate details in the **Comment** field, and click **Ok**, as shown:



The workflow progresses to the next step.

To ensure the pages are published:

10. Navigate to **We.Retail > User0XX > English**.
11. Select the **Products** page, and observe the **Published** status and **Published by** fields from the details list, as shown:

Title	Name	Template	Modified	Modified By	Language
Products	products	Product Page	35 minutes ago	Administrator	English
Published					
Published By					

12. Similarly, select the **About Us** page and observe the **Published** status and **Published by** fields from the details list.

To view the **Products** and **About Us** pages on the publish instance:

13. Open the browser and add the following URL in the address bar to view the Products page:
`http://<host name>:<port number>/content/we-retail/user0XX/en/products.html`
14. Similarly, add the following URL in the address bar to view the About Us page:
`http://<host name>:<port number>/content/we-retail/user0XX/en/about.html`



Note: Ensure that the publish instance is started. If you are using an AEM cloud instance, use the publish instance URL that your instructor provided to you.

References

Use the following links for more information on:

- [Annotating a page](#)
- [Workflows](#)

Multichannel Publishing

Introduction

In this digital age, consumers frequently switch between several devices such as mobile, smart watch, tablet, computer, television, billboards, and in-store displays to consume media and information.

To cater to the experiences through these devices and keep the consumers engaged, brands need to integrate different modes of media consumption. At the same time, brands need to maintain strong brand image and recognition, no matter where and how the consumers view their content. Adobe Experience Manager (AEM) enables marketers anticipate, manage, orchestrate, and deliver experiences that differentiate the brand throughout the customer journey.

Objectives

After completing this module, you will be able to:

- Explain Content Fragments (CF) in AEM
- Create and edit CF and add it to a page
- Edit a CF by using the markdown editor
- Explain the CF models
- Explain Content Services
- Create a structured CF that can be processed by Content Services
- Explain Experience Fragments (XF)
- Create an XF with structured data from a CF
- Create blocks of CF stores by using building blocks in XF

Content Fragments

With AEM, you can publish content across owned, earned, and paid channels where content goes beyond the traditional web form and is available in a multitude of end points such as screens, dynamic adaptive forms, documents, email, social, and apps. AEM offers a tool to help publishers adapt to the multi-channel world, reach their targeted audiences, and keep the publishing processes agile at the same time.

When creating content for multi-channel publishing, you need to distinguish between:

- Un-styled content: Un-styled content signifies plain text or rich formatted text. It can also be a media asset such as an image or a video file. In media formats, there is no assumption in which channel or format the content will be consumed.
- Styled content: Styled content signifies a webpage where layouts are defined to make the content on a webpage look good and easy to consume across channels. You can use templates that consist of styling and layout information. However, you must adapt the content for each channel and combine the content with specific templates to optimize the experiences for each channel.

AEM has CF and XF content types that help manage the multiple variations of content and templates for many channels. CF is the container of information, text, images, and videos that are closely related to store the raw information materials.

CF and associated content

You as an author and content producer in the creative department can use CFs to create basic content artifacts. CFs are the containers of related content items for a topic or a story and consist of content in plain text or rich text with associated content in the form of images, videos, documents, and other media types. You can store these media assets in the AEM digital asset manager (DAM).

CFs and associated content

Content Fragments can be used by content producers in the creative department. Content producers create the basic content artifacts. CFs are the containers of related content items for a topic or a story. A CF consists of the content in plain or rich text together with optionally associated content in form of images, video, documents, and other media types, that can be stored in the AEM assets, the digital asset management functionality in AEM.

CF Variations

You can create and store a variation of a CF when you need to adapt a content type to a particular content format. For instance, you can prepare a news article to have a long form, an abstract, and a very short version with only 280 characters for Twitter. All of these are variations of the news article.

Exercise 1: Create and edit a CF and add it to a page

Scenario:

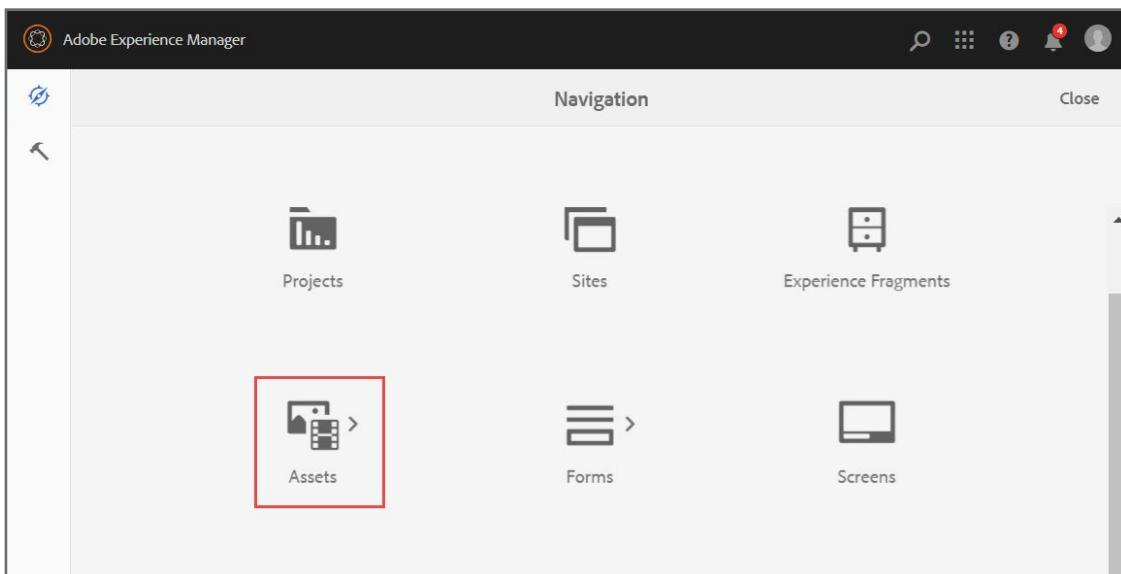
The Marketing team needs to write an editorial, and they need a shorter version of the article to publish on different devices. As an author, you must create a CF and add it to a page.

In this exercise you will perform the following tasks:

1. Create and edit a CF
2. Add the CF to a page

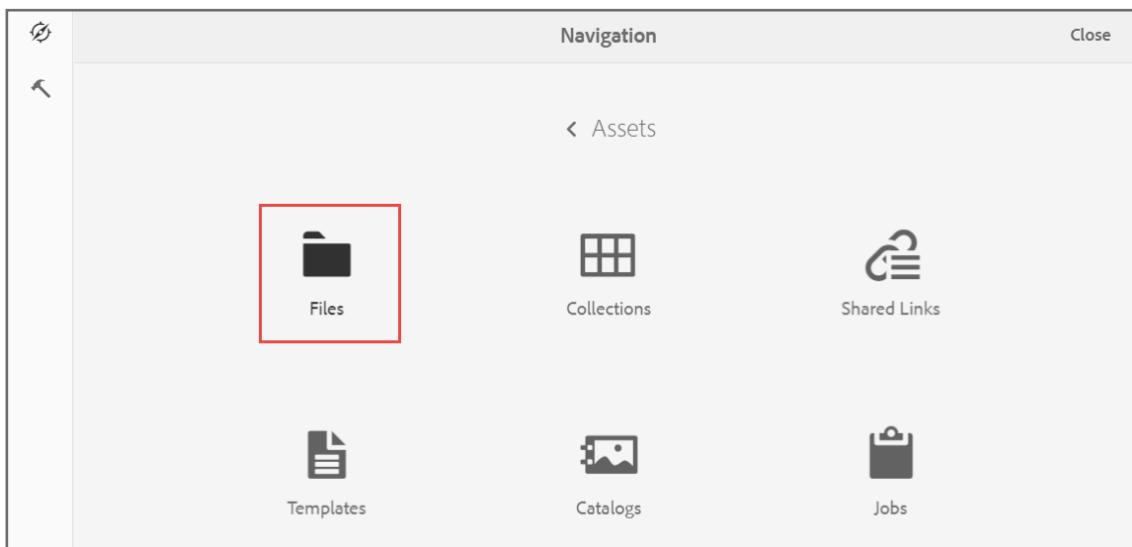
Task 1: Create and edit a CF

1. Click the **Adobe Experience Manager** on the header bar and click the **Assets** console, as shown:



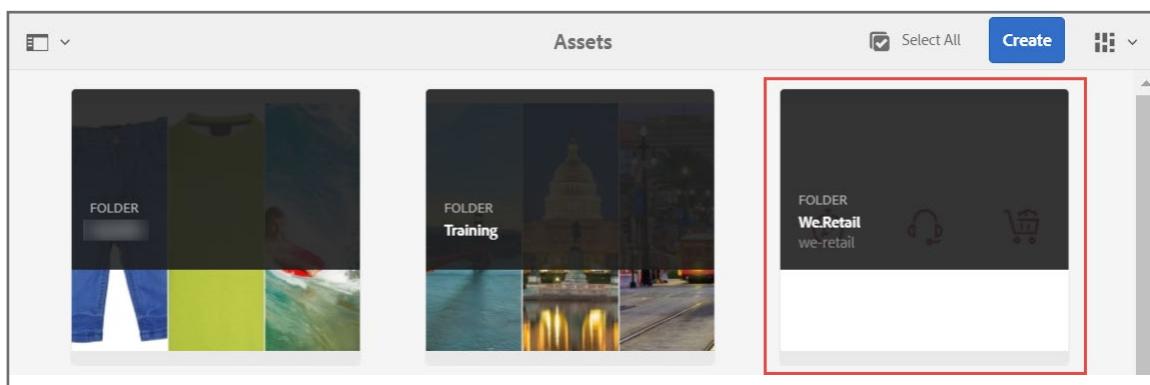
The **Assets** console opens.

2. Click the **Files** folder, as shown:



The **Files** folder containing asset folders opens.

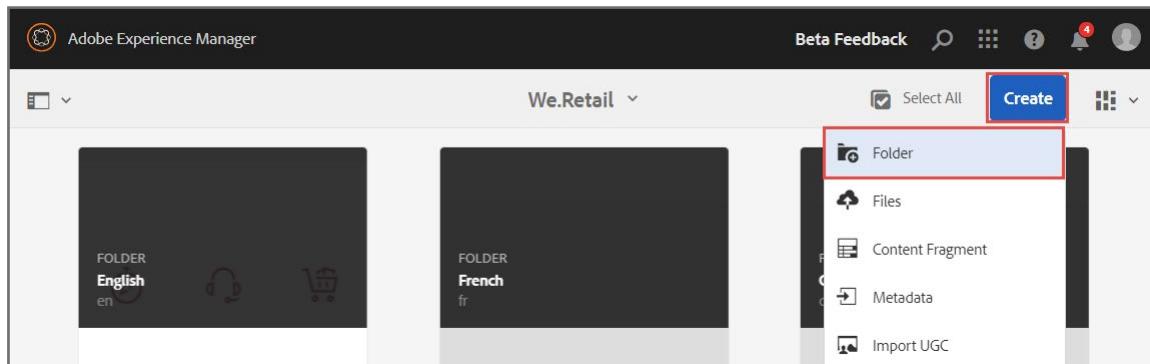
3. Click **We.Retail**, as shown:



The **We.Retail** folder opens.

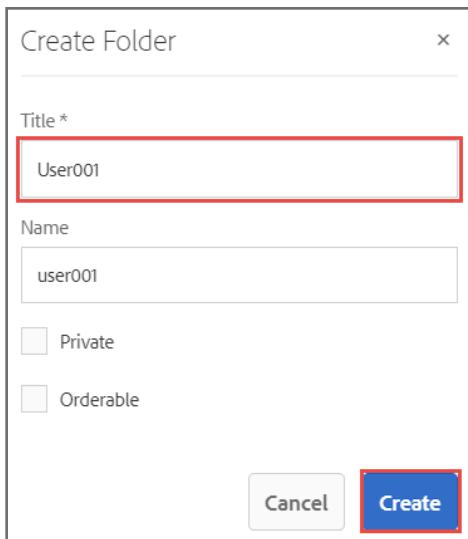
 **Note:** If you do not have the User0XX folder, follow steps 4 and 5 to create a User0XX folder.

4. Click **Create > Folder** at the upper-right corner of the page, as shown:



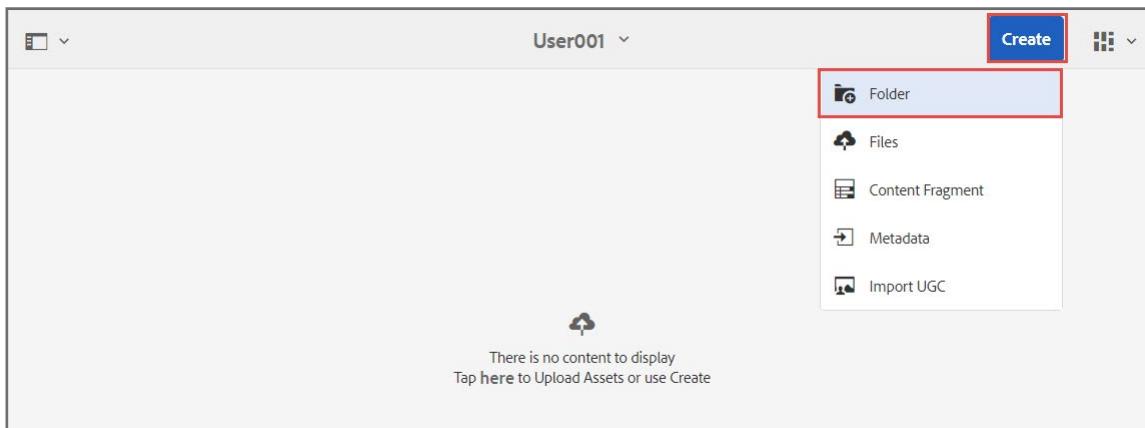
The **Create Folder** dialog box opens.

5. In the **Title** field, type **User0XX** (where User0XX is the user number assigned to you for this training), and click **Create**, as shown:



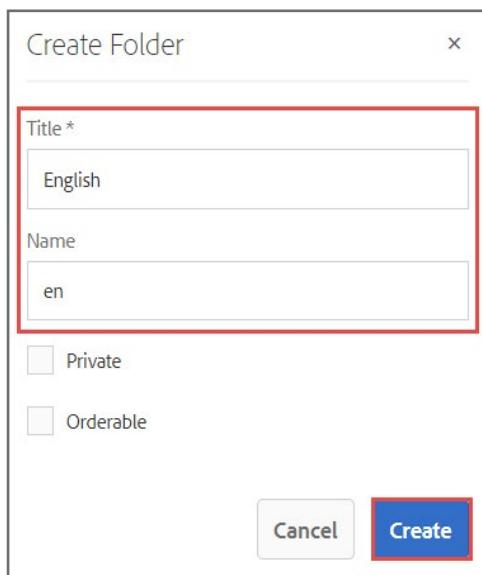
The **User0XX** folder is created.

6. Click the **User0XX** folder. The **User0XX** folder opens.
7. Click **Create** from the actions bar and select **Folder** from the drop-down menu, as shown:



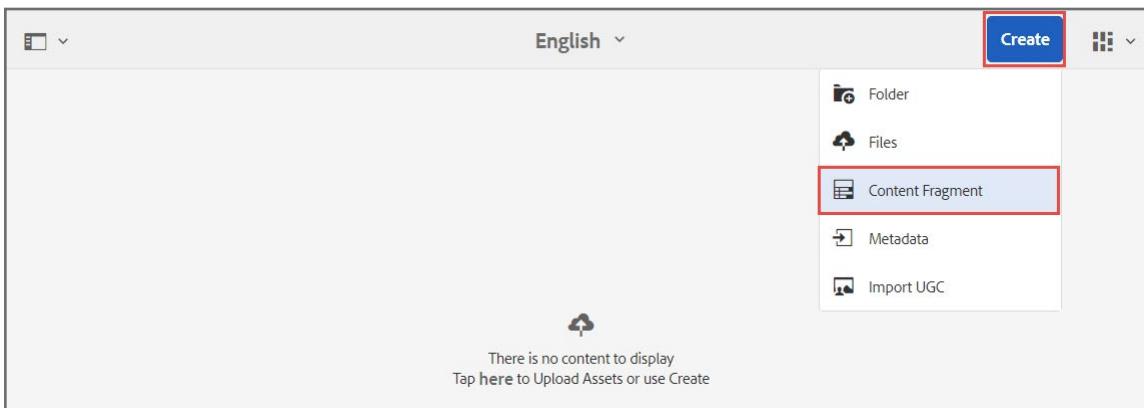
The **Create Folder** window opens.

8. In the **Title** field, type **English** and in the **Name** field, type **en**, and click **Create**, as shown:



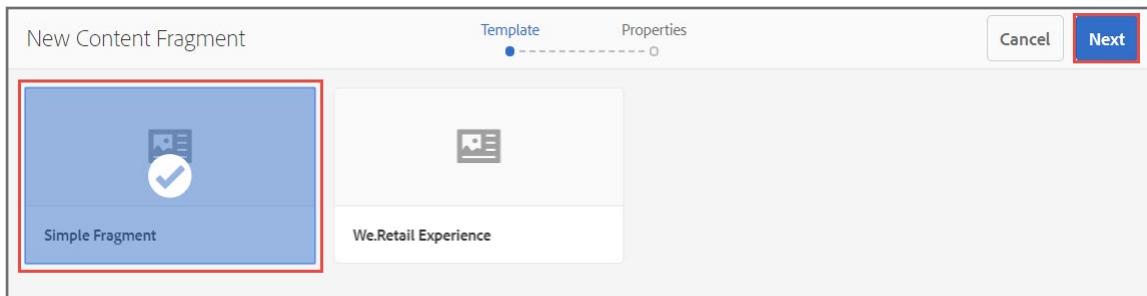
The **English** folder is created. This will enable the text summarization in English for all the CFs placed in it.

9. In the newly created **English** folder, click **Create** from the actions bar and select **Content Fragment** from the drop-down menu, as shown:



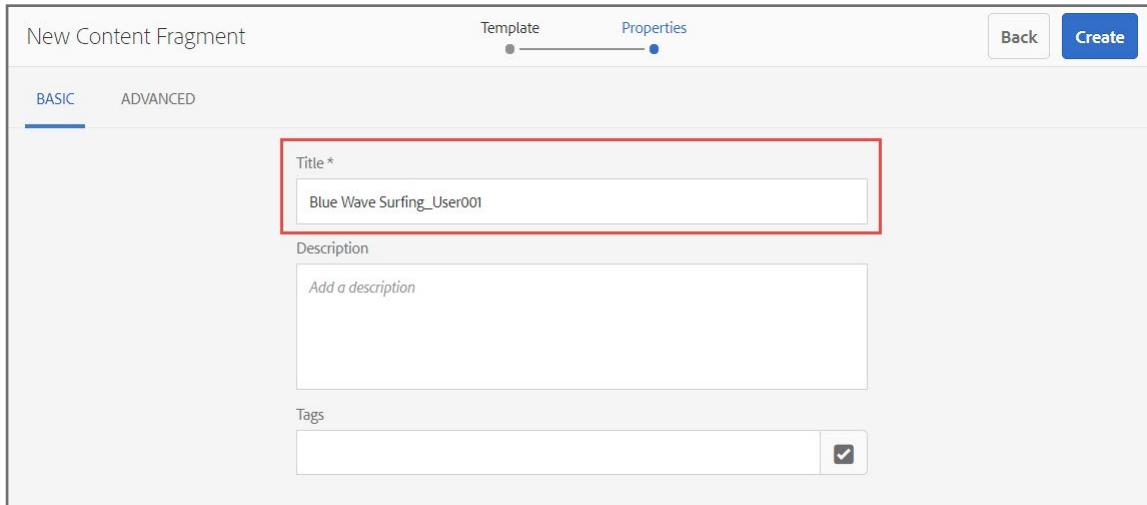
The **New Content Fragment** wizard opens in the **Template** page.

10. Select the **Simple Fragment** template and click **Next**, as shown:

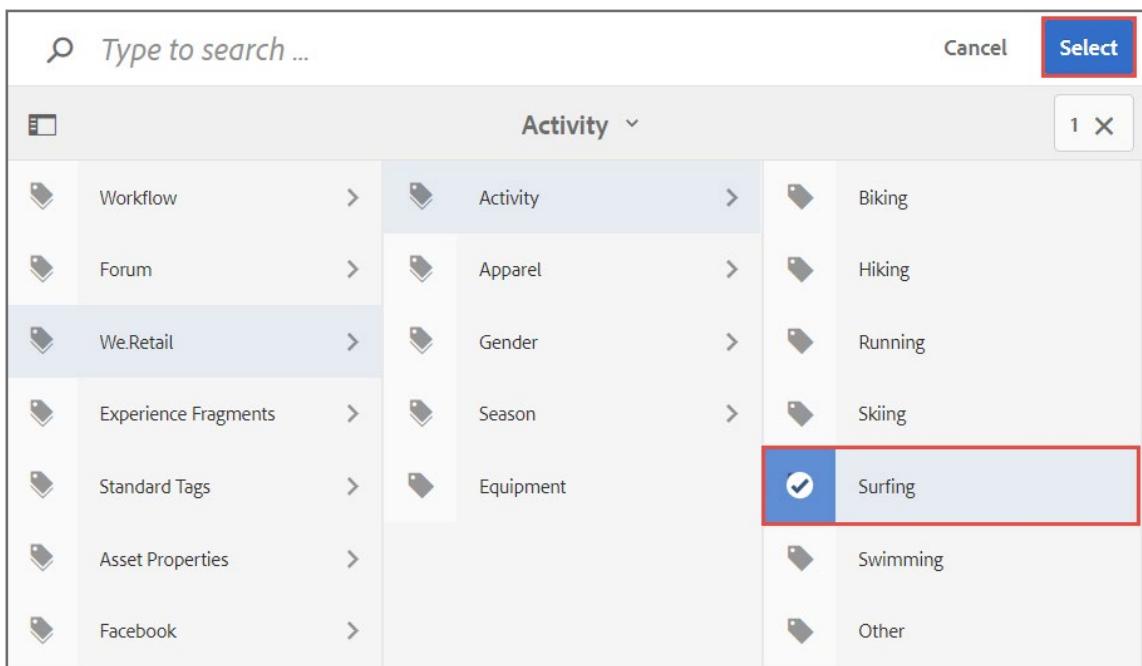


The **New Content Fragment** opens in the **BASIC** tab of the **Properties** page.

11. In the **Title** field, type **Blue Wave Surfing_User0XX** (where 0XX is the user number assigned to you for this training), as shown:



12. In the **Tags** field, select the **Surfing** tag and click **Select**, as shown:



The Surfing tag is added to the CF.

Tip: You may enter *surfing* into the tag field and the typeahead will recognize this tag for you to select.
There is currently only one **Surfing** tag available, under **We.Retail/Activity/Surfing**.

13. Click **Create**, as shown:

New Content Fragment Template Properties Back **Create**

BASIC ADVANCED

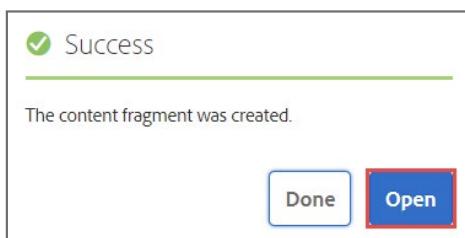
Title * Blue Wave Surfing_User001

Description
Add a description

Tags
 We.Retail : Activity / Surfing

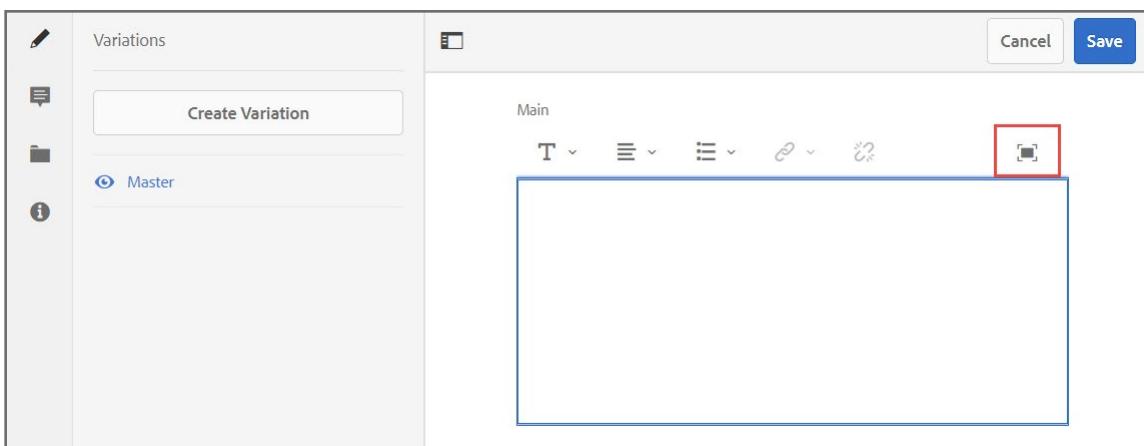
A **Success** pop-up window appears.

14. Click **Open**, as shown:



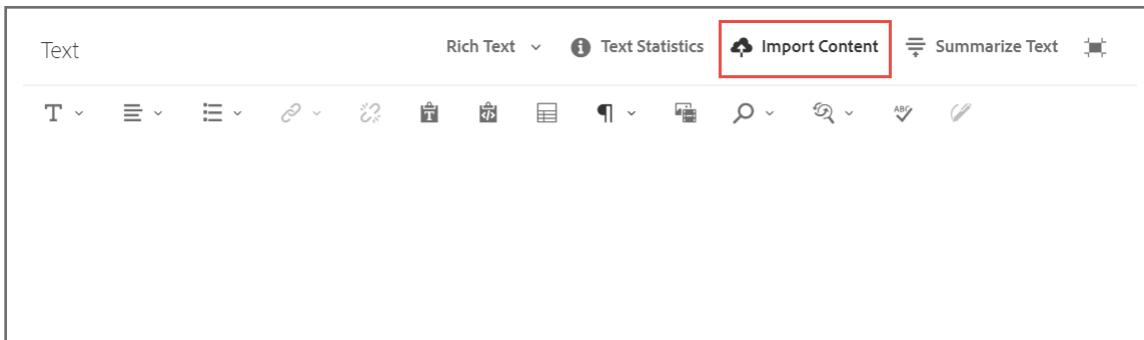
The CF opens for editing in a new browser tab.

15. Keep the cursor in the text area and at the upper-right corner of the editor, click the **Enter full screen mode** icon, as shown:



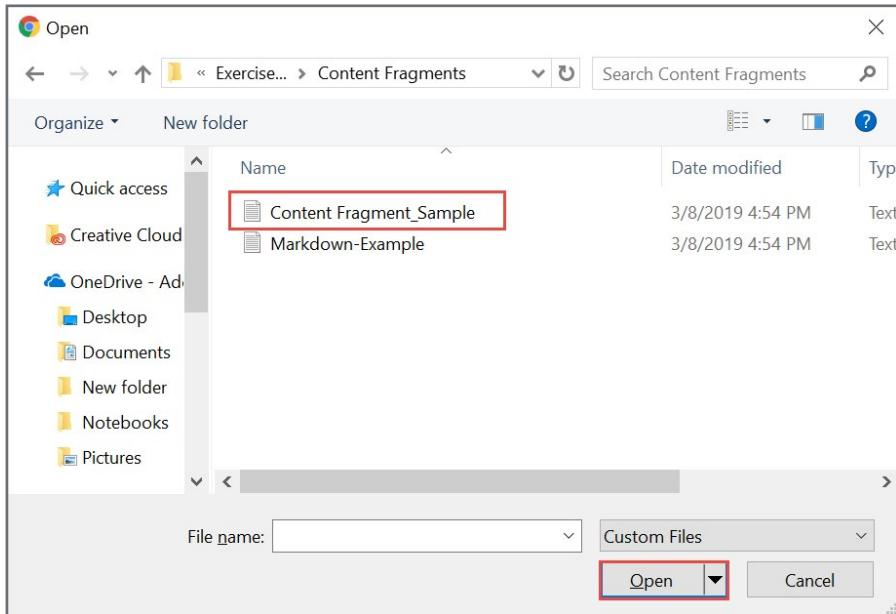
The editor opens in full screen mode.

16. Place the cursor inside the text editing area and click **Import Content**, as shown:



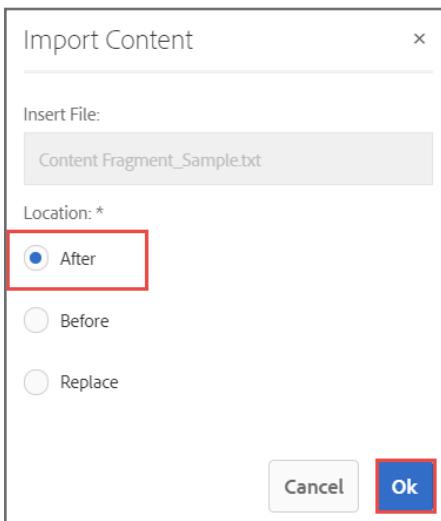
The **Open** dialog box opens.

17. Navigate to the **Exercise_Files > Content Fragments** folder, select the **Content Fragment_Sample.txt** file, and click **Open**.



The **Import Content** dialog box opens.

18. Select **After** as the location and click **Ok**.



The text content from the Content Fragment_Sample file is imported to the CF.

19. Place the cursor after the second paragraph of context fragment text and click **Insert asset** from the authoring toolbar, as shown:

The subtle hues of the arctic circle are welcoming, comfortable on the eyes. To properly score in this part of the world, equipment means everything, and any inconsistency can ruin a session, the whole trip even. As our social media devices are put on sleep mode and reading lamps are switched off, the wind grows in intensity, rattling our windows through the night.

The rain keeps hammering down; to a point where little freshwater streams start flooding the field, and cameras start breaking down. If finding good surf this far north in October is a daunting task, documenting it is proving even more difficult. It's easy to mistake the athletes in the water for the tough ones; stripping naked in near freezing temps and paddling out into the North Atlantic Ocean to get their fix of far-traveled energy.

Neoprene is hung to dry after hours in the water, not that it won't still be wet the following morning, but any attempts to make surfing in the Arctic easier count. As dark falls, we make another pot of pesto tortellini and prepare for the night, to the sound of polished rocks rumbling in the shore break below our tents.

The **Assets** dialog box opens.

Tip: If the **Insert asset** option is unavailable, ensure you still have the editor in Maximize (full screen) mode, as instructed in step #15.

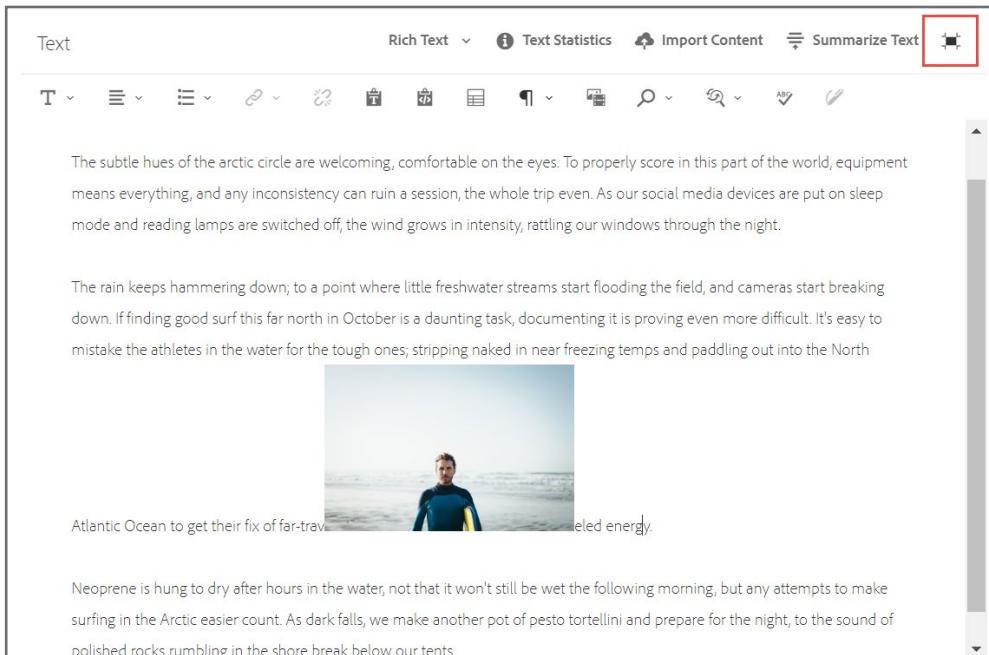
20. Navigate to **We.Retail > English > Activities > Surfing**, select a surfing image, and click **Select**.

Title	Name	Modified	Modified By	Dimensions	Size	Type
Man Wetsuit	man-wetsuit.jpg	Sep 12, 2016, 5:16:41 PM	Administrator	1620 x 1080 px	76.4 KB	IMAGE

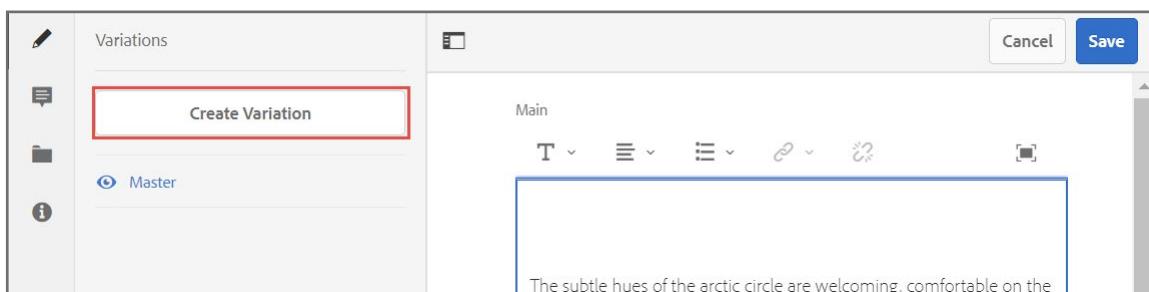
The image is added in between the text paragraphs of the CF.

You will next create a variation of the CF for mobile devices.

21. Click the **Exit full screen mode** button to collapse the editor, as shown:

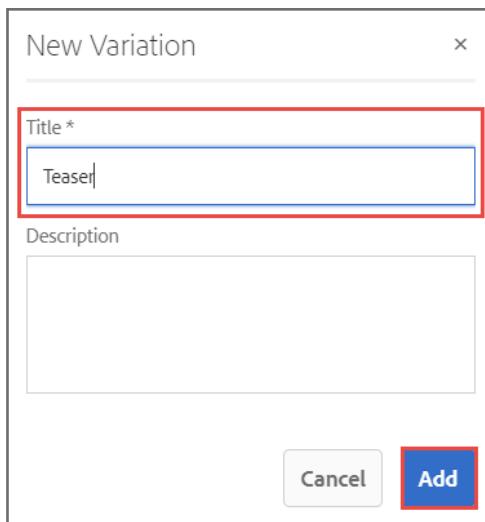


22. Keep the cursor in the text area and click **Create Variation** from the side panel, as shown:

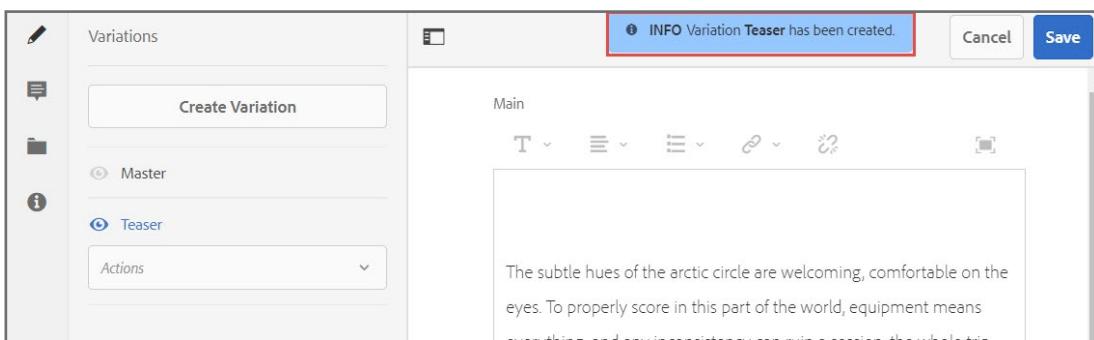


The **New Variation** dialog box opens.

23. In the **Title** field, type **Teaser** and click **Add**, as shown:



A message **Variation Teaser has been created** appears at the top of the screen, as shown:



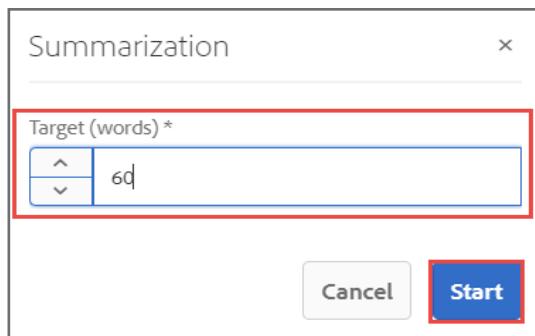
24. Place the cursor in the text editor, and click the **Enter full screen mode** icon to enlarge the editor. The editor opens in full screen mode.

25. Click **Summarize Text**, as shown:



The **Summarization** pop-up window appears.

26. In the **Target (words)** field, type **60** and click **Start**.



A suggested summarization appears on the right side based on an analysis of sentences by AEM. You can click a sentence to include or exclude it, and then preview the result with the **Preview** switch. You can click the **Summarize** button to save the summarization.

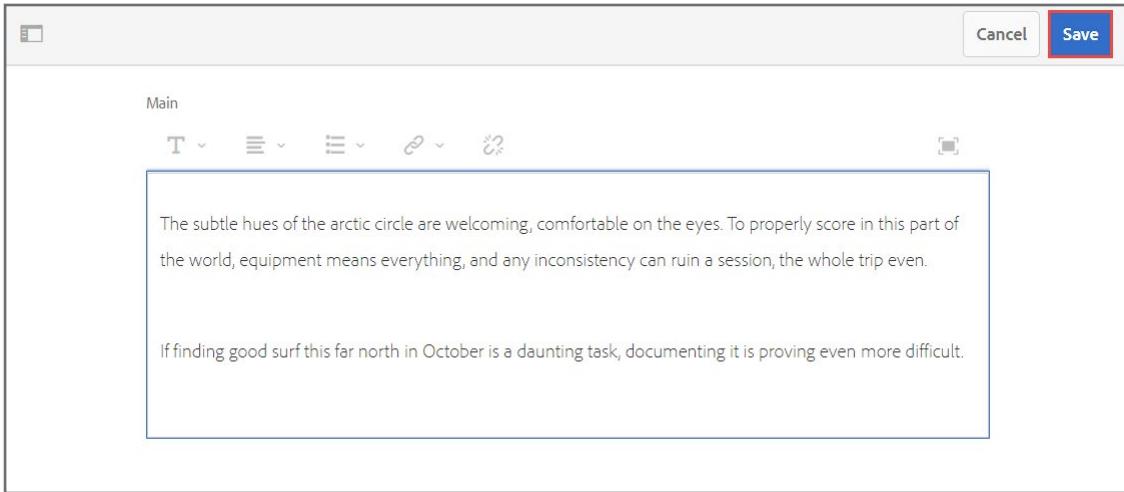
Current	Summarization Actual
The subtle hues of the arctic circle are welcoming, comfortable on the eyes. To properly score in this part of the world, equipment means everything, and any inconsistency can ruin a session, the whole trip even. As our social media devices are put on sleep mode and reading lamps are switched off, the wind grows in intensity, rattling our windows through the night.	The subtle hues of the arctic circle are welcoming, comfortable on the eyes. To properly score in this part of the world, equipment means everything, and any inconsistency can ruin a session, the whole trip even. As our social media devices are put on sleep mode and reading lamps are switched off, the wind grows in intensity, rattling our windows through the night.
The rain keeps hammering down; to a point where little freshwater streams start flooding the field, and cameras start breaking down. If finding good surf this far north in October is a daunting task, documenting it is proving even more difficult. It's easy to mistake the athletes in the water for the tough ones; stripping naked in near freezing temps and paddling out into the North Atlantic	The rain keeps hammering down; to a point where little freshwater streams start flooding the field, and cameras start breaking down. If finding good surf this far north in October is a daunting task, documenting it is proving even more difficult. It's easy to mistake the athletes in the water for the tough ones; stripping naked in near freezing temps and paddling out into the North Atlantic
Ocean to get their fix of far-trav...led energy.	Ocean to get their fix of far-trav...led energy.



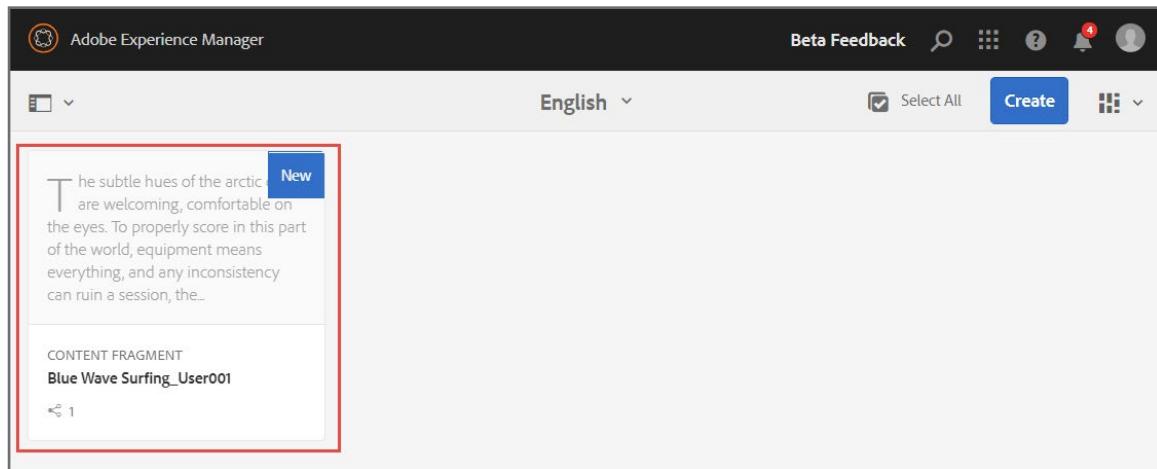
Note: In the future, Adobe Sensei will use Artificial Intelligence (AI) to automatically create variations such as summary and teaser.

27. Click the **Exit full screen mode** icon to resize the editor.

28. Click **Save** to save the CF, as shown:



The CF is added to the **English** folder, as shown:



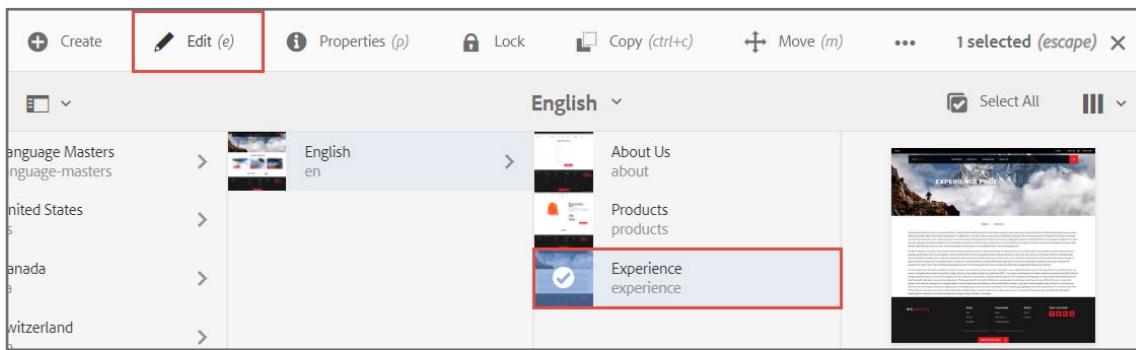
Task 2: Add the CF to a page

In this task, you will add the newly created CF to a page.

- From the **Sites** console, navigate to **We.Retail > User0XX > English**.

 **Note:** If you do not have a **We.Retail > User0XX** page, complete the first task of Exercise 1: Create pages and subpages in the *Basic Authoring Skills* module.

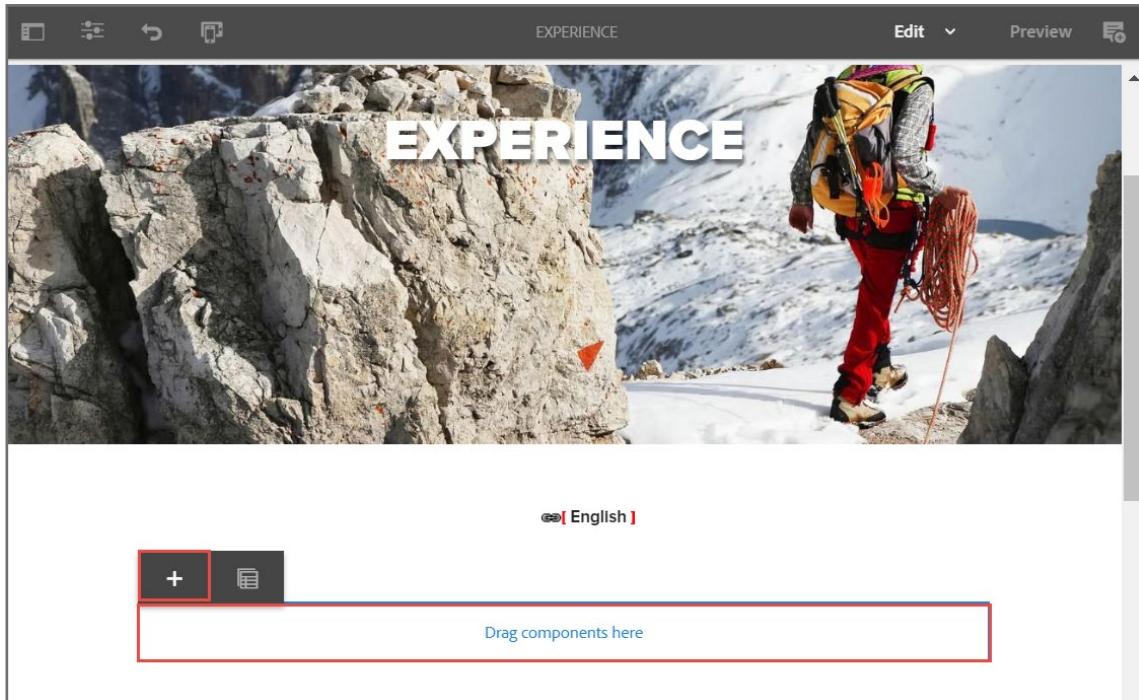
- Select the **Experience** page and click **Edit** from the actions bar, as shown:



The screenshot shows the AEM Sites console interface. The top navigation bar includes 'Create', 'Edit (e)' (which is highlighted with a red box), 'Properties (p)', 'Lock', 'Copy (ctrl+c)', 'Move (m)', and '...' options. Below the bar, the site structure is displayed under 'English'. The 'Experience' page is listed at the bottom of the page structure, also highlighted with a red box. To the right, a preview window shows a landing page with a mountain scene and the word 'EXPERIENCE'.

The page opens in a new browser.

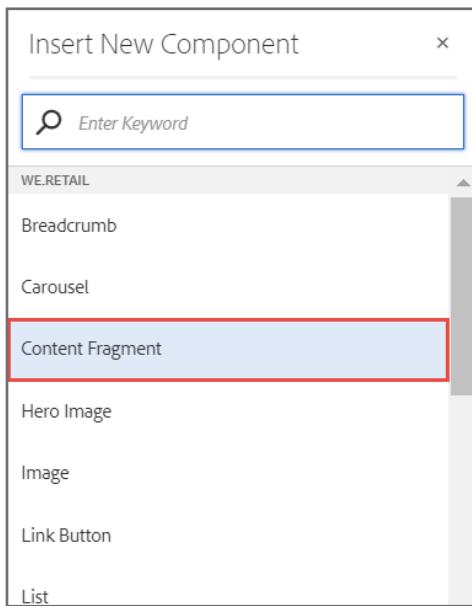
- Scroll to the bottom of the page, click the **Drag components here** area and click **Insert component** to add a component, as shown:



The screenshot shows the 'Experience' page in edit mode. At the top, there's a banner image of a climber on a rocky mountain. Below the banner, the page content area has a large 'EXPERIENCE' heading. At the very bottom of the page, there's a white footer section with a red border. Inside this footer, there's a red-bordered box containing the text 'Drag components here'. Above this box, there are two buttons: a red-bordered '+' button and a 'grid' icon button. The 'grid' icon button is highlighted with a red box.

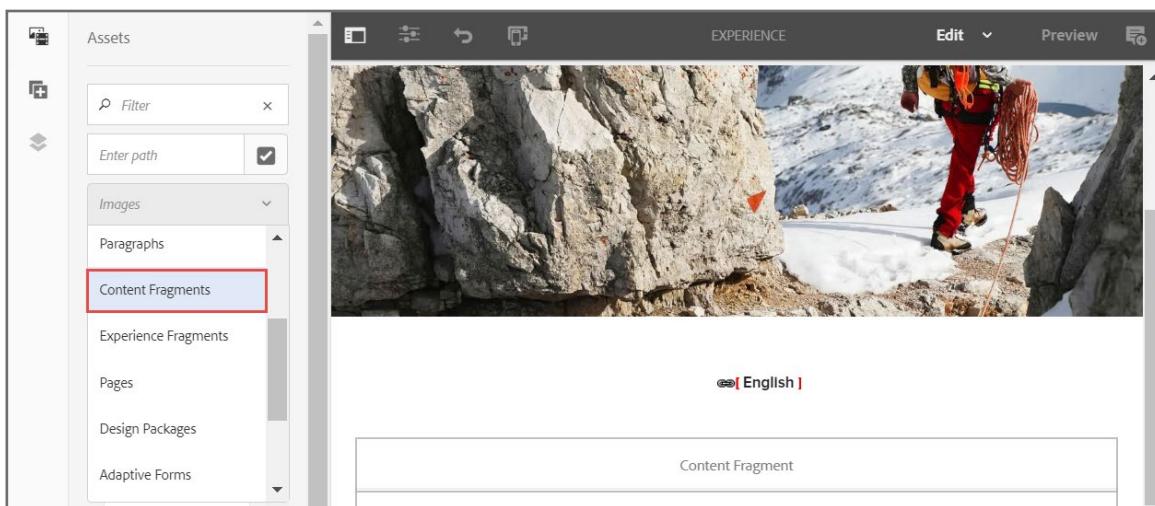
The **Insert New Component** dialog box opens.

4. Select the **Content Fragment** component, as shown:



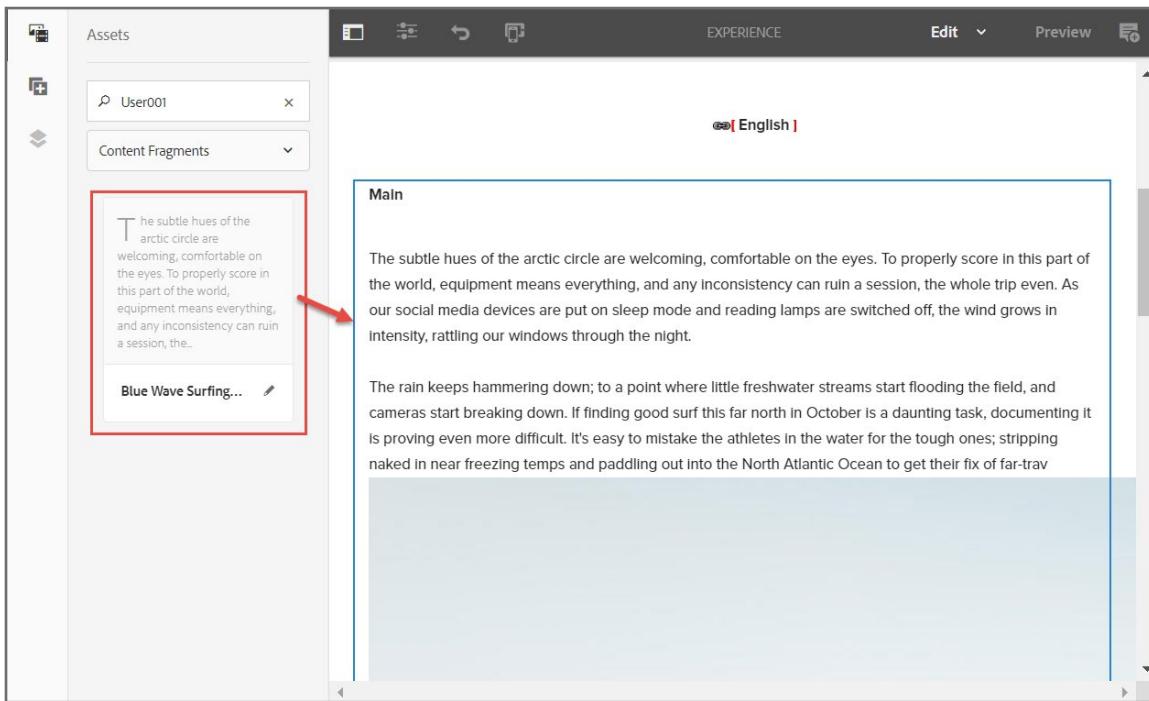
A **Content Fragment** placeholder appears above the **Drag components here** area.

5. Click **Toggle Side Panel**. The **Assets** panel appears.
6. Select **Content Fragments** from the **Images** drop-down menu, as shown:



You must narrow the list of CFs to locate the one you created. Search for the unique user number/code (User0XX) to locate the CF you created.

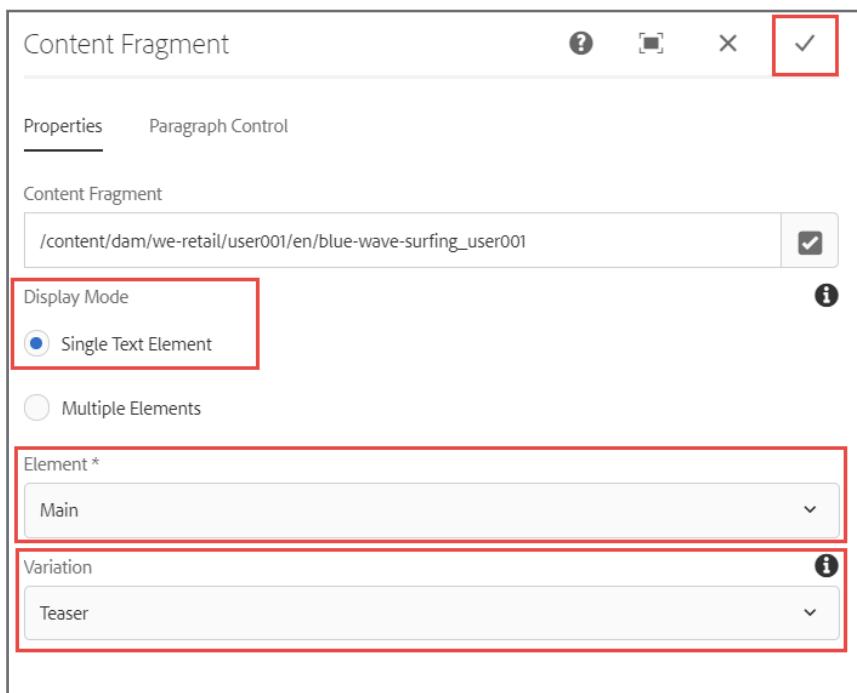
7. Drag the **Blue Wave Surfing_User0XX CF** to the **Content Fragment** component of the **Experience** page, as shown:



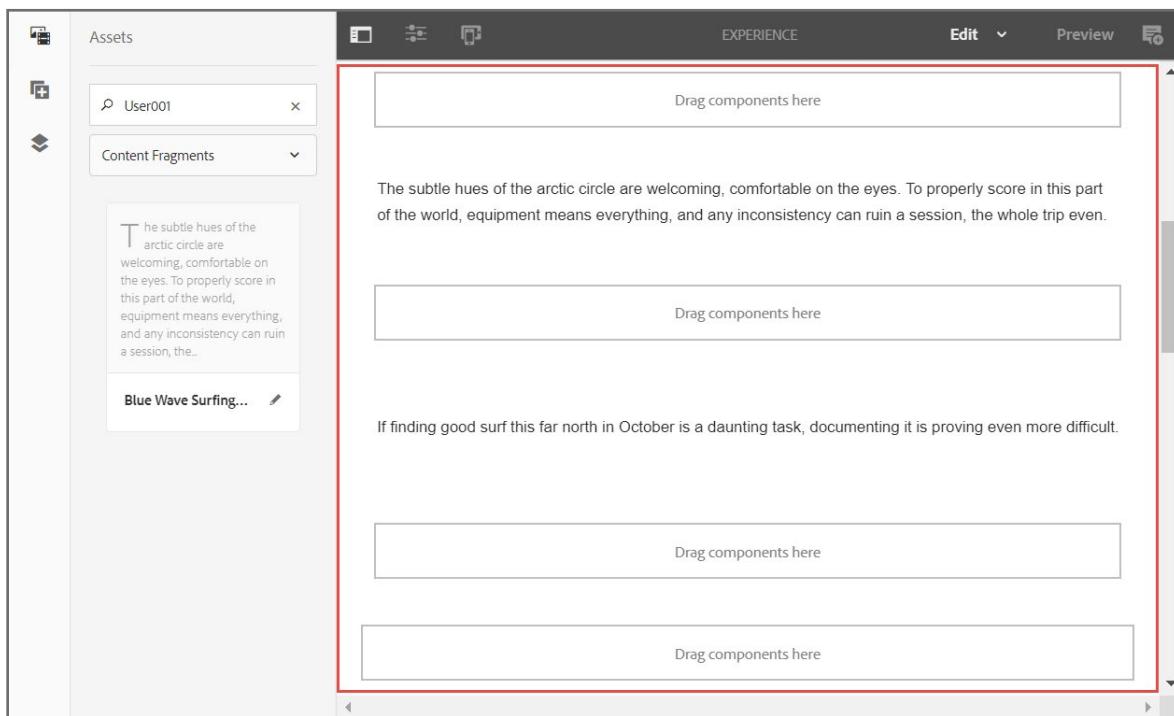
8. Select the Content Fragment component and click the **Configure** icon from the toolbar to configure the component. The Content Fragment window appears.

9. Ensure you select the following settings, as shown:

- a. In the **Display Mode** section, select **Single Text Element** option. This is because you created the CF with the Simple Fragment template. This template has a single element.
- b. From the **Element** drop-down menu, select **Main**.
- c. From the **Variation** drop-down menu, select **Teaser**.
- d. Click the **Done** icon.



Observe how the CF appears on the page, as shown:



A block labeled **Drag components here** is inserted between two consecutive paragraphs of the CF. A paragraph is created every time you press Enter when editing the CF (represented as a Carriage Return or Vertical Space). These paragraph blocks are called Fragment Grids and are used as layout containers on the page to add additional components. For example, you can add an image corresponding to the rendered CF on a page.

Editing CFs

You can edit content in a CF by:

- Uploading a preformatted text document so that you do not need to use the Rich Text Editor of the CF to add formatting attributes.
- Using the Rich Text Editor to copy text from Microsoft Word to the Content Fragment editor. This preserves the formatting done in Microsoft Word.
- Using the Markdown editor that helps enter text with Markdown, a lightweight markup language. It provides a simple and unobtrusive syntax to achieve text formatting.



Note: Because Markdown is a superset of HTML, you can use any HTML-based markup source.



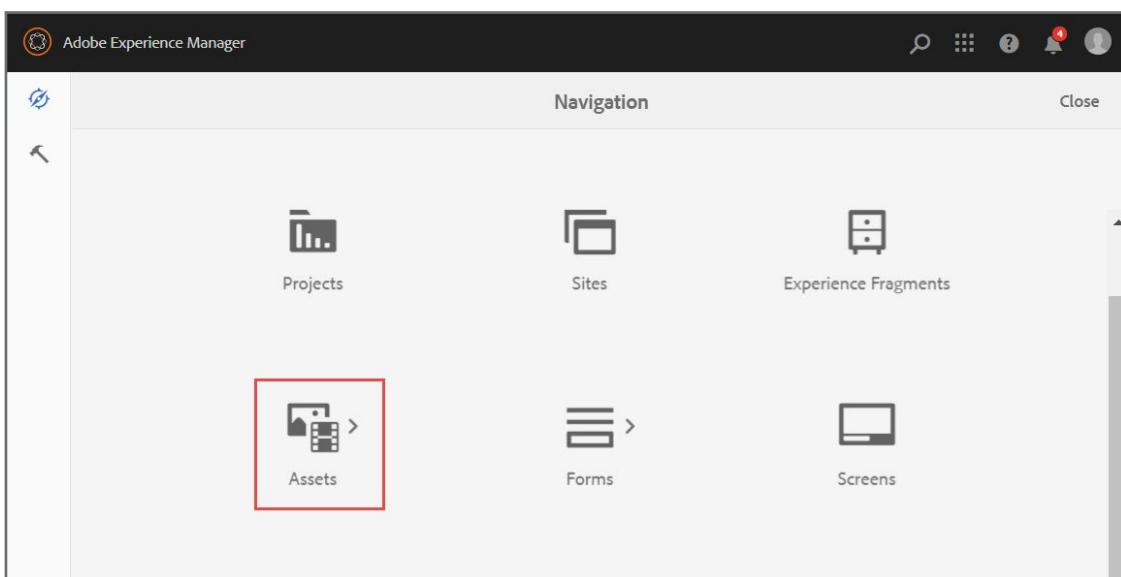
Warning: When using the Markdown editor, do not switch to the Rich Text editor and vice versa, because the markup may be modified (it is re-interpreted). However, this will not affect the rendering of the fragment because no content is lost. On the other hand, switching to Plain Text mode removes everything that is not raw text.

Exercise 2: Edit a CF by using markdown editor

Scenario: As an author, you need a CF that displays guidelines on adding text to a page for marketers. You already have the content formatted with the markup language for use.

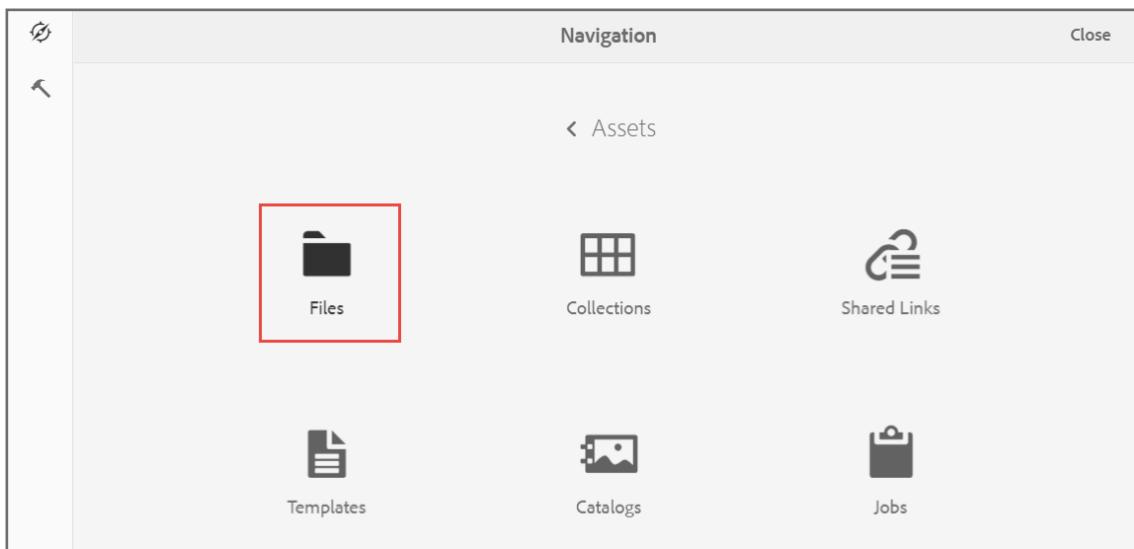
In this exercise, you will create a CF and edit the it to upload a text file in the Markdown editor, which contains some markups and observe how the fragment is rendered.

1. Click **Adobe Experience Manager** on the header bar and click the **Assets** console, as shown:

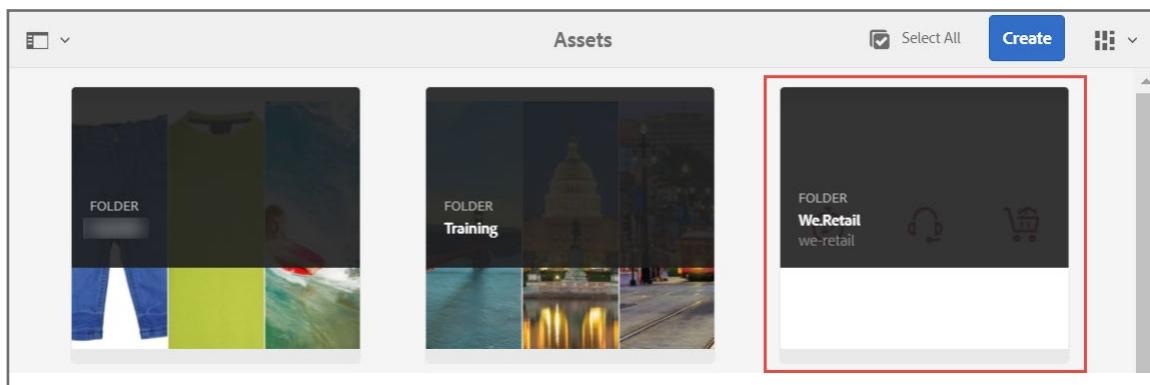


The **Assets** console opens.

2. Click the **Files** folder, as shown:

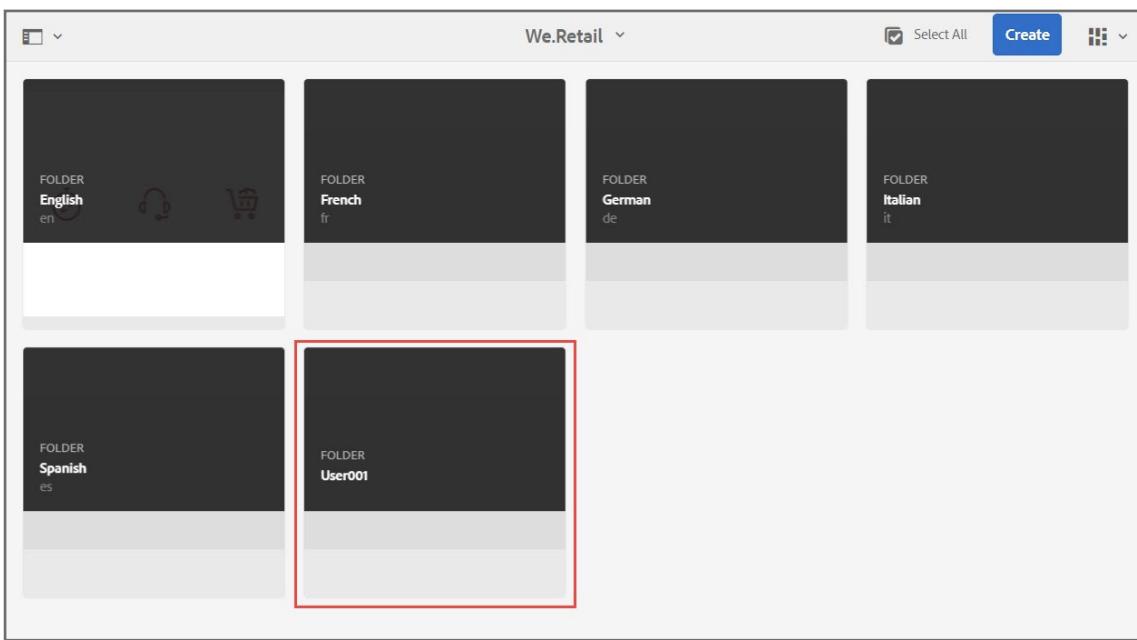


3. Click **We.Retail**.



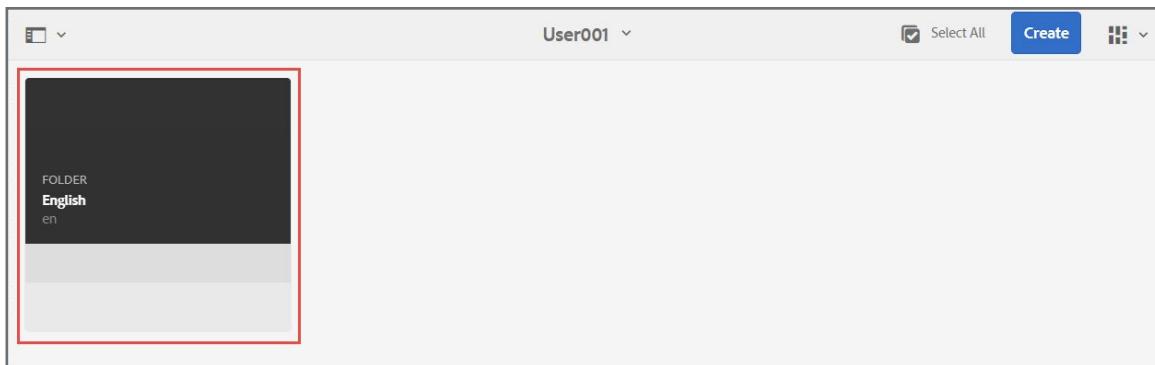
The **We.Retail** folder opens.

4. Click **User0XX** folder, as shown:



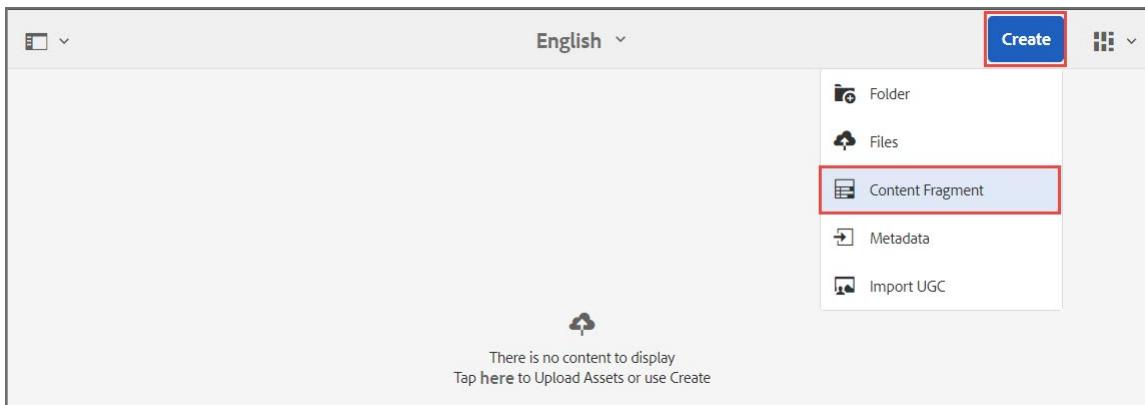
The **User0XX** folder opens.

5. Click the **English** folder, as shown:



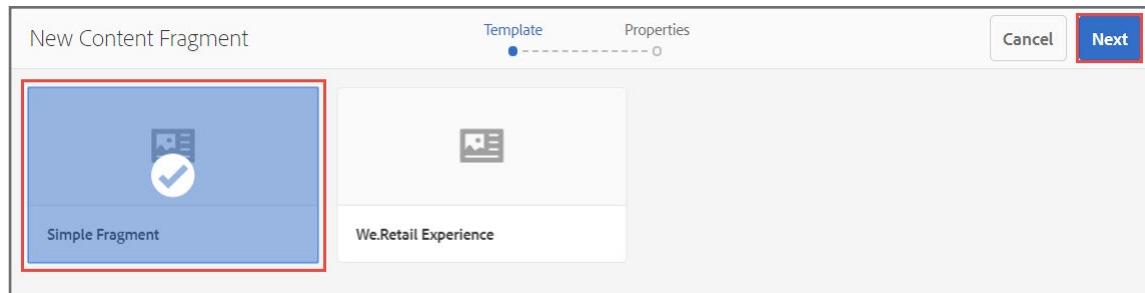
The **English** folder opens.

6. Click **Create** and select **Content Fragment** from the drop-down menu.



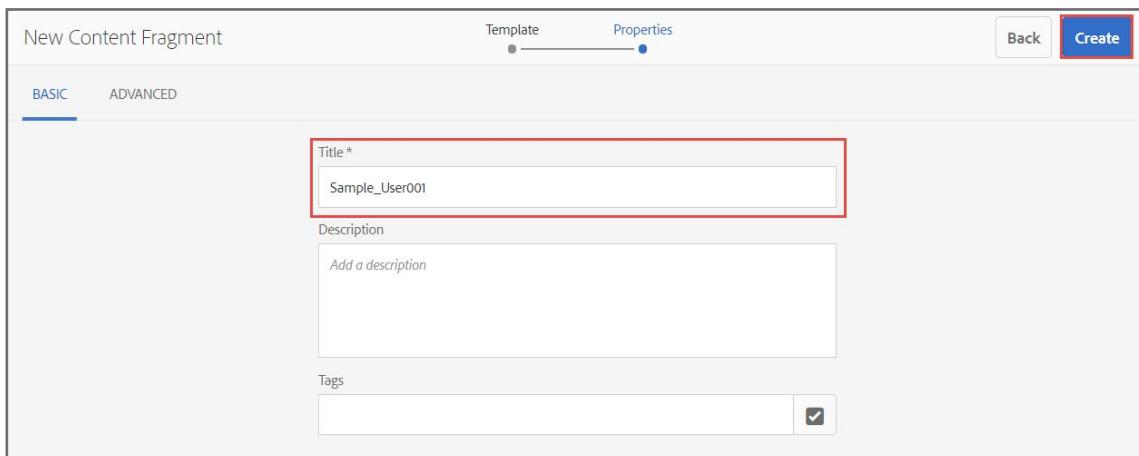
The **New Content Fragment** wizard opens on the **Template** page.

7. Select the **Simple Fragment** template and click **Next**.



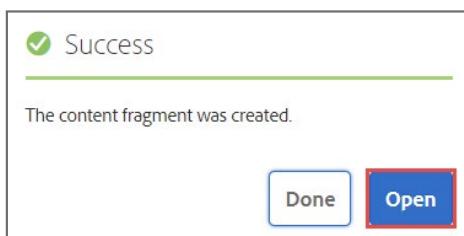
The **New Content Fragment** wizard opens on the **BASIC** tab of the **Properties** page.

8. In the **Title** field, type **Sample_User0XX** (where 0XX is the user number assigned to you for this training) and click **Create**, as shown:



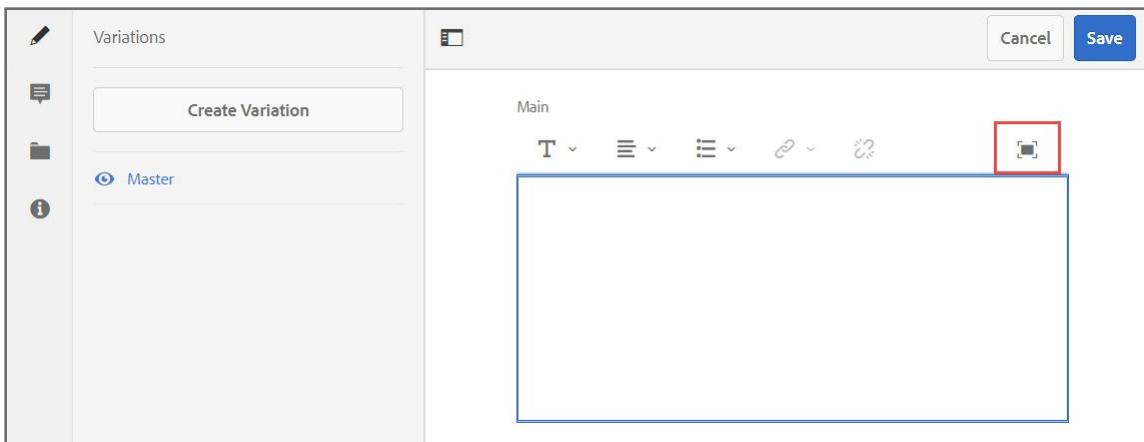
A **Success** pop-up window appears.

9. Click **Open**, as shown:



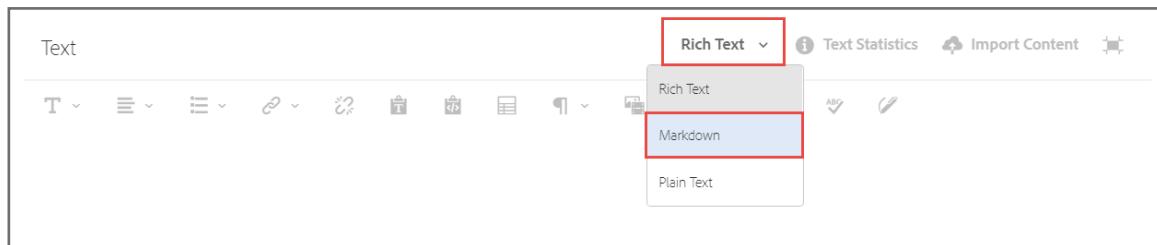
The CF opens for editing in a new browser.

10. Place the cursor in the text editor and click the **Enter full screen mode** icon, as shown:



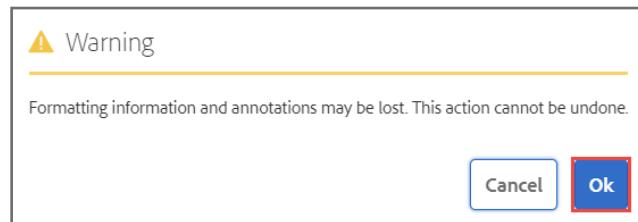
The editor opens in full screen mode.

11. Place the cursor inside the text editor and click the **Rich Text** drop-down arrow and select **Markdown**, as shown:

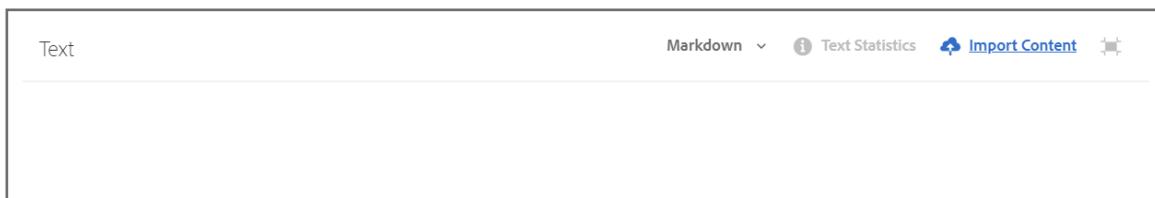


The **Warning** pop-up window opens.

12. Click **Ok**.

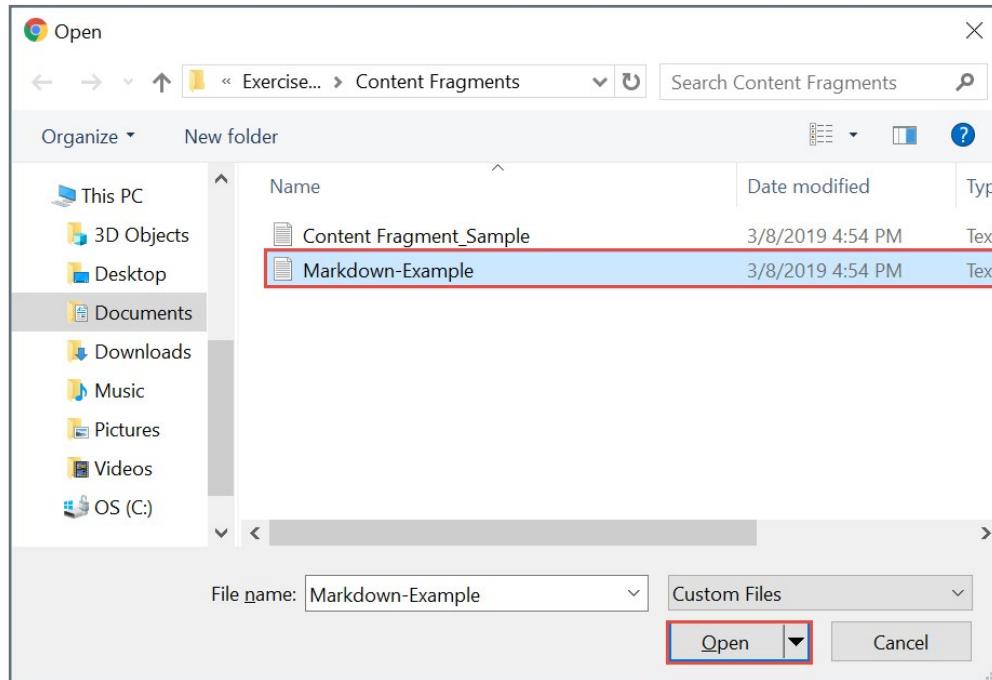


13. Click the **Import Content** button, as shown:



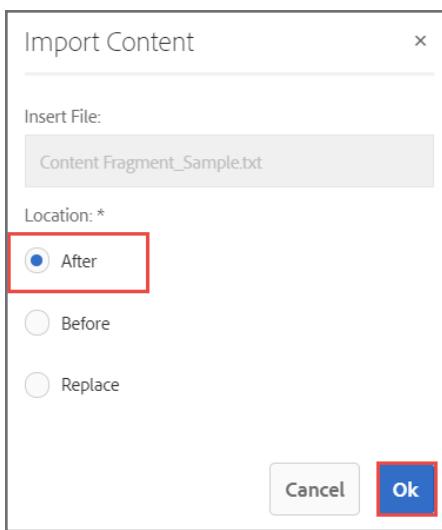
The **Open** dialog box appears.

14. Navigate to the **Exercise_Files > Content Fragments** folder, select the **Markdown-Example.txt** file, and click **Open**, as shown:



The **Import Content** dialog box opens.

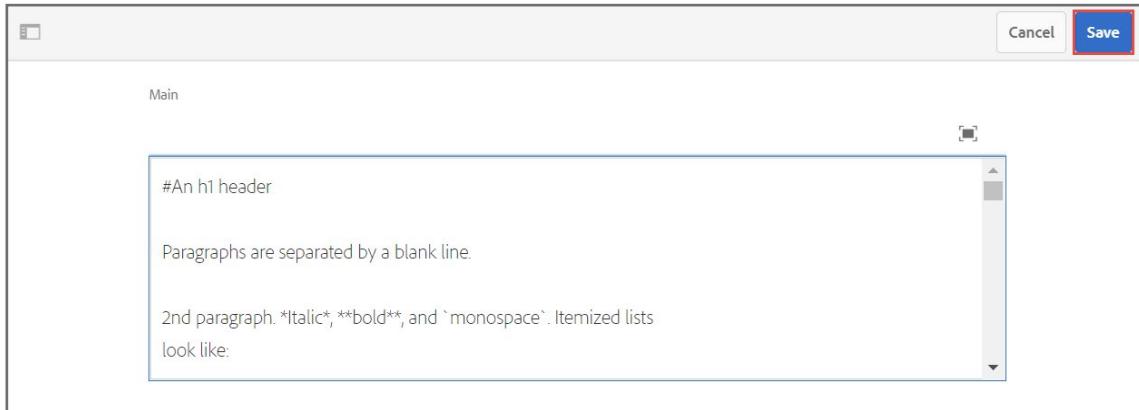
15. Ensure the **After** option is selected and click **Ok**.



The text content from the **Markdown-Example.txt** file is imported to the CF.

16. Place the cursor inside the text editor and click the **Exit full screen mode** icon to resize the editor.

17. Click **Save**, as shown:



The CF is added to the **English** folder, as shown:

The screenshot shows the AEM interface. On the left, a content fragment titled "Sample_ContentFragment" is being processed, indicated by a blue header bar with the text "Processing ...". The main content area contains several paragraphs of text demonstrating various rich text features like italic, bold, monospace, and lists. On the right, the "User001" navigation bar is visible, along with a "Create" button and a "Select All" checkbox. The "English" folder is selected, showing its structure with sub-items like "About Us", "Products", and "Experience".

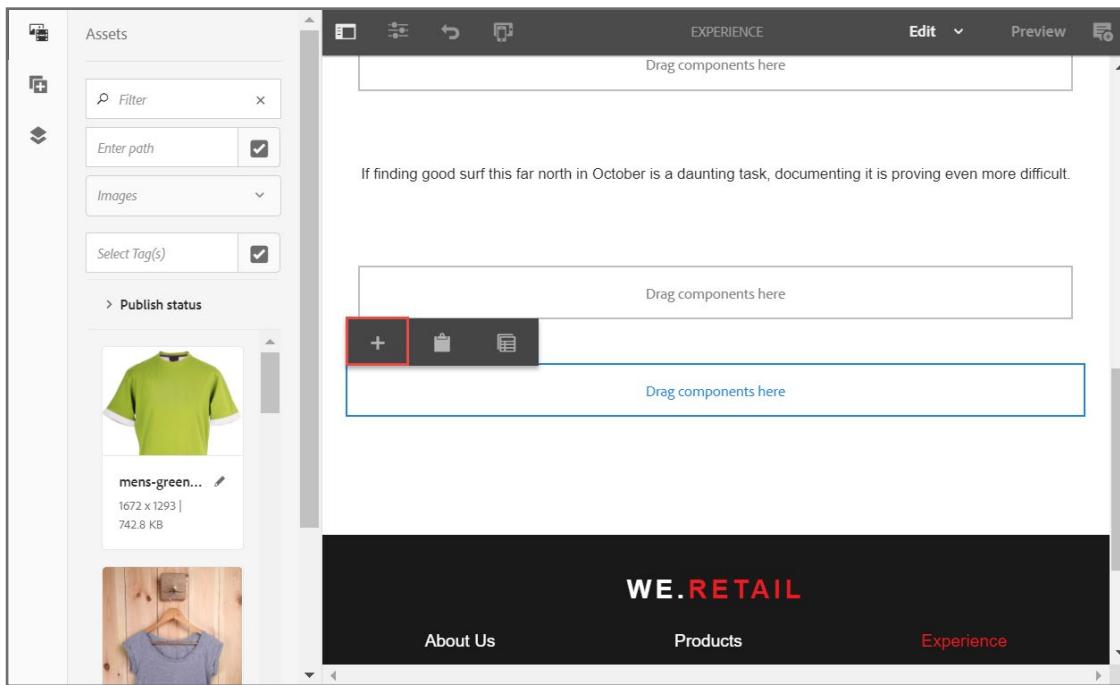
You can add the newly created CF to a page in AEM.

18. Click **Adobe Experience Manager** from the header bar, and click **Sites** from the **Navigation** page. The **Sites** console opens.
19. From the **Sites** console, navigate to **We.Retail > User0XX > English**.
20. Select the **Experience** page and click **Edit** from the actions bar, as shown:

The screenshot shows the AEM Sites console. The navigation path is "Language Masters > United States > Canada > Switzerland > English". The "Experience" page under the English folder is selected and highlighted with a red box. The actions bar at the top has a "Edit (e)" button, which is also highlighted with a red box. To the right, a preview of the "Experience" page is shown in a browser window.

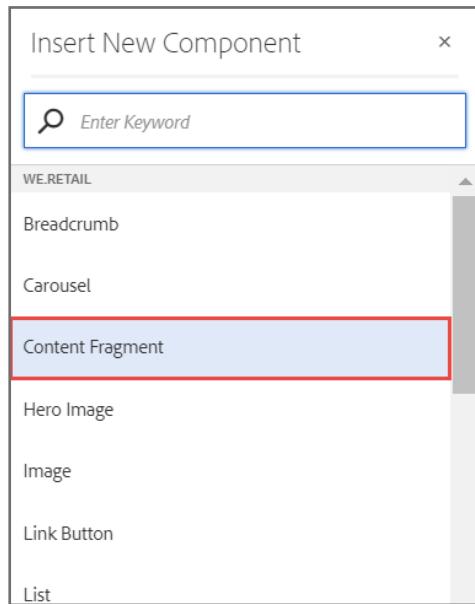
The page opens in a new browser.

21. Scroll to the bottom of the page, click the **Drag components here** area, and click **Insert component** to add a component., as shown:



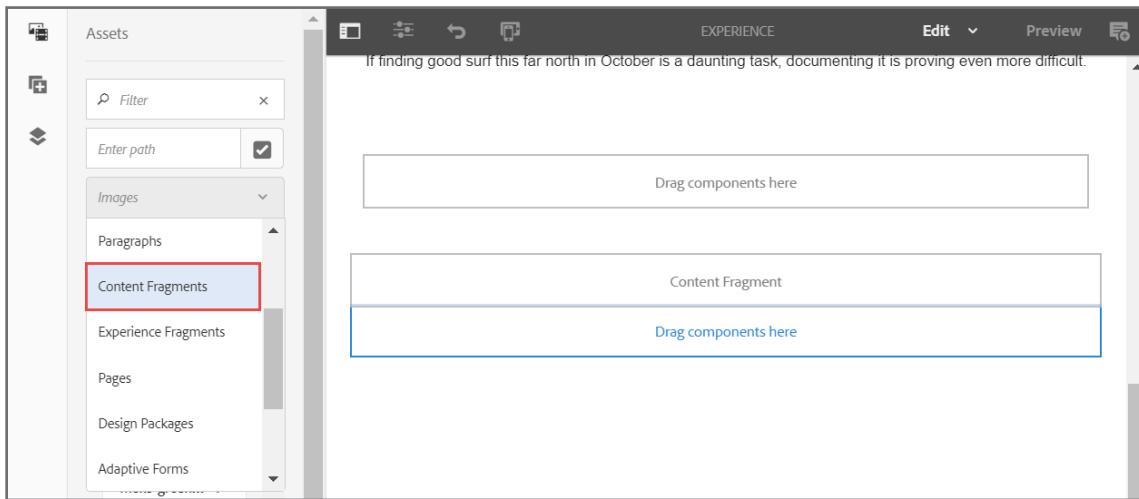
The **Insert New Component** dialog box opens.

22. Select the **Content Fragment** component, as shown:



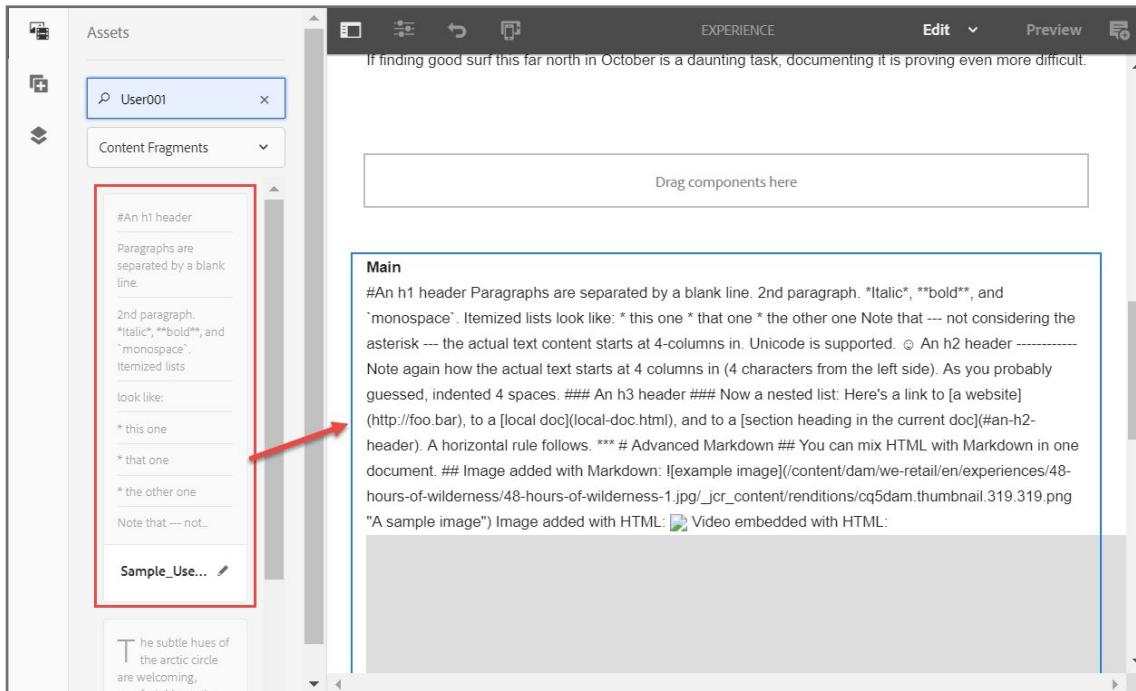
A **Content Fragment** placeholder appears above the **Drag components here** area.

23. From the **Assets** panel, select **Content Fragments** from the **Images** drop-down menu, as shown:



 **Note:** You must narrow the list of CFs to locate the one you created. Search for the unique user number/code (User0XX) to locate the Content Fragment you created.

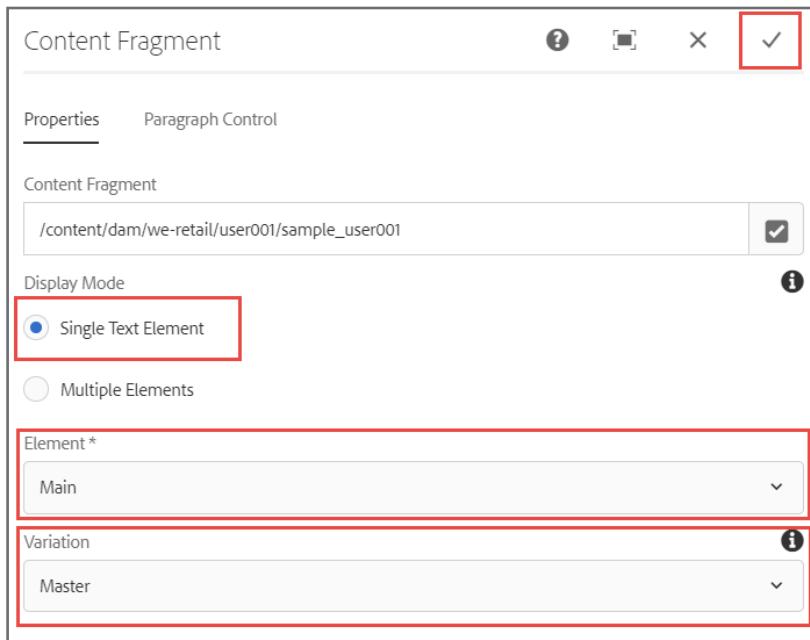
24. Drag the CF asset **Sample_ User0XX** to the **Content Fragment** component of the **Experience** page, as shown:



25. Select the **Content Fragment** container and click **Configure** icon from the toolbar to configure the component. The **Content Fragment** window appears.

26. Ensure you select the following settings, as shown:

- In the **Display Mode** section, select the **Single Text Element** option.
- From the **Element** drop-down menu, select **Main**.
- From the **Variation** drop-down menu, select **Master**.
- Click the **Done** icon.



Observe how the CF appears on the page, as shown:

CF Models

A CF Model is a template that defines the structure of content for CFs.

You can create different CF models after careful analysis of a content type. Content can be:

- Unstructured: If the structure of the content to be published is not known because authors may not know what the content should look like, the content is called unstructured.
- Structured: If authors know the structure of the content and what the content should look like, the content is referred as structured or semi-structured. For example, a mailing address always follows certain patterns in a specific country or region. The address is often a mail box, street, or square with numbers. It always has a postal code (or zip code) and a city/town name. Additionally, for international addresses, the country value is a mandatory field.

Modelling known content types up front helps authors publish content in a consistent way and reduces errors.

Content Services

Digital content was optimized to support the most common web browsers and mobile web browsers. Today, there are many digital platforms and content properties. The digital content is not controlled by the publishers nor by the devices consuming the content through the HTTP service. Many devices require formats other than HTML or proprietary display technologies. Also, each device uses Internet to consume content.

Industries now mostly use content formats such as JSON and XML to deliver content in a presentation-agnostic way. Content is rendered and styled by the consuming environment itself. This practice of display-agnostic content publishing is called Content Services.

AEM can satisfy the requirements of content services with out-of-the box capabilities. AEM endorses hybrid content service model wherein content creators can use a Content Management System (CMS) to publish content to web and make the content available as a web service.

In this way, AEM supports both the publishing models—the web-centric and Content Services—known as headless CMS.

AEM supports Content Services for structured and unstructured content, or a combination of both. You can observe the content service property of AEM, when you modify the URL extension sent by a browser to the server with the extension *.model.json instead of *.html.

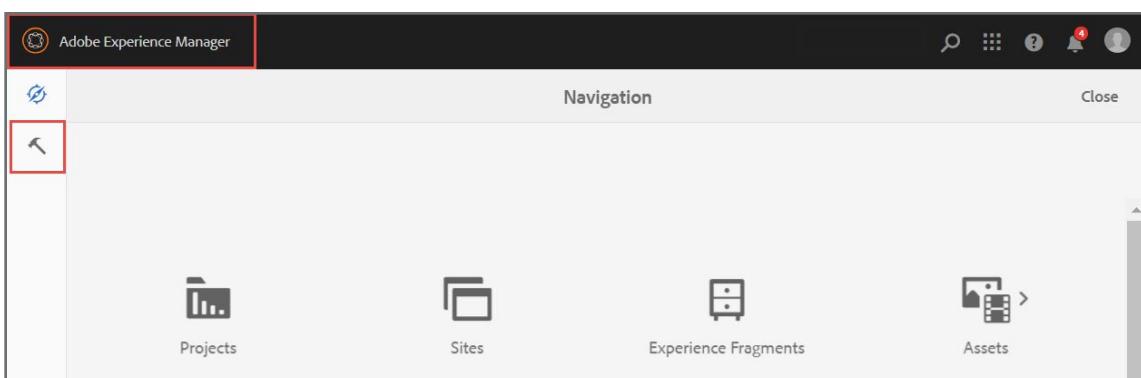
Exercise 3: Create a structured CF that can be processed by Content Services

Scenario:

The Marketing team must display the store details in the **Experience** page of the company's website. As an author, you need to use the structured CFs created with CF models to deliver the page content in the JSON data model format.

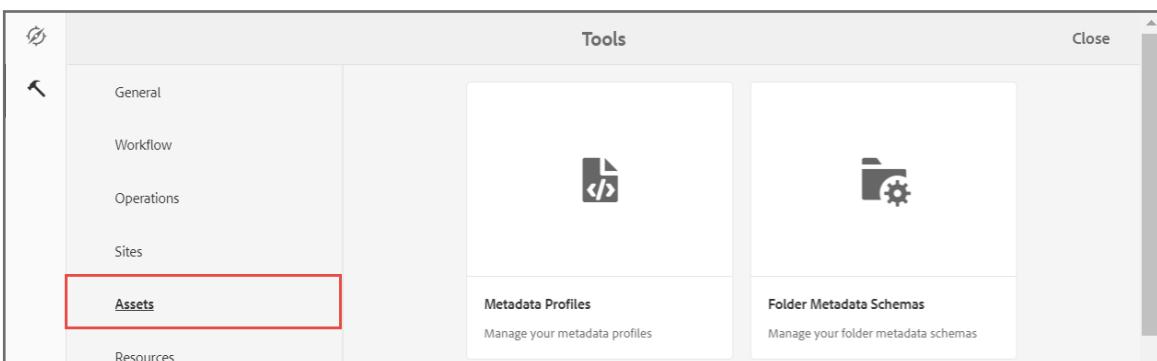
In this exercise, you will build structured CFs that will contain information about a We. Retail store.

1. Click **Adobe Experience Manager** on the header bar and click **Tools**, as shown:



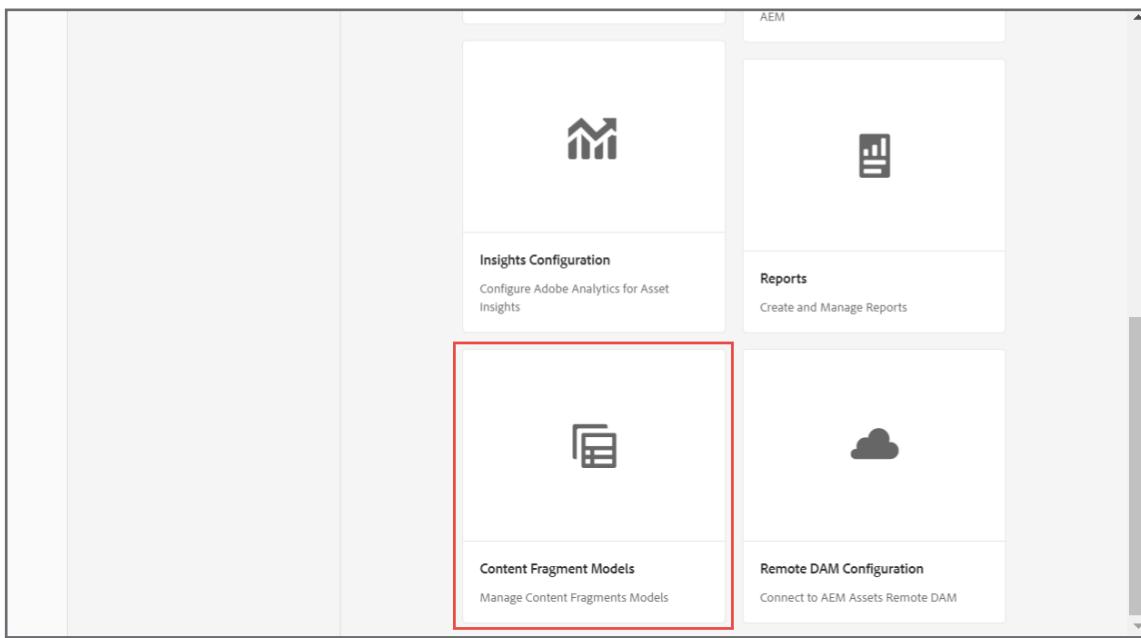
The **Tools** console appears.

2. Click **Assets**, as shown:



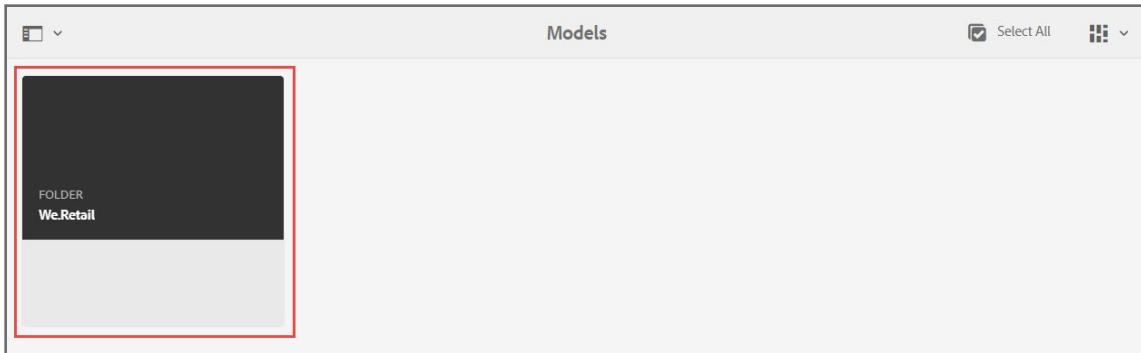
The tools in the Assets folder appears.

3. Scroll down the page and click **Content Fragment Models**, as shown:



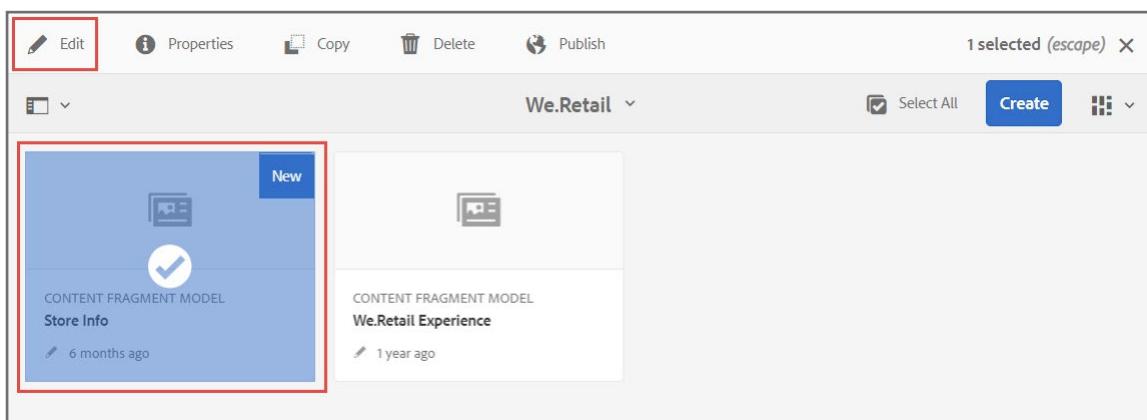
The **Models** folder opens.

4. Click the **We.Retail** folder, as shown:



The **We.Retail** folder opens.

5. Select the **Store Info** model and click **Edit** from the actions bar, as shown:

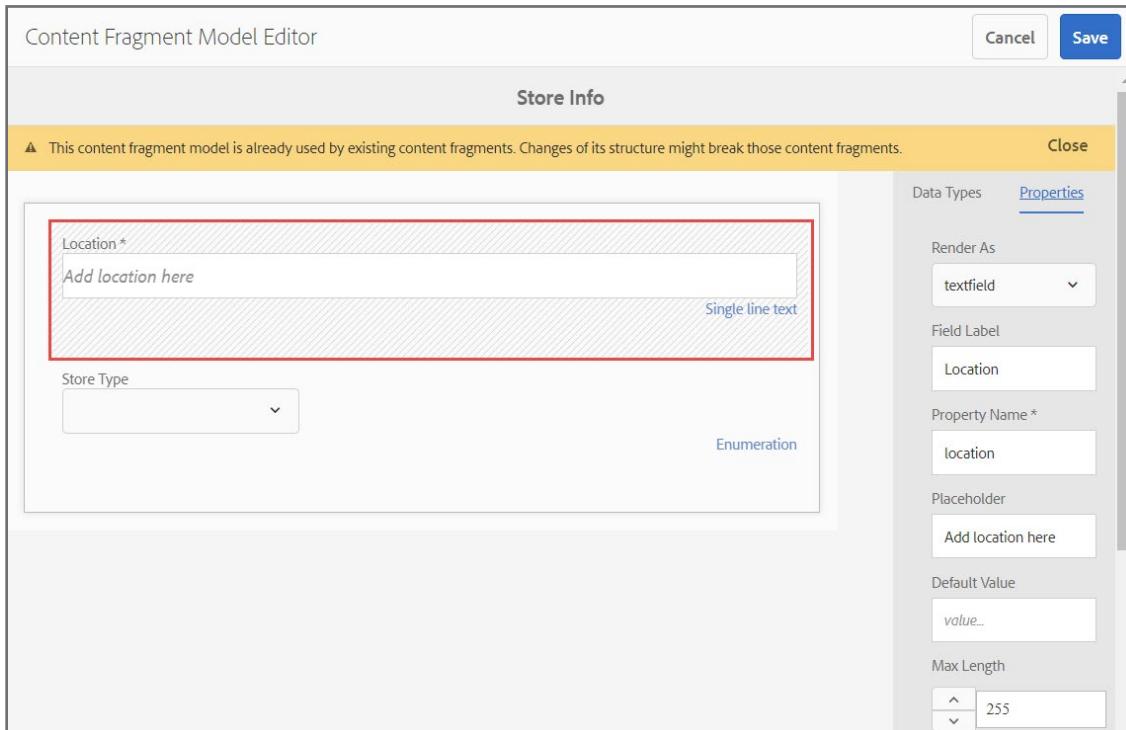


The **Store Info** editor opens.

Note: This is the editor for a Content Fragment Model called **Store Info**. The model editor (on the left) contains a text input field to set the location name for a store and an Enumeration field to choose from a fixed list of store types. This model can be used as a template to create CFs that have a structured data model, enabling authors to set predefined data.

Observe the right panel. It contains elements in the **Data Types** tab that can be dragged to the model editor to add an element. The **Properties** tab helps set the properties for a selected field of the data model.

6. Click the **Location** element, as shown:

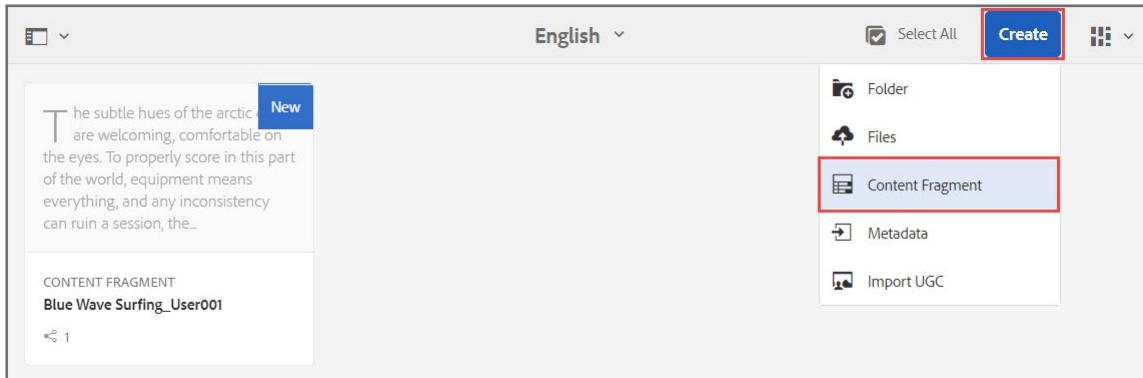


On the **Properties** tab, notice that the **Property Name** for this element is **location**. The **Property Name** will be used as the name of this data element in the JSON produced for omnichannel delivery.



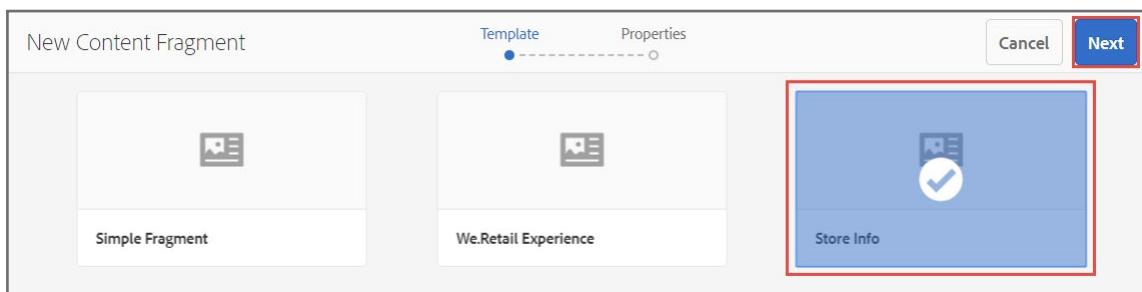
Note: You will work with the JSON data from a CF in a later exercise.

7. Click **Cancel** at the upper-right corner to close the editor.
8. Navigate to the **Assets** console, click **Files > We.Retail > User0XX > English** folder, click **Create** and select **Content Fragment** from the drop-down menu.



The **New Content Fragment** wizard opens on the **Template** page.

9. Select the **Store Info** template and click **Next**.



The **New Content Fragment** wizard opens on the **Properties** page.

10. In the **Title** field, type the name of a city of your choice and click **Create**, as shown:

New Content Fragment

Template Properties

Back Create

BASIC ADVANCED

Title *

Bangalore

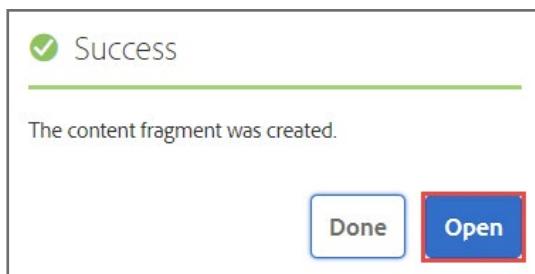
Description

Add a description

Tags

A **Success** pop-up window opens.

11. Click **Open**, as shown:



Note: The Location field is highlighted in red with a warning sign. This is because this field was configured as required in the CF Model. A CF cannot be saved until every mandatory field is populated.

12. In the **Location** field, type a street address of your choice.

13. From the **Store Type** drop-down menu, select a type of store of your choice, and click **Save**, as shown:

Cancel Save

Location *

M.G. Road

Store Type

WeRetailExpress

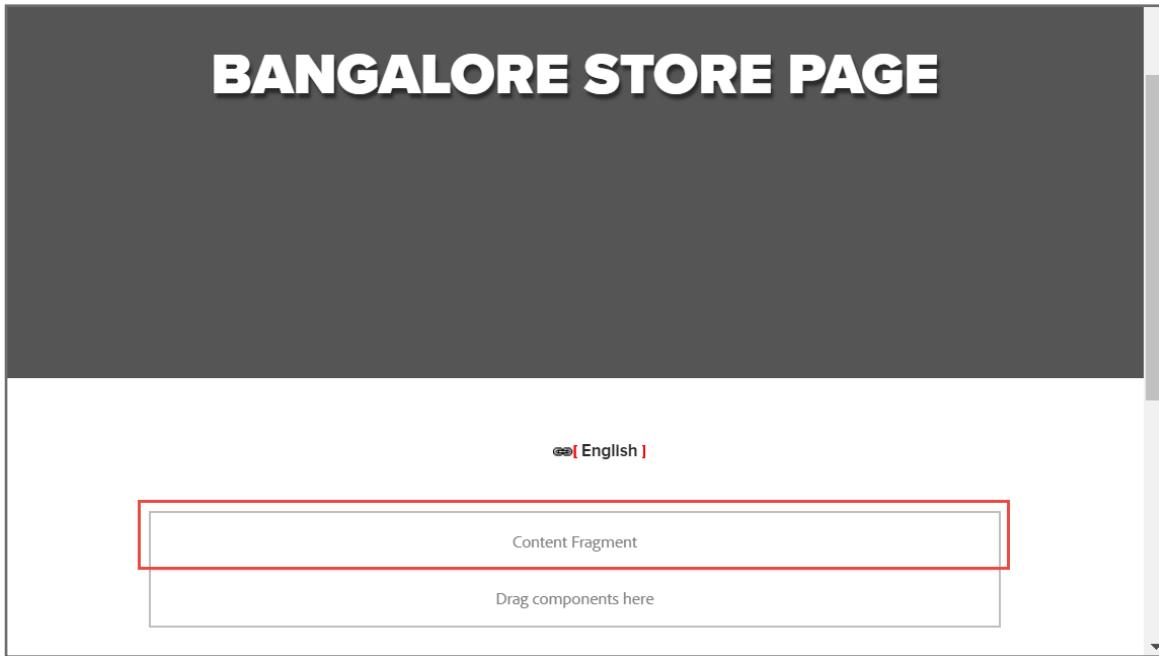
The new CF is created, as shown:

The screenshot shows the AEM Content Fragments interface. At the top, there's a toolbar with 'English' selected, 'Select All', and a 'Create' button. Below the toolbar, a list of content fragments is displayed. One fragment, 'M.G. Road' under 'WeRetailExpress', is highlighted with a red border. To its right, the content of the fragment is visible: a paragraph about the arctic circle and a link to 'Blue Wave Surfing_User001'. Another fragment, 'CONTENT FRAGMENT Bangalore', is also listed below.

14. In the **Sites** console, navigate to **We.Retail > User0XX > English**.
15. Create a page under the **English** page using the **Experience Page** template.
16. Set the title to **<Your City> Store Page**, as shown:

The screenshot shows the AEM Sites console. On the left, a navigation tree lists 'Campaigns', 'Community Sites', 'Screens', and 'We.Retail'. Under 'We.Retail', several sub-sites are listed: 'language-masters', 'United States', 'Canada', 'Switzerland', 'Germany', 'France', 'Spain', 'Italy', 'We.Retail Content Servi...', and 'User001'. On the right, the 'English' site is selected. A new page, 'Bangalore Store Page', is being created under it, with the title 'Bangalore Store Page' and the path 'bangalore-store-page' highlighted with a red border.

17. Select the <Your City> Store Page. The actions bar appears.
18. Click **Edit**. The <Your City> Store Page opens in the page editor. Notice the layout container has an initial CF component already (this is how the We.Retail Experience Page template is designed), as shown:



19. Click the **Toggle Side Panel**, as shown:



The **Assets** panel appears on the side panel.

- From the **Image** drop-down menu, select **Content Fragment**, as shown:

The screenshot shows the AEM interface. On the left, the **Assets** panel is open, displaying a tree structure with categories: Images, Paragraphs, Content Fragments (which is highlighted with a red box), Experience Fragments, Pages, Design Packages, and Adaptive Forms. On the right, the main workspace is titled "BANGALORE STORE PAGE". At the top of the workspace, there are "Edit" and "Preview" buttons. Below the title, the text "BANGALORE STORE PAGE" is displayed in large, bold, white letters. At the bottom of the workspace, it says "English".

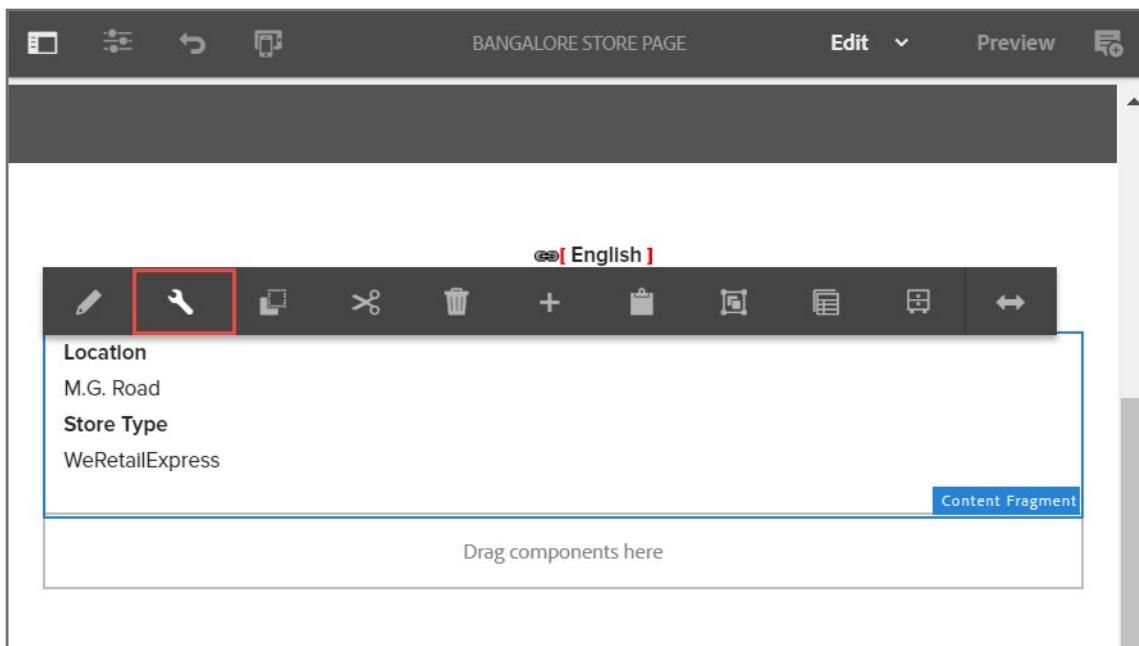
All the available CFs appear.

- Drag the **<Your City> Store Page** CF you created in the previous steps to the **Content Fragment** container, as shown:

The screenshot shows the AEM interface. On the left, the **Assets** panel is open, showing a list of content fragments: "M.G. Road", "WeRetailExpress", and "Bangalore" (which is highlighted with a red box). An arrow points from the "Bangalore" fragment in the Assets panel to a blue-bordered box on the right labeled "Content Fragment". This box contains the text "Location", "M.G. Road", "Store Type", and "WeRetailExpress". Below this box, it says "Drag components here".

The CF is added to the **Bangalore Store Page**.

22. Click the CF and from the actions bar that appears, click the **Configure** icon, as shown:

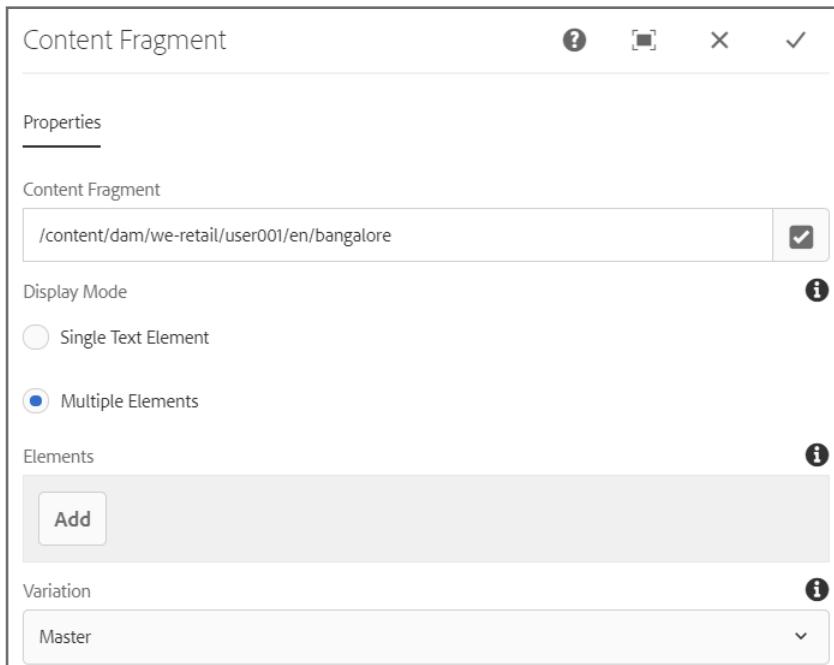


The **Content Fragment** dialog box appears.

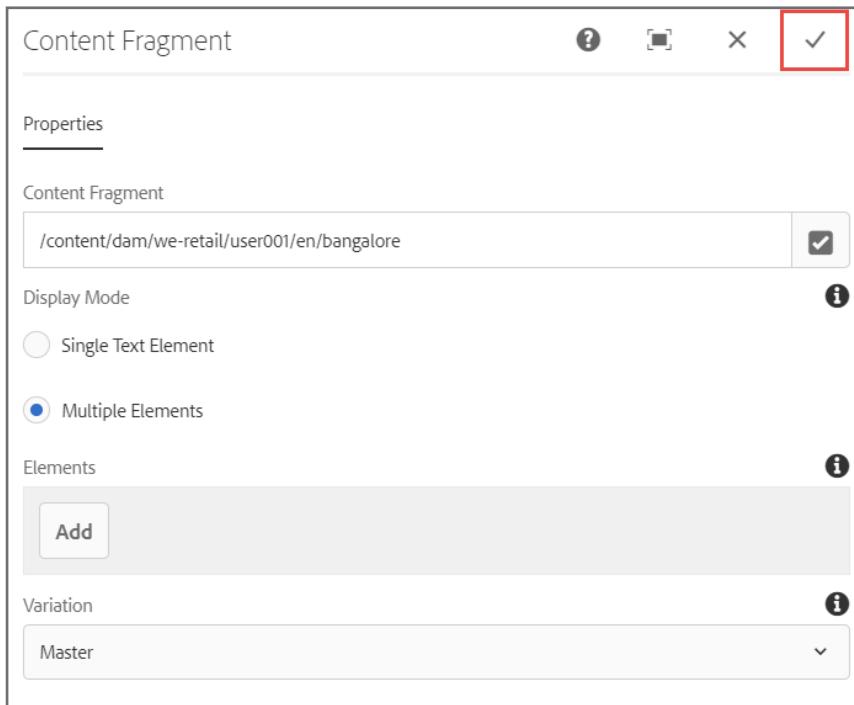
23. Ensure that the **Display Mode** is set to **Multiple Elements** by default.

24. For this exercise, leave the **Properties** fields as is.

(You can click the **Add** button in the **Elements** section to render the elements that you must display on the page. When you do not select any element (as it is by default), all the elements are rendered on the page.)



25. Click the **Done** icon to save the changes in the dialog box.



26. To view how the data of this CF is formatted to be used outside AEM for an omnichannel delivery (through JSON), modify the page URL in the address bar of the browser by replacing html (at the end) by model.json, as shown:

/en/basel-store-page.html  /en/basel-store-page.model.json

The JSON representation of the page data is displayed in the browser, as shown. Observe how the store information is represented in the JSON feed, with the data types and names defined in the CF model:

```

"content_fragment": { ▼ 9 properties, 498 bytes
  "columnClassNames": "aem-GridColumn aem-GridColumn--default--12",
  "description": "",
  "title": "Basel Store Info",
  "model": "we-retail/models/store-info",
  "elements": { ▼ 2 properties, 215 bytes
    "location": { ▼ 4 properties, 104 bytes
      "value": "Barfüsserplatz 6, Basel, Switzerland",
      "dataType": "string",
      "title": "Location",
      ":type": "string"
    },
    "storeType": { ▼ 4 properties, 85 bytes
      "value": "WeRetailExpress",
      "dataType": "string",
      "title": "Store Type",
      ":type": "string"
    }
  }
}

```



Note: By using structured CFs, the data created by authors can be quickly and easily extracted, avoiding time-consuming queries to search them to be streamlined to any channel.



Tip: Depending on your browser, your JSON output may appear in a different style. AEM can also output formatted JSON. To view it add .tidy in front of the extension of the URL so that it ends with **.model.tidy.json**.

Experience Fragments

An XF is a content container that can be reused with styles and layout already applied through a template. The XF content must be used with a larger content. For example, an XF can be a header or footer that must be used with other content type on a webpage. However, if you have content that can be reused in many places, the XF is the right content type to choose as it can be placed in as many locations and on as many channels as required.

With the branding and layout applied, the XF is less versatile in its reuse than the CF. For each context, it needs to have a specific template. You can create variations in XF and each variation can have an optimized template for a specific channel.

Use Cases for XFs

The most frequent use cases for XF are:

- Reuse of web content in different locations on a website
- Content adapted in variations to different channels with the help of channel optimized templates
- Content reuse with Content Services

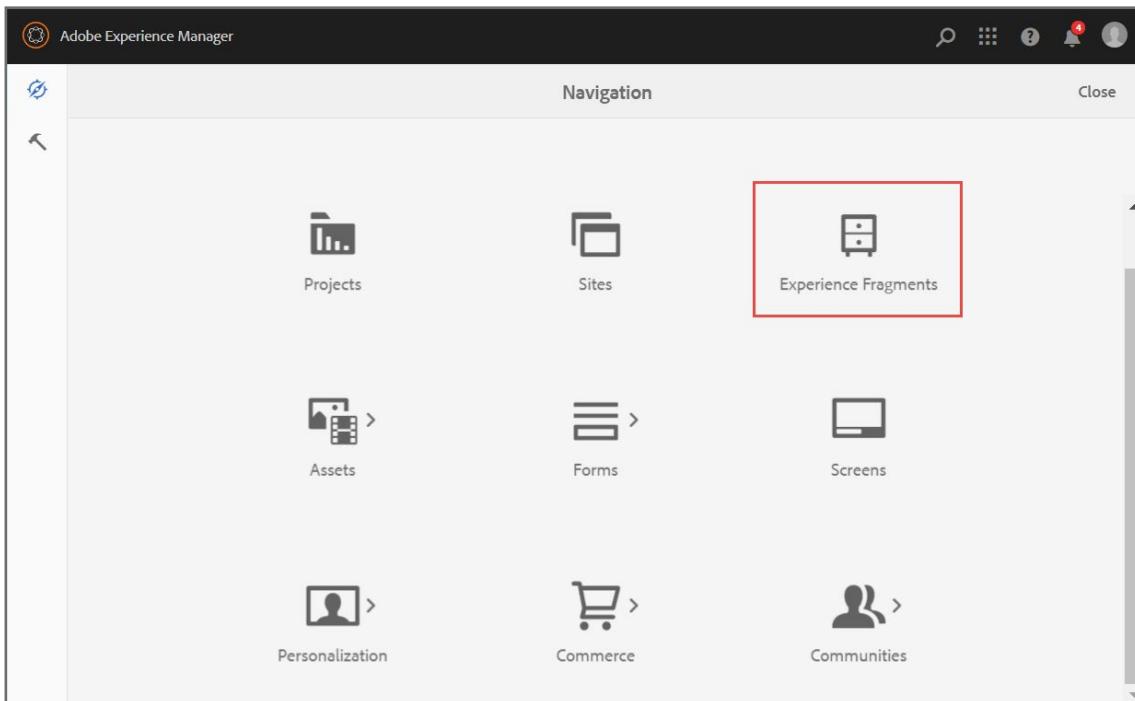
Exercise 4: Create an XF with structured data from a CF

Scenario:

As an author, you need to build a teaser to advertise the opening of new stores that can be reused across channels with the same look and feel.

In this exercise, you will create an XF and add it to a page. Carry out the following steps:

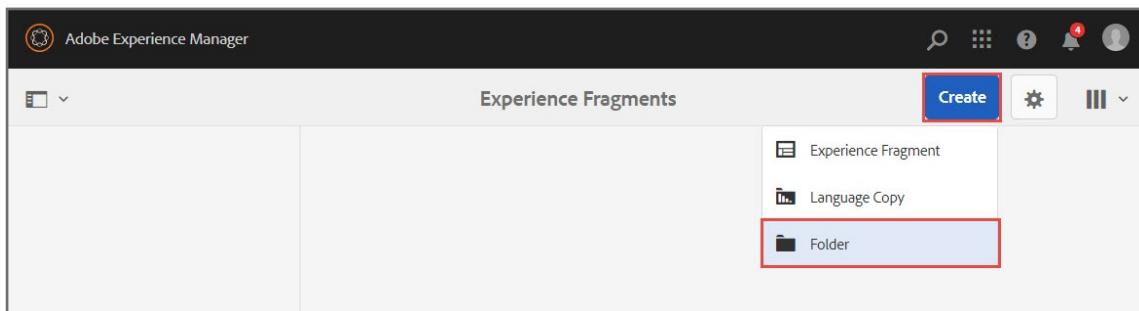
1. Click **Adobe Experience Manager** to open the **Navigation** console and click the **Experience Fragments** console, as shown:



The **Experience Fragments** page opens.

-  **Note:** A Product Navigation tutorial may appear. Close this tutorial and select the **Do not show this again** check box.

- Click **Create** and select **Folder** from the drop-down menu, as shown:

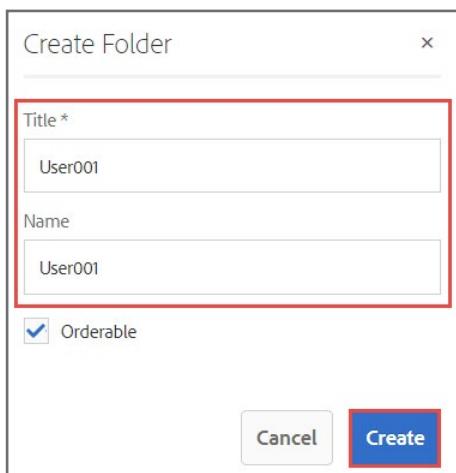


The **Create Folder** dialog box opens.



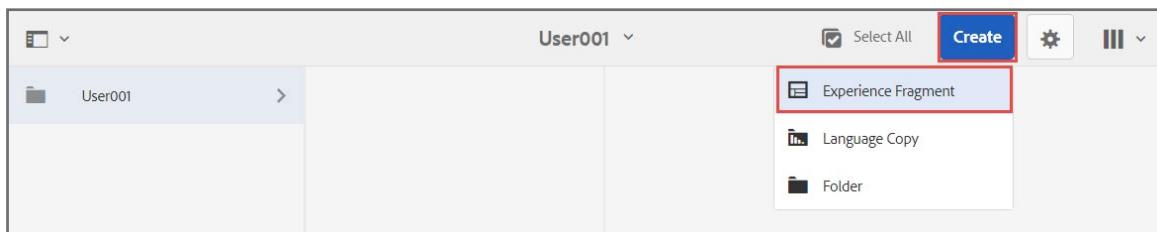
Note: You need to organize your fragments into folders as a best practice. So, before you create a Fragment, create a folder first.

- In the **Title** and **Name** fields, type **User0XX** (where 0XX is the user number assigned to you for this training) and click **Create**, as shown:



The **User0XX** folder is added to the **Experience Fragments** page.

- Create an XF in the **User0XX** folder:
 - Click the **User0XX** folder. The actions bar appears.
 - Click **Create** and select **Experience Fragments**, as shown:

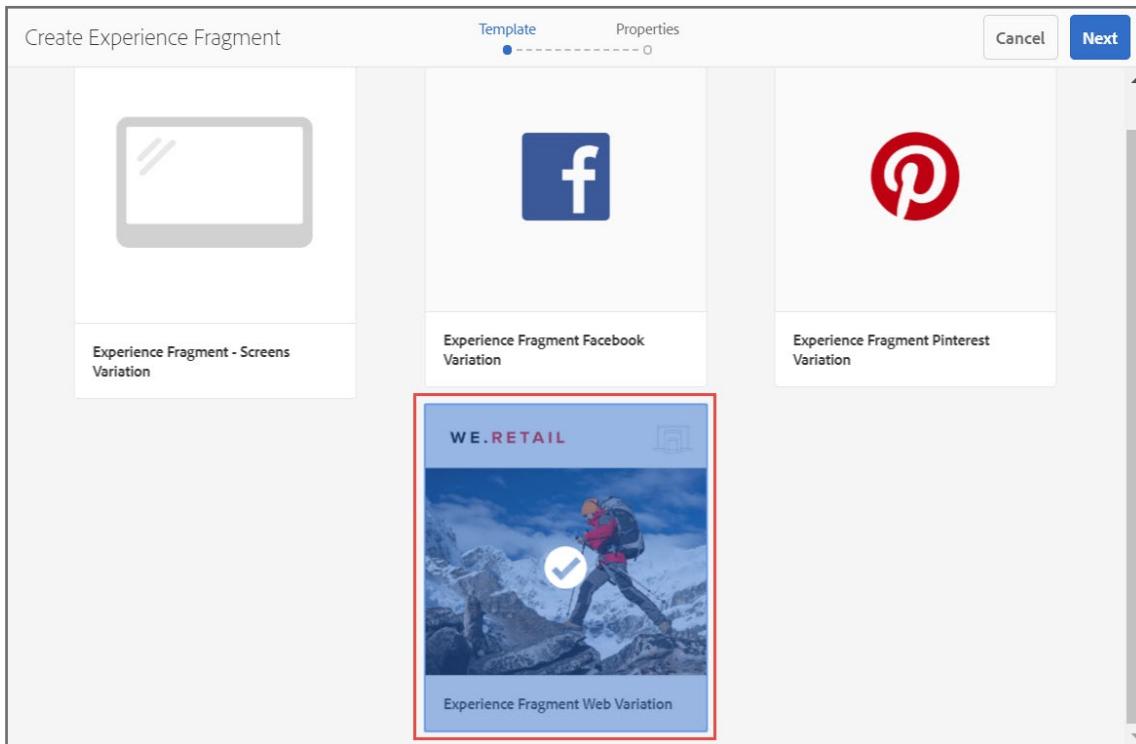


The **Create Experience Fragment** wizard opens on the **Template** page.



Note: Ensure the User0XX folder appears in the Parent Hierarchy.

5. Select the **Experience Fragment Web Variation** template and click **Next**, as shown:



The **Create Experience Fragments** wizard opens on the **Properties** page.

6. In the **Title** field, type **Store Info User0XX** and click **Create**, as shown:

Basic	<input type="text" value="Store Info User001"/> Title * <input type="text"/> <input type="text"/> <input type="text"/>
-------	--

The **Success** pop-up window appears.

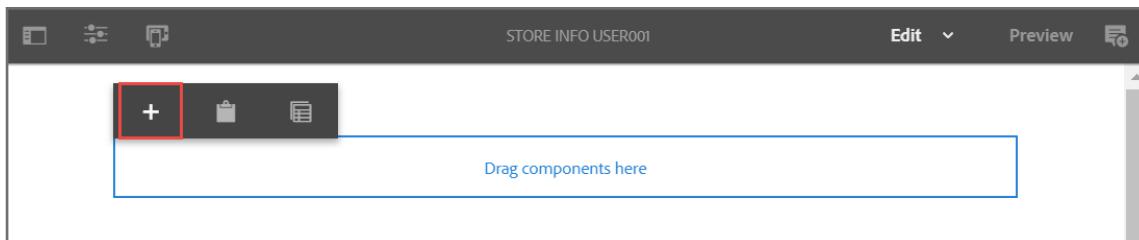
7. Click **Close**.

The XF is added to the User0XX folder on the XF page.

8. Select the **Store Info User0XX** XF and click **Edit** from the toolbar. The XF page opens in a new tab for editing.

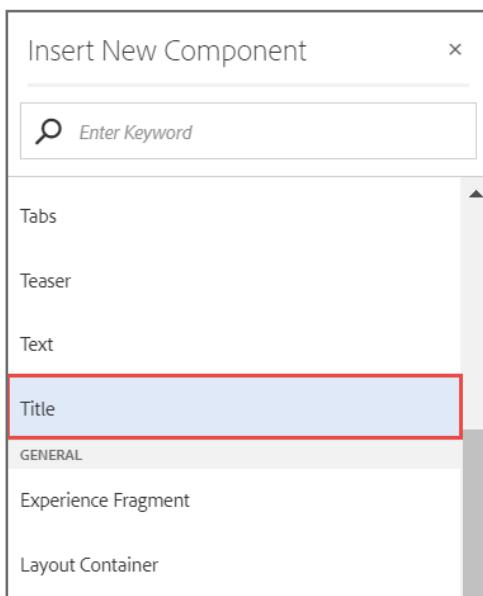
9. Click the **Drag components here** area. A toolbar appears.

10. Click **Insert component** from the tools bar, as shown:



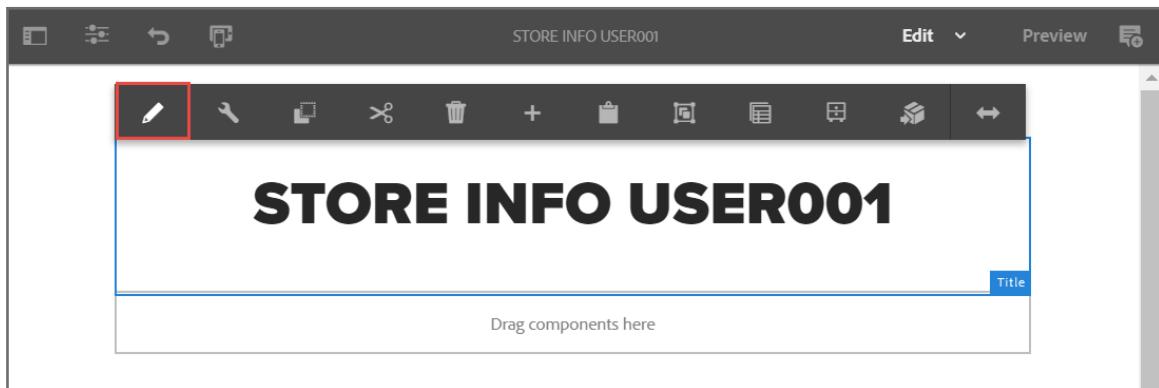
The **Insert New Component** pop-up window appears.

11. Scroll down within the **WE.RETAIL** category and select the **Title** component, as shown:



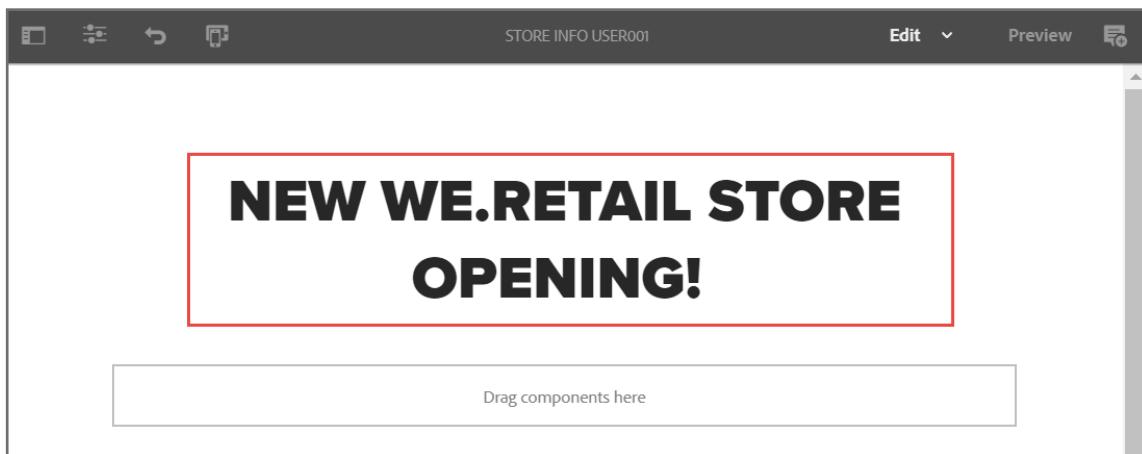
The Title component is added to the page.

12. Select the **Title** component, and click the **Edit** icon from the toolbar, as shown:



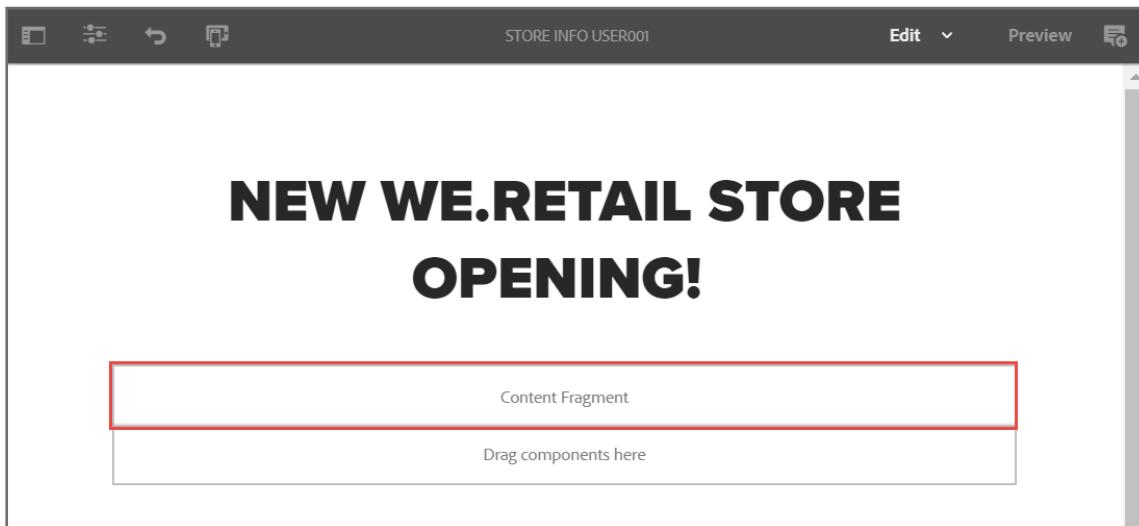
The **Title** changes to edit mode.

13. Change the title to **New We.Retail Store Opening!**, as shown:



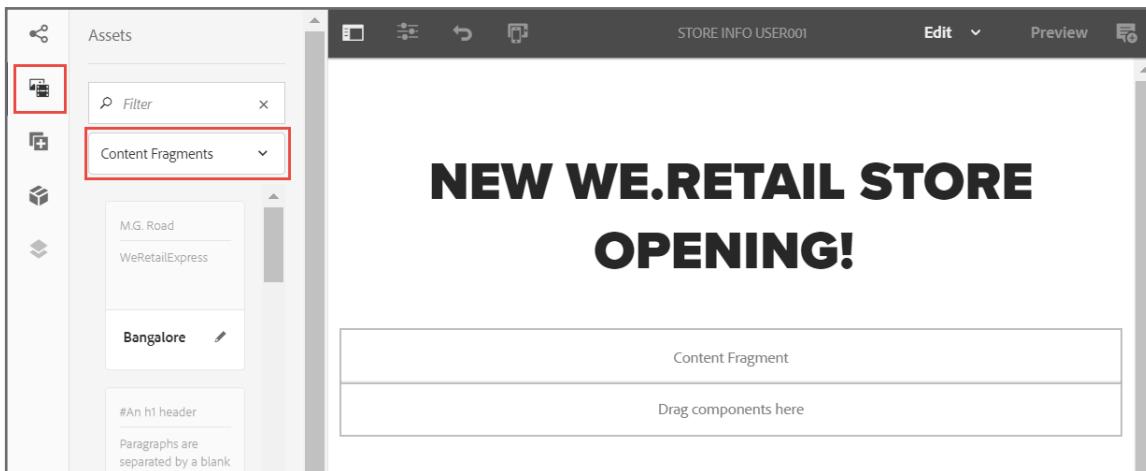
14. Repeat steps 8 and 9 to insert a CF. Remember to select **Content Fragment** from the **Insert New Component** pop-up window.

The Content Fragment component is added below the Title component, as shown:

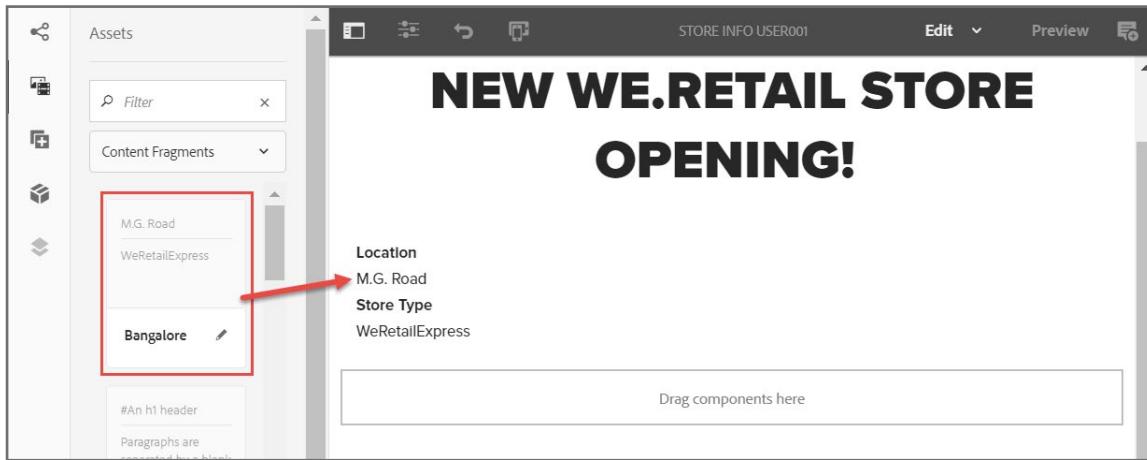


15. Click **Toggle Side Panel**. The **Variations** panel displays.

16. Click the **Assets** icon, click the **Images** drop-down menu, and select **Content Fragments**, as shown:



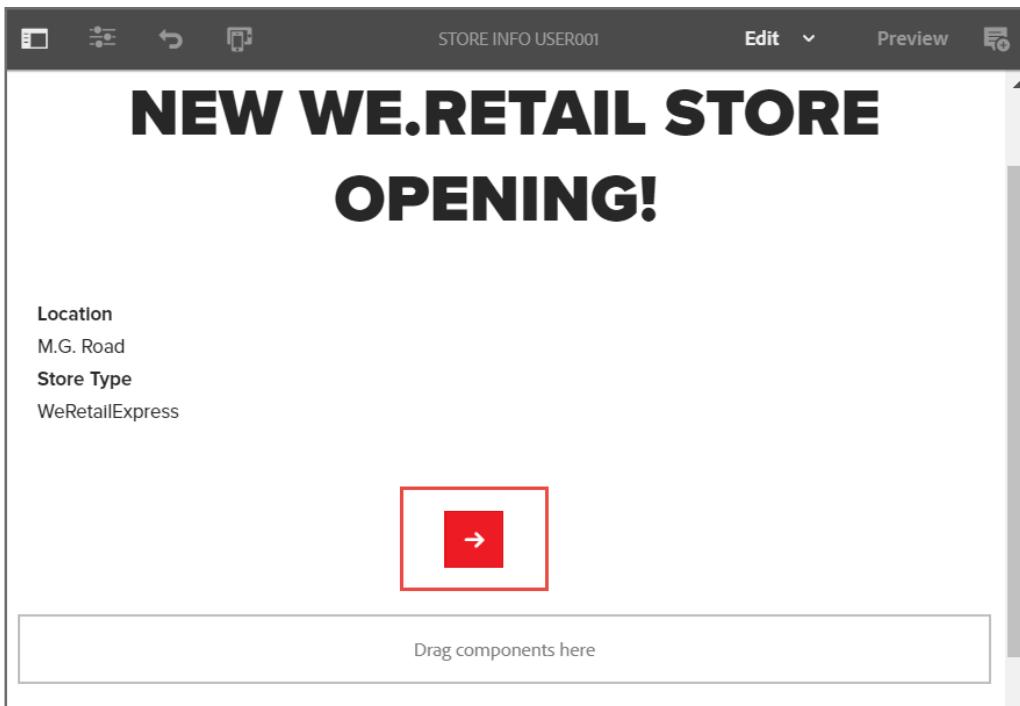
17. Drag the <Your City> Store Page you created in the previous exercise to the CF component, as shown:



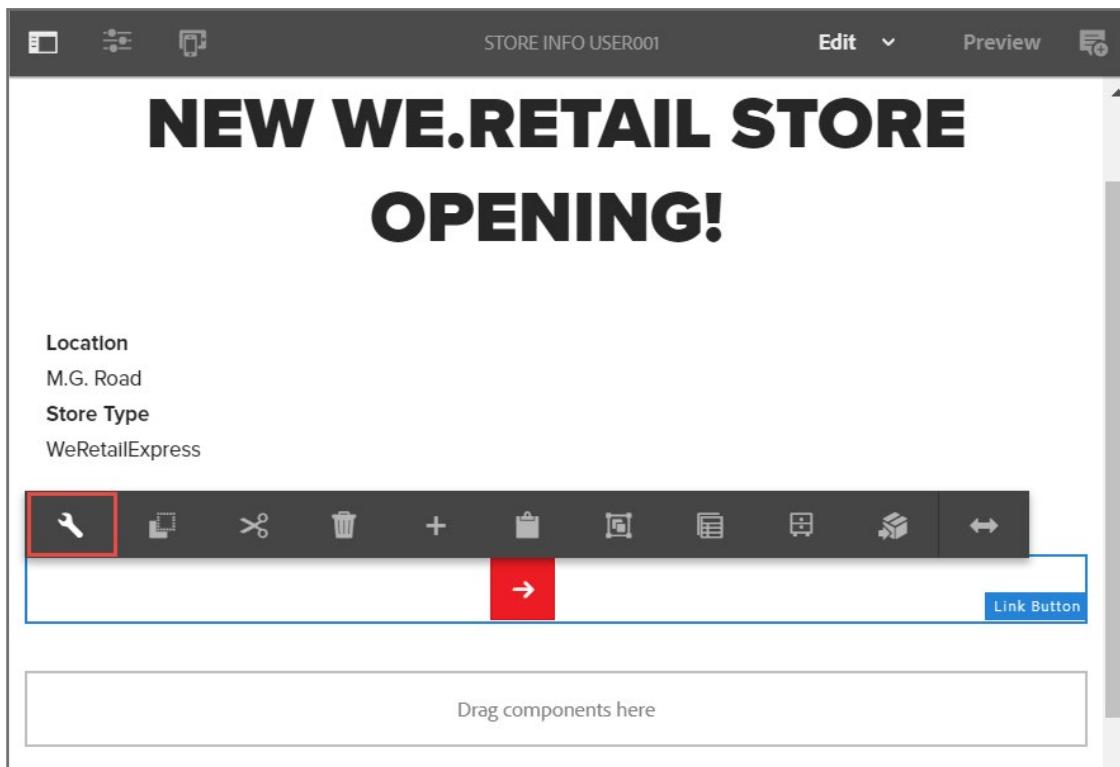
Tip: You may need to filter by the name of the CF to narrow the list if you see several CFs in the shared training environment (created by other participants).

18. Repeat steps 8 and 9 to add a **Link Button** component below the CF. Remember to select **Link Button** in the **Insert New Component** pop-up window.

The **Link button** is added to the page, as shown:



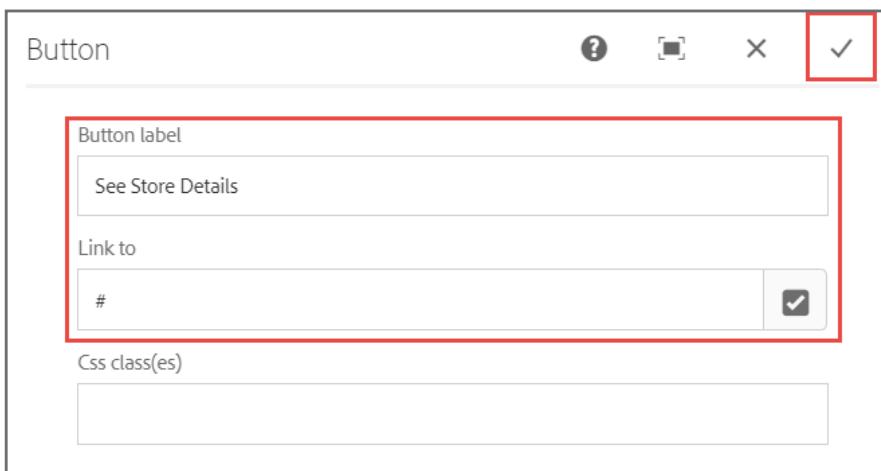
19. Click the **Link Button** component and click the **Configure** icon, as shown:



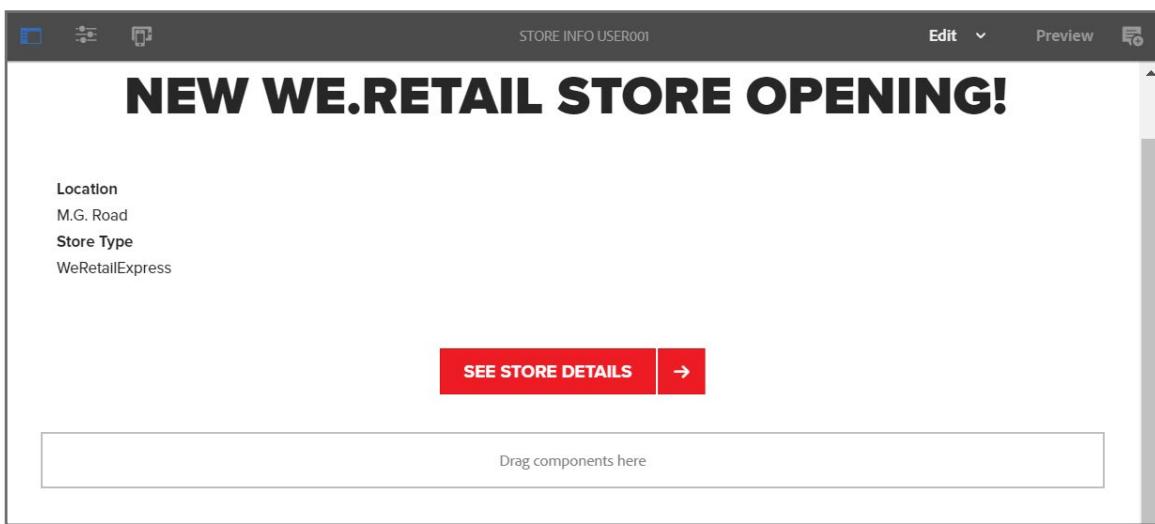
The **Button** dialog box opens:

20. In the **Button** dialog box:

- In the **Button label** field, type **See Store Details**.
- In the **Link to** field, type the **#** symbol. In a realistic situation, the **Link to** value should be the path to the page about this store.
- Click the **Done** icon, as shown:



21. The XF should look as shown:



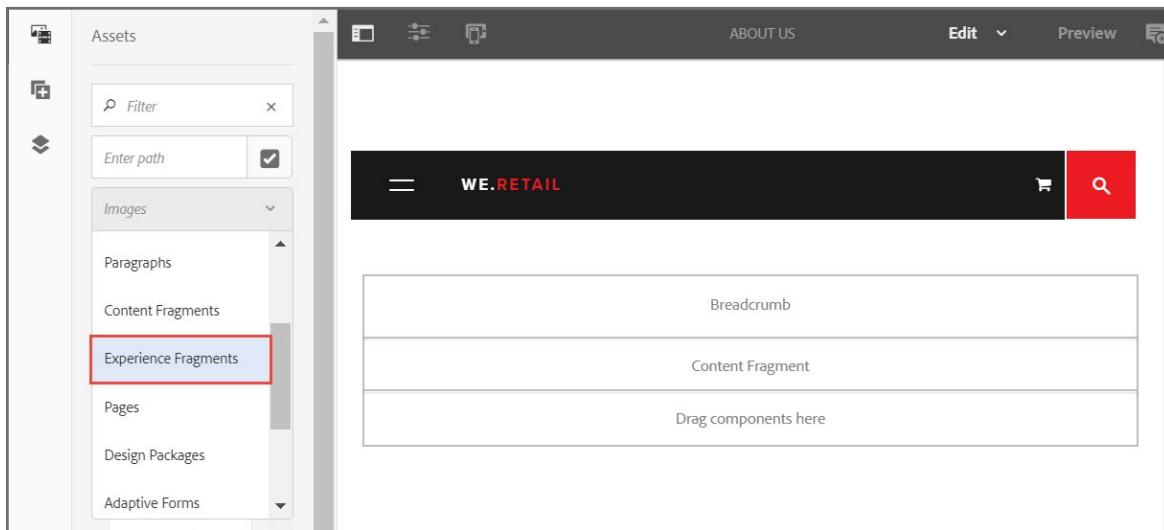
You can add the newly created XF to a page in AEM.

22. Navigate to the **Sites** console > **We.Retail** > **User0XX** > **English** and select the **About Us** page. The actions bar appears.

23. Click **Edit**. The **About Us** page opens in the page editor.

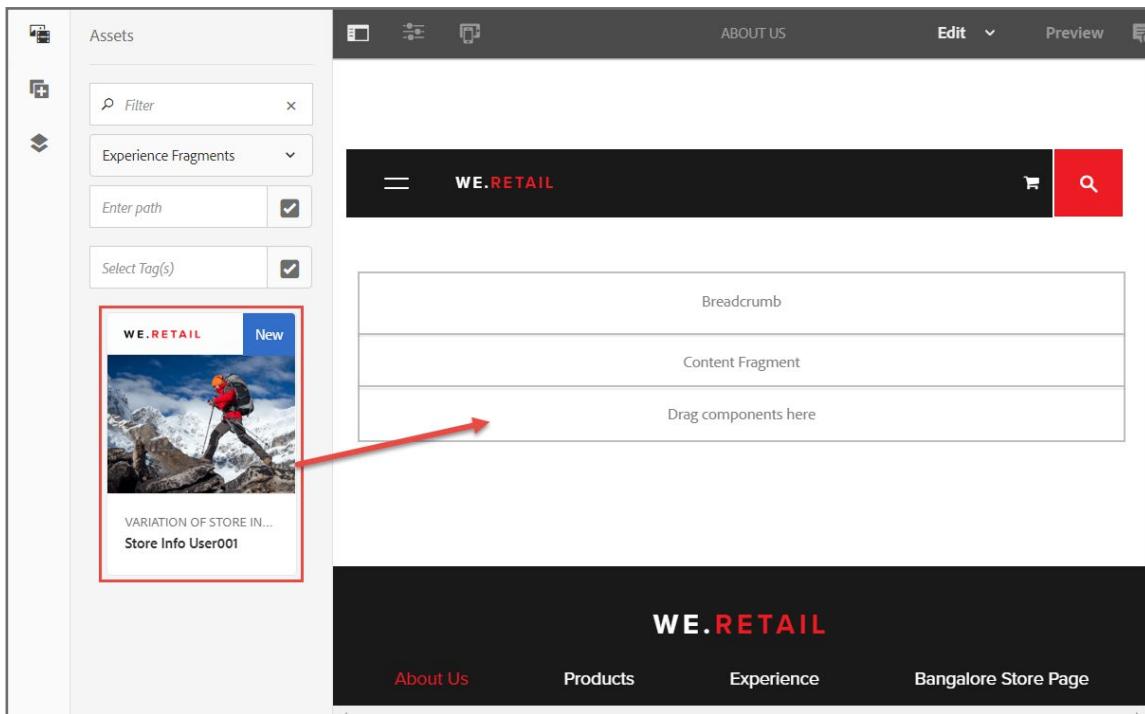
24. Click the **Toggle Side Panel**. The **Assets** panel appears.

25. From the **Images** drop-down menu, select **Experience Fragments**, as shown:



Note: You must narrow the list of XFs by searching for the unique user number or code to locate the Store Info Page you created.

26. Drag the **Store Info User0XX XF** to the **Drag Components here** container, as shown:



Observe how the XF renders on the page. If you have multiple variations, you can choose the variation that you must display on the page by opening the **Configure** dialog box from the XF container.

Optionally, you can create different variations for different channels (with or without photographs, or with more/less detailed information based on the elements you choose in the CF), using channel-specific templates such as Facebook, Pinterest.

You can also create a generic XF for any store opening and create a variation for each different store.

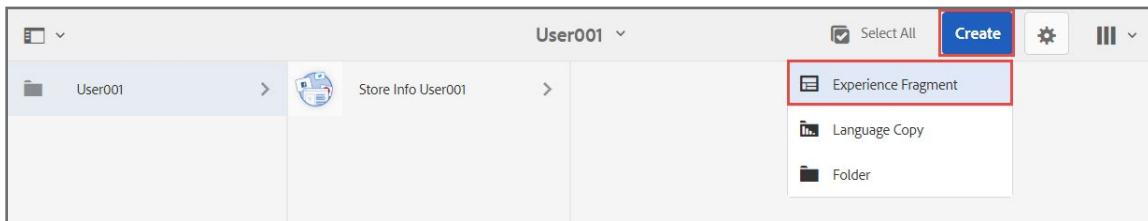
Exercise 5 (Optional): Create CF stores by using XF building blocks

Scenario:

After creating an XF, you need to reuse the XF across variations and templates. As an author, you can do so by using the building blocks feature in XF.

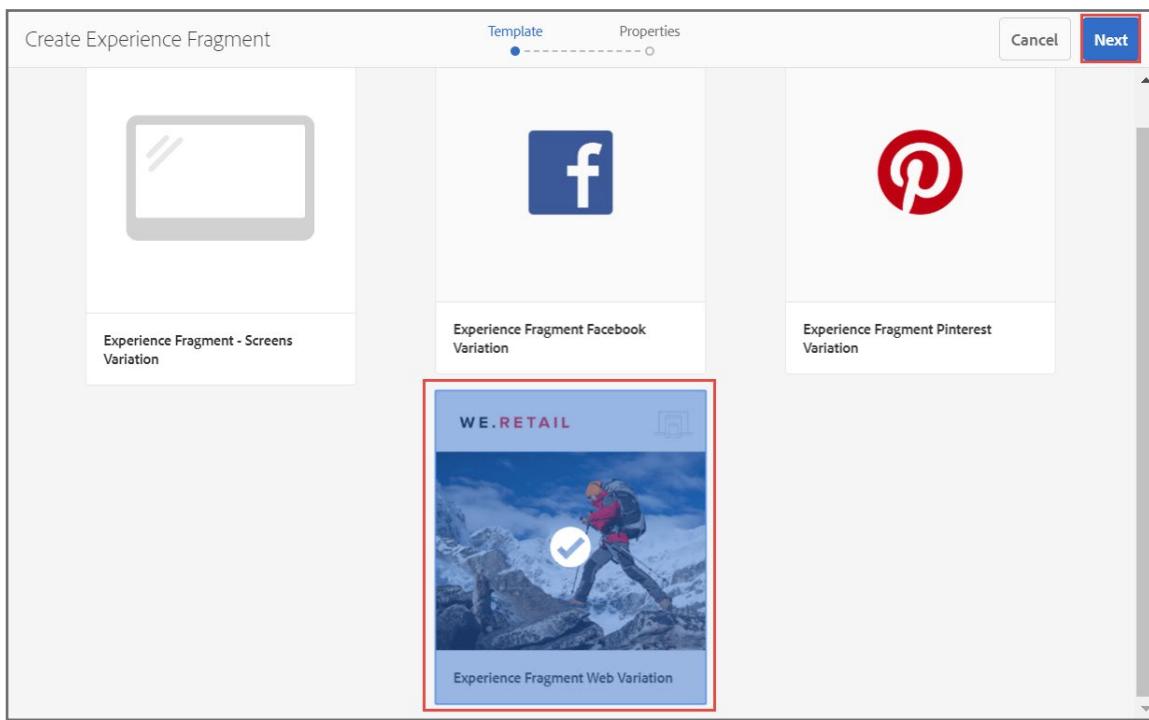
In this exercise, you will use XF building blocks to create blocks of CF stores for different regions.

1. Click **Adobe Experience Manager** on the header bar and navigate to the **Experience Fragments** console. The **Experience Fragments** page opens.
2. Click **User0XX**, click **Create** and select **Experience Fragment**, as shown:



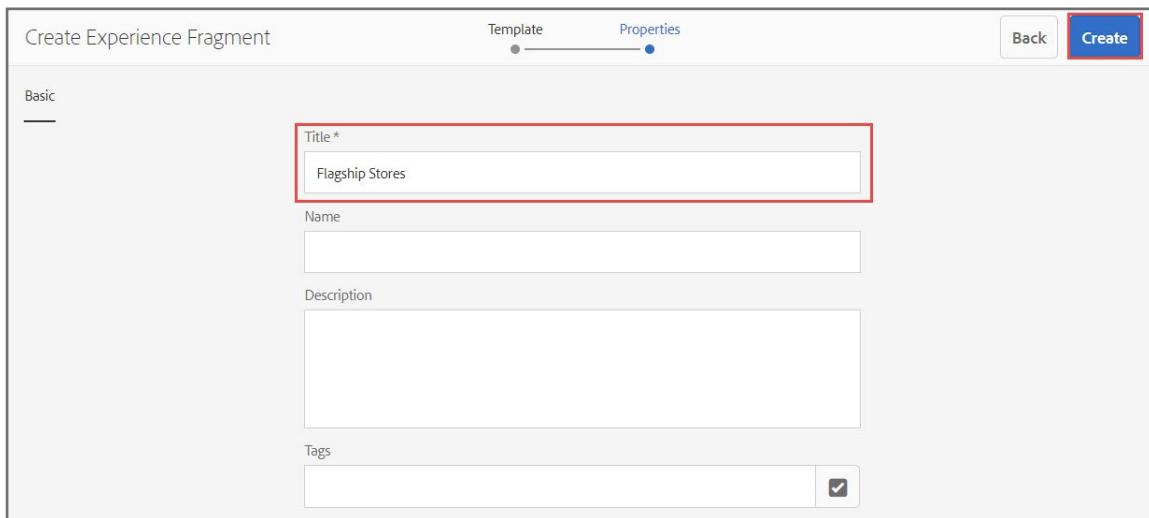
The **Create Experience Fragments** wizard opens on the **Template** page.

3. Select the **Experience Fragment Web Variation** template and click **Next**, as shown:



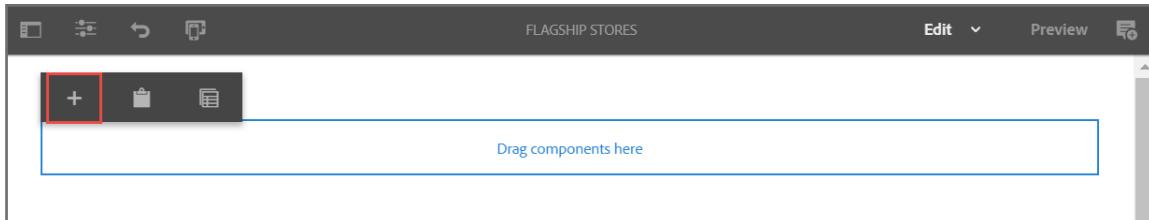
The **Create Experience Fragments** wizard opens on the **Properties** page.

4. In the **Title** field, type **Flagship Stores** and click **Create**, as shown:



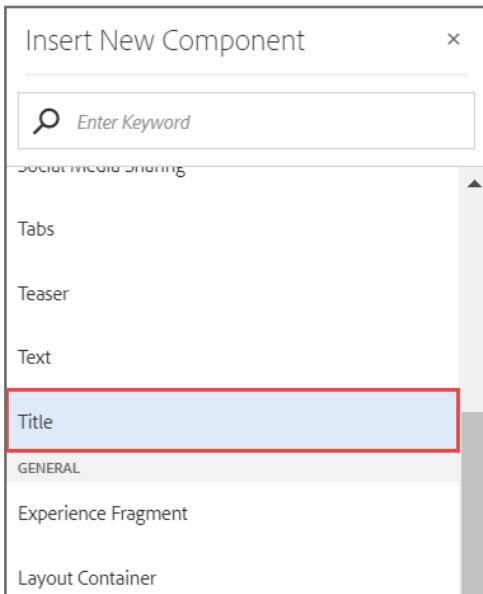
The **Success** pop-up window appears.

5. Click **Done**. The **Flagship Stores XF** is added to the User0XX folder.
6. Select the **Flagship Stores XF** and click **Edit**. The XF page opens in a new tab for editing.
7. Click **Drag components here** and click **Insert Component** icon, as shown:



The **Insert New Component** pop-up window opens.

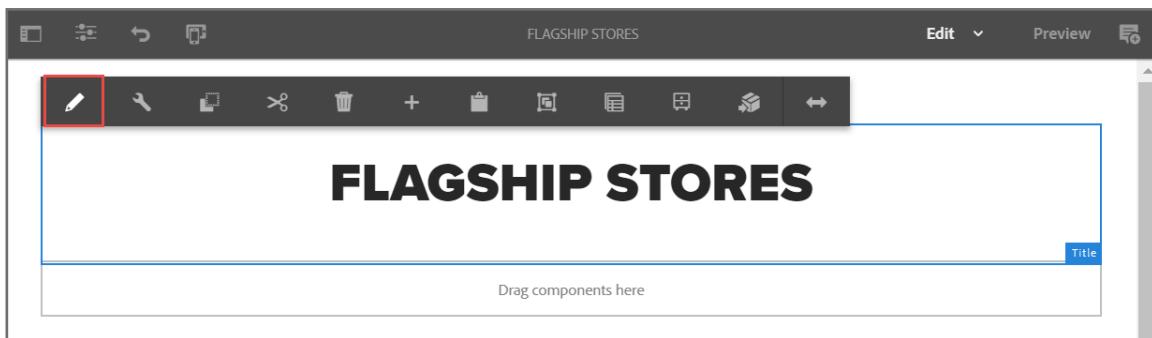
8. Select the **Title** component, as shown:



The **Title** component is added to the **Drag components here** area.

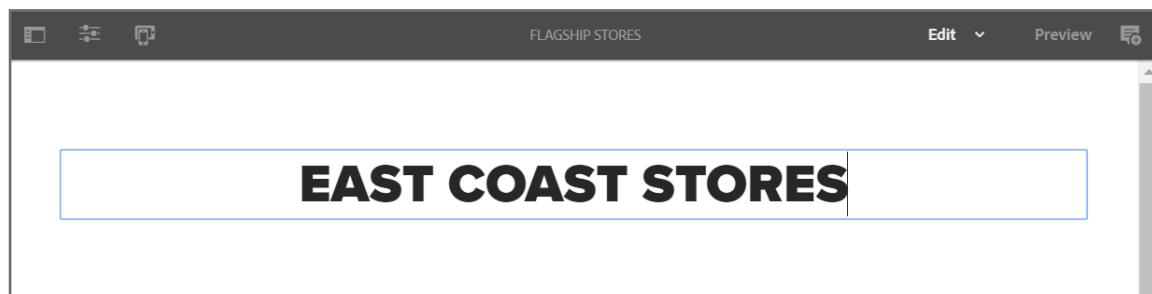
9. Click the **Title** component. The component toolbar appears.

10. Click the **Edit** icon, as shown:



The **Title** component appears in the edit mode.

11. Type **East Coast Stores**, as shown:



12. Click the **Toggle Side Panel** and click the **Assets** icon.

13. From the **Images** drop-down menu, select **Content Fragments**. The available CFs are displayed.

14. Below the **Title** component, drag **New York Store** and **Miami Store Info** CFs to the **Drag components here** area, as shown:

The screenshot shows the AEM富媒体编辑器界面。左侧是资产浏览器，显示了以下内容片段：4 Broadway, New York, NY, WeRetailExpress, New York S..., Seattle, WeRetail, Seattle Stor..., Miami, 和 Miami Stor...。右侧的内容区域包含一个

EAST COAST STORES

标题，下方有两组信息块，每组包含**Location**和**Store Type**。下方有一个带红色边框的区域，内有文字“Drag components here”，表示可以在此处拖放组件。

15. Add another **Title** component below the **East Coast Stores** CF area, and change the title to **West Coast Stores**, as shown:

The screenshot shows the AEM富媒体编辑器界面。上方显示了“EAST COAST STORES”标题及其下方的信息块。下方有一个新的

WEST COAST STORES

标题，该标题被一个红色边框包围。下方还有一个带红色边框的“Drag components here”拖放区。

16. Drag **Seattle Store**, **Los Angeles Stores**, and **San Francisco Store** CFs to the **Drag component here** area below the **West Coast Stores** title component, as shown:

The screenshot shows the AEM富文本编辑器界面。顶部有“FLAGSHIP STORES”、“Edit”、“Preview”等按钮。中间部分有一个大标题“WEST COAST STORES”。下方有一个红色边框包围的区域，内有文字“Drag components here”。左侧是一个“Assets”面板，显示了“Content Fragments”下的多个项目，包括“Seattle Stor...”，“Miami”，“Miami Stor...”，“13 Ocean Avenue, Santa Monica, CA”，“Los Angeles...”，以及“50 Market street, San Fransisco, CA”。右侧是“Content Fragments”视图，展示了三个商店的详细信息：

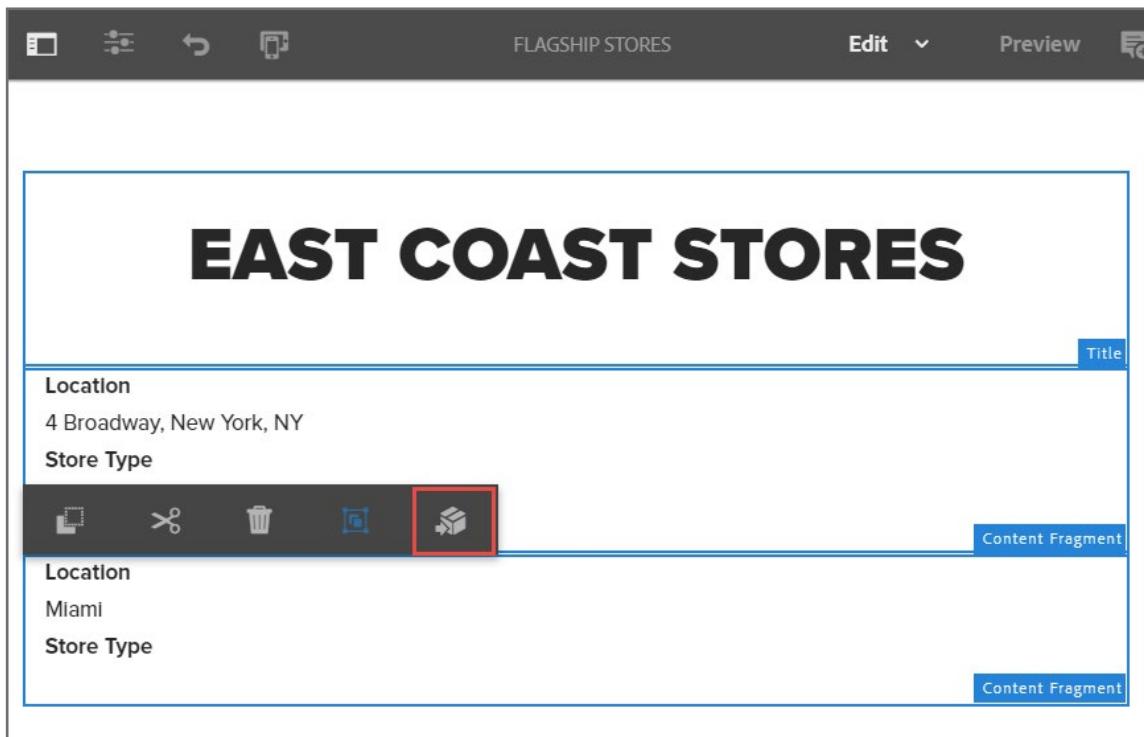
- Seattle**: Location Seattle, Store Type WeRetail
- Miami**: Location 13 Ocean Avenue, Santa Monica, CA, Store Type WeRetailExpress
- Los Angeles**: Location 50 Market street, San Fransisco, CA, Store Type WeRetail

17. Select the **East Coast Stores** title component and click **Group** from the component toolbar, as shown:

The screenshot shows the AEM富文本编辑器界面。顶部有“FLAGSHIP STORES”、“Edit”、“Preview”等按钮。中间部分有一个被蓝色边框包围的标题“EAST COAST STORES”。下方是组件工具栏，其中“Group”图标（一个带有方框的正方形）被红色边框突出显示。左侧是资产库，右侧是内容片段视图，展示了Miami商店的详细信息：

- Location**: Miami
- Store Type**

18. Select the two CFs under **East Coast Stores** and click **Convert to building block**, as shown:



The screenshot shows the AEM富文本编辑器界面。顶部导航栏显示“FLAGSHIP STORES”，右侧有“Edit”、“Preview”和一个带有加号的图标。下方是一个蓝色边框的编辑区域，包含两个Content Fragment（CF）块。

CF 1 (Top):

- Title:** EAST COAST STORES
- Location:** 4 Broadway, New York, NY
- Store Type:** Miami

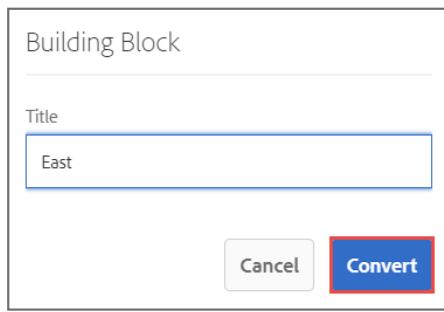
CF 2 (Bottom):

- Location:** Miami
- Store Type:** Miami

工具栏上有一个带有立方体图标（表示转换为构建块）的按钮，该按钮被红色方框高亮显示。

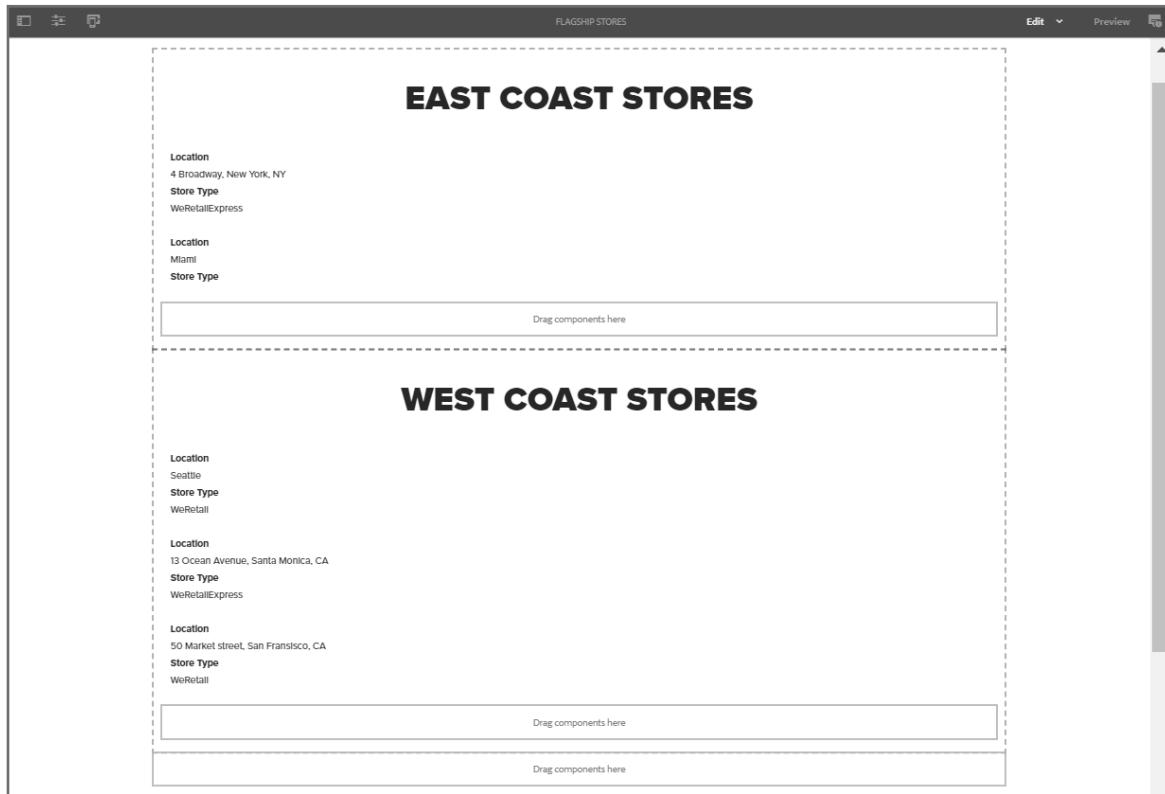
The **Building Block** pop-up window opens. Notice the title suggested is **East**.

19. Click **Convert**, as shown:

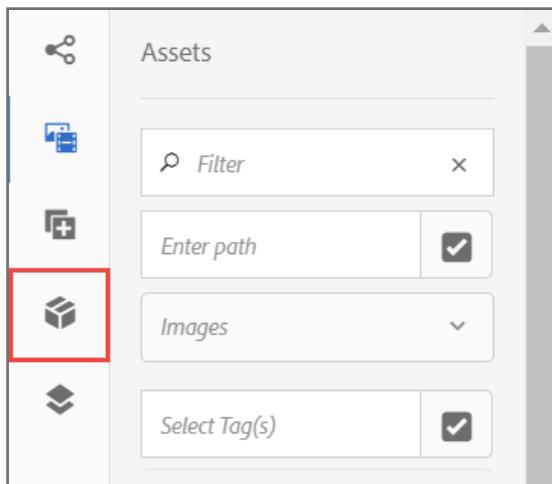


20. Similarly, repeat steps 16 through 18 to convert the **West Coast Stores** to a building block. The suggested title for this building is **West**.

The Experience Fragment page should look as shown. Notice the two building blocks on the page are separated by a dotted line, as shown:

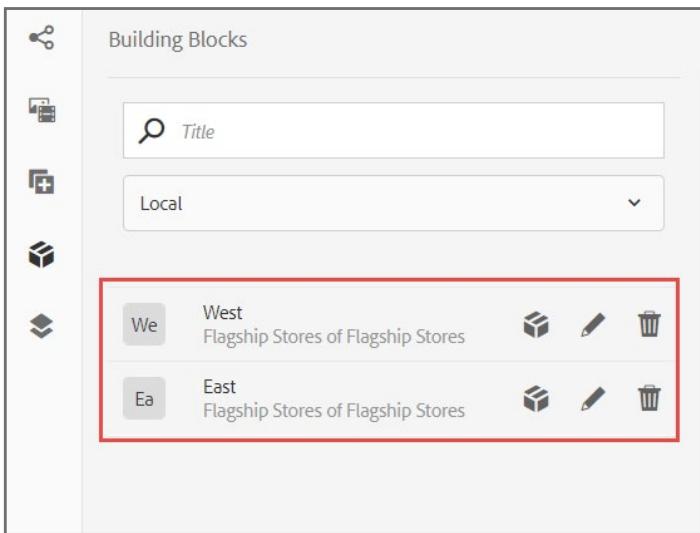


21. In the side panel, click the **Building Blocks** tab, as shown:



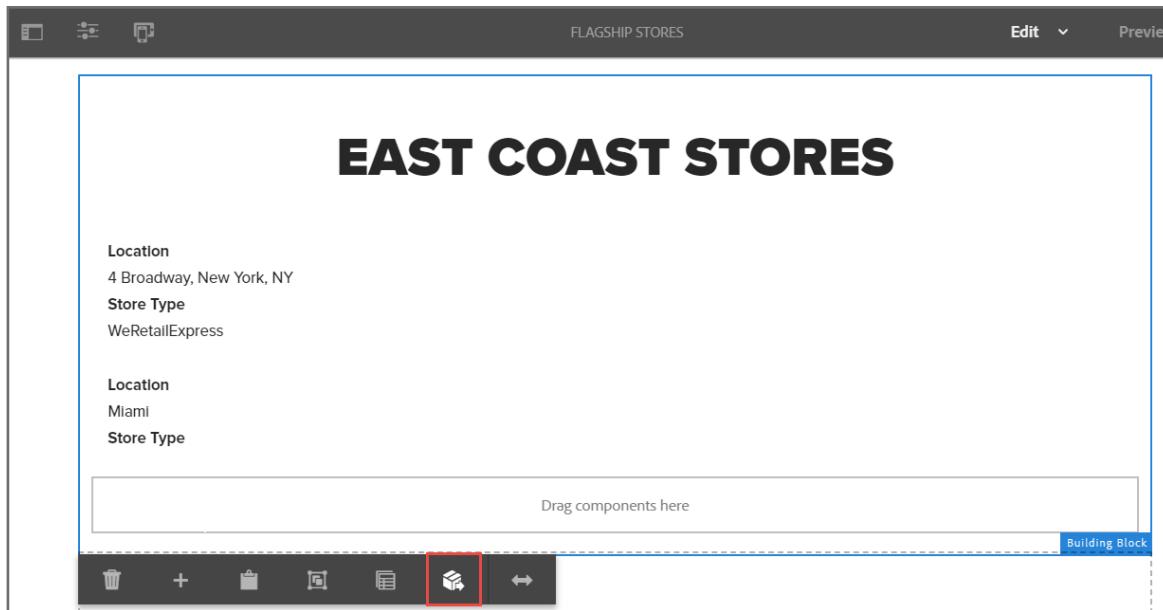
The **Building Blocks** panel opens.

22. Observe the available blocks, as shown:



The building blocks are available in every variation of the XF.

If you edit a building block, the changes will affect every XF used on a page. If you need to edit components in an Experience Fragment belonging to a building block, but do not need to modify the master building block, click the **Cancel inheritance** icon, as shown:



References

Use the following links for more information on:

- [Content Fragments](#)
- [Experience Fragments](#)
- [Content Fragments vs. Experience Fragments](#)
- [Content Fragment Models](#)
- [Fluid Experiences: Gems Session](#)

Editable Templates and Template Management

Introduction

To create a page, you need a layout where you can place the various types of content for a website. As a template author, in Adobe Experience Manager (AEM) you can create editable templates with layout structures, reusable components, and styles that can be used for a page.

Objectives

After completing this module, you will be able to:

- Explain types of templates in AEM
- Explain the Templates console and the template editor
- Manage editable template
- Modify an existing template structure
- Explain the Content Policies used in templates
- Explain style systems used in templates
- Apply styles to an editable template by using Content Policies

Types of Templates in AEM

AEM enables organizations build a website and add content to webpages. Based on the business requirements, you create pages by using a specific template, and add content to the page by using various components.

A template defines the structure of the resultant page, initial content, and the components that you are allowed to use on a page.

Roles Involved in Managing Templates

Template can be created and edited by developers and template authors.

The following table describes the roles:

Developer	Sets up the initial environment Creates the components to be used in template
Template Author	Creates templates using the template editor in AEM Defines allowed components for layout containers Configures components using Content Policies
Page Author	Creates pages based on the templates Adds content to pages and publishes the pages

AEM provides two basic types of templates for creating pages:

- Editable
- Static

The following table lists the difference between the two template types:

Editable Templates	Static Templates
Are created and edited by authors	Are developed and configured by developers
Help define the structure, initial content, and content policies for pages	Have the same structure as the page
Maintain a dynamic connection between the template and pages	Are copied to create a new page and do not have a dynamic connection with the page
Use Content Policies (edited from the template editor) to persist the design properties	Use the Design mode to persist design properties

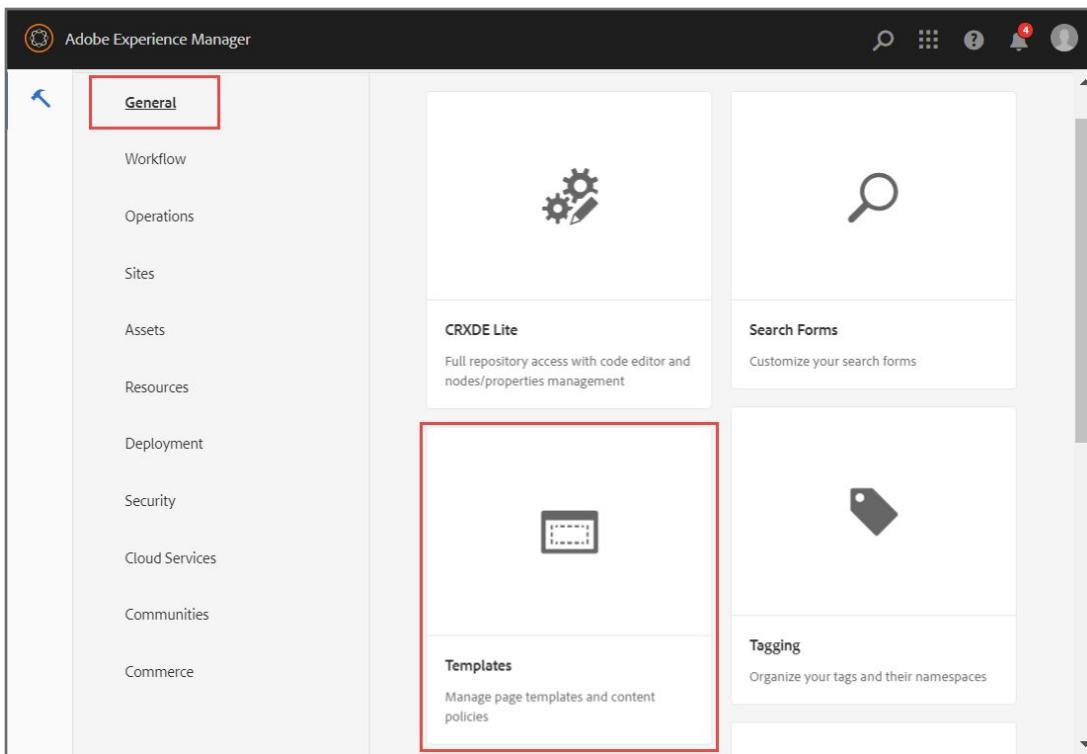
Editable Templates are recommended over Static Templates because they do not require as much IT/developer intervention on template definition changes and provide a dynamic connection between templates and pages such that the changes to the templates are immediately reflected on the pages.

Template Console and the Template Editor

The Template Console helps template authors:

- Create a new template or copy an existing template
- Access the template editor
- Manage the lifecycle of the template

You can access the Templates console from the **General** section of the **Tools** panel, as shown:



Template Editor

The template editor tool helps template authors:

- Define the components that can be edited on the resultant pages (based on the template)
- Preconfigure components
- Add the available components to the template and position them on a layout container
- Compose templates from the available components
- Manage the lifecycle of the templates

Template Editor Modes

The template editor provides Structure, Initial Content, and Layout modes.

Structure

The Structure mode helps template authors define components such as header, footer, and navigation for a resultant page. A page author cannot move or delete components defined in the template structure. Template authors can add a paragraph system to the template to enable page authors add or remove

components from the resultant pages. New components added in structure have their content locked. This means their content may not be changed by page authors unless they are unlocked.

In the Structure mode, you cannot move, cut, or delete components that are the parent of an unlocked component. If template authors modify the structure of a component, all the pages created with the template are affected.

Initial Content

The Initial Content mode helps template authors define content that needs to be included in all pages, by default. When a component is unlocked, template authors can define the initial content that will be copied to the resultant page(s) created from the template. You can edit these unlocked components on the resultant page(s). In the Initial Content mode (and on the resultant pages), you can delete any unlocked components with an accessible parent, such as components within a layout container.

Layout

The Layout mode helps template authors predefine the template layout for the required device formats. On the resultant pages, you cannot edit the structure components, but can edit the initial content components.

Best Practices to Use Editable Templates

The best practices to use editable templates are:

- Check the impact of changes to templates (that are enabled) on the resultant pages.
- Check if the changes to the structure apply to the pages.
- Check if the changes to Content Policies and design configurations apply to the affected pages.
- Check if the changes to the initial content apply only to the newly created pages.
- Check if the changes to the layout apply to the new pages immediately or depending on whether the modified component is part of the structure or initial content.
- Check the impact of locking and unlocking components of an enabled template. The newly unlocked components are not be displayed on the existing pages. If you lock the editable components, content will not be displayed on the page.
- Create your own folders for site-specific templates.
- Publish your templates from the Templates console.

Exercise 1: Manage editable templates

Scenario

As a template author, you need to create editable templates and add structure components such as headers and footers. You also need to define the components that can and cannot be edited, control layouts for devices, and prepopulate initial content. This enables authors to design and develop templates with reduced IT intervention and deploy content in new page designs rapidly.

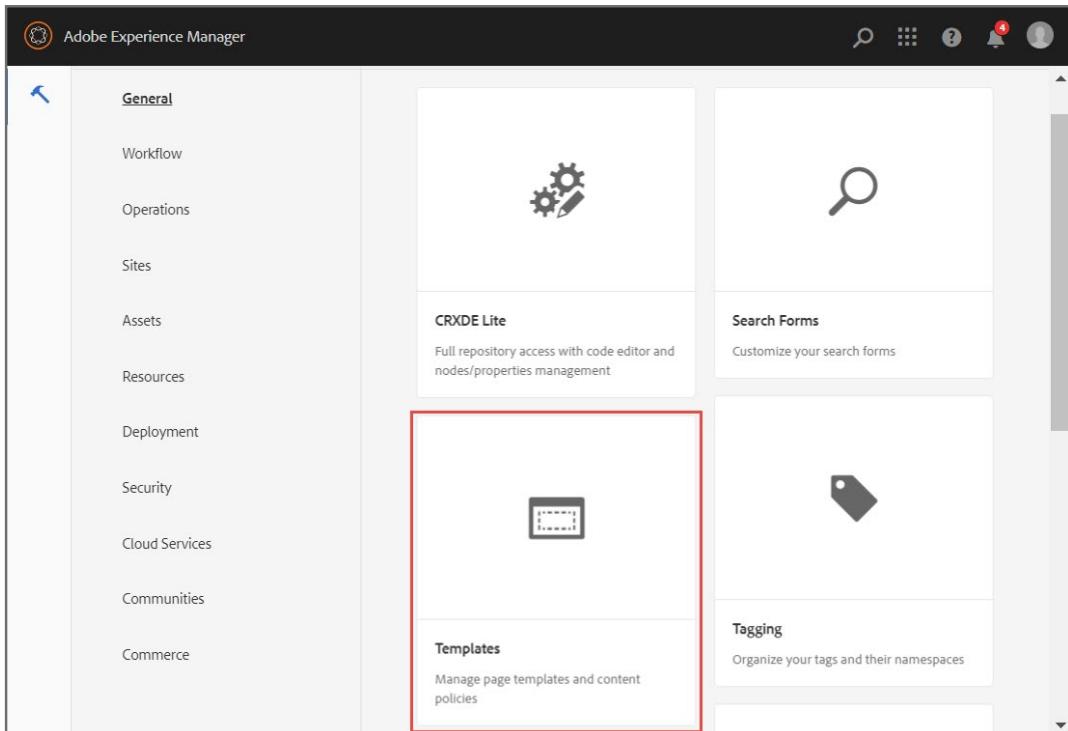
In this exercise, you will perform the following tasks:

1. Create and enable an editable template
2. Create a page from the editable template

Task 1: Create and enable an editable template

To create an editable template:

1. Navigate to the **Templates** console from **Tools > General** and click **Templates**, as shown:

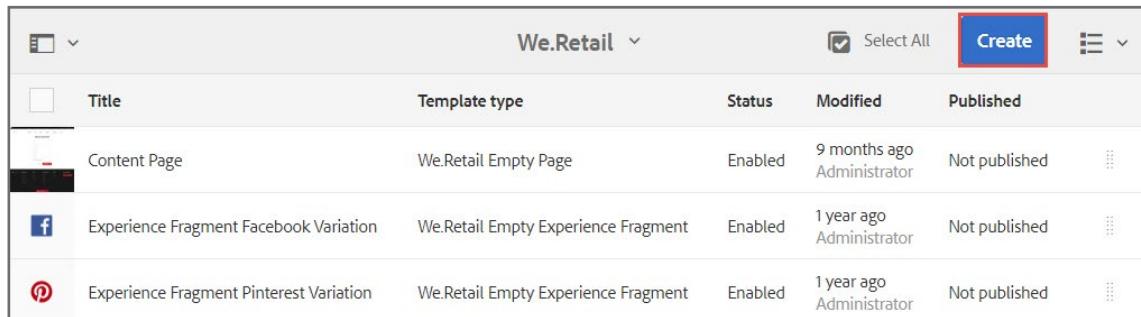


The **Templates** page opens listing all the available templates folders.

2. Click the **We.Retail** folder. The **We.Retail** page opens.

All the available built-in editable templates are displayed under the **We.Retail** folder.

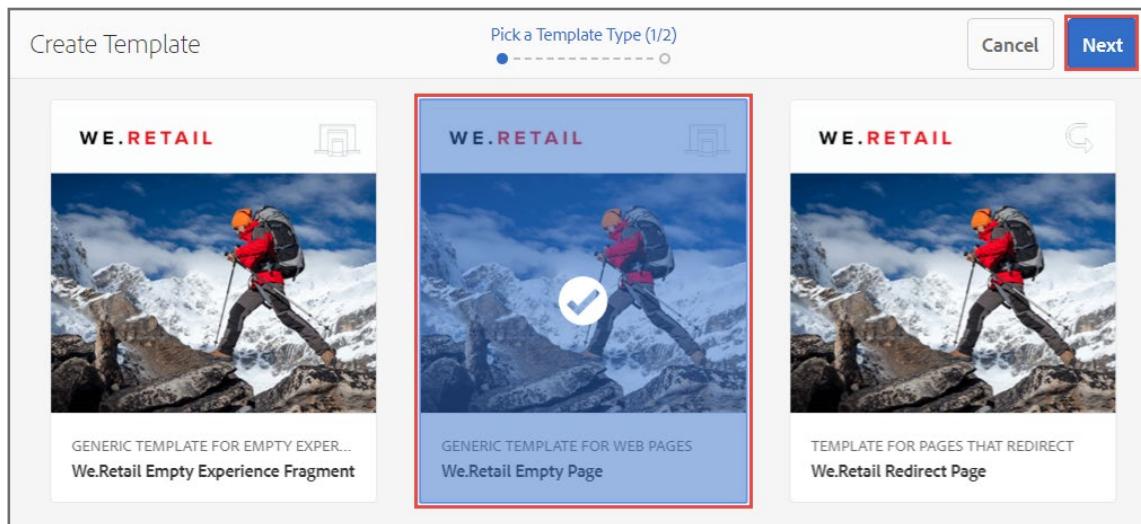
3. Click **Create**, as shown:



Title	Template type	Status	Modified	Published
Content Page	We.Retail Empty Page	Enabled	9 months ago Administrator	Not published
Experience Fragment Facebook Variation	We.Retail Empty Experience Fragment	Enabled	1 year ago Administrator	Not published
Experience Fragment Pinterest Variation	We.Retail Empty Experience Fragment	Enabled	1 year ago Administrator	Not published

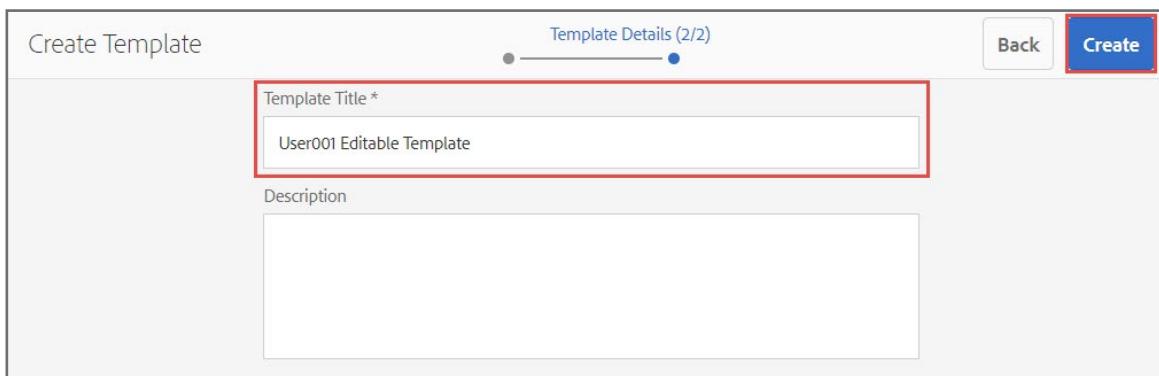
The **Create Template** wizard opens.

4. Select the **We.Retail Empty Page** template and click **Next**, as shown:



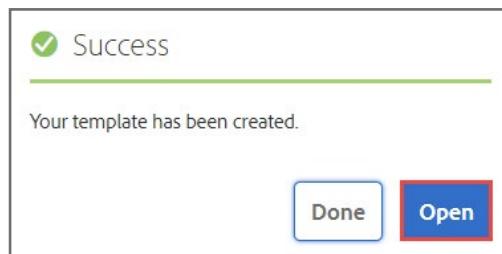
The **Create Template** opens on the **Template Details** page.

5. In the **Template Title** field, type **User0XX Editable Template** (where 0XX is the user number assigned to you for this training) and click **Create**, as shown:



The **Success** pop-up window appears.

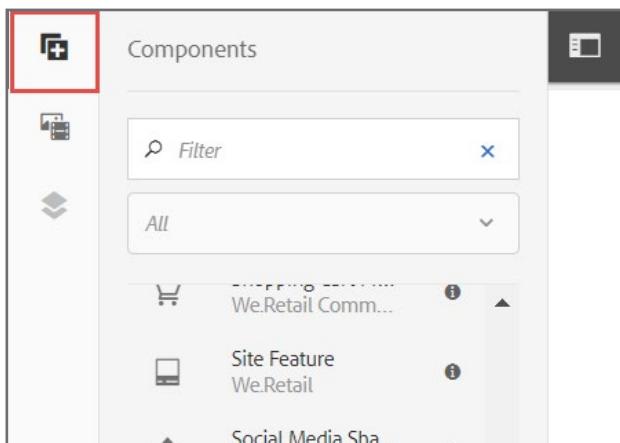
6. Click **Open**, as shown:



The new template opens in the template editor in a new browser.

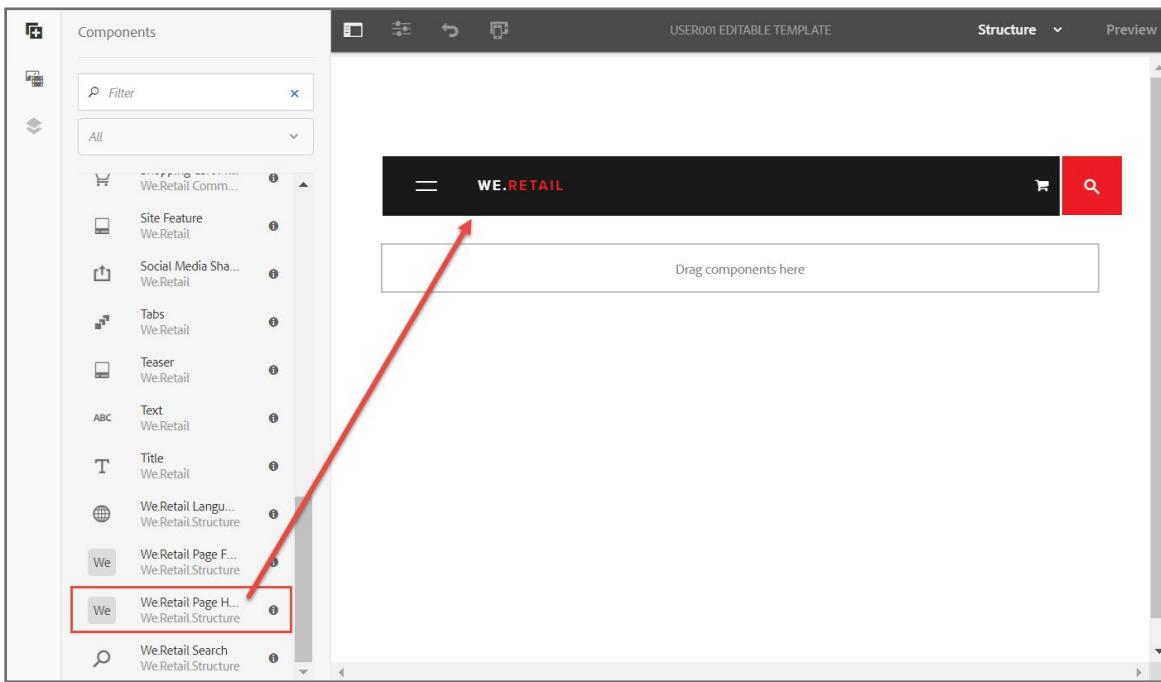
You need to add a header, a title component, a layout container, and a footer one after the other to the template.

7. In the side panel, ensure **Components** is selected, as shown:

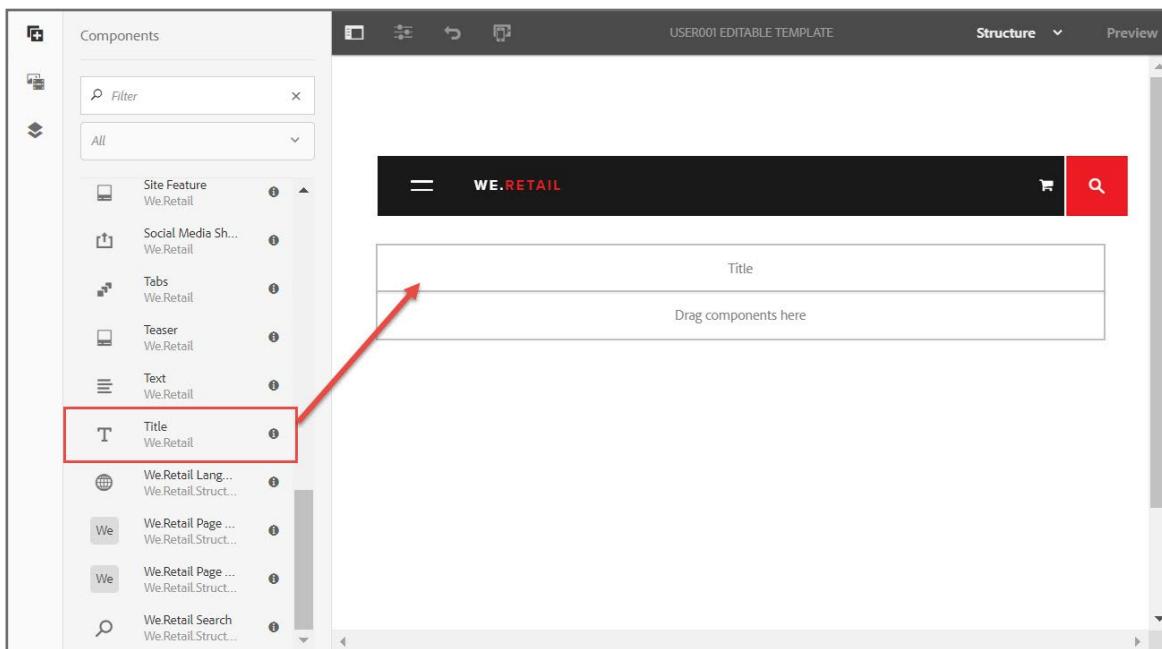


Tip: If the side panel is not open in the template editor, click the **Toggle Side Panel** icon to open it.

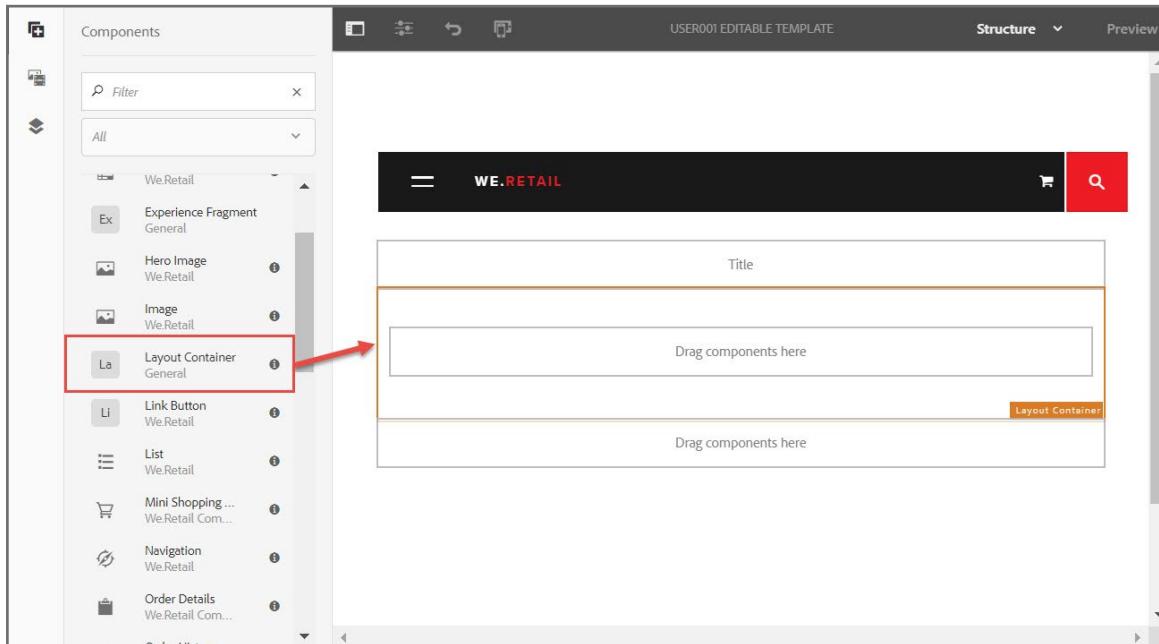
8. Drag the **We.Retail Page Header** component onto the **Drag components here** area, as shown:



9. Similarly, drag a **Title** component onto the **Drag components here** area, after the **Header** component, as shown:

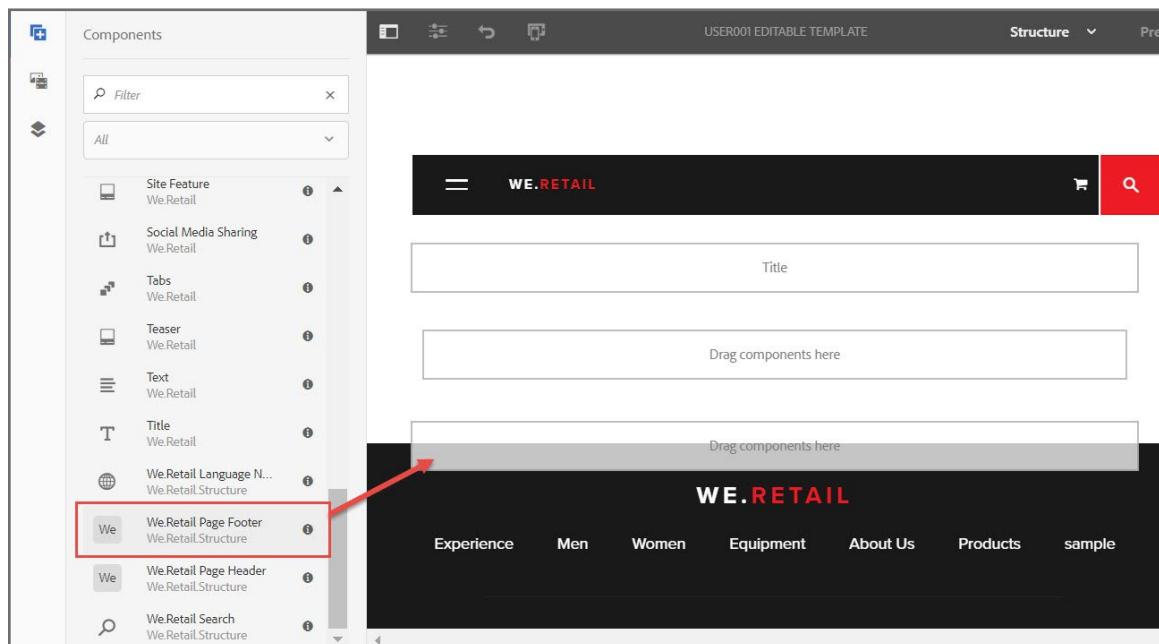


10. Drag a **Layout Container** component onto the **Drag components here area**, below the **Title** component, as shown:



Tip: Ensure that the template editor is in the Structure mode.

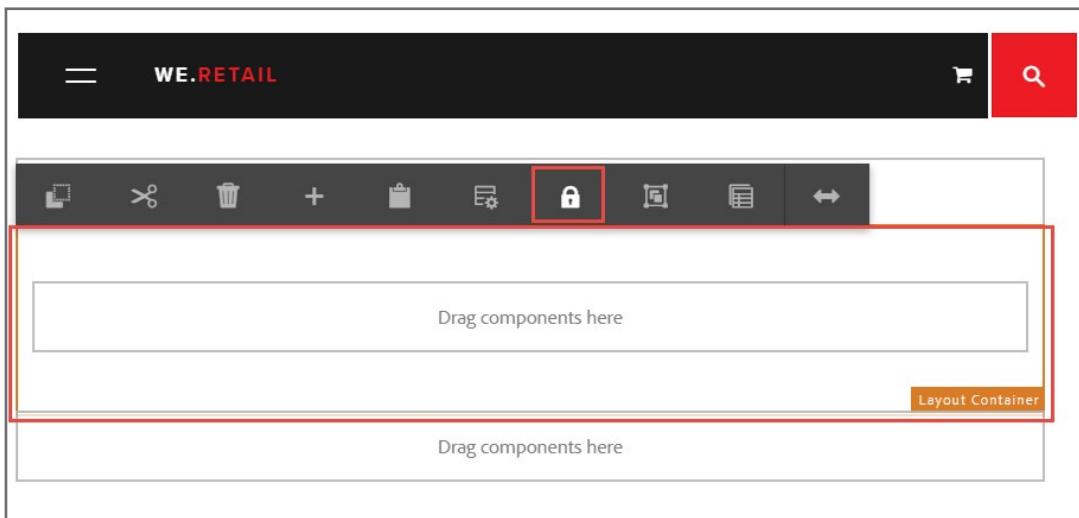
11. Finally, drag the **We.Retail Page Footer** component onto the **Drag components here area**, below the **Layout Container** component, as shown:



 **Note:** The header and footer components are locked by default. When you build an editable template, you do not want the header and footer to be editable on the resultant pages. This is because what the header and footer display should be determined by their own logic, like building the top-level navigation from the page tree. The title component does not necessarily need to be editable because by default, it will display the page title.

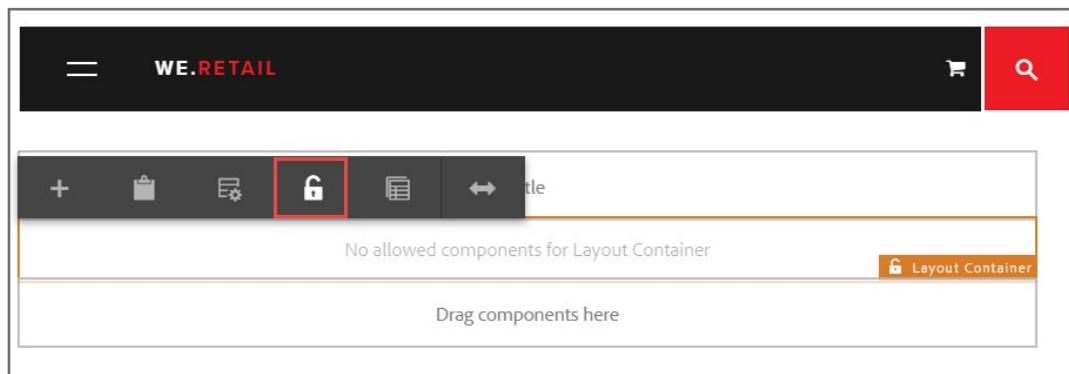
 **Note:** The layout container needs to be made editable. To make the layout container editable, unlock it and assign a content policy, so it has a list of allowed components for the resultant pages. This will be achieved in the next step.

12. To unlock the **Layout Container** component you added, click the **Layout Container** and click the **Unlock structure component** icon on the component toolbar, as shown:



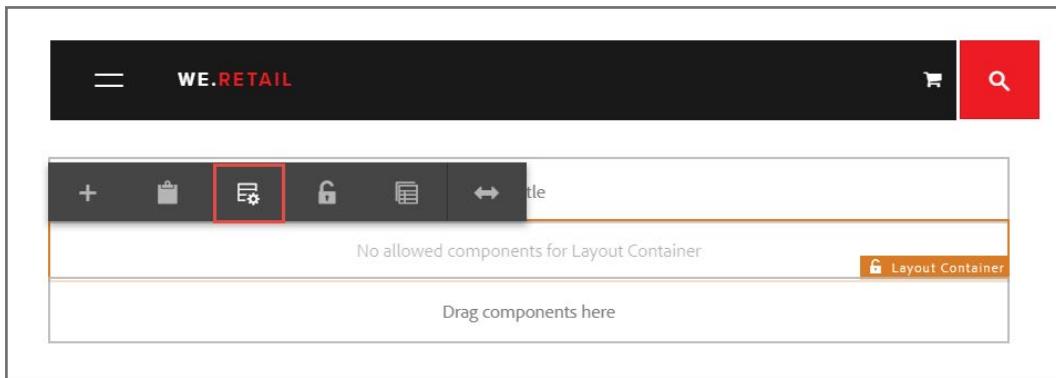
Notice the **Drag component here** area changes to **No allowed components for Layout Container**.

Select the **No allowed components for Layout Container**, it now shows the **Lock structure component** icon, as shown:



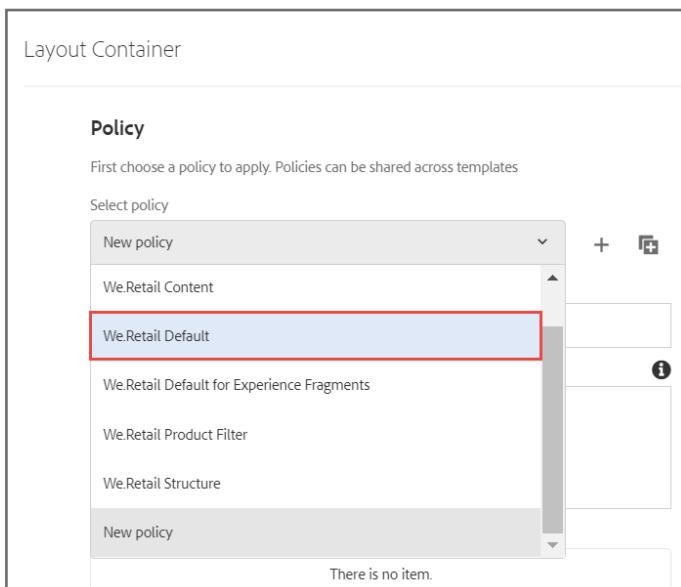
To add Content Policies:

13. Select the **Layout Container** and from the component toolbar, click the **Policy** icon, as shown:

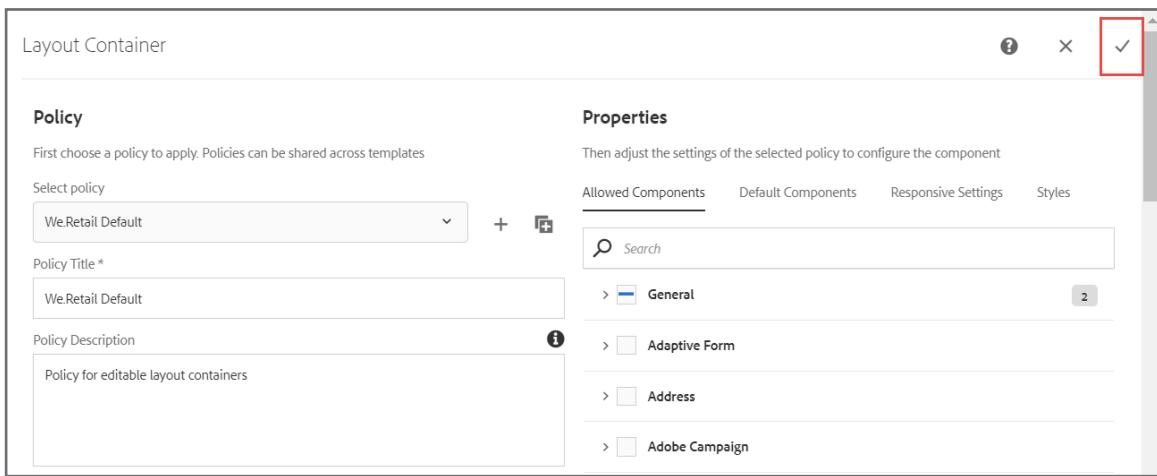


The **Layout Container** page opens with two sections, **Policy** and **Properties**.

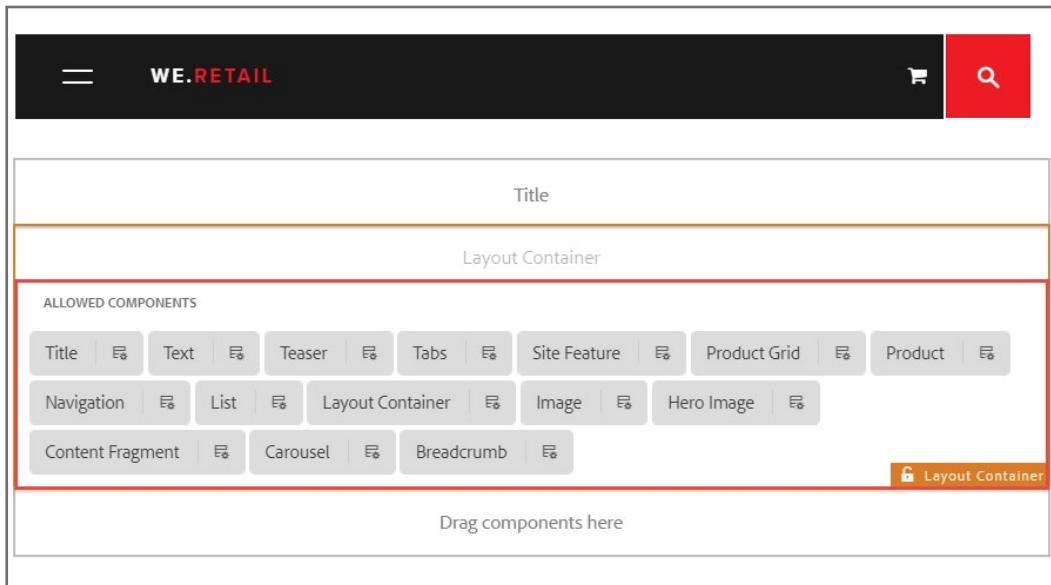
14. Under the **Policy** section, in the **Select Policy** field, click the drop-down arrow and select the **We.Retail Default** policy, as shown:



15. Click the **Done** icon to save the changes, as shown:

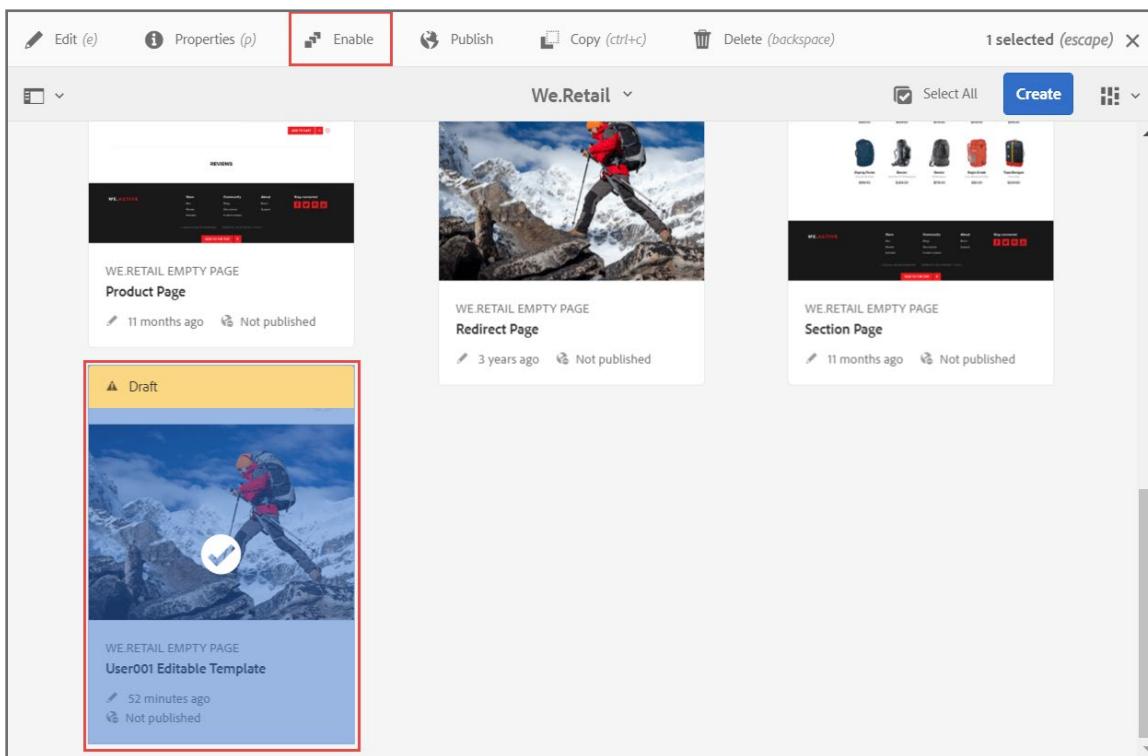


The allowed components are added in the **Layout Container**, as shown:



To enable the editable template for page authors to create pages in AEM:

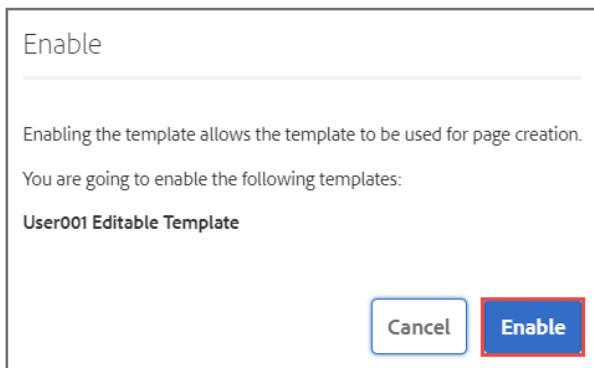
16. Navigate to **Tools > General > Templates** and click the **We.Retail** folder. The **We.Retail** folder opens.
17. Select the **User0XX Editable Template** you created and click **Enable** from the actions bar, as shown:



Tip: The **We.Retail** folder may contain several templates created by other participants in this training. To quickly locate the editable template you created, change the view to list view.

An **Enable** pop-up window appears.

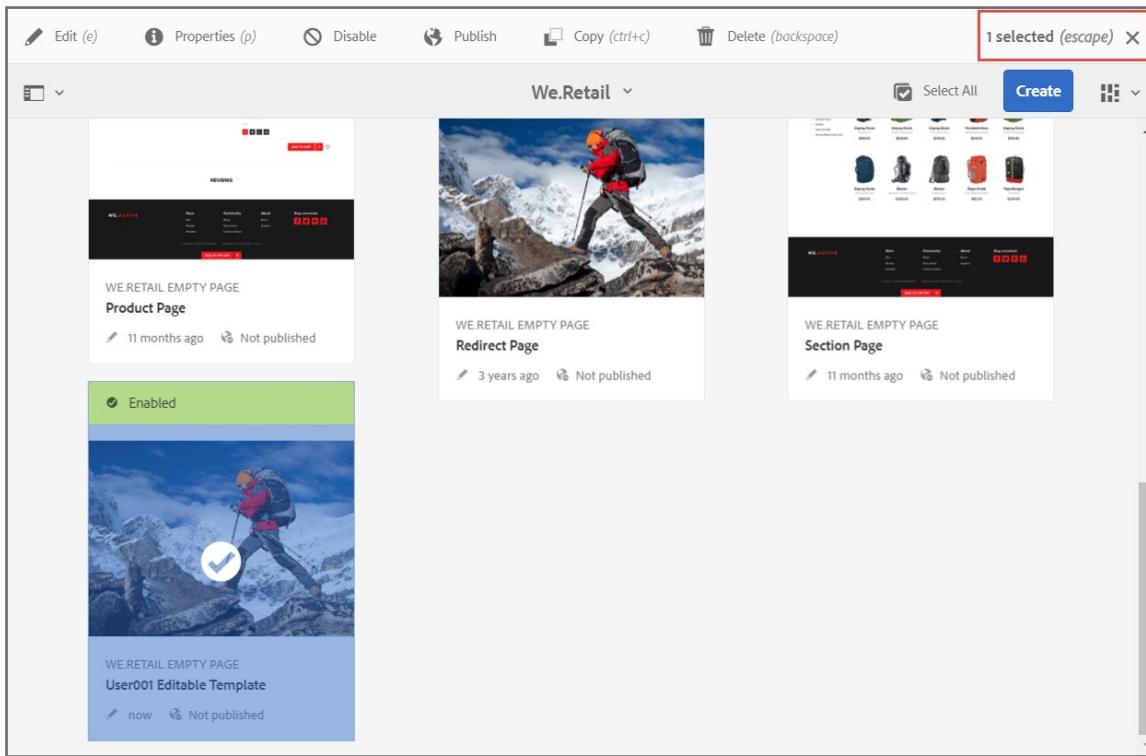
18. Click **Enable**, as shown:



The template is enabled, as shown. The page authors can use the template to create pages.

The screenshot shows the AEM authoring interface with the 'We.Retail' site selected. A modal dialog is open at the top, confirming the enablement of the 'User001 Editable Template'. The main content area displays a list of three pages: 'Product Page', 'Redirect Page', and 'Section Page'. The 'Product Page' item is highlighted with a green background and a red border around its thumbnail, indicating it is the currently selected template. The 'Enabled' status is explicitly mentioned in the details for the 'Product Page'.

19. Cancel the template selection by clicking the **1 selected (escape)** icon at the upper-right corner of the page, as shown:



Task 2: Create a page from the editable template

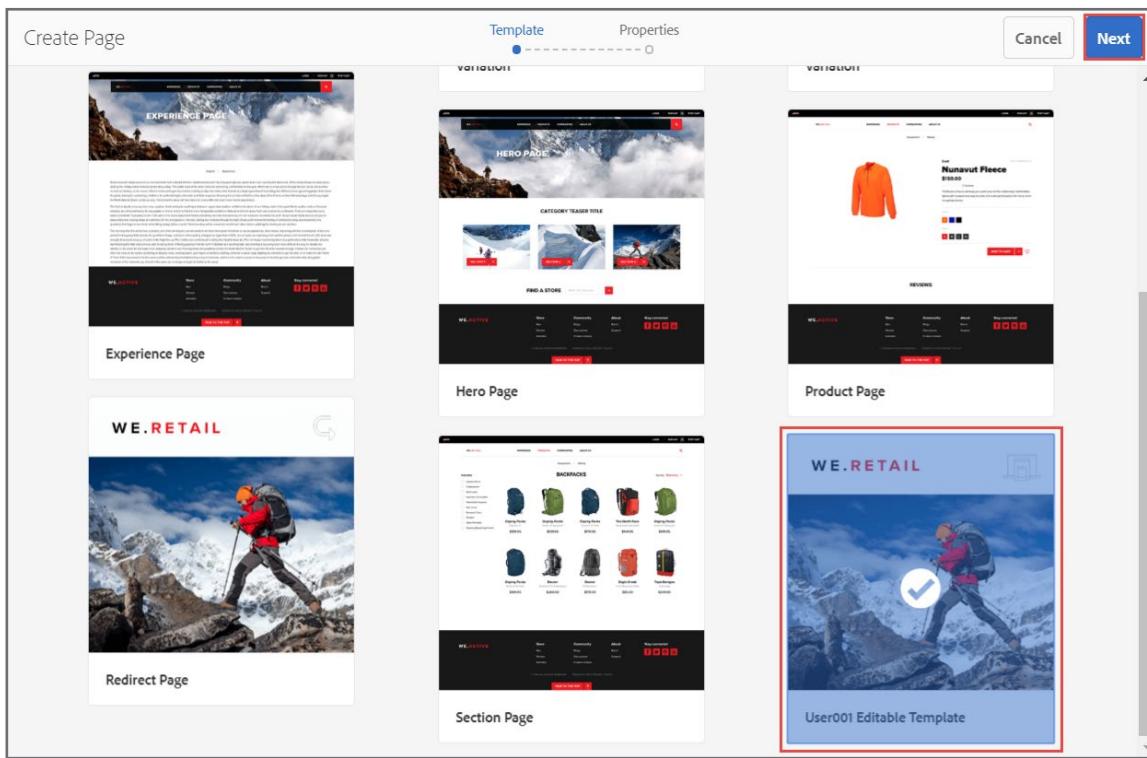
In this task, you will create a page from the editable template you created in the previous task. You will add a component and edit it on the page.

1. Click **Adobe Experience Manager** on the header bar and click **Navigation**. The **Navigation** panel opens.
2. Click the **Sites** console and navigate to **We.Retail > User0XX > English** and click **Create > Page**, as shown:



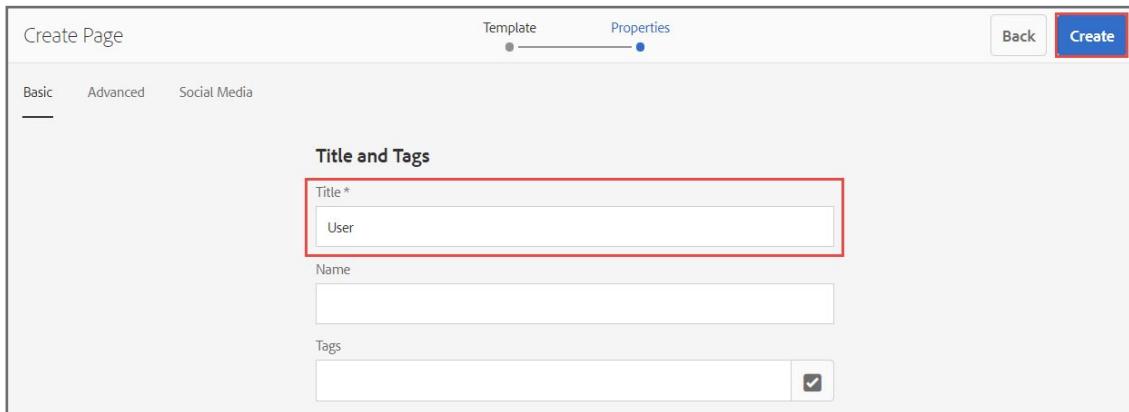
The **Create Page** wizard opens on the **Template** page.

3. Select the **User0XX Editable Template**, and click **Next**, as shown:



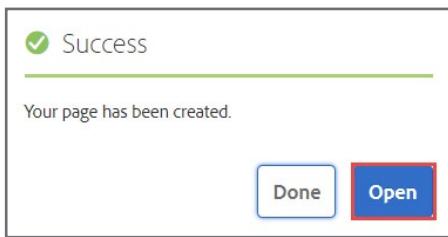
The **Create Page** wizard opens in the **Properties** page.

4. In the **Title** field, type **User** as the page title and click **Create**, as shown:



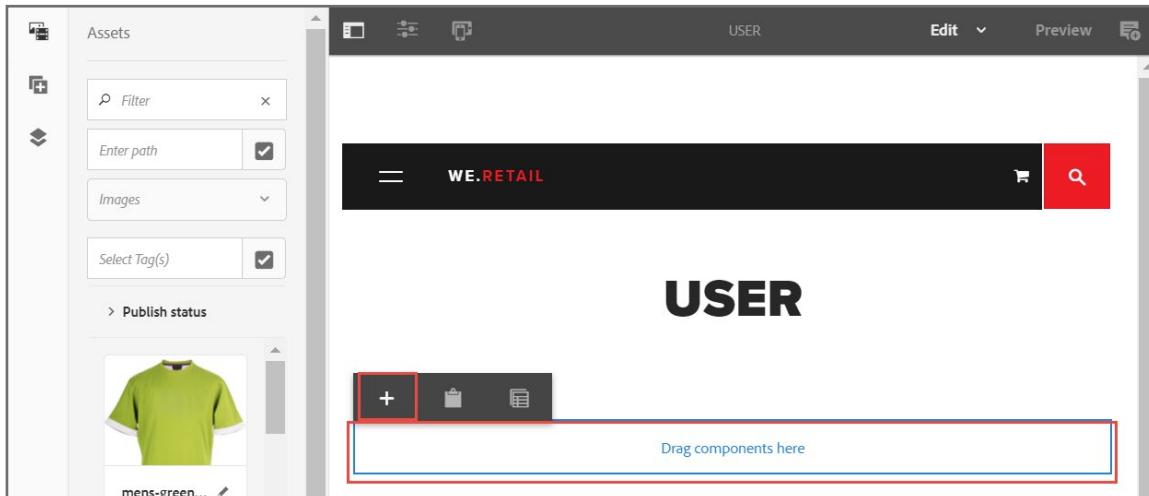
A **Success** pop-up window appears.

5. Click **Open**, as shown:



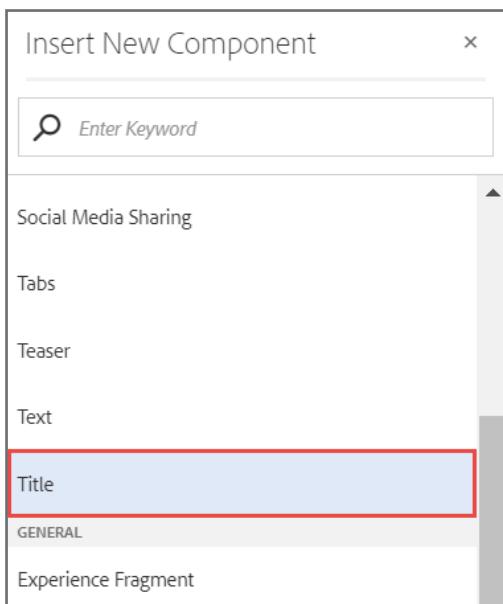
The **User page** opens in the page editor. Notice the page is predefined with content (header, title, and footer) that is not editable. The only editable component in the page is the Layout Container (the **Drag components here** area). The other components are locked for editing.

6. Select the **Drag component here** area and from the component toolbar, click the **Insert component** icon, as shown:



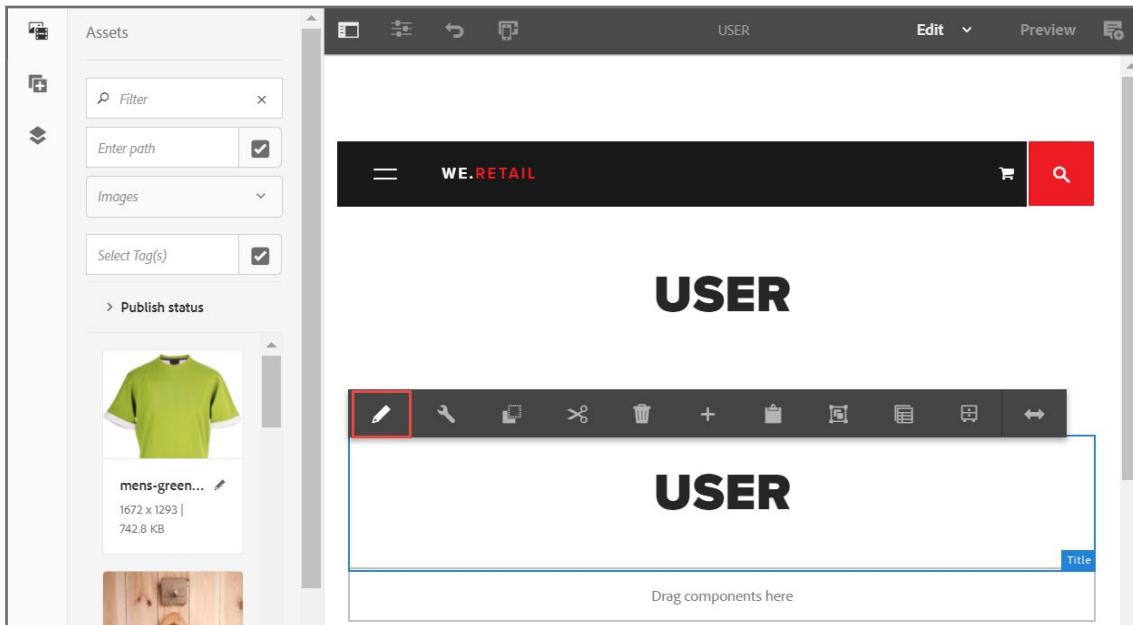
The **Insert New Component** pop-up window appears.

7. Select the **Title** component, as shown:



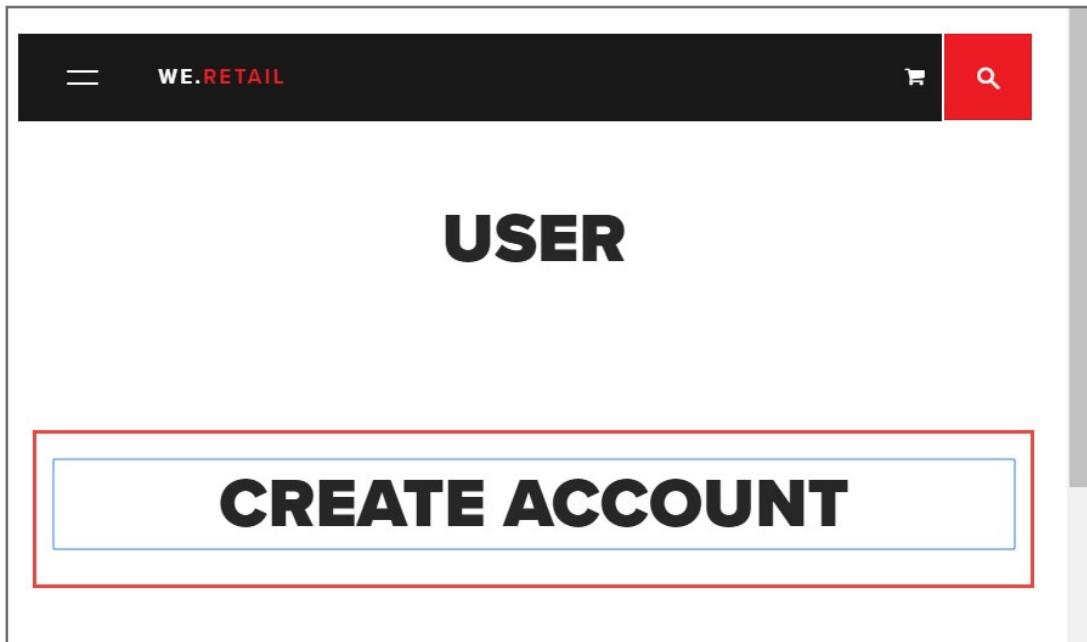
The **Title** component is added to the layout container.

8. Select the **Title** component and from the component toolbar, click the **Edit** icon, as shown:



The Title component changes to the edit mode.

9. Type **Create Account**, as shown:



Note: Text will be automatically converted to uppercase as you type it. The text is uppercase because this is how this component's properties were defined by developers.

Exercise 2: Modify an existing template structure

Scenario:

As a template author, you may need to edit the existing template structure. You need to observe how these changes are dynamically reflected on the new page created from the editable template in the previous exercise.

In this exercise, you will perform the following tasks:

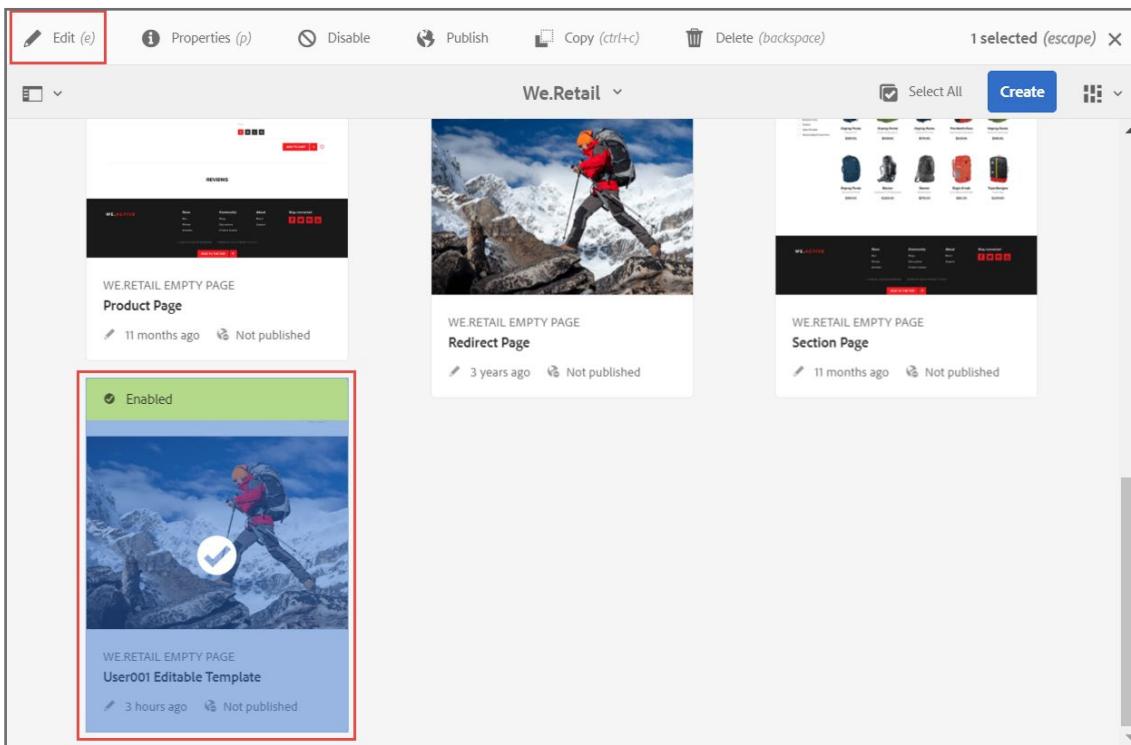
1. Edit the template structure
2. Add initial content to a template

Task 1: Edit the template structure

In this task, you will add a Link Button to the structure of the template you created in the previous exercise.

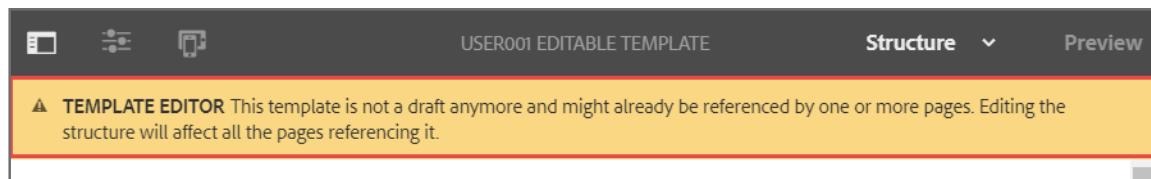
1. From the browser, navigate to the tab that has User0XX Editable Template open. If you do not have the User0XX Editable Template open, click the **Adobe Experience Manager** from the header bar and click **Tools**. Navigate to **General > Templates** and click the **We.Retail** folder.

2. Select the **User0XX Editable Template** and from the actions bar, click **Edit**, as shown:



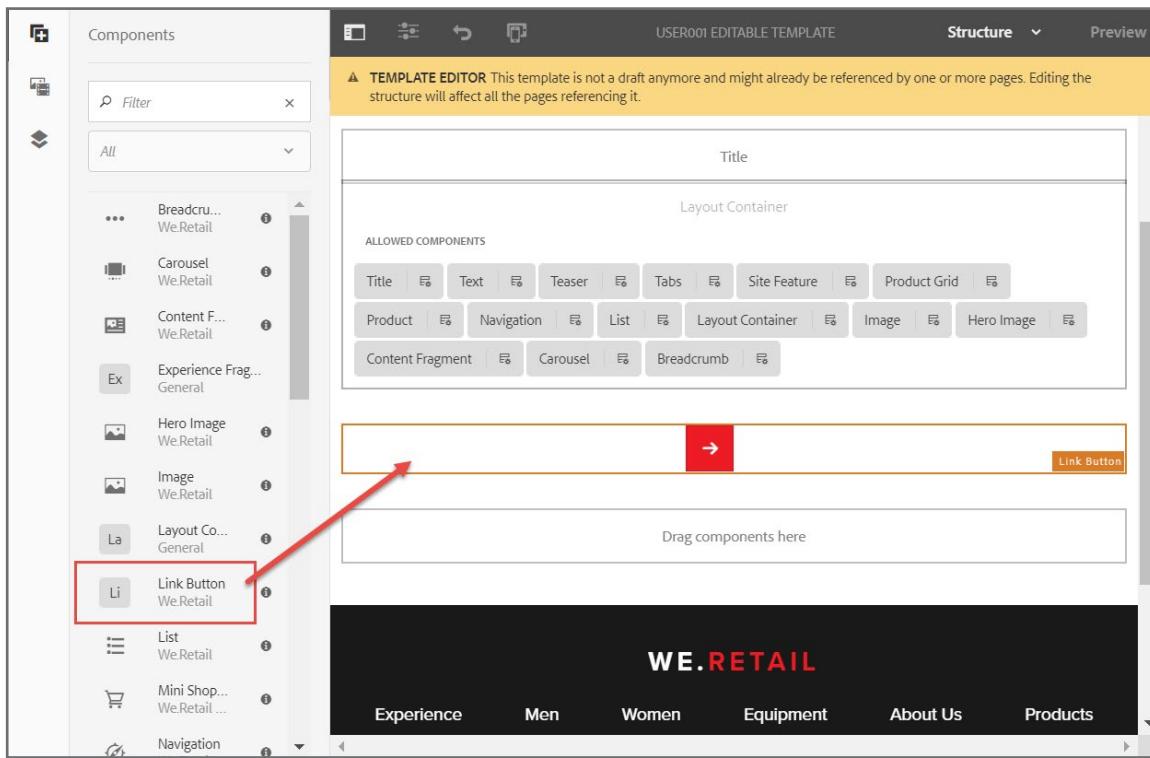
The **User0XX Editable Template** opens in the template editor.

The template should have a yellow warning banner, as shown in the below screenshot, which indicates the dynamic nature of the editable template, that is, any changes will impact the resultant pages.

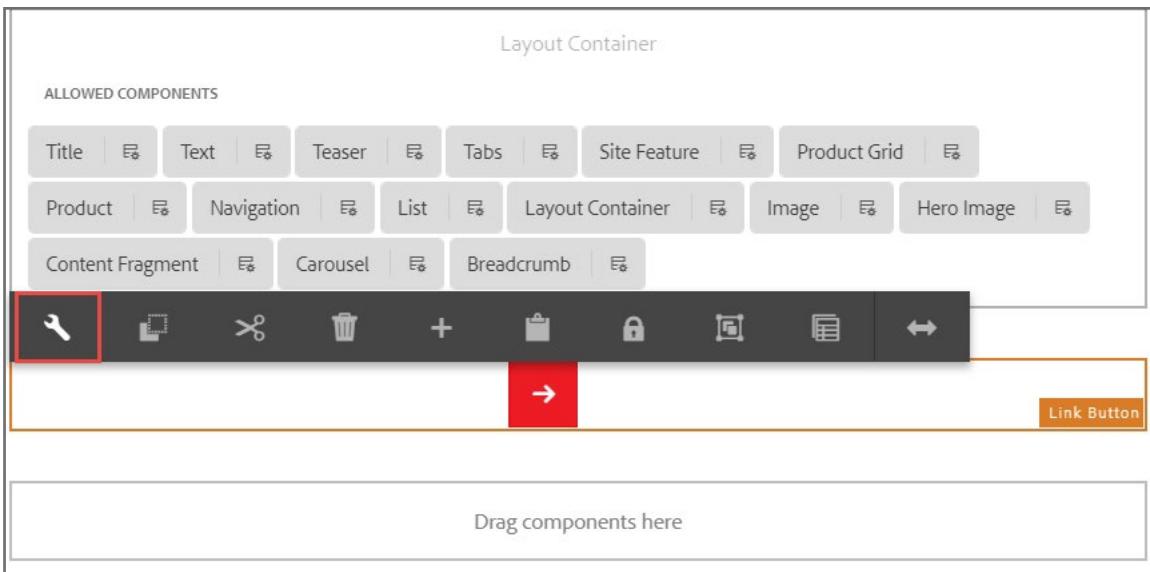


Tip: If the yellow warning banner does not appear, press F5 (on MS Windows) to refresh your browser or click the browser's refresh button to reload the page.

3. From the **Components** panel, drag a **Link Button** component onto the **Drag components here** area (in between the **Layout Container** and the **Page Footer**), as shown:

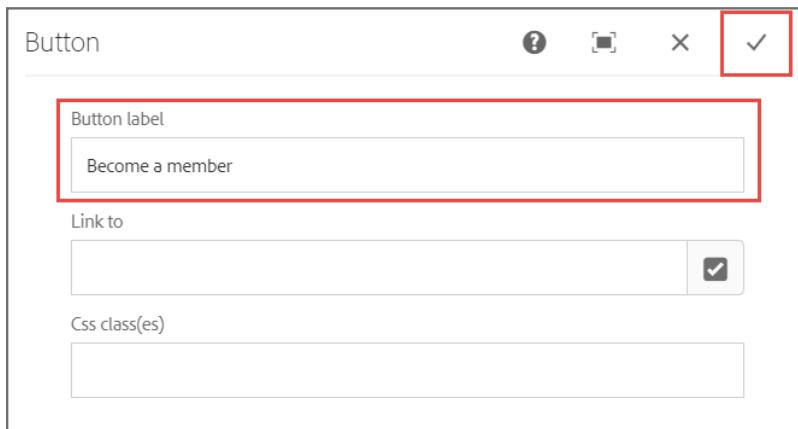


4. Select the **Link Button** component and click the **Configure** icon from the component toolbar, as shown:

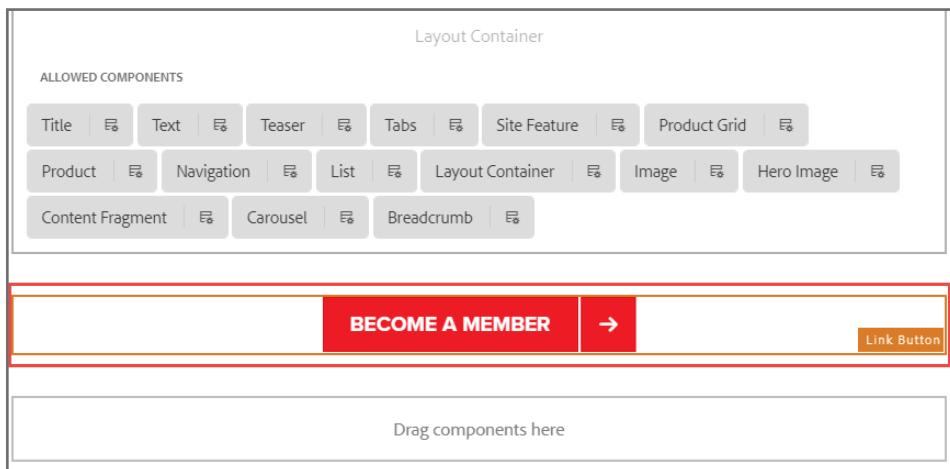


The **Button** dialog box opens.

5. In the **Button label** field, type **Become a member** and click the **Done** icon, as shown:



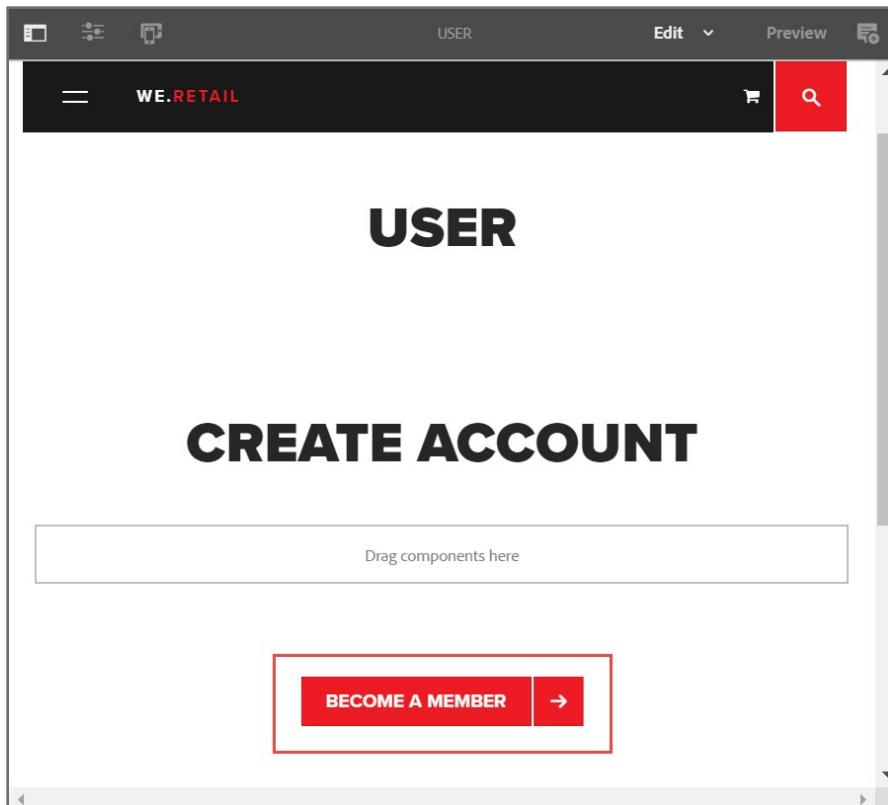
The **Link Button** is updated as shown:



To view how the resultant page looks after the template is updated:

6. Navigate to the browser tab that has the User page, you created in the previous exercise, open. If you do not have the User page open, click **Adobe Experience Manager** from the header bar and click **Navigation**. Click the **Sites** console and navigate to **We.Retail > User0XX > English** and select the **User** page. From the actions bar, click **Edit**. The **User** page opens in the page editor.

Notice the Link Button is added to the User page, as shown. The change in the template is immediately reflected in the User page.

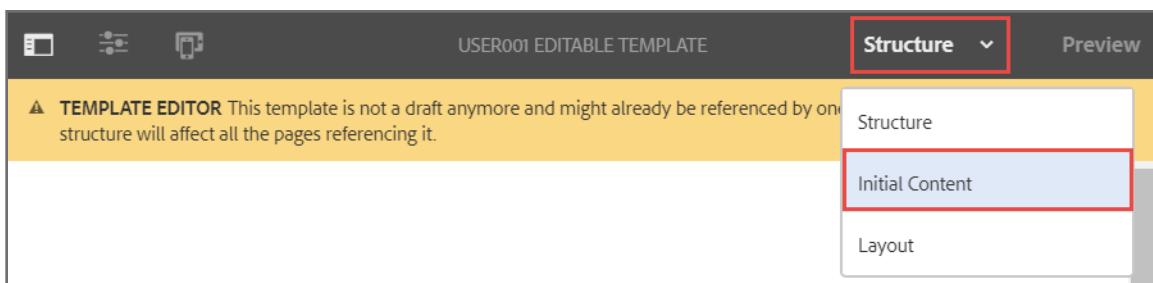


Tip: If you do not see the changes, press F5 (on Windows) to refresh your browser or click the browser's refresh button to reload the page.

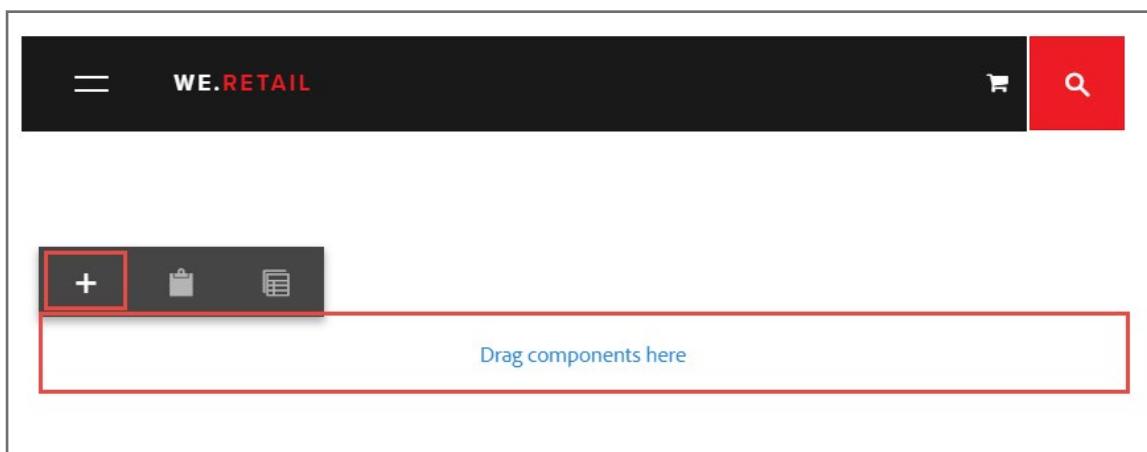
Task 2: Add initial content to a page

In this task, you will specify preloaded content on a template so that the changes are reflected on the new pages created from the template and publish the template to the publish instance.

1. Navigate to the tab that has the User0XX template open. If you do not have the User0XX template open, click the **Adobe Experience Manager** from the header bar, click **Tools**, navigate to **General > Templates**, and click the **We.Retail** folder.
2. Select the **User0XX Editable Template** and from the actions bar and click **Edit**. The **User0XX Editable Template** opens in the template editor.
3. From the toolbar, click the **Structure** drop-down arrow and select **Initial Content**, as shown:

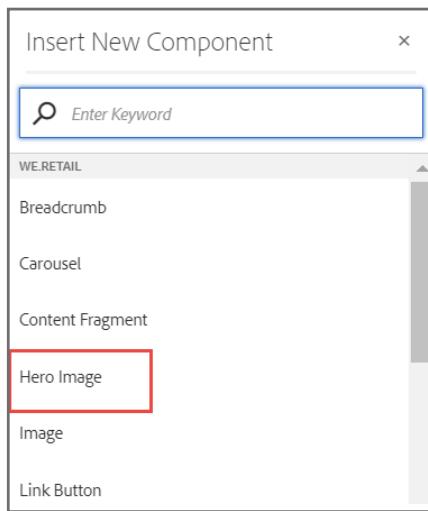


4. Select the **Drag components here** area inside the **Layout Container** and click the **Insert component** icon, as shown:



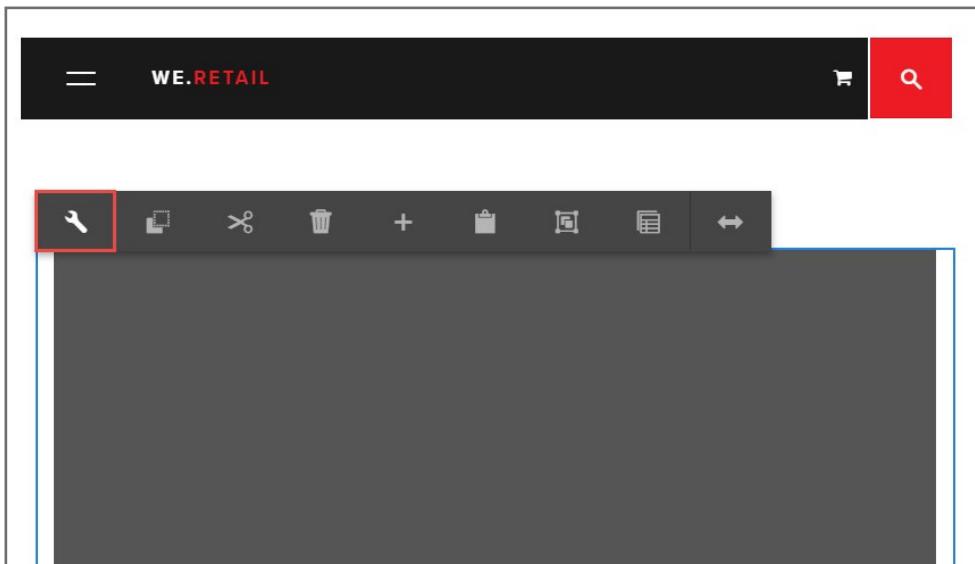
The **Insert New Component** dialog box appears.

5. Select the **Hero Image** component from the list, as shown:



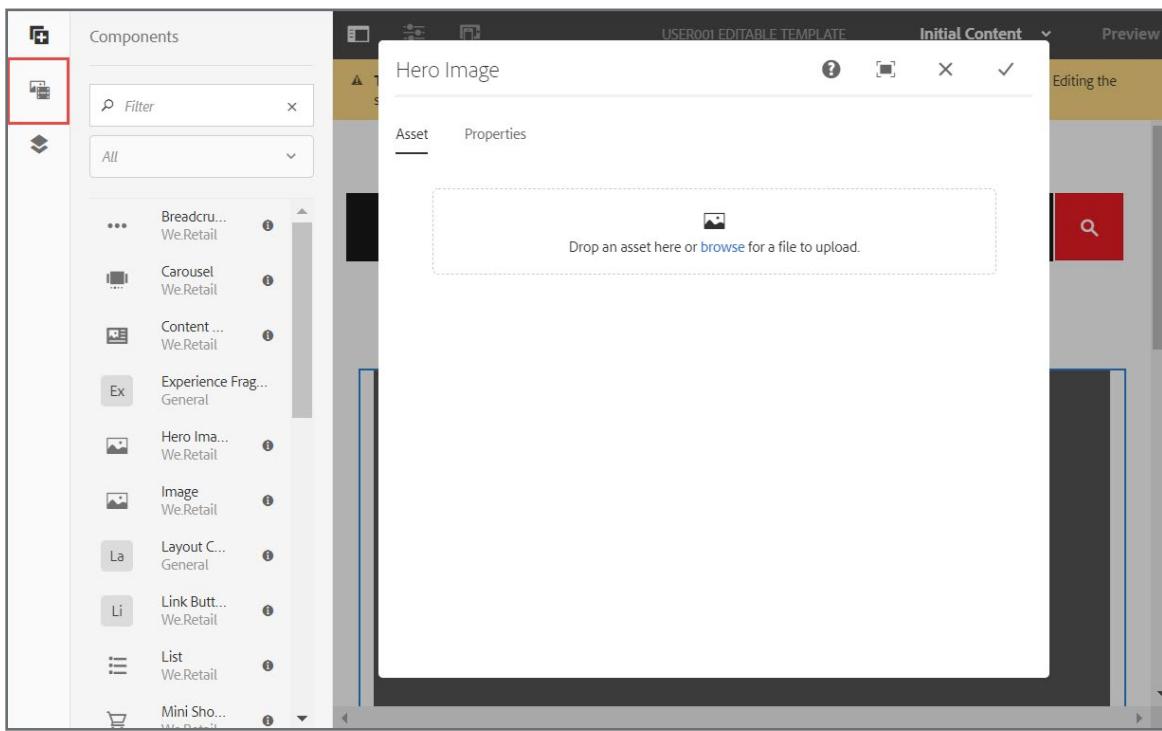
The **Hero Image** component (a dark gray box) is added to the **Layout Container**.

6. Select the **Hero Image** component and click the **Configure** icon, as shown:



The **Hero Image** dialog box appears.

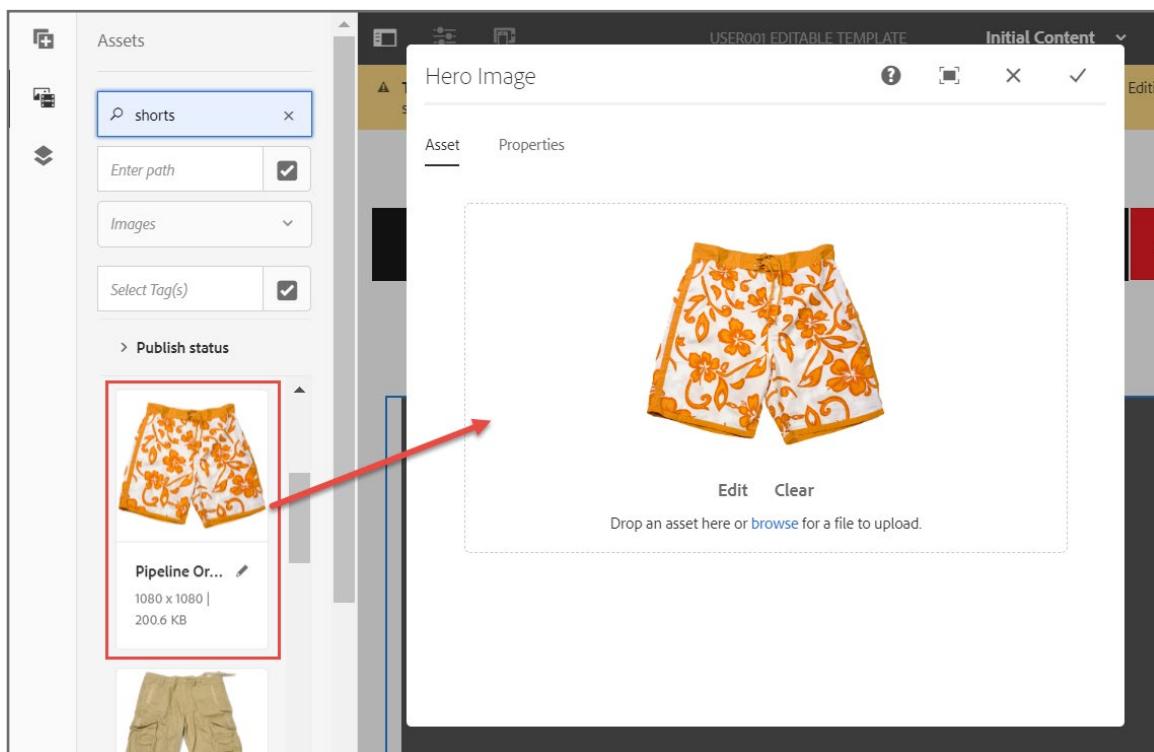
7. In the **Side Panel**, click **Assets**, as shown:



The **Assets** panel appears.

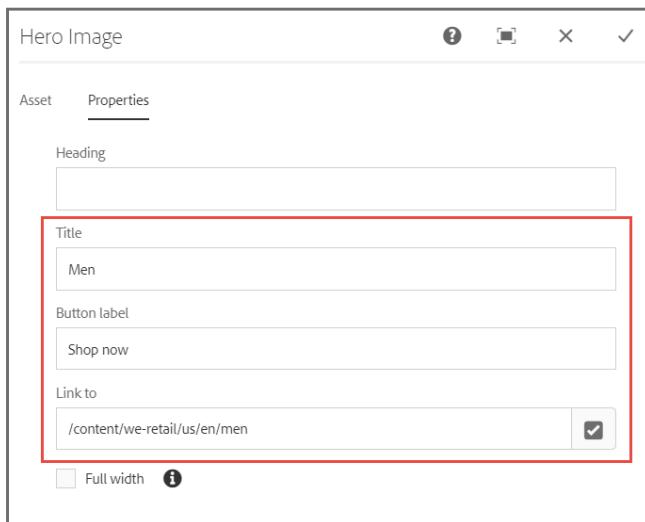
8. In the **Filter** field, search for **Shorts** to narrow the list of available assets.

9. Drag the **Pipeline Orange** shorts image onto the **Hero Image** dialog box.



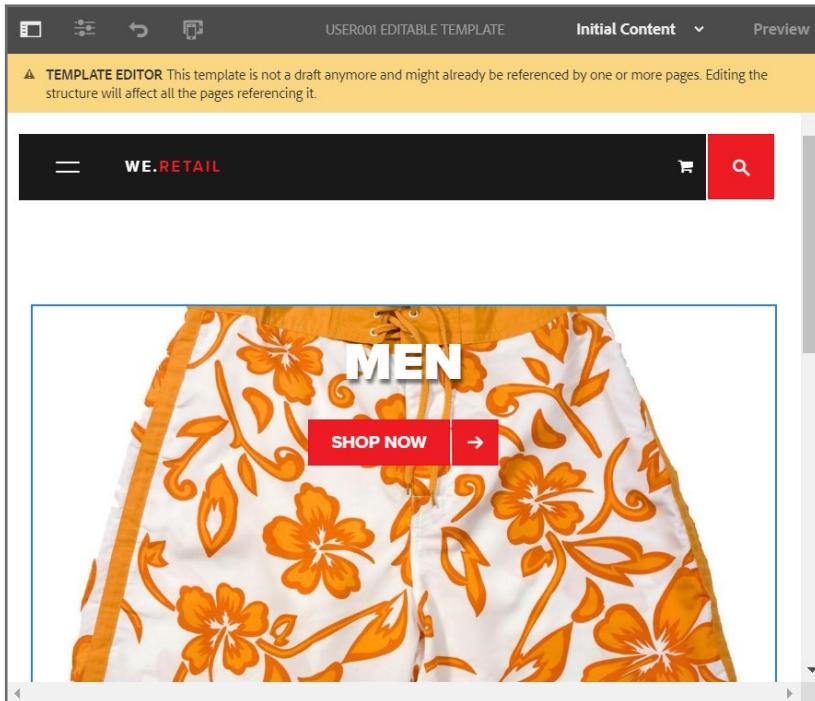
10. Click **Properties** and specify the following, as shown:

- Title:** Men
- Button label:** Shop now
- Link to:** /content/we-retail/us/en/men



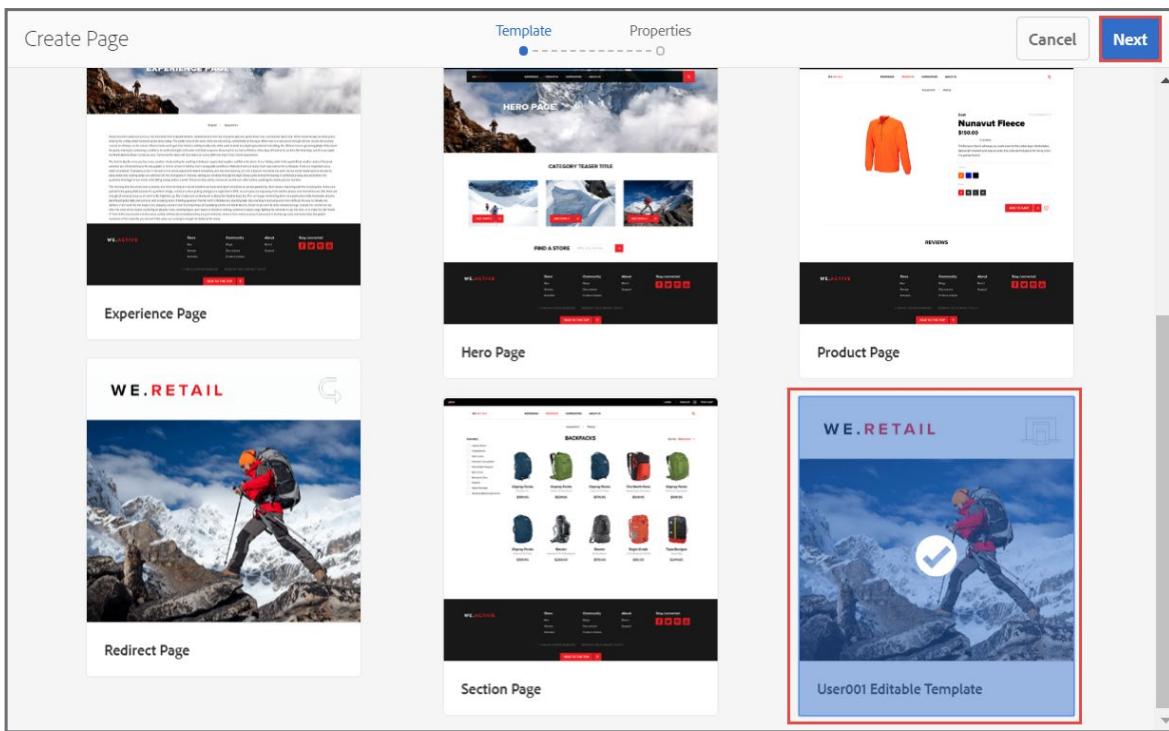
Tip: If you do not see the side panel, click **Toggle Side Panel** in the toolbar at the top of the page. To create the media sets described in this student guide, you must enable dynamic media in your author instance.

11. Click **Done**. The **Hero Image** is added as shown:



12. From the **Sites** console, navigate to **We.Retail > User0XX > English**.
13. Click **Create** and select **Page** from the drop-down menu. The **Create Page** wizard opens.

14. In the **Create Page** wizard, select the **User0XX Editable Template**, and click **Next**, as shown:



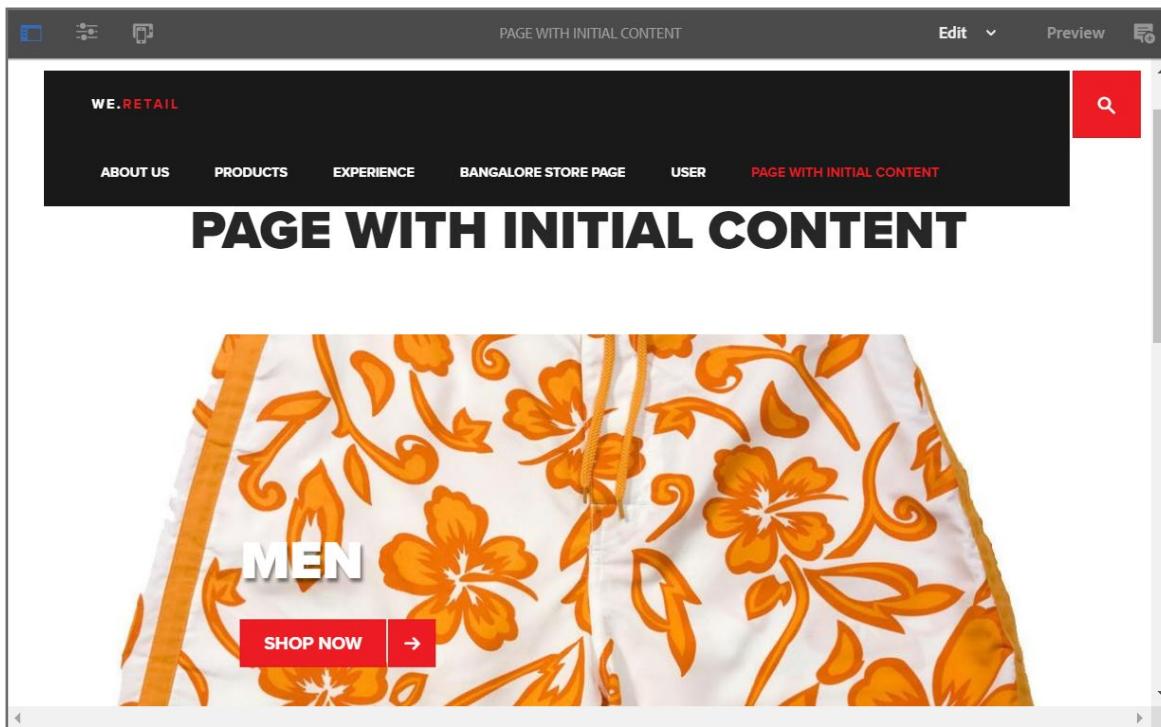
15. In the **Title** field, type **Page with initial content** and click **Create**, as shown:

Title *	Page with initial content
Name	
Tags	<input checked="" type="checkbox"/>

The **Success** pop-up window appears.

16. Click Open.

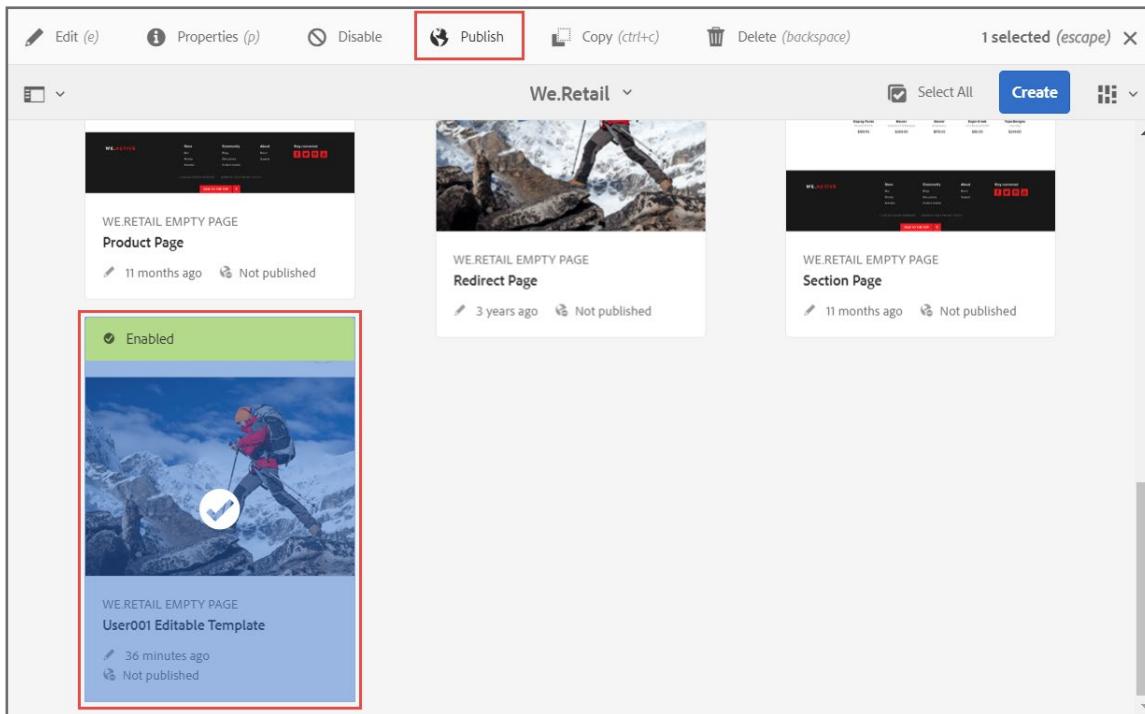
The **English** page opens in the page editor. The page you created reflects the initial content you defined and should look like the screenshot as shown:



Note: The Men page components should be editable, and the authors should be able to replace or edit the content as needed. You must adhere to a layout and basic content model.

You must publish the editable template so that it is live on the publish instance:

17. Navigate to the **User0XX Editable Template** in the browser tab. If you do not have the template tab open, from the **Header** bar, click **Adobe Experience Manager > Tools**. Navigate to **General > Templates > We.Retail** and select the **User0XX Editable Template**. Click **Publish**, as shown:

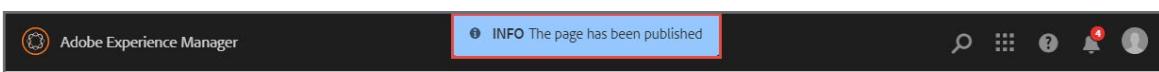


The **Publish** wizard opens.

18. Ensure all the items are selected and click **Publish**, as shown:



A blue information appears indicating **The page has been published**, as shown:



Content Policies Used in Templates

The Template Editor helps create Content Policies for a template and components in the Structure mode. The content policies help define design properties of components used in the Structure mode. For example, you can define the components available in the minimum/maximum dimensions. This helps preconfigure a component's behavior on the resultant page. You can also define the number of columns in the template. The Content Policies are applicable to the template and the pages created with the template.

AEM offers two types of Content Policies:

- Allowed: Helps select entire groups of components by AEM capability or component types individually. For example, asset editor components.
- Default: Helps set the media types for components that are dragged onto the layout container. For example, Content Fragment text.

Style System Used in Templates

Template authors can enable Style System in AEM to define the appearance for a component. For example, they can define colors, background color, size, and font for a component.

Style System: User Roles

Styles Systems can be edited by developers, template authors, and page authors.

The following table describes the user rights:

Developer	Creates styles in CSS or LESS to provide several visual variations of a component
Template Author	Defines and enables a content policy on an editable template and determines which styles are available
Page Author	Selects a style for a component using a paintbrush icon on a component toolbar.

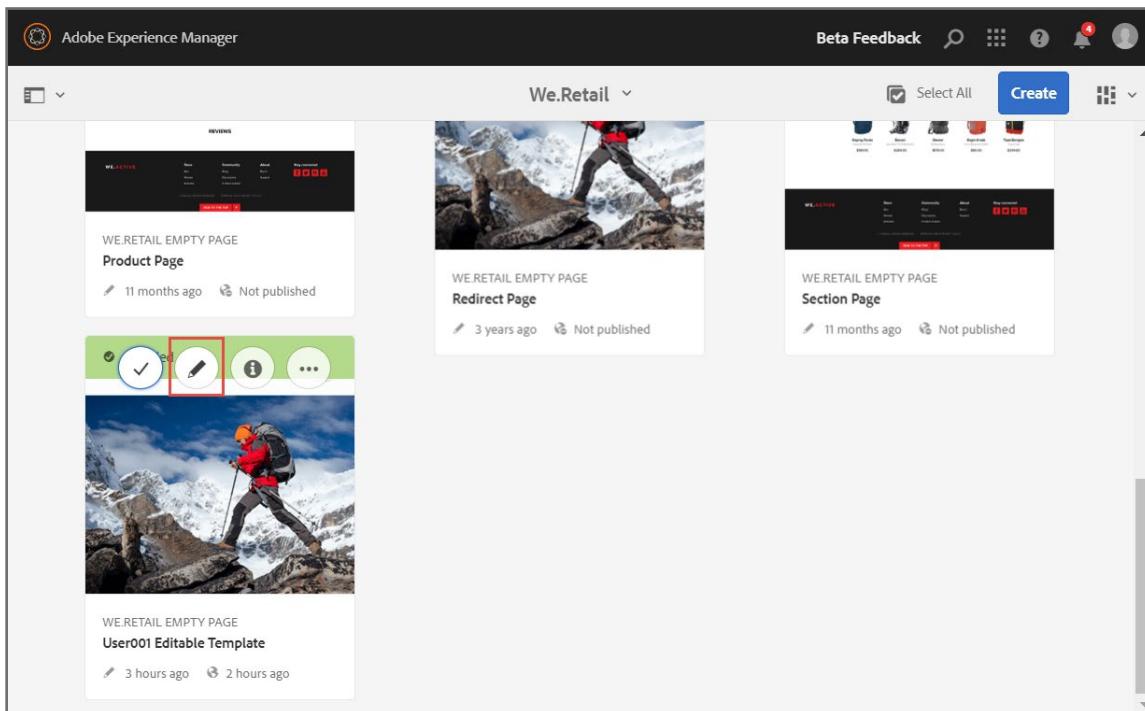
Exercise 3: Apply styles to an editable template by using Content Policies

Scenario: As a template author, you need to enable content authors to select appropriate styles for components. You need to configure the style system for components by using Content Policies.

In this exercise, you will define custom styles that page authors can apply to the list component.

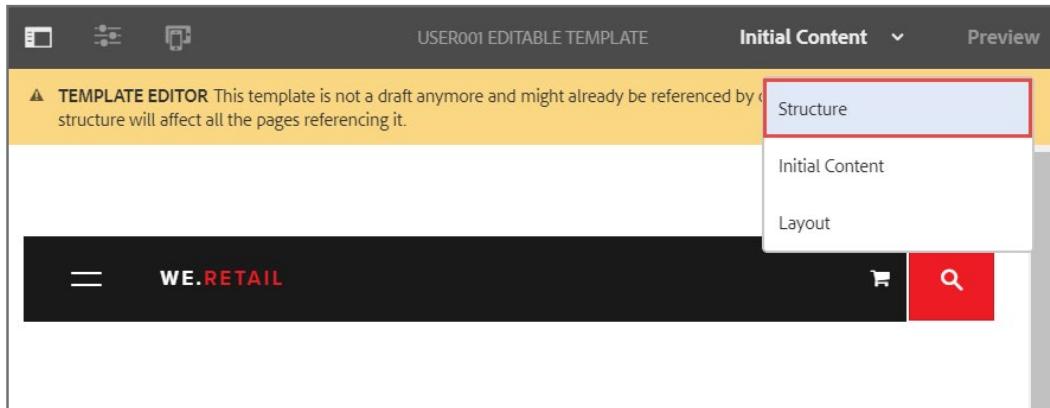
Add and configure the Dark and Large styles in the editable template.

1. To edit the **User0XX Editable Template**, click the **Adobe Experience Manager** from the header bar and click **Tools**. Navigate to **General > Templates > We.Retail**.
2. Change the view to Card View, if it is not already in Card View.
3. Hover over the **User0XX Editable Template** and click the **Open** icon from the quick actions toolbar that appears, as shown:

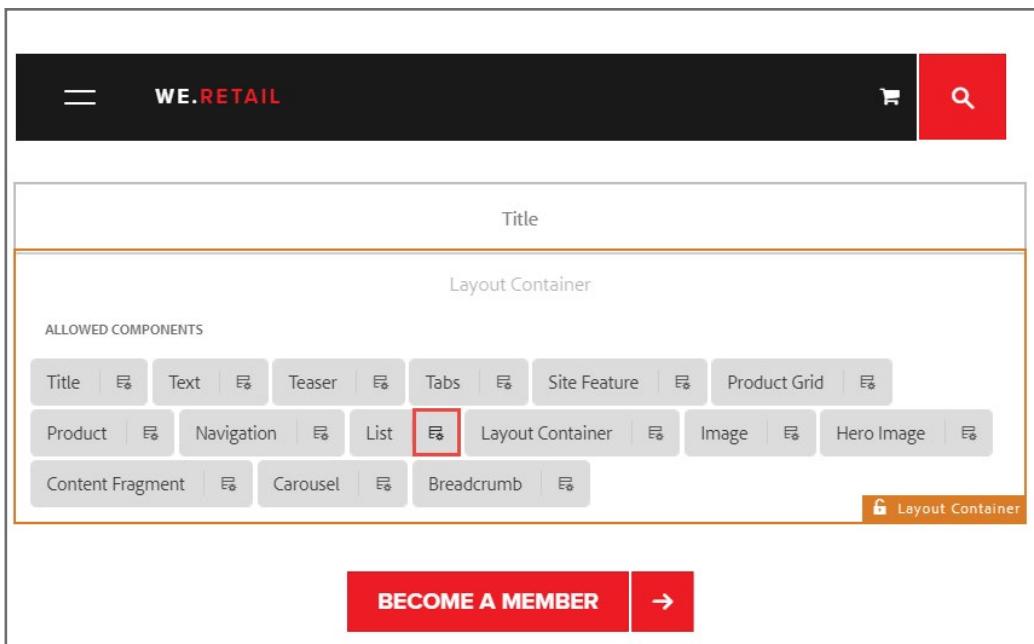


The template opens in the template editor.

- From the page toolbar, click the **Initial Content** drop-down arrow and select **Structure**, as shown:



- In the **Layout Container**, click the **Policy** icon next to the **List** component, as shown:



The **List** page opens with two sections, **Policy** and **Properties**.

- From the **Select Policy** drop-down menu, select **List Component – Style System** and click the **Duplicate** icon, as shown. You must duplicate the policy to affect only the template you created and not all the policies for the list components in the instance.

The screenshot shows the 'List' component configuration screen. In the 'Policy' section, the 'Select policy' dropdown is set to 'List Component - Style System'. A red box highlights both the dropdown and the 'Duplicate' icon (+ icon with a square symbol) to its right. Below the dropdown, there is a 'Policy Title *' input field containing 'List Component - Style System', which is also highlighted with a red box. The 'Policy Description' field contains the text 'Policy that defines the Style System styles for the List Component.' with an information icon (i) to its right.

The policy title changes to **Copy of List Component – Style System**. You must rename the policy to reflect that the policy is exclusively for the editable template you created by using a syntax.

- In the **Policy Title** type **User0XX List Component – Style System**, as shown:

The screenshot shows the 'List' component configuration screen. In the 'Policy' section, the 'Select policy' dropdown is set to 'User001 List Component - Style System'. The 'Policy Title *' input field below it is highlighted with a red box and contains 'User001 List Component - Style System'. The 'Policy Description' field at the bottom is also highlighted with a red box and contains the text 'Policy that defines the Style System styles for the List Component.' with an information icon (i) to its right.

8. Under the **Properties** section, click **Styles**, as shown:

The screenshot shows the 'List' component configuration dialog. In the top right corner, there are three tabs: 'List Settings', 'Item Settings', and 'Styles'. The 'Styles' tab is highlighted with a red box. Below the tabs, there is a 'Date Format' field set to 'yyyy-MM-dd'. Under 'Available list types', there are four checkboxes: 'Disable children', 'Disable static', 'Disable search', and 'Disable tags', each with an information icon.

The Styles section opens with a warning message - **Editing the styles can have a visual impact on existing components.**

9. Scroll down the page and click the **Add** button, as shown:

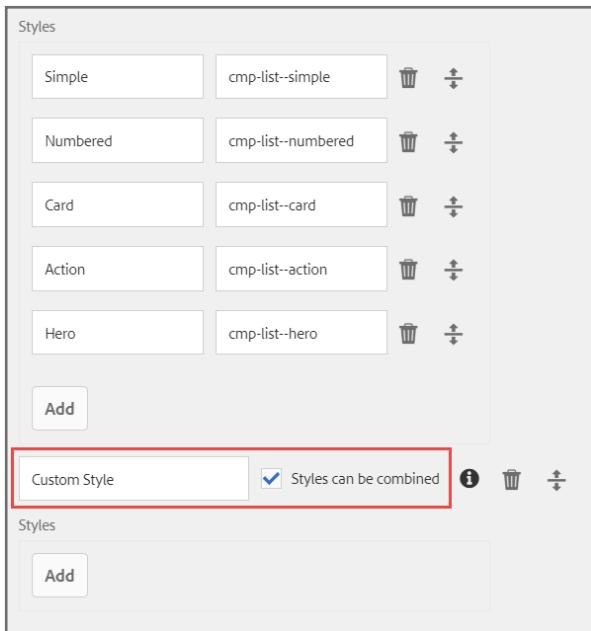
The screenshot shows the 'List' component configuration dialog. On the left, there is a 'Policy Description' field containing 'Policy that defines the Style System styles for the List Component'. Below it, a section titled 'Other templates also using the selected policy' lists 'Hero Page', 'Product Page', and 'Section Page'. On the right, under 'Allowed Styles', there is a 'Layout' input field and a checkbox 'Styles can be combined'. Below this, a 'Styles' section contains five items: 'Simple' (style 'cmp-list--simple'), 'Numbered' (style 'cmp-list-numbered'), 'Card' (style 'cmp-list-card'), 'Action' (style 'cmp-list-action'), and 'Hero' (style 'cmp-list-hero'). Each item has a trash icon and a 'Edit' icon. At the bottom of the 'Styles' section, there is a large red-bordered 'Add' button.

A Style Group is created.



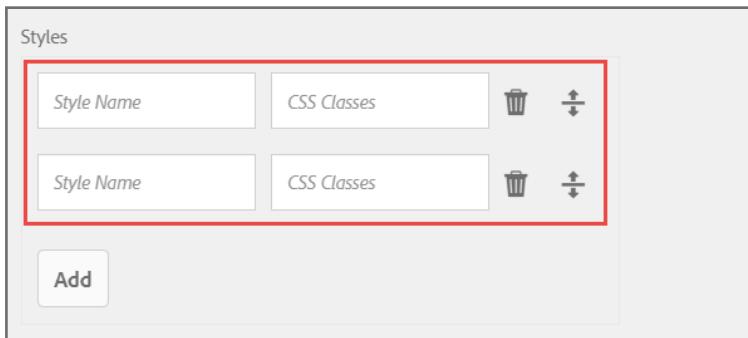
Note: Style groups help organize styles better and determine if a set of styles can be combined with one another and applied to a component.

10. In the **Group Name** field, type **Custom Styles** and select the **Styles can be combined** check box, as shown:



11. In the **Styles** section, below the **Custom Styles** group, click **Add** twice.

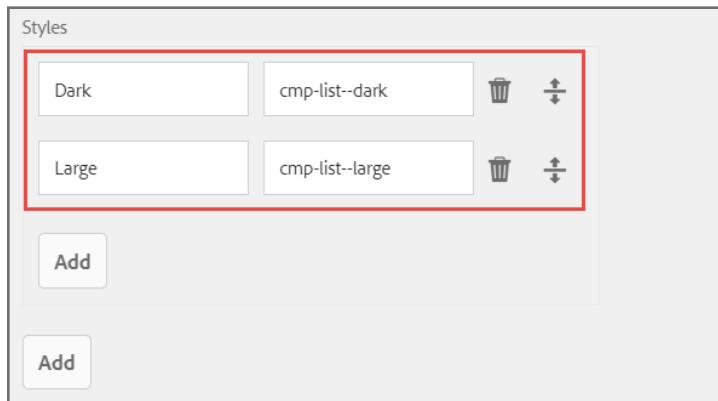
Two empty style fields are added as shown:



Note: You will add two available styles created by IT staff or developers that are available to you in AEM. There are styles present that authors can use to style a list component (Simple, Numbered, Card, and so on). These are the styles that provide a way to list items, each with their own look and feel, such as font size, color, background. You must provide a user-friendly name for these styles but match them to the correct style.

12. In the two empty rows, add the following, as shown:

- **Style Name:** Dark
- **CSS Classes:** cmp-list--dark
- **Style Name:** Large
- **CSS Classes:** cmp-list--large



13. At the upper-right corner of the page, click **Done**.

You have enabled the list component in your editable template to use two additional styles, either individually, or at the same time.

14. (Optional) To use the style you created, edit one of the pages with the User0XX Editable Template.

15. Navigate to **Sites > We.Retail > User0XX > English** and open the **User** page in the page editor. The User page is created using the User0XX Editable Template.

16. Click the **Components** icon. The **Components** panel opens.

17. Drag the **List** component to the **Drag components here** area. The **List** component is added to the page.

18. Select the **List** component and then click the **Configure** icon from the component toolbar. The **List** dialog box opens. You must provide data for the list component.

19. Ensure you are on the **List Settings** tab. In the **Parent Page** field add **/content/we-retail/language-masters/en/experience** either by typing the path in, or by clicking the **Selection Dialog** and navigating to that path.

20. Click the **Item Settings** tab. Different options in the **Item Settings** tab appear.

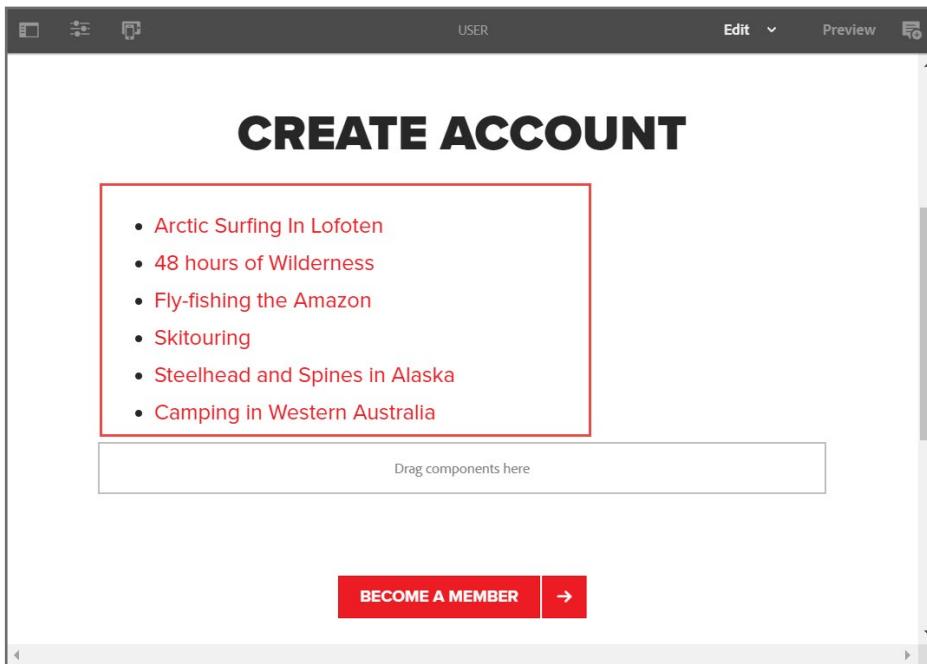
21. Ensure in the Type field, Article is selected, select all the check boxes, and click the **Done** icon.

Notice, a list with the titles of the We.Retail Experience subpages appear on the page.

22. Select the list component and click the **Styles** icon from the component toolbar.

23. Select the **Large** style and click the Done icon.

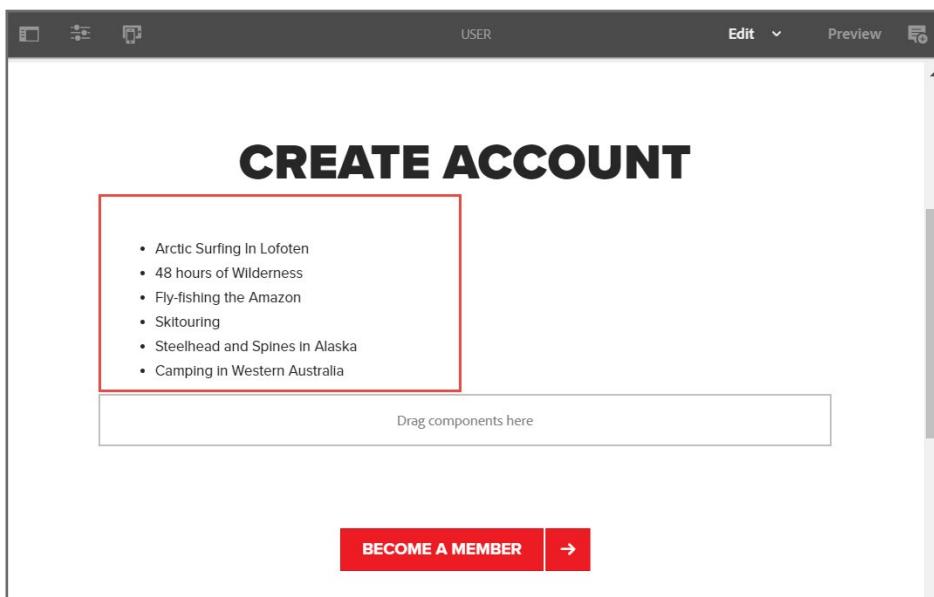
The **Large** style looks as shown:



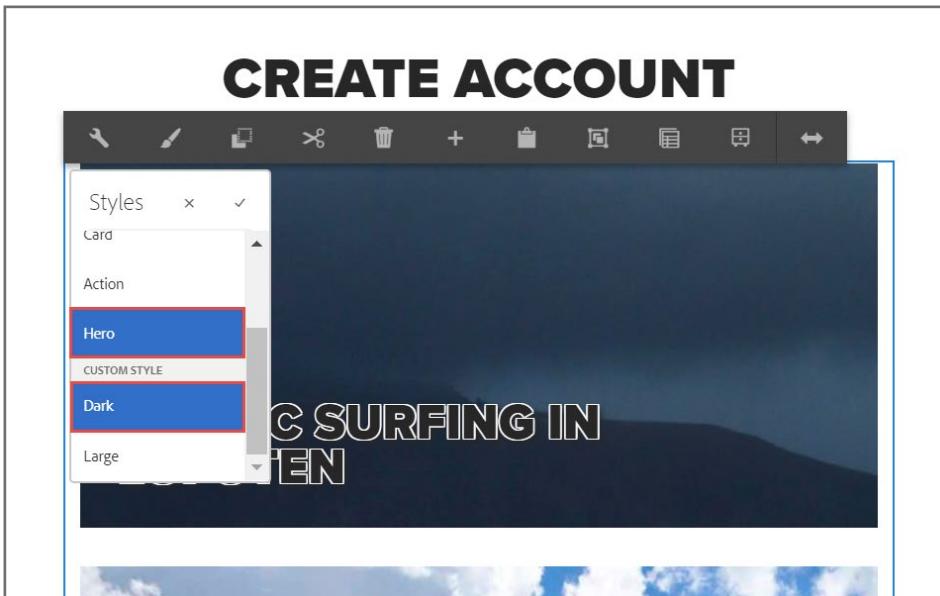
24. Again, select the list component and click the **Styles** icon from the component toolbar.

25. Select the **Dark** style and click the done icon.

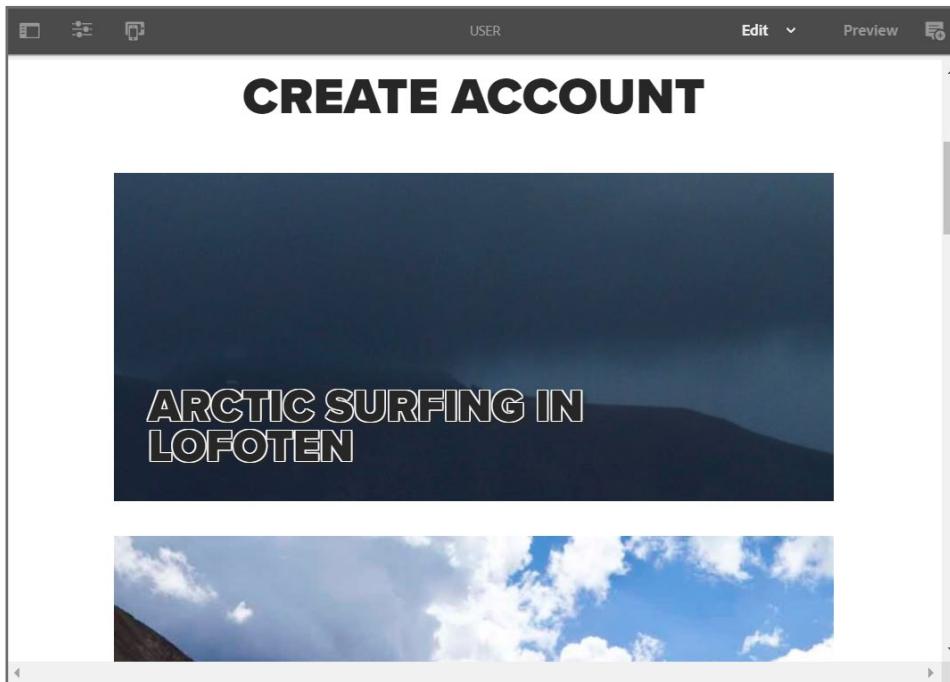
The **Dark** style looks as shown:



26. Apply two or more styles at the same time by repeating the steps 22 and 23, but set the Style for the list component to **Hero** and **Dark**, as shown. Recall that in the Custom Styles group you added and enabled the Hero style option.



Notice that the additional Dark style is applied to the font style of the title of each list item as shown:



References

Use the following links for more information on:

- [Editable Templates](#)
- [AEM Style System](#)

Project Collaboration

Introduction

When working on a project, you must collaborate with your team members to work on specific tasks to meet the project goals. A project manager can enable the team members to work on resources and processes without depending on the AEM user administration, usually handled by the IT department. Content authors automatically get the permissions to work with the content resources or initiate processes according to the role that is assigned to them when they are added to the team.

Objectives

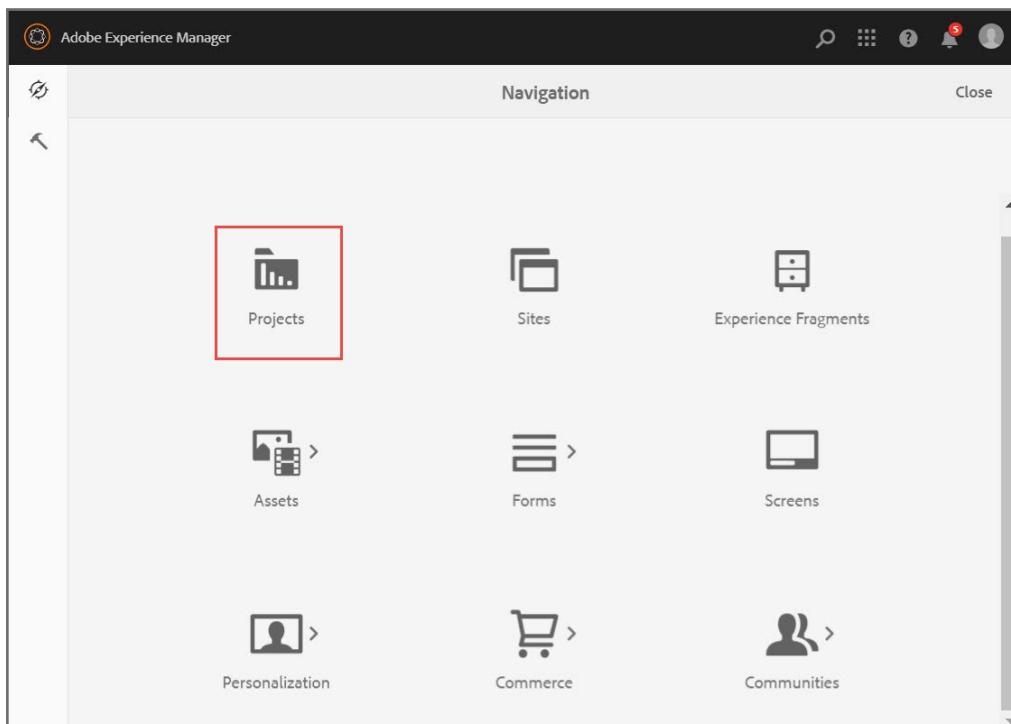
After completing this module, you will be able to:

- Explain key concepts related to projects in AEM
- Create a project and explore permissions
- Add assets to a project
- Explain tasks in a project
- Create and execute a task
- Explain the workflows in projects

Projects in AEM

Projects help project administrators manage permissions on content resources, such as the right to view, edit or publish a page, assets or experience fragments. From the perspective of process governance, AEM Projects enable content management processes to be more secure, while keeping the organization flexible at the same time.

You can access and manage projects from the Projects console, as shown:



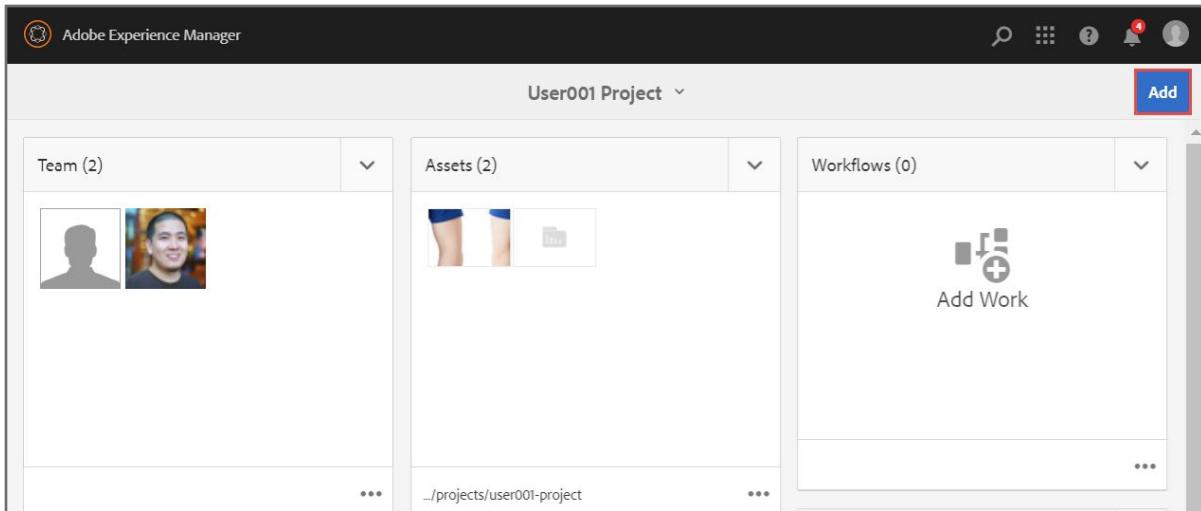
The project dashboard provides an overview of the resources employed as well as shortcuts to add and remove resources. You can monitor the processes of progress that were initiated within the project scope through the status indicators in the process-related tiles.

Project Tiles

Tiles enable to configure the functions that the projects provide:

- Informative tiles: Provides an overview of aspects of the project such as Project Info and Links
- Resource access tiles: Gives access to the resources by granting permissions to Assets, Asset collections, and Experience
- Translation tiles: Helps configure and execute translation projects
- Translation Job: Provides the status of a translation job and the number of pages and assets in the job
- Translation Summary: Lists the translation project details such as Owner, Language, Provider, and Method
- Process access tiles, such as Workflow, Launches, and Email
- Team management tiles: Helps coordinate the human resources involved in Team and Tasks

You can also add different tiles, such as asset Collections, Experiences, Tasks, and Links to the project by clicking **Add**, as shown:



Project Template

AEM offers four project templates as out-of-the-box examples:

- Simple: A basic template for custom projects
- Translation: A template for all translation projects
- Media: A template for a media project
- Product Photo Shoot: A template for a photo shoot project

Project User Roles

AEM Projects are preconfigured with some typical project roles. System administrator can create additional ones, when needed.

The following table describes the user roles that are available with the simple project template:

Observer	Can view project details, including the project status
Editor	Can upload and edit the content resources and initiate workflows
Owner	Can manage the project life cycle. Additionally, for resource and workflow access, the owner can manage team members and retire or delete the project.

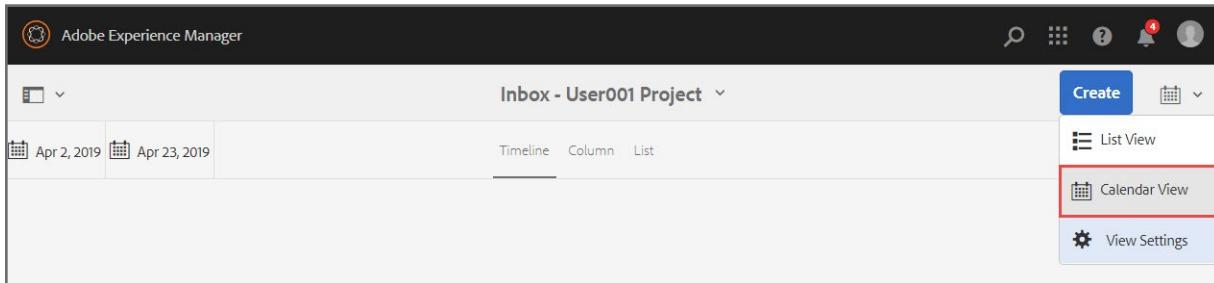
Managing Project Life Cycle

You can perform the following actions from the **Projects** console:

- Create projects
- Add tiles to a project
- Make projects active or inactive

Project Life Cycle: Calendar View

You can track the project from a time perspective from the Calendar View. The Calendar View is available when you select a project and click the View Switcher icon on the actions bar, as shown in the below screenshot. You may also view all the projects in Calendar view from the Projects console.



 **Note:** By default, all the projects are displayed in a date range. For example, from April 17, 2019 to July 31, 2019. You can customize the timeline.

Exercise 1: Create a project and explore permissions

Scenario: In the process of creating an online shopping website, as a project manager, you need to create a project, and assign user roles to your team members. You also need to add the resources that are needed for the project.

In this exercise, you will perform the following tasks:

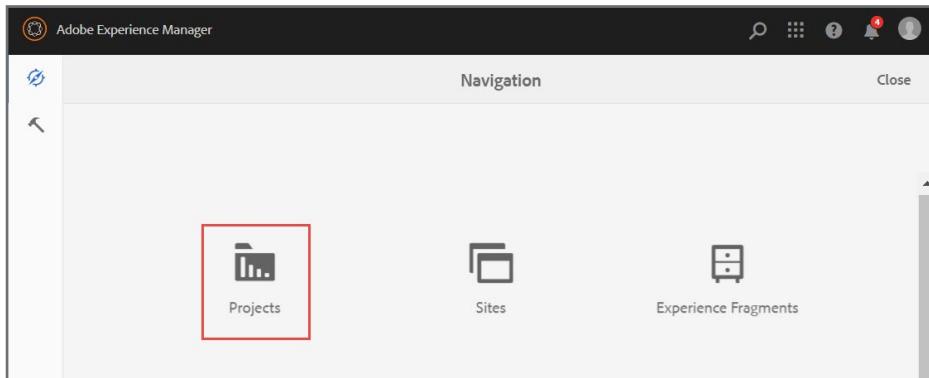
1. Create a simple project
2. Add assets to the project

You must download **Exercise_Files** to your local system for this exercise. You will need the **Projects** folder for Task 2.

Task 1: Create a simple project

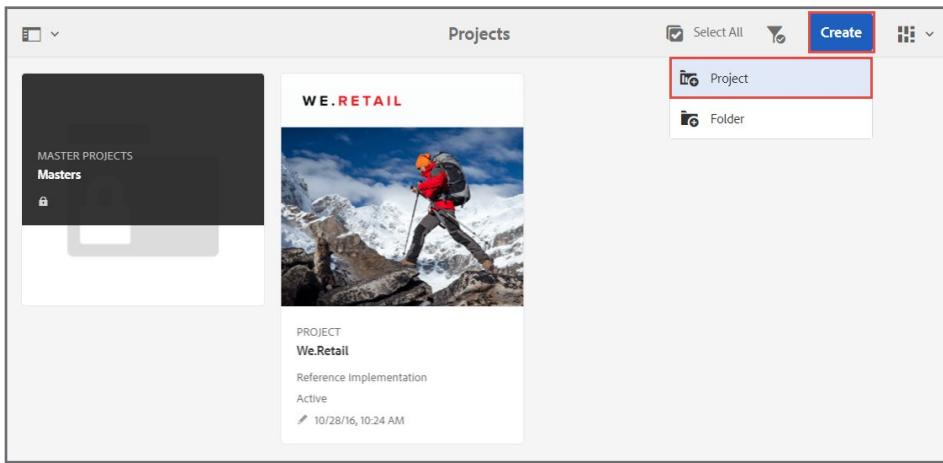
In this task, you will create a simple project and add Willie Melton as an observer.

1. Navigate to the **Projects** console from the **Navigation**, as shown:



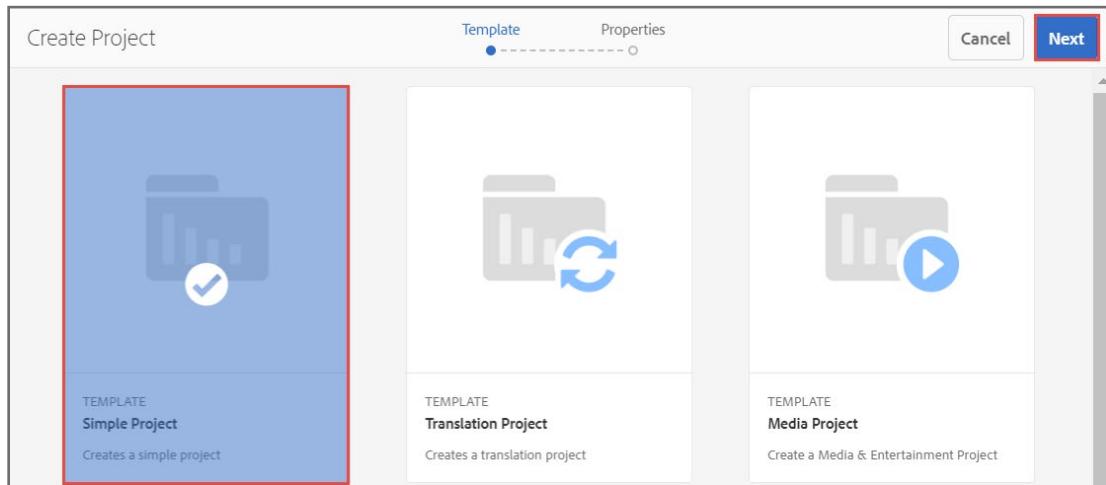
The **Projects** console opens.

2. Click **Create** and select **Project** from the drop-down menu, as shown:



The **Create Project** wizard opens on the **Template** page.

3. Select the **Simple Project** template and click **Next**.



The **Create Project** wizard opens on the **Properties** page.

4. On the **Basic** tab, fill in the following details:
 - a. **Title:** User0XX Project
 - b. **Start Date:** Select today's date.
 - c. **Due Date:** Select the date that is one month from the Start date.
 - d. In the **User** field, select **Willie Melton**. You can also type and search for the name.
 - e. From the **Owners** drop-down menu, select **Observers**, and click the **Add** button. Willie Melton is added as an observer to the project.
5. Click **Create**, as shown:

The screenshot shows the 'Create Project' dialog box. The 'Basic' tab is selected. The 'Title' field contains 'User001 Project'. The 'Description' field is empty. The 'Start Date' is set to '2019-05-10 16:04'. The 'Due Date' is set to '2019-06-10 16:04'. The 'User' dropdown shows 'Administrator' and 'Observers' is selected. A user named 'Willie Melton' is listed as an observer. The 'Create' button is highlighted in blue.

A **Success** pop-up window appears.

6. Click Done.

The **User0XX Project** folder is created, as shown:

The screenshot shows the 'Projects' section of the AEM interface. It displays three project cards:

- MASTER PROJECTS Masters**: A dark card with a lock icon, indicating it is a master project.
- PROJECT We.Retail**: A card featuring a photo of a person climbing a snowy mountain. Details: Reference Implementation, Active, created on 10/28/16 at 10:24 AM.
- PROJECT User001 Project**: A card with a bar chart icon. Details: Active, due in 4 minutes on 6/10/19, 4:04 PM.

Task 2: Add assets to the project

In this task, you will add an asset to the project.

1. Click the **User0XX Project** folder. The **User0XX Project** folder opens.
2. On the **Assets** tile, click the ellipsis (...), as shown:

The screenshot shows the 'User001 Project' dashboard. It includes sections for Team (2), Assets (1), Workflows (0), and Experiences (0). The 'Assets' section is highlighted with a red box around its ellipsis button.

The **User0XX Project** folder opens.



Note When you click the **Assets** title, the **Assets** console opens.

3. Click **Create** and select **Folder** from the drop-down menu, as shown:



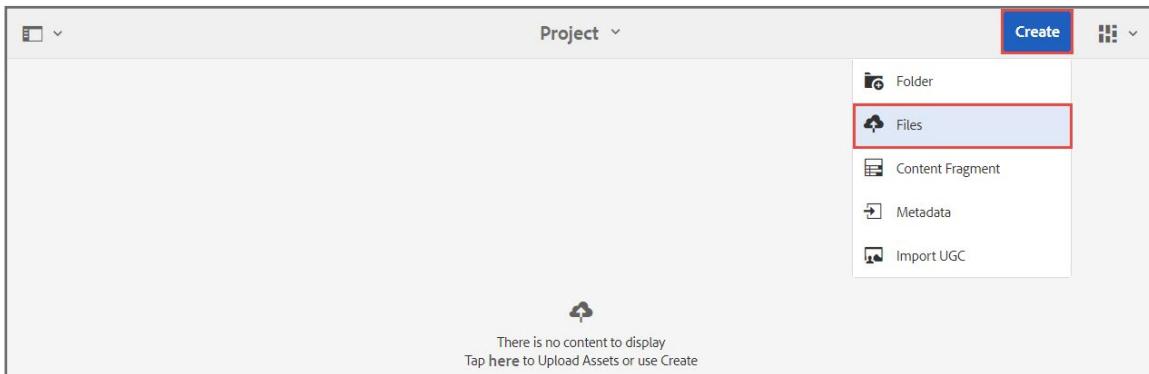
The **Create Folder** dialog box opens.

4. In the **Title** field, type **Project** and click **Create**, as shown:

A screenshot of the "Create Folder" dialog box. It has a title bar "Create Folder" and a close button "x". Inside, there is a "Title *" field containing "Project", which is highlighted with a red box. Below it is a "Name" field containing "project". There are two checkboxes: "Private" and "Orderable", neither of which is checked. At the bottom are "Cancel" and "Create" buttons, with "Create" also highlighted with a red box.

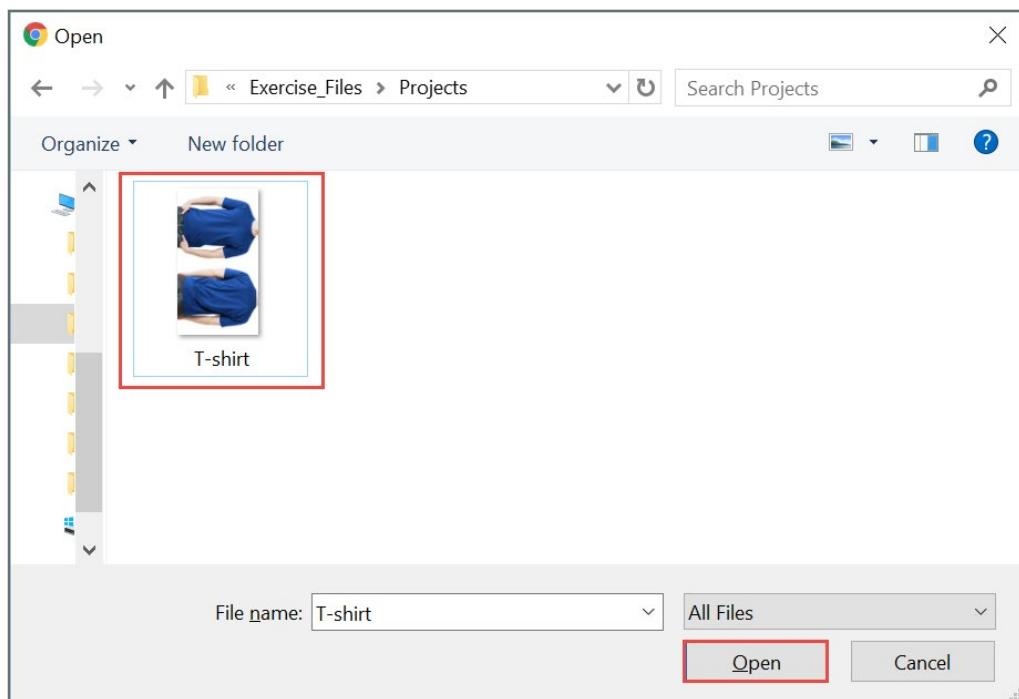
The **Project** folder is created.

5. Click the **Project** folder to open it.
6. Click **Create** and select **Files** from the drop-down menu, as shown:



The **Open** dialog box displays.

7. Select the **T-shirt** image from the **Exercise_Files > Projects** folder, which you have downloaded on your local file system and click **Open** to upload the image, as shown:



The **Upload Assets** pop-up window appears.

8. Click **Upload**, as shown:



The image is added to the **Project** folder.

You will now impersonate as Willie Melton to view if you can edit the image.

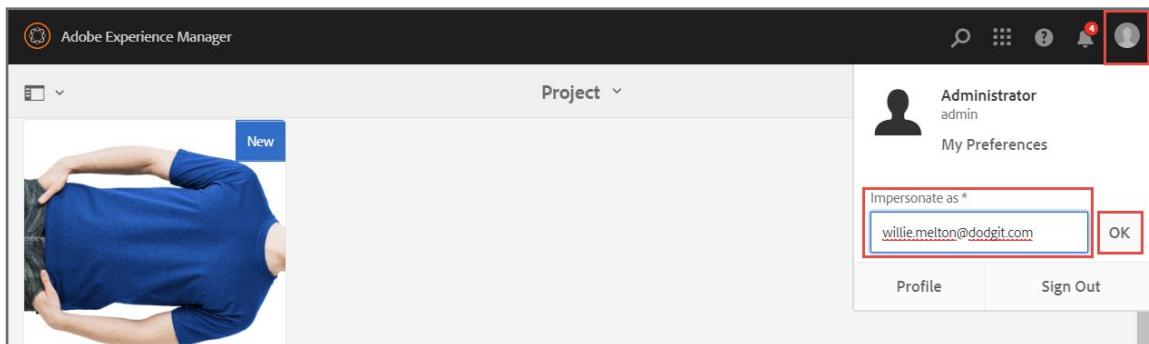
9. On the header bar, click the **User** icon.

10. In the **Impersonate As** field, type **Willie Melton**.



Tip: Check if Willie Melton's picture is in the Team tile to ensure he is added to the project correctly.

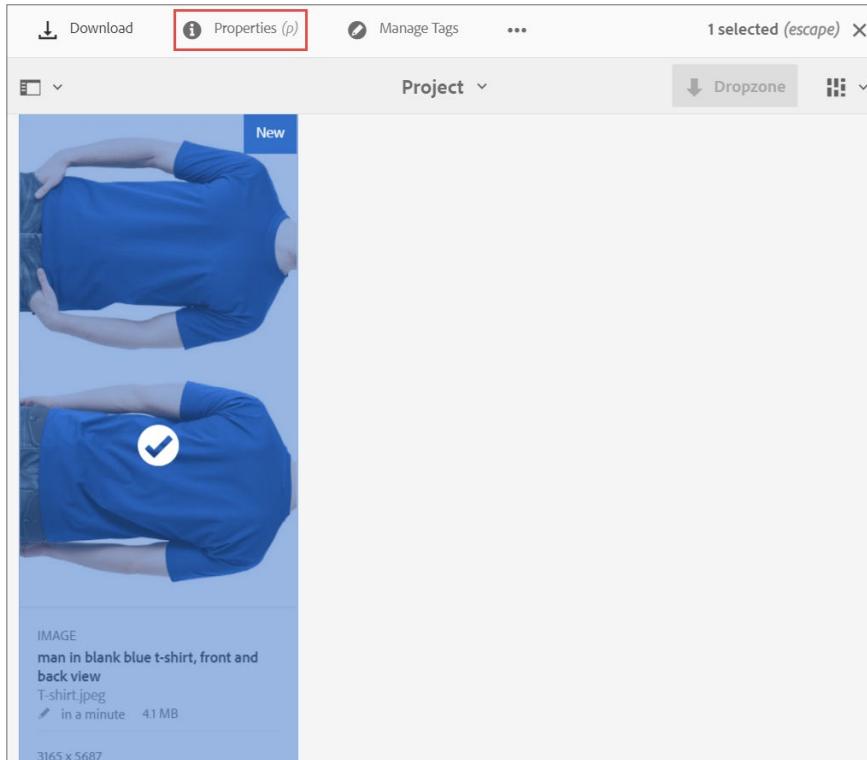
11. Select the email address that appears, and click **OK**, as shown:



Notice, the user role changes to Willie Melton.

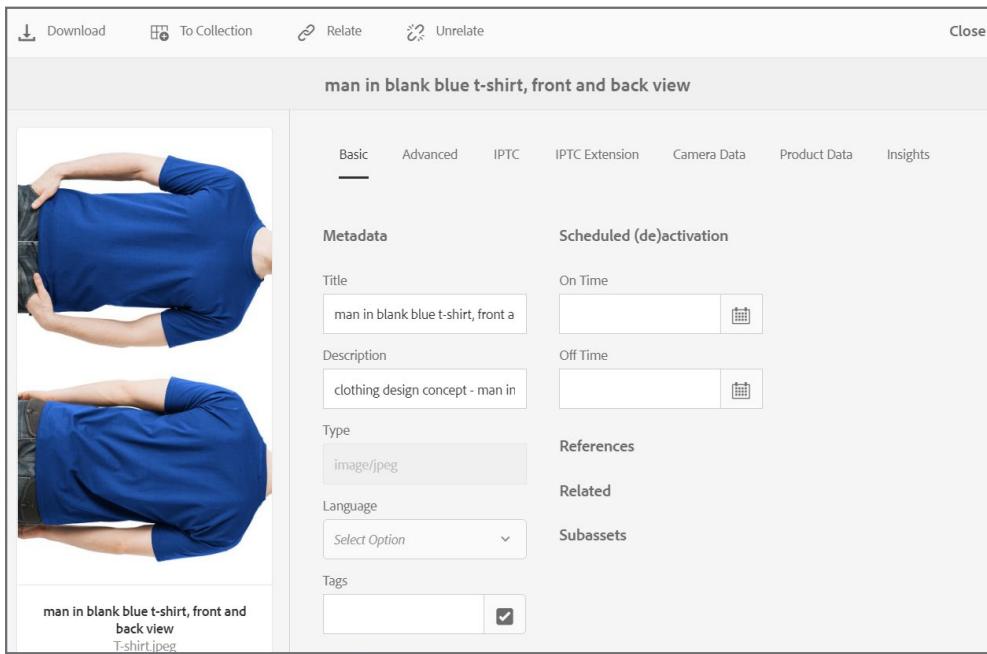
12. From the same **Projects** folder, click the image that you uploaded.

13. Click **Properties** icon from the quick actions bar, as shown:



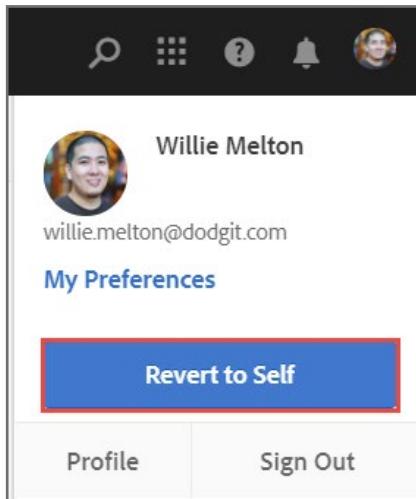
The properties page opens.

14. Observe that Willie cannot edit the properties and only view them because Willie Melton is added as an observer.



15. Click **Close**.

16. On the header bar, click the User icon and click **Revert to Self**, as shown:



Managing Tasks

Project progress initiates when tasks represent items of work to be done on a content resource. For example, editing an editorial for a website is a task. When all the tasks that make up a project are added and tracked in an AEM project, the task tile will inform you about the level of completeness of current tasks. You can modify the tasks, view and modify task comments, and add tasks in a project.

When you are assigned a task, it appears in the User Inbox.

You can determine the project progress by checking the **Task title** and **Task list**.

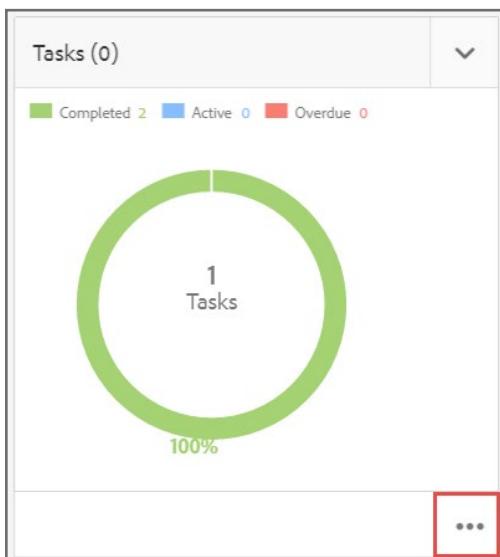
Task Title

The **Task title** indicates the status of the project's tasks as completed and active. The following information is visible in the **Task title**:

- Percentage of completed tasks
- Percentage of active tasks
- Percentage of overdue tasks

Task List

The **Task list** displays the detailed information about all the tasks related to a project. To view the list of tasks, click the ellipsis (...) on the Task tile, as shown in the below screenshot. The tasks are divided by parent workflows. The task details are displayed along with metadata such as due date, assignee, priority, and status.

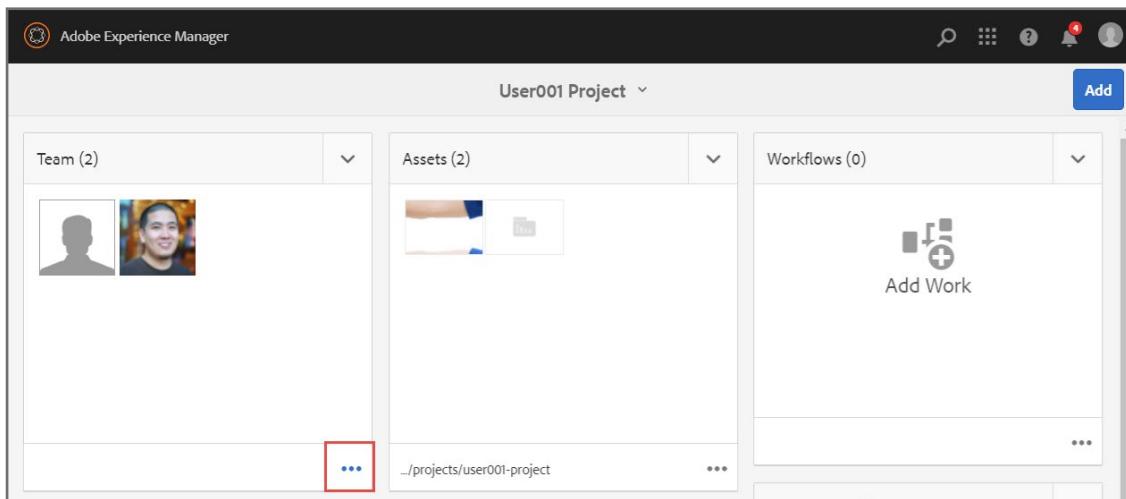


Exercise 2: Create and execute a task

Scenario: After creating a project, as the project owner, you must assign tasks to the team members working on the project. You need to create tasks and assign the tasks to specific roles.

In this exercise, you will add Willie Melton as an editor, assign Willie a task, and complete the task by impersonating as Willie.

1. On the Header bar, click **Adobe Experience Manager** and navigate to the **Projects** console. The **Projects** console opens.
2. Click the **User0XX Project** folder.
3. Click the ellipsis (...) on the **Teams** tile, as shown:



The **Project Team** page appears.

4. From the list of members, click the **Delete** icon next to Willie Melton, as shown, because in the previous exercise he was added as an observer.

The screenshot shows the 'Project Team' dialog. In the 'Members' section, there are two entries: 'Administrator' and 'Willie Melton'. 'Willie Melton' is listed under 'Observers' and has a small trash can icon to its right, which is highlighted with a red box. At the top right of the dialog are 'Cancel' and 'Save & Close' buttons.

5. From the **User** drop-down menu, select **Willie Melton**, and from the **Owner** drop-down menu, select **Editors** and click **Add**, as shown:

The screenshot shows the 'Project Team' dialog. The 'User' dropdown at the top left is set to 'Willie Melton' and is highlighted with a red box. Below it, the 'Members' section shows 'Administrator' and 'Willie Melton'. To the right of 'Willie Melton' are the 'Owners' dropdown (set to 'Editors') and a trash can icon. At the top right are 'Cancel' and 'Save & Close' buttons.

Willie Melton is added as an Editor.

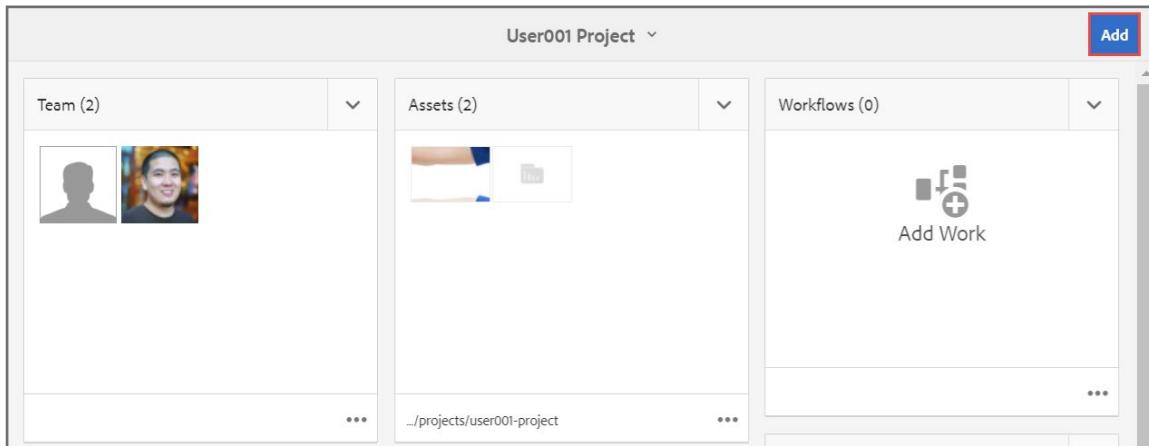
6. Click **Save & Close**, as shown:

The screenshot shows the 'Project Team' dialog. The 'User' dropdown is empty. The 'Members' section shows 'Administrator' and 'Willie Melton', with 'Willie Melton' now listed under 'Editors'. The 'Owners' dropdown is set to 'Editors'. At the top right are 'Cancel' and 'Save & Close' buttons, with 'Save & Close' highlighted with a red box.

A message, **The form has been submitted successfully**, appears.

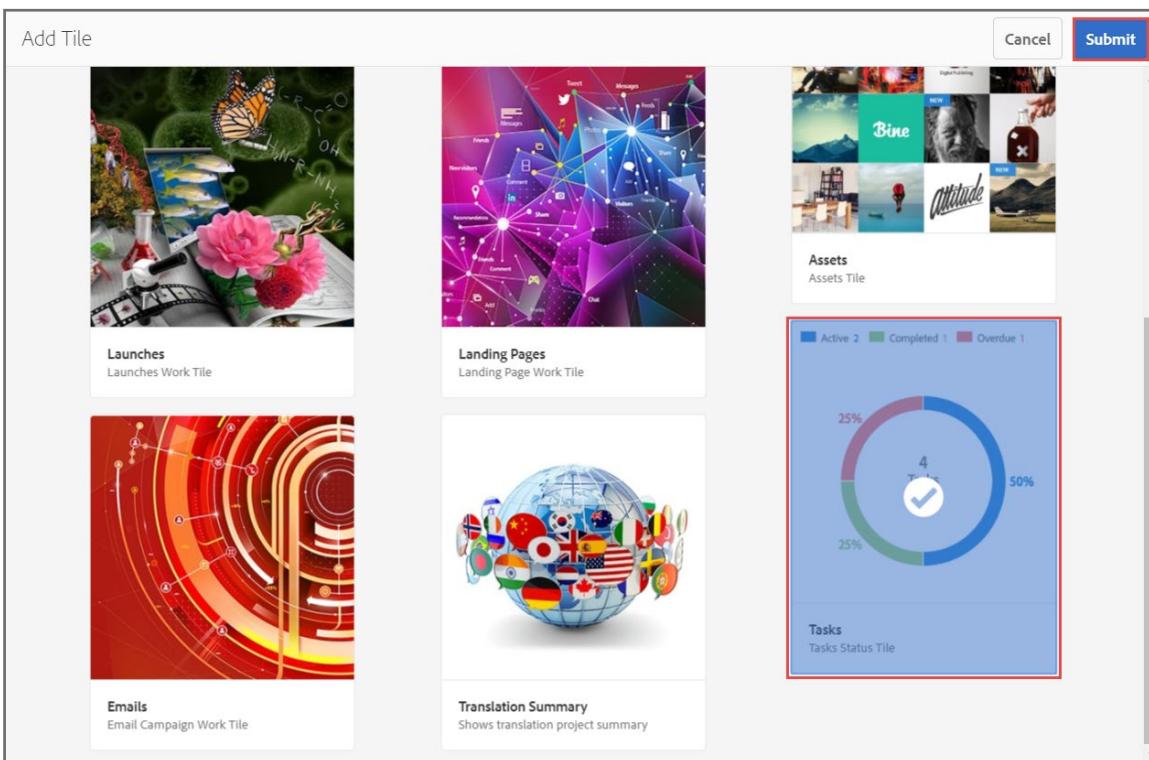
Now, assign a task to Willie Melton due in two days with high importance.

7. In the **User0XX Project** folder, click **Add**, as shown:



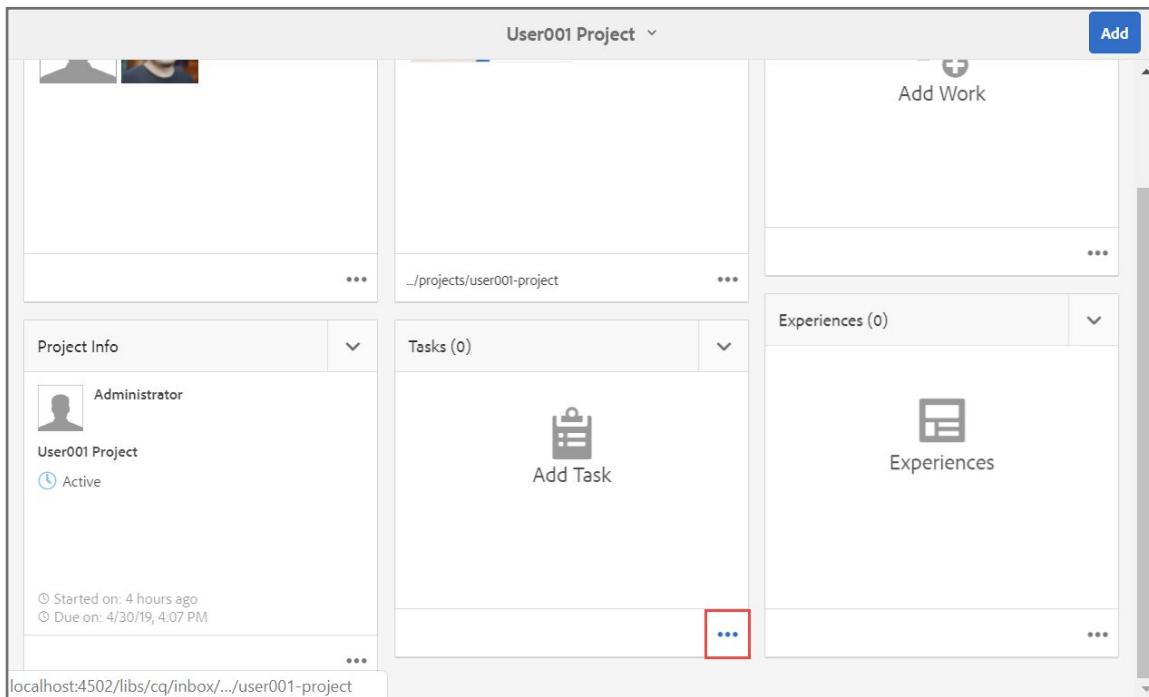
The **Add Title** page appears.

8. Select the **Tasks** folder and click **Submit**, as shown:



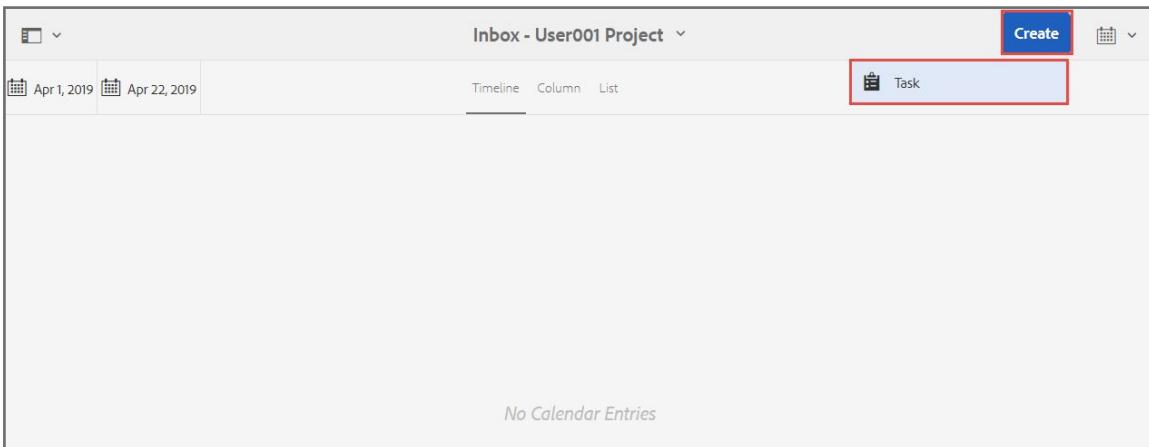
The **Tasks** tile is added to the **User0XX Project** folder.

9. On the **Tasks** tile, click the ellipsis (...), as shown:



The **Inbox-User0XX Project** page opens.

10. Click **Create** and select **Task**, as shown:



The **Add Task** page opens.

11. Enter the following details and click **Submit**, as shown:

- a. **Title:** Update Image
- b. **Assignee:** Editors
- c. **Content:** Navigate to Content > Assets > Projects > User0XX Project > Project > T-shirt.jpeg
- d. **Description:** Rotate the image in Assets by 90 degrees
- e. **Task Priority:** High
- f. **Start Date:** Set to today's date.
- g. **Due Date:** Two days from the Start date.

Add Task

Cancel **Submit**

Basic Advanced



Title *

Project

Assignee

Content

Description

Task Priority

Start Date

Due Date

The **Task Created** pop-up window appears.

12. Click Done.

One task is added, as shown:

The screenshot shows the Adobe Experience Manager interface with a project titled "User001 Project". The "Tasks" section is highlighted with a red box. It displays a circular progress bar with the number "1 Tasks" and "100%" completion. Below the progress bar, there are three status categories: Active (1), Completed (0), and Overdue (0).

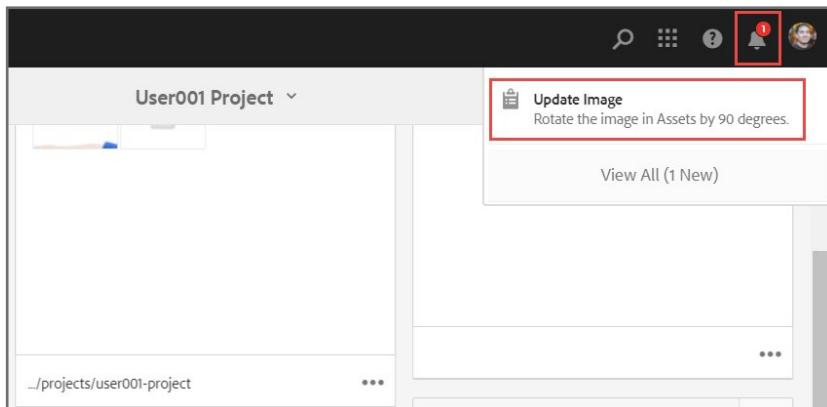
Now, you will impersonate as Willie Melton and complete the task assigned.

13. On the header bar, click the User icon and in the Impersonate As field, type **Willie Melton and select the email address that appears. Click **OK**, as shown:**

The screenshot shows the Adobe Experience Manager header bar. The "Impersonate as" dropdown menu is open, displaying the email address "willie.melton@odgeit.com". The "OK" button is also highlighted with a red box.

Notice, the user role changes to Willie Melton.

- On the header bar, click the **Inbox** icon and click the **Update Image** notification, as shown:

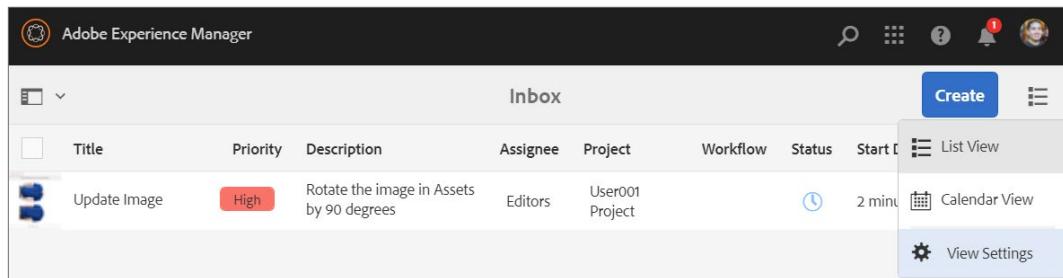


The **Task** page opens. You can view all the information related to the task, project, and comments from the **Task** page. You must also notice the due date.

- Click **Cancel**.

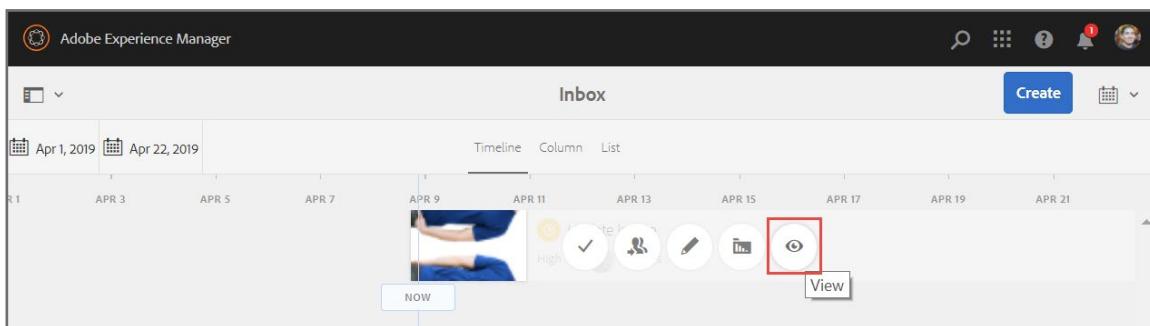
The **Inbox** appears.

- Click the **List View** icon on the upper right and select **Calendar View** from the drop-down menu, as shown:



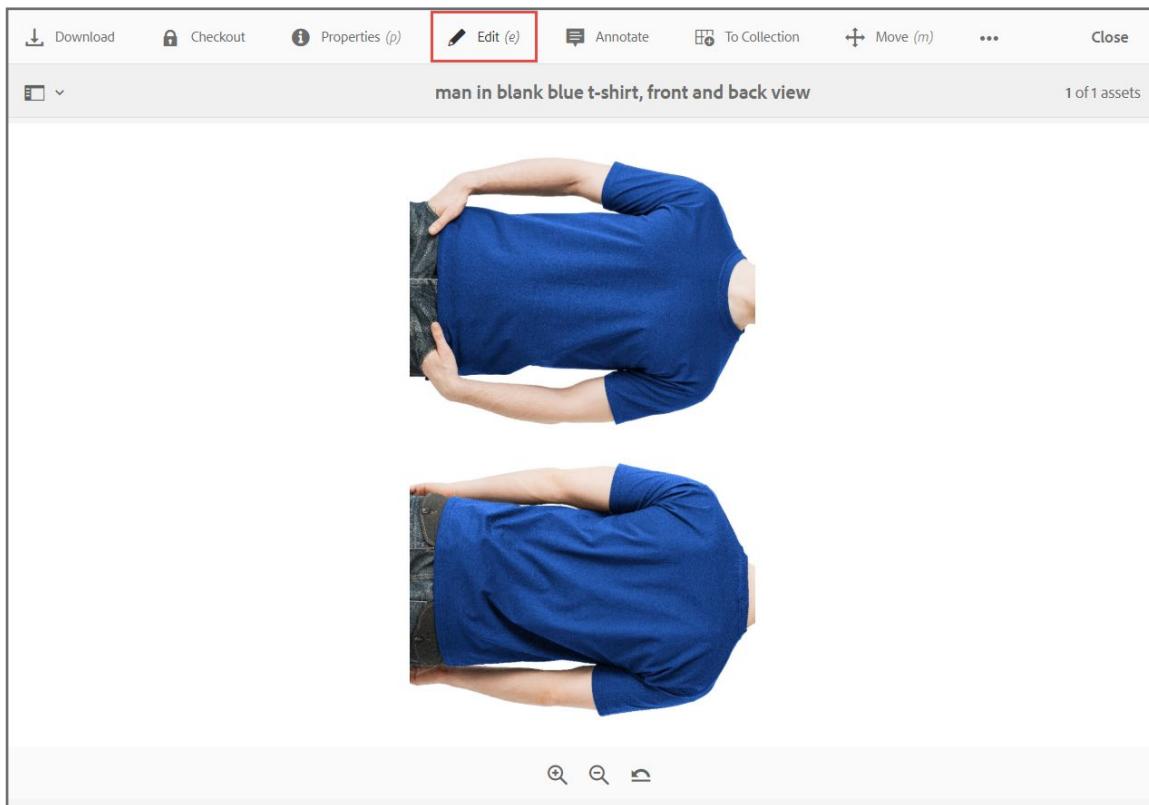
The **Inbox** view changes to **Calendar**.

- Hover the mouse over the **Task** and click the **View** icon, as shown:



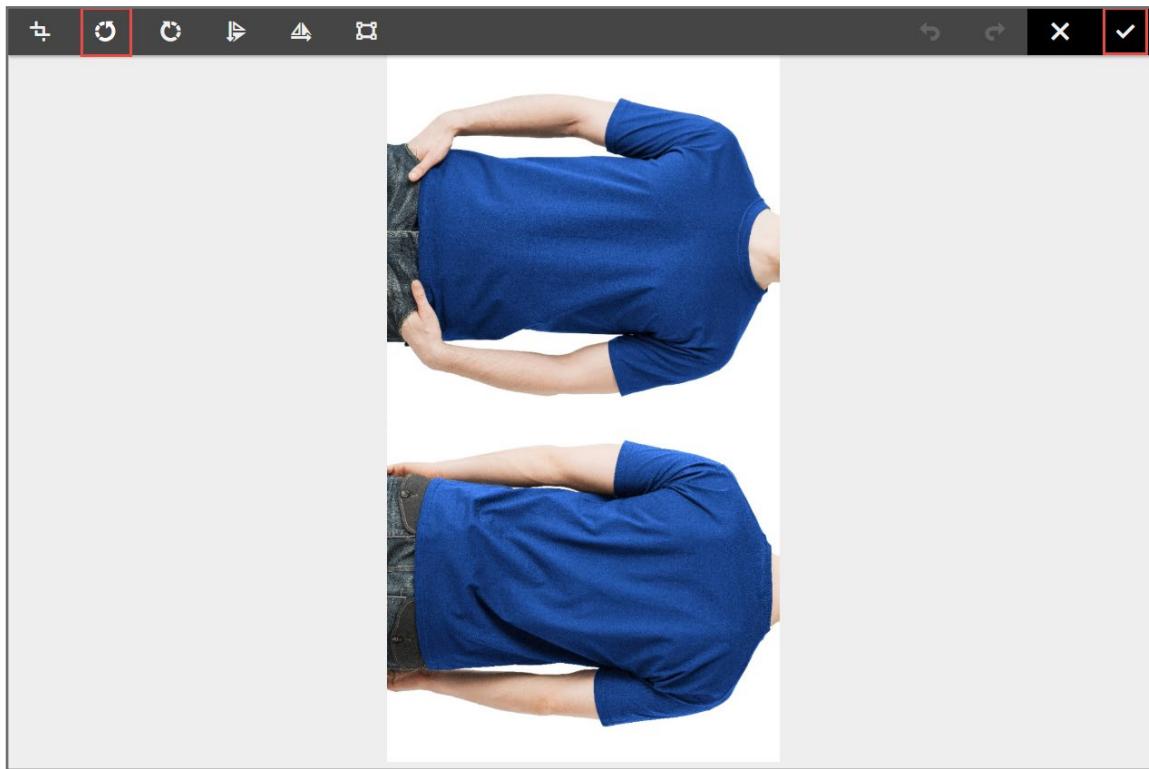
The image opens in a new tab. Notice Willie Melton can edit the image.

18. Click **Edit** from the toolbar, as shown:



The image opens in the edit mode.

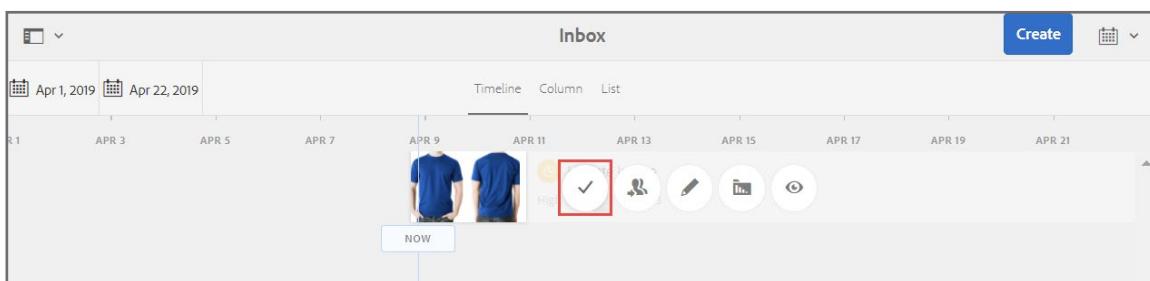
19. Click the **Rotate left** icon and click **Finish** (tick mark), as shown:



20. Click **Close**. The image is edited.

21. Navigate back to the tab that has the **Inbox** open.

22. Hover the mouse over the **Task** and click the **Complete Task** icon, as shown:



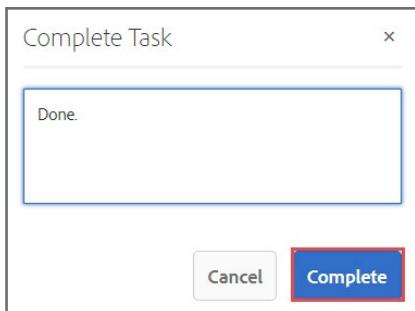


Note: If you do not have the **Inbox** open, click the **Inbox** icon and select the **Update Image** notification. The **Task** page opens. Click **Complete** on the upper left of the page, as shown:

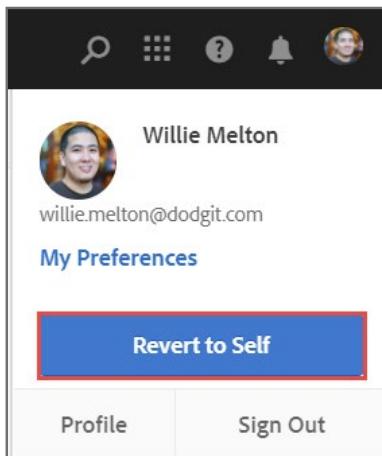
The screenshot shows the 'Task' page interface. At the top left is a 'Complete' button with a checkmark icon, which is highlighted with a red box. At the top right are 'Cancel' and 'Save (ctrl+s)' buttons. Below the header is a navigation bar with 'TASK', 'PROJECT INFO', and 'COMMENTS' tabs. Underneath the tabs is a preview area showing two images of a person in a blue t-shirt from front and back. Below the images is a caption: 'man in blank blue t-shirt, front and back view' and 'clothing design concept - man in blank blue t-shirt, front and back view'. To the right of the preview is a form section titled 'Task'. It includes fields for 'Title *' (containing 'Update Image'), 'Assignee' (set to 'Editors'), 'Content' (containing '/content/dam/projects/user001-project/project/T-shirt.jpeg' with a checked checkbox), and 'Description' (containing 'Rotate the image in Assets by 90 degrees').

The **Complete Task** pop-up window appears.

23. In the **Comment** field, type **Done** and click **Complete**, as shown:



24. On the header bar, click the **User** icon and click **Revert to Self**, as shown:



25. Navigate to **Projects > User0XX Project** and observe the tasks completed on the **Task** title, as shown:

The screenshot shows the AEM interface with the following details:

- Project Info:** Administrator, User001 Project, Active. Started on: 6 hours ago, Due on: 4/30/19, 4:07 PM.
- Tasks (0):** Completed 1, Active 0, Overdue 0. A green circular progress bar indicates 100% completion of 1 task.
- Experiences (0):** No experiences listed.
- Header:** Adobe Experience Manager, User001 Project, Add Work button.

Workflows in a Project

A Project consist of a set of tasks, which can be performed by AEM users or automated using the workflow engine. Projects use the AEM workflow engine to define sequence of tasks to model task dependencies, automate, and manage project processes. For example, the business process for creating and publishing assets include approval and sign-off tasks by various participants. You can model these business processes by using workflows and applying them to specific content. Based on the project configuration, the specified users are notified to complete tasks in the project.

References

Use the following links for more information on:

- [Projects](#)
- [Tasks](#)
- [Workflows](#)

Content Targeting

Introduction

Customers usually return to websites and spend more time on a particular website if the content provided matches their preferences and interests. In Adobe Experience Manager (AEM), content authors can create content targeted to specific audience that shares a common trait or interest to grab customers' attention.

Objectives

After completing this module, you will be able to:

- Explain the targeting mode in AEM
- Explain the personalization console used to author targeted content
- Explain ContextHub in AEM used to simulate visitor experience
- Explain content targeting in AEM
- Create activities and map audiences to user experiences

Targeting Mode

To enable content authors to control the targeting and delivery process of targeted content, the page editor and the configuration consoles provide tools to create content for specific experiences. The targeting mode enables authors to compose and deliver specifically tailored content to a targeted audience. You can access the targeting mode from the page editor.

To deliver targeted content, you must define:

- **Segmentation:**

You can define the relevant segments based on a combination of traits. If AEM is combined with other solutions available in the Experience Cloud, such as Adobe Target or Adobe Campaign, either of the solution can be synchronized with the segmentation done in another system. The tools in AEM help configure segments through a user interface (UI). For larger deployments, both Target and Campaign offer more powerful features than AEM.

- **Targeted Content:**

After the targeted segments are defined, you need to create content for each audience. The preferred container for targeted content is the Experience Fragment (XF). It helps store different XF versions for each targeted segment in a XF variation.

- **Targeting Engine:**

When a visitor requests for a targeted content, a set of rules define which targeted content should be served. The process, that selects the content can be executed in AEM. If Target or Campaign are executed, the matching can also be made by the more powerful targeting engines of those systems.

Organizing Targeting Activities

Organizations may have set up a multitude of targeted experiences. However, organizing all the activities is not an easy task. The Activities console helps group various experiences in a useful order as shown in the diagram:



Brand

On the top level, activities are grouped into brands. Organizations can group targeting activities by product, service, marketing brand, business unit, or other criteria.

Area

The activities that take place within a brand can be further grouped into areas. Areas group the activities by site or by channel, where the targeted activities take place. For example, a targeted content for a brand needs to be published on a multi-national website with similar sites, but under a different domain name. You need to configure a distinct area within the brand for each of the sites. If the activities on both the sites are the same and the Live Copy feature is used, you can create Live Copies of the area. This maintains several copies of the activities saved in the area.

Activity

An activity consists of references to associated audience and experience pairs with additional configurations for the timing and priority of a group of experiences. An activity includes properties that help content authors to schedule the duration and when the targeted experiences should be available. The author can set a priority property for the case that several experiences are available for a targeted segment. With the priority, the author can determine how the conflict will be resolved and which content takes precedent.

The activity configuration also sets the targeting engines that will be used, if the integrations with other Experience Cloud solution, such as Target or Campaign exist.

Activities are also referenced in the UI as Offers. You can access the Offers console from the Personalization console. Offers and activities are the same, except that activities help leverage the targeting engines of other experience cloud solution such as Target and Campaign, and offers are always served by the less configurable AEM targeting engine.

Experience

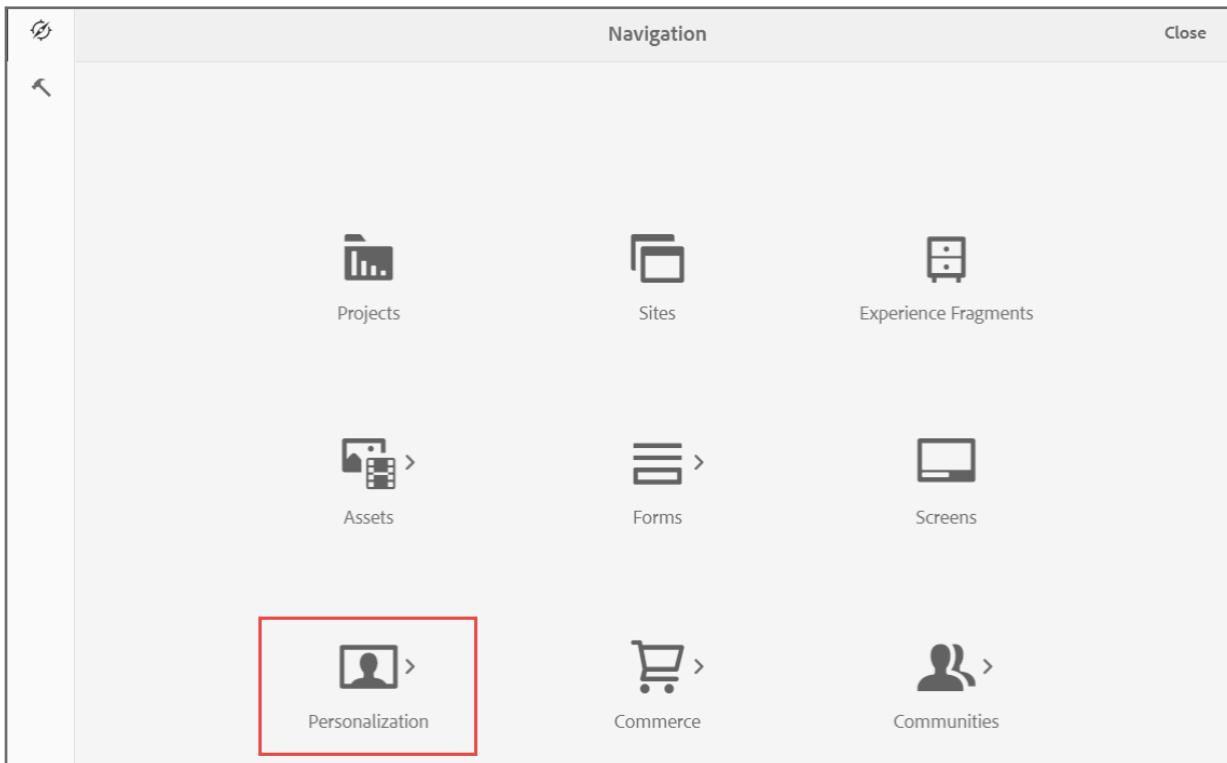
An experience sets the relationships between an audience and the targeted content that is created for a specific audience. The experience can involve not just one, but a whole list of audience segments and references to audience-specific content.

Audience and Content

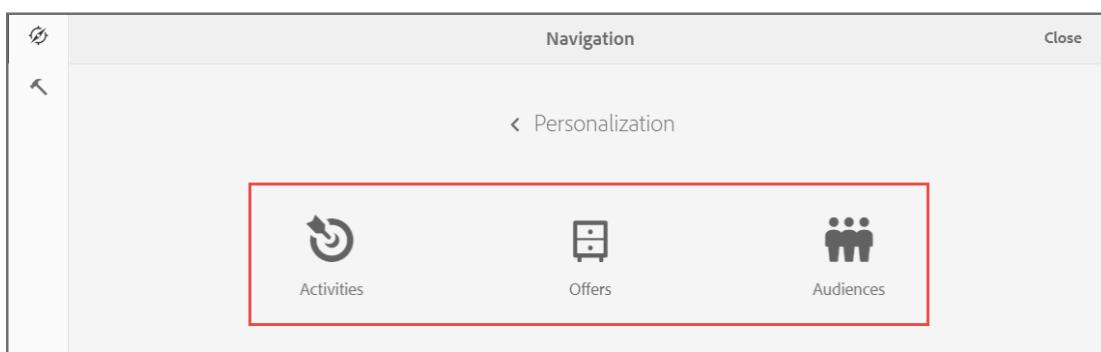
An experience is the combination of a set of audiences that are mapped to the targeted content that is specifically created for the visitors of that website.

Personalization Console

The Personalization console helps organize the activities into Brands and Areas and view and configure the audiences. You can access the **Personalization** console from the **Navigation**, as shown:



The Personalization console consists of the Activities, Offers, and Audiences consoles, as shown:



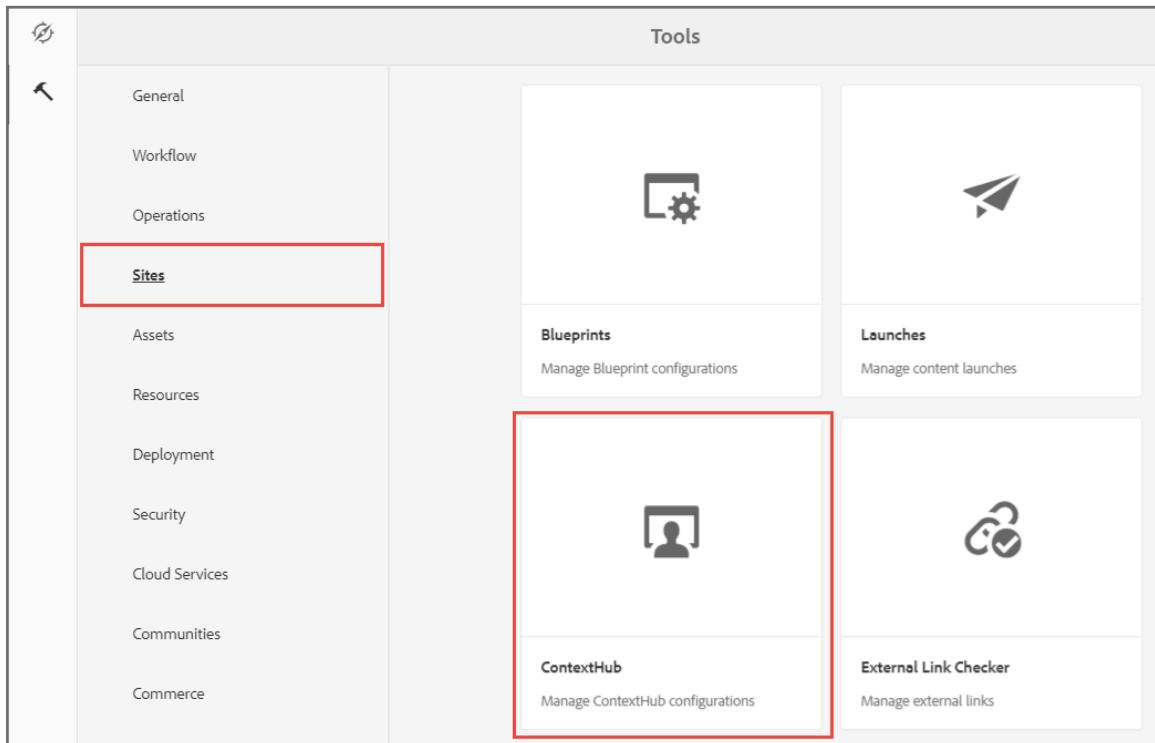
ContextHub

ContextHub is a framework that helps marketers access page visitor information. Marketers can use ContextHub to simulate the visitor experience, such as what the visitor wants to see and what the visitor actually sees on a page. ContextHub helps test and simulate user experiences based on visitor interaction.

 **Note:** Only the users with the appropriate permissions can navigate to the ContextHub console.

ContextHub Console

You can access and view the ContextHub console from the **Tools > Sites** section, as shown:



The ContextHub console helps manage various configurations from the Configuration Container, as shown:

conf		Select All
Title	Modified	
screens Configuration Container	Modified	⋮
WKND Events Configuration Container	Modified	⋮
global Configuration Container	Modified	⋮
We.Retail Configuration Container	Modified	⋮
Core Components Examples Configuration Container	Modified	⋮

ContextHub consists of ContextHub stores to persist context data on the client mode and the UI mode to access the store.

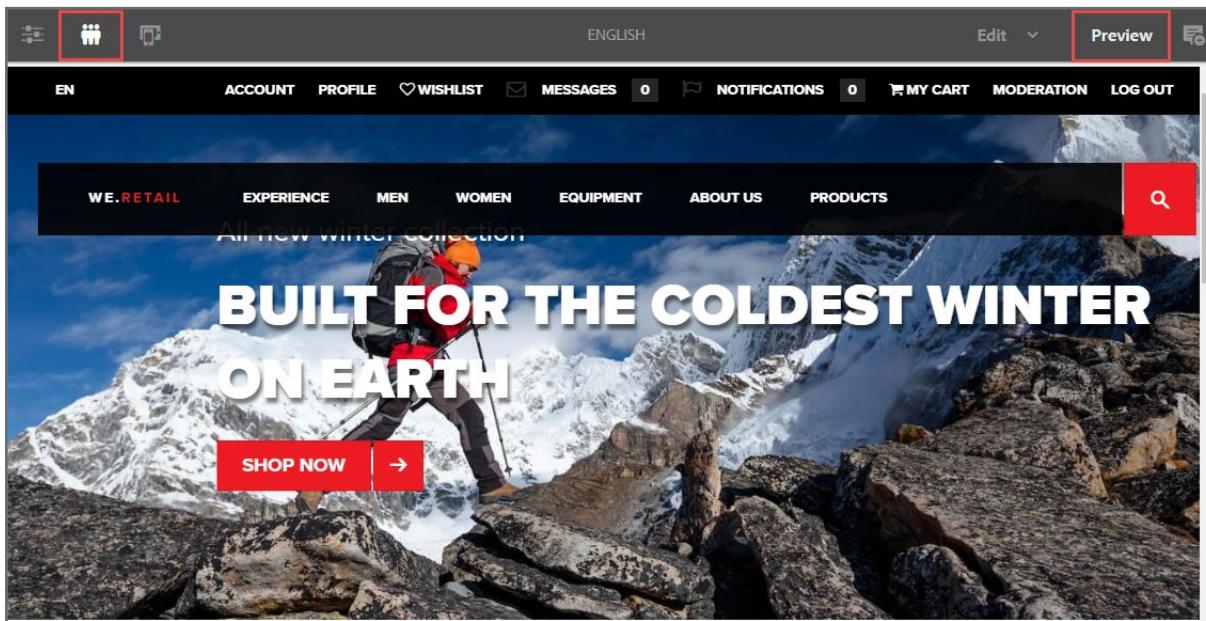
ContextHub Configuration		Select All	Create
Title	Type		
Geolocation	ContextHub Store Configuration (generic)	⋮	↑
Surferinfo	ContextHub Store Configuration (generic)	⋮	↑
Profile	ContextHub Store Configuration (generic)	⋮	↑

ContextHub Toolbar

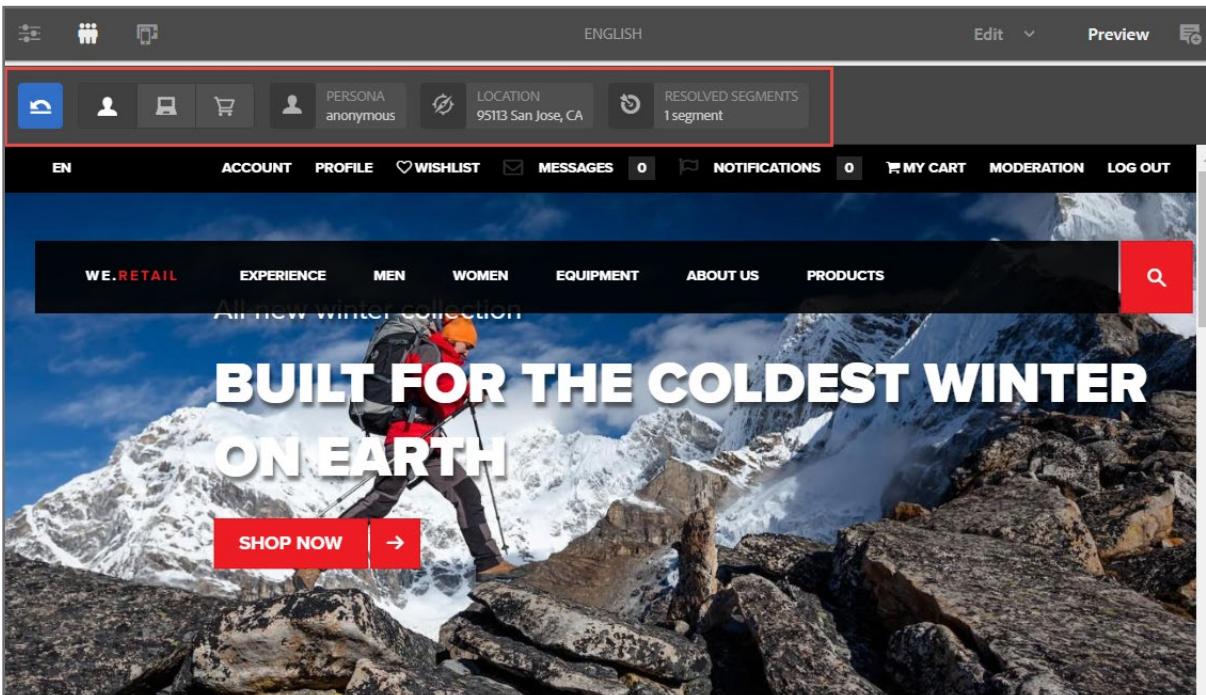
The ContextHub toolbar:

- Displays the context, that is, the information you know about the current user
- Simulates the working of the content targeting engine for testing and verification purpose

You can access the ContextHub toolbar by clicking the ContextHub icon from the page toolbar in Preview mode, as shown:

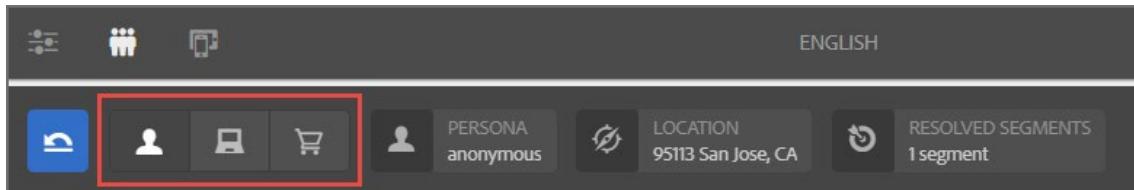


The ContextHub toolbar displays information about the user profile, the requesting device, and the history of activities in the e-commerce store, as shown in the below screenshot. You can switch between different stores.



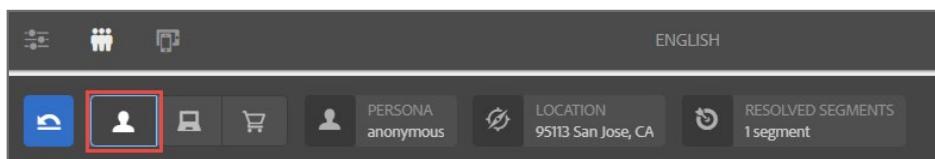
ContextHub UI Modes

The toolbar consists of a series of UI modes. UI modes are icons that appear on the left side of the toolbar. When you click or tap an icon, the toolbar reveals the UI modules, as shown: The UI modules display the data from one or more ContextHub stores. Some UI modules also help you customize the stored data.

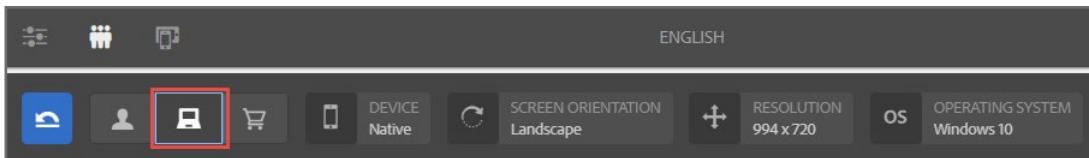


ContextHub consist of the following UI modes:

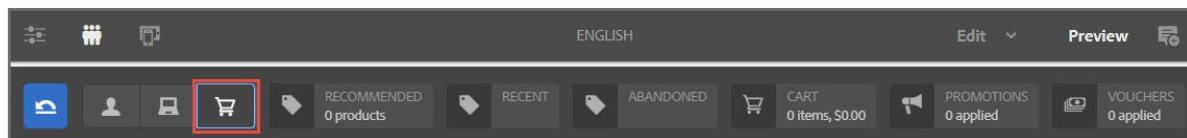
- Persona: Provides information about the visitor, such as profile, location, and the list of audience segments associated with the current visitor's profile, as shown:



- Device: Provides information about the visitor's device, such as type of device and screen orientation, as shown:

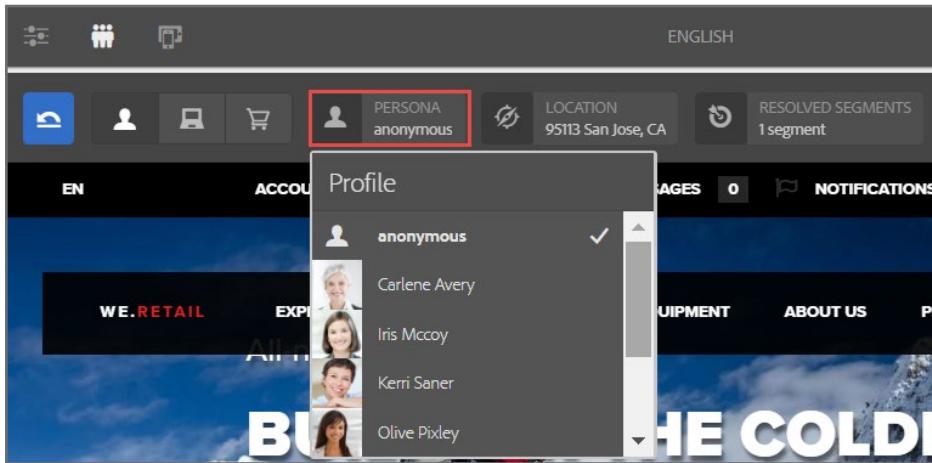


- Commerce: Provides recommended products, shows recent activities by the visitor, and the visitor's cart details and values, such as promotions and vouchers, as shown:



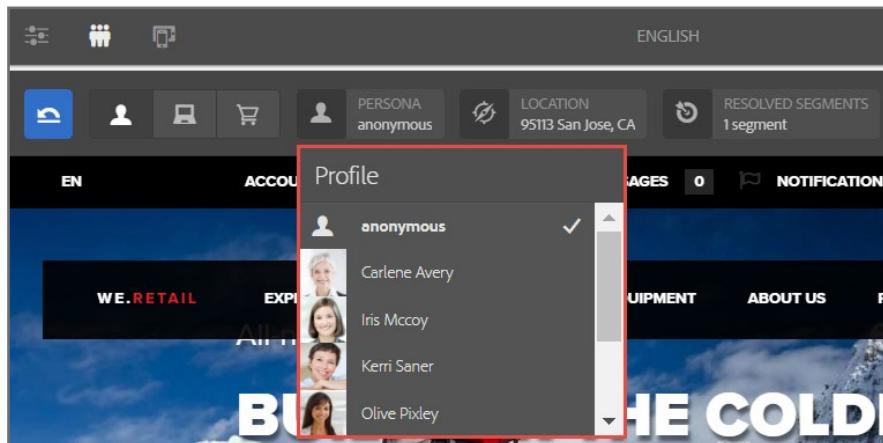
User Profiles in ContextHub

You can explore the user profiles in ContextHub from the Persona UI mode. Persona displays a list of profiles available by default in AEM, as shown:

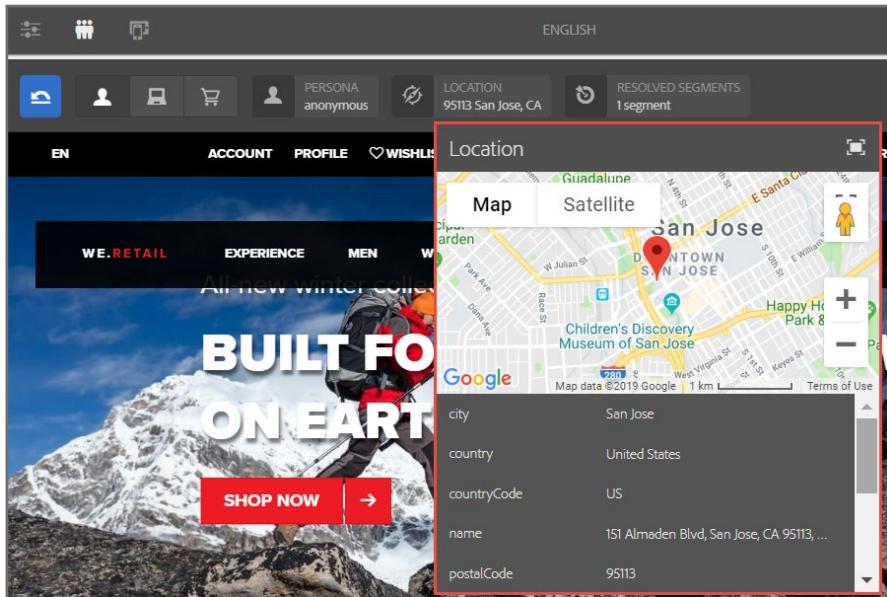


Each profile consists of:

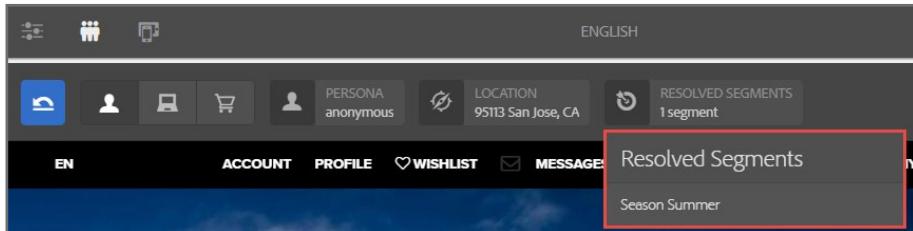
- Profile: Provides the details about a visitor such as name, age, birth date, email, and gender, as shown:



- Location: Contains the map, country, postal code, address, and the latitude and longitude details of the visitor's location, as shown:



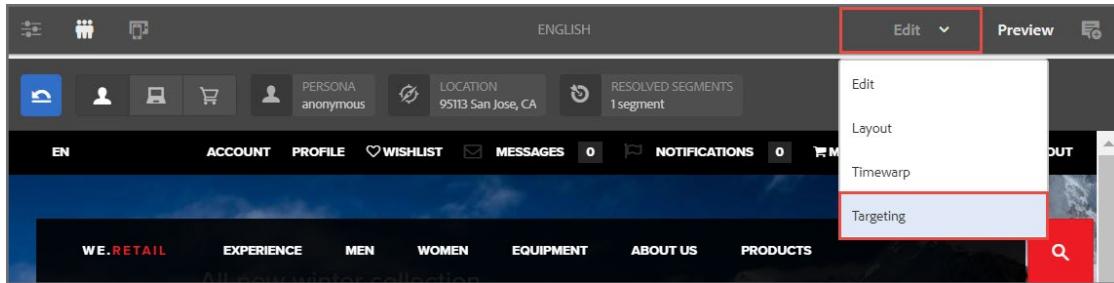
- Resolved Segments: Lists the segments mapped with the visitor, as shown:



Content Targeting

Content targeting helps include targeted content containers, such as experience fragments on an experience, to dynamically display the personalized content depending on the available visitor information. You can configure any component in the AEM authoring system to display targeted content by assigning an activity to it.

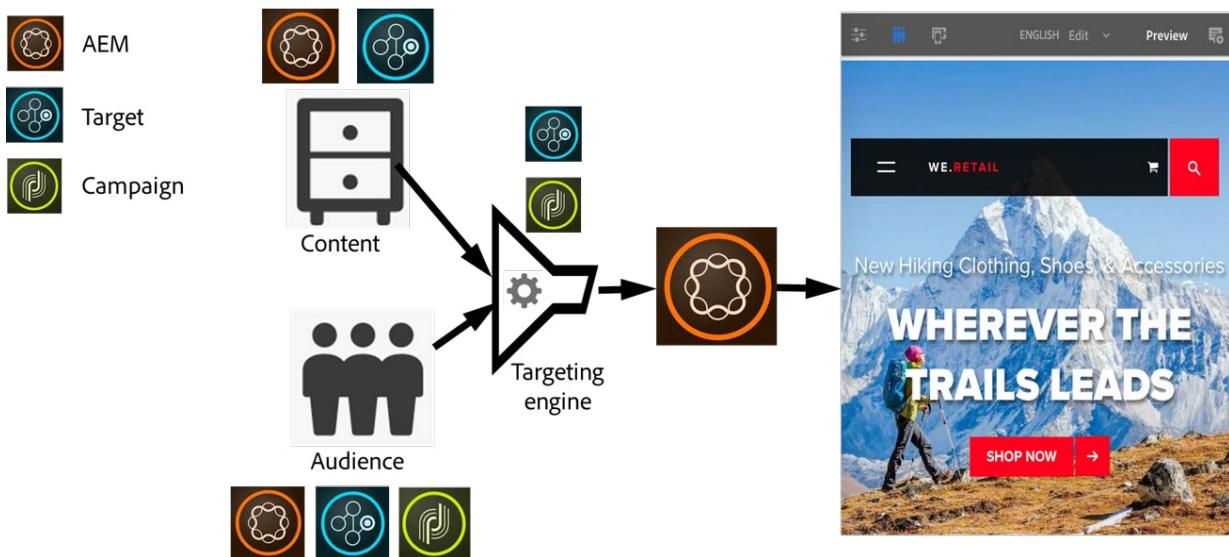
You can start targeting content from the page editor by changing the edit mode to targeting mode, as shown:



Targeting Engines and Experience Cloud Integration

AEM can be a part of the experience cloud deployment, which includes other solutions such as Adobe Target or Adobe Campaign. These solutions must be configured before a content author starts working in AEM.

Data, such as audience profiles, are shared between AEM and Target or Campaign through a synchronization mechanism that ensures that the audience data is in sync. For common functions, such as the targeting logic engine, one of the solutions need to work in a centralized manner. The targeting logic can be configured on a per-activity basis. The solutions need to be configured to delegate the targeting logic to another system.



Targeting the Audience

To create targeted content for the audience:

1. Open the page where you want to place the targeted content.
2. Add a Target component to the page.
3. Select the Targeting mode from the toolbar.
4. Select a brand and an activity to view the experiences.
5. Add offers or XFs to experiences by using offers or XFs from the respective libraries.

Simulating User Experience

After you add the targeted content to the page, you must verify if the audiences are mapped with an experience. You can use ContextHub to simulate a visitor's experience to verify how an experience changes based on the selected visitor. When simulating the experience, you can load different visitor profiles to view the targeted content for that site visitor.

The criteria that determine the content when simulating a visitor experience are the:

- Data in the user's session store (through ContextHub).
- Activities that are live.
- Rules that define the segments.
- Content of the experiences in target components.

The options used for simulation are:

- Activity in Targeting mode: Helps you create targeted content in the form of offers for a specific audience and map those offers to different audiences. You can also edit the offers that target a user.
- Preview mode: Helps you select the users and locations that satisfy the criteria of the segments that your experiences are based on. When ContextHub selections change, the targeted content changes accordingly.

Exercise 1: Simulate different traits with the ContextHub toolbar

In this exercise, you will observe the content changes based on different personas.

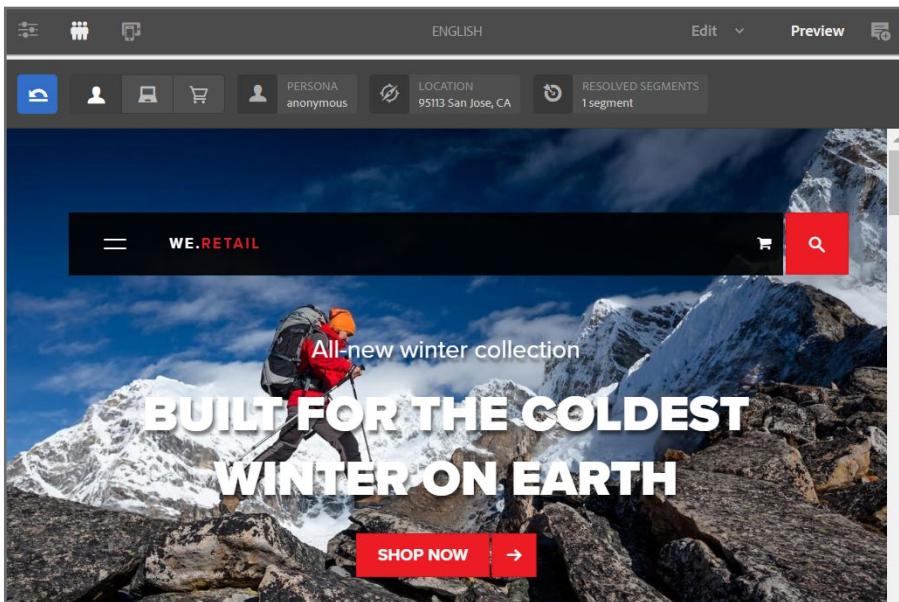
1. From the **Sites** console, navigate to **We.Retail > Language Masters**, select the **English** page and click **Edit** on the toolbar. The **English** page opens in a new tab in the Edit mode.
2. On the page toolbar, click **Preview**, as shown:



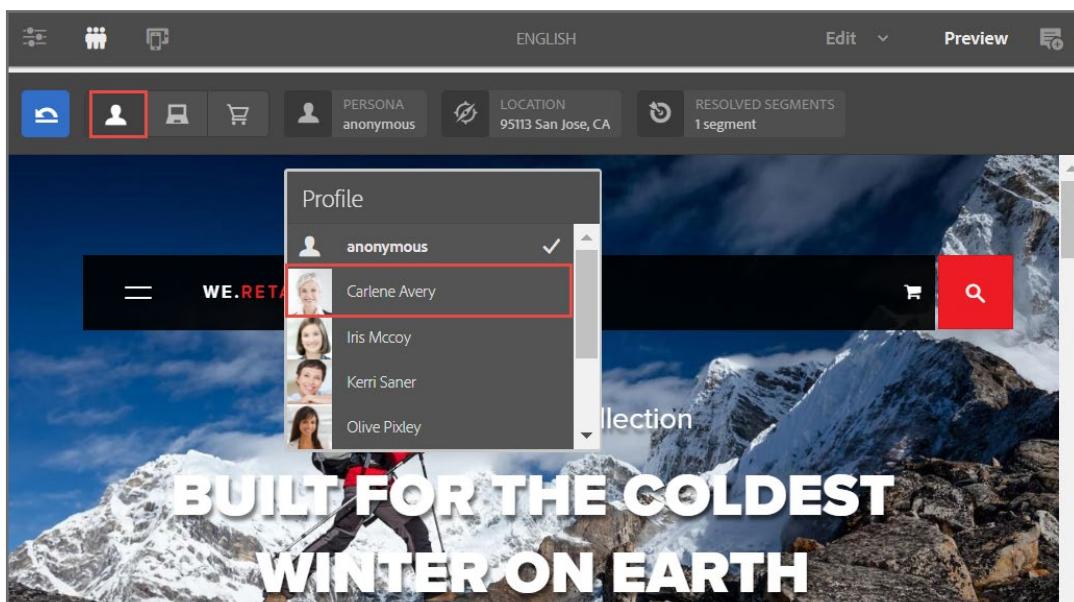
3. Click the **ContextHub** icon, as shown:



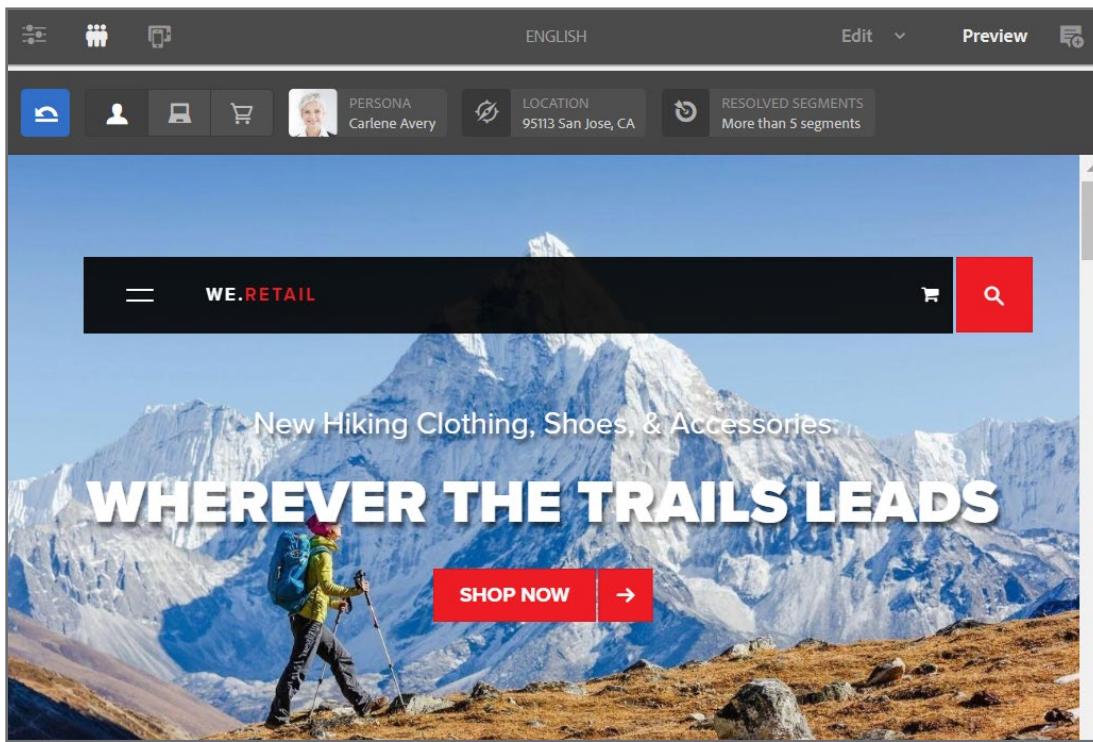
The **ContextHub** toolbar is displayed. By default, the Anonymous audience is selected, and the default content is displayed, as shown:



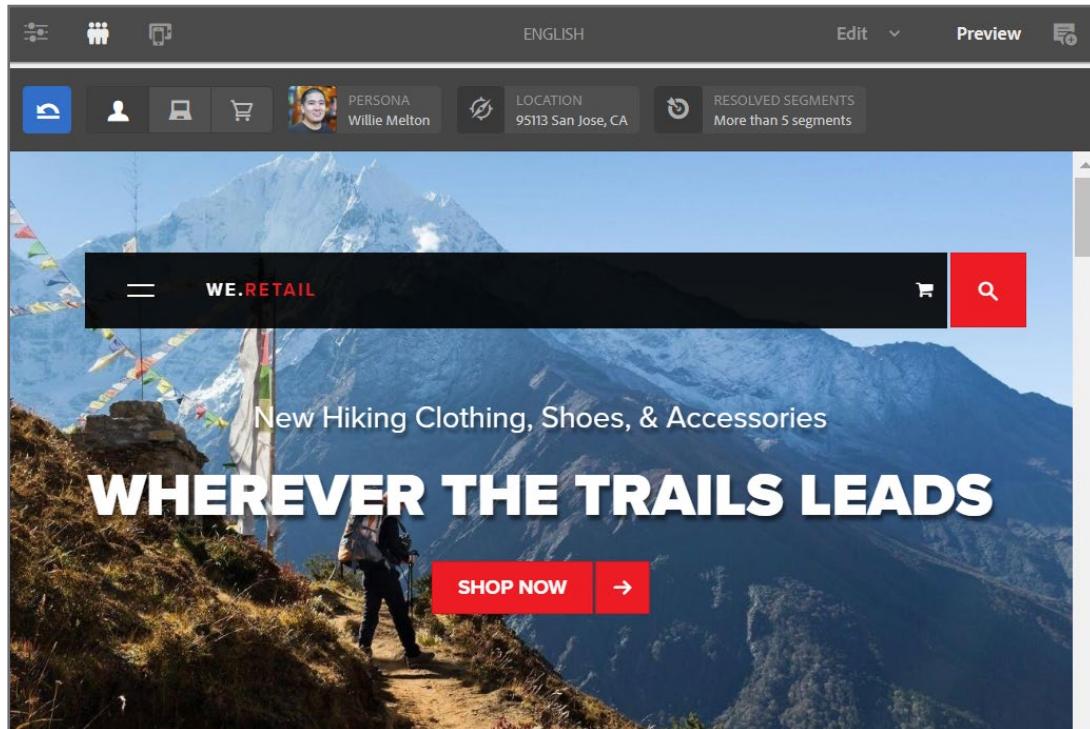
4. Click the **Profile** icon and select **Carlene Avery** from the drop-down list, as shown:



Observe for Carlene. The default image changes to display the image associated with the female audience, as shown:



5. Similarly, select a male persona and observe the image changes to display the image associated with the male audience, as shown:



Exercise 2: Create activities and map audiences with user experiences

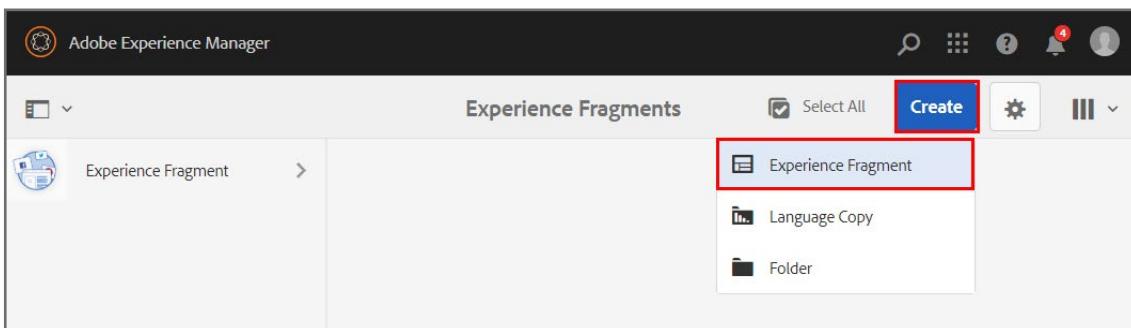
Scenario: As a marketer, you need to cater content that resonates with the interests of your audience. You decide that your web content will display content based on male and female audience. To achieve this, you need to create custom content for each gender, save the content into an XF, and add the XFs to the required page.

In this exercise, you will perform the following tasks:

1. Create XFs for male and female audience
2. Target male and female audience with specific XFs
3. Simulate a persona with Contexthub

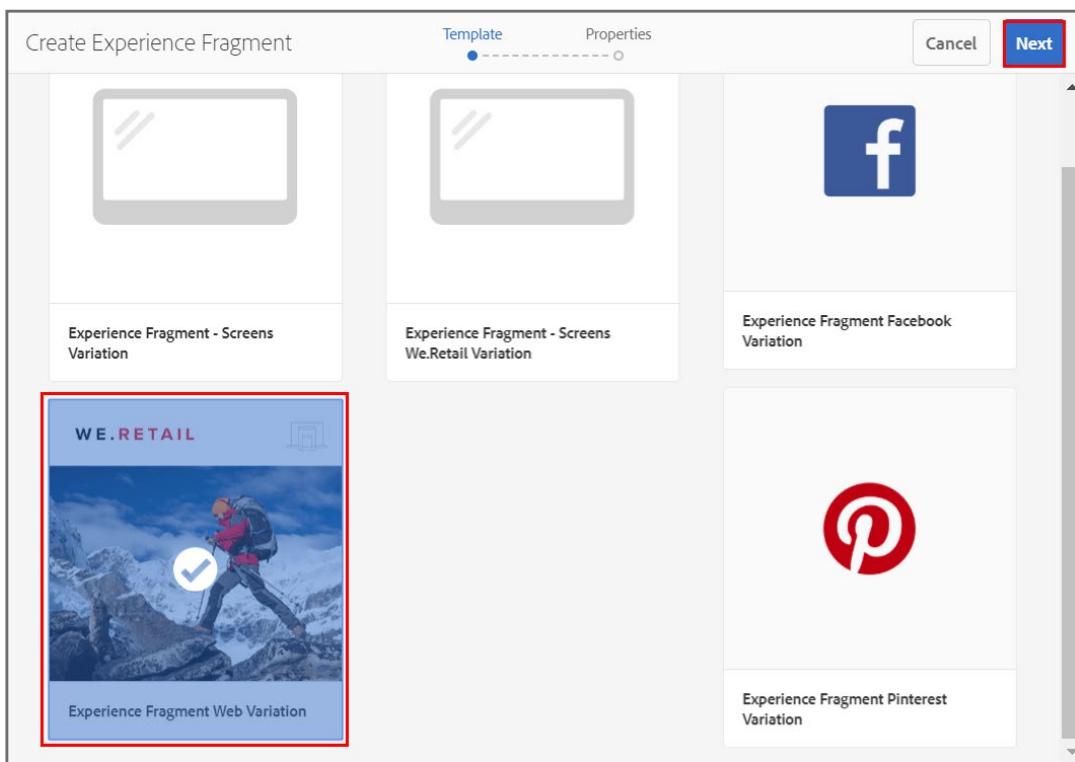
Task 1: Create XFs for male and female audience

1. On the header bar, click **Adobe Experience Manager** and click **Experience Fragments**. The **Experience Fragment** console opens.
2. Click **Create** and select **Experience Fragment** from the menu, as shown:



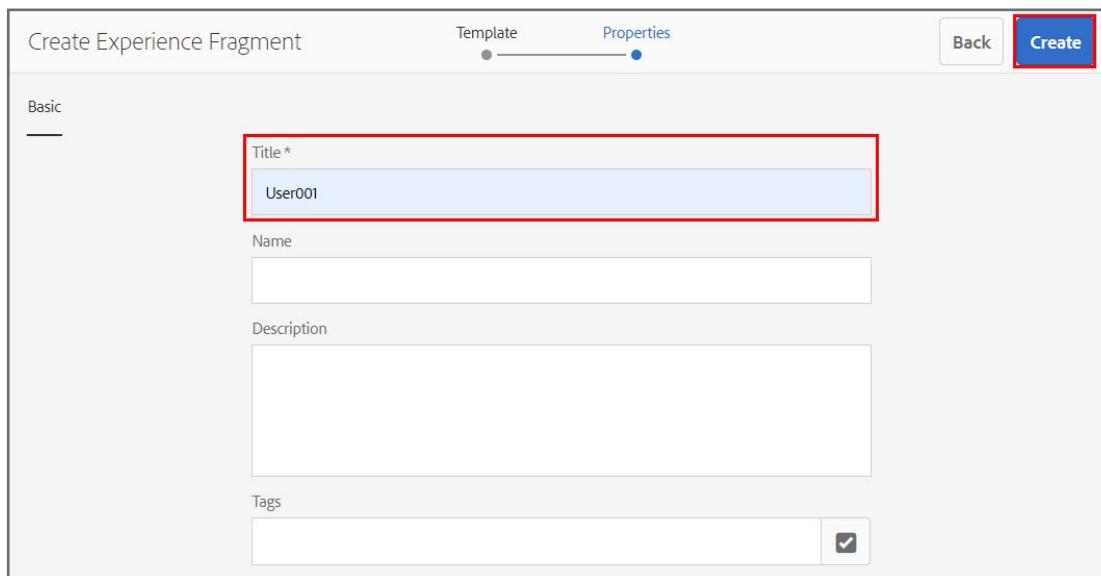
The **Create Experience Fragment** wizard opens in the **Template** page.

3. Select the **Experience Fragment Web Variation** and click **Next**, as shown:



The **Create Experience Fragment** wizard opens in the **Properties** page.

4. In the **Title*** field, type **User0XX** (where **0XX** is the training user number assigned to you) and click **Create**, as shown:



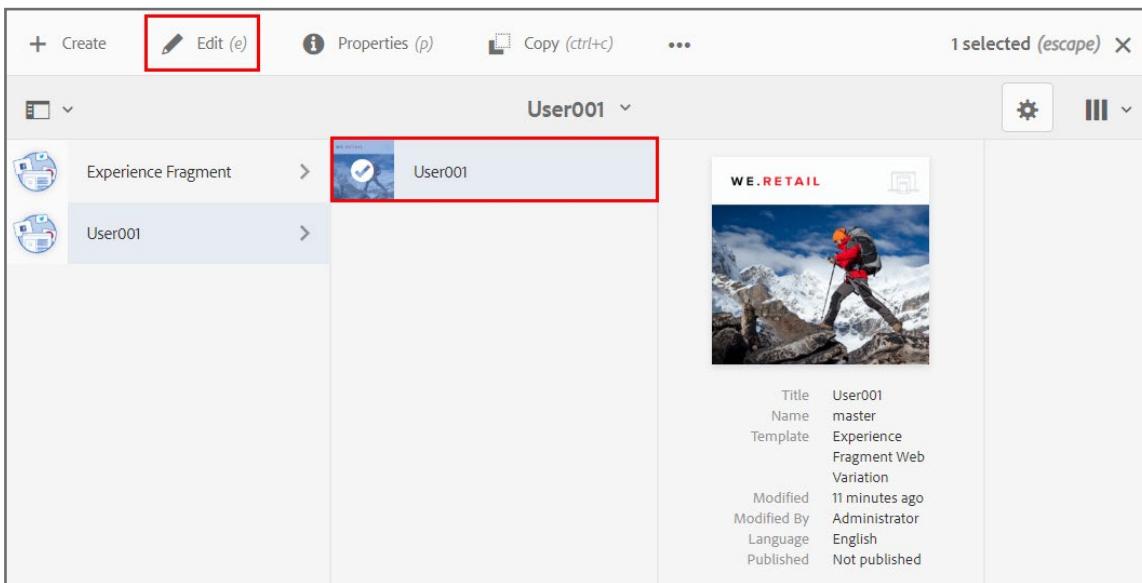
The **Success** pop-up window appears.

5. Click **Done**.

The **User0XX XF** is added to the parent column.

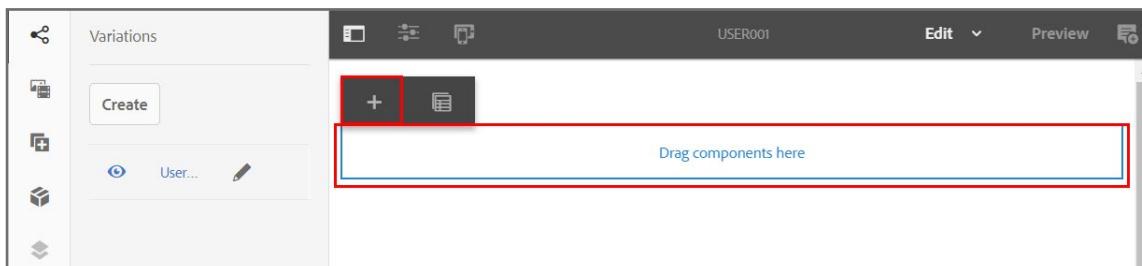
6. Click the arrow beside the **User0XX XF**. The **User0XX XF** appears as a child XF.

7. Select the **User0XX** and click **Edit** from the toolbar, as shown:



The **User0XX XF** opens in the edit mode.

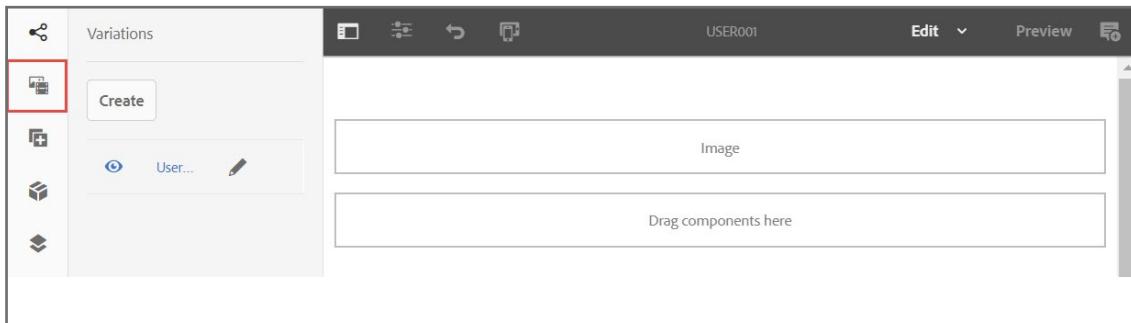
8. Click the **Drag Component here** area and click **Insert Component** from the component toolbar, as shown:



The **Insert New Component** window appears.

9. Select the **Image** component. The **Image** component is added to the page.

10. From the side panel, click the **Assets** icon, as shown:

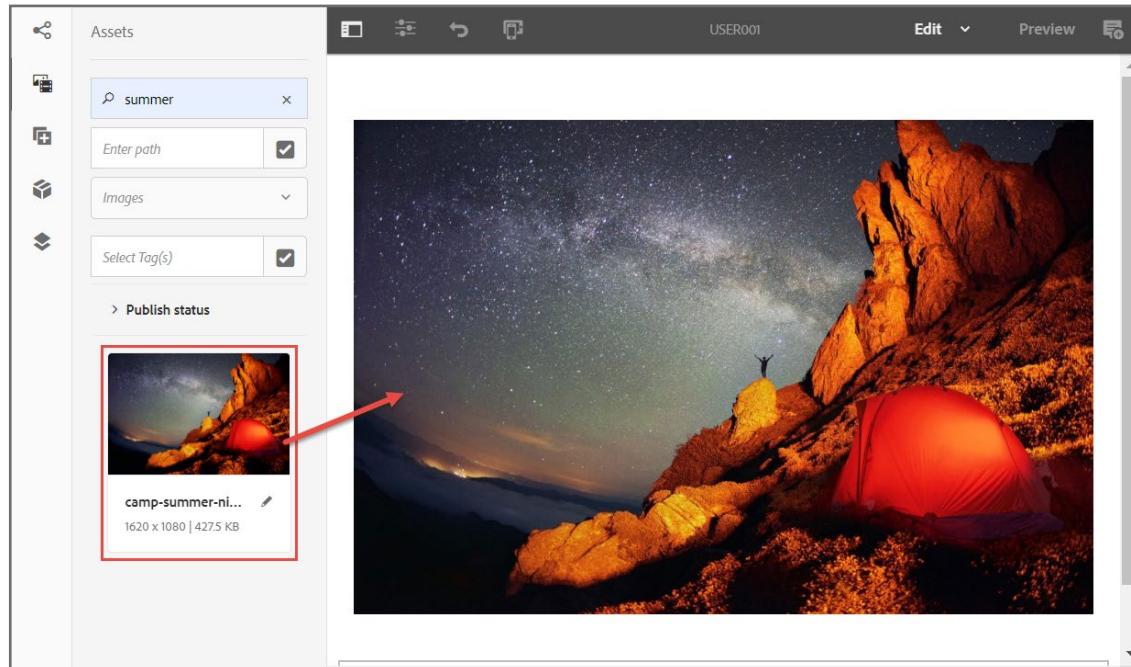


11. Select an image from the list of images that appear. For example, you can select the **Summer** image.



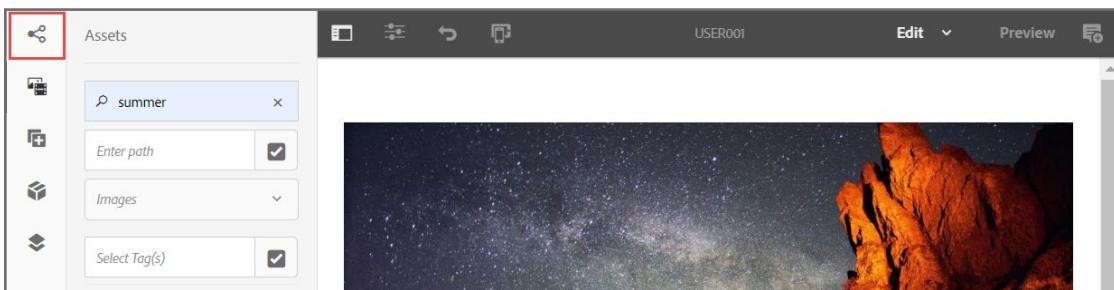
Tip: In the **Filter** field, type **Summer** to view images related to the summer tag.

12. Drag the **camp-summer-night** image to the **Image** component, as shown:

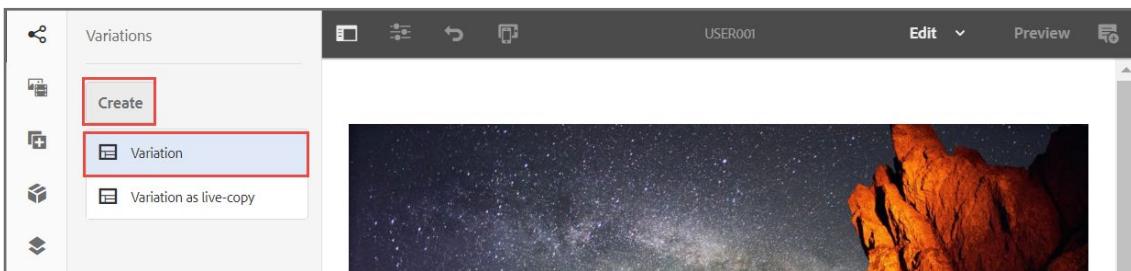


The image is added to the XF.

13. Click the **Variations** icon, as shown:



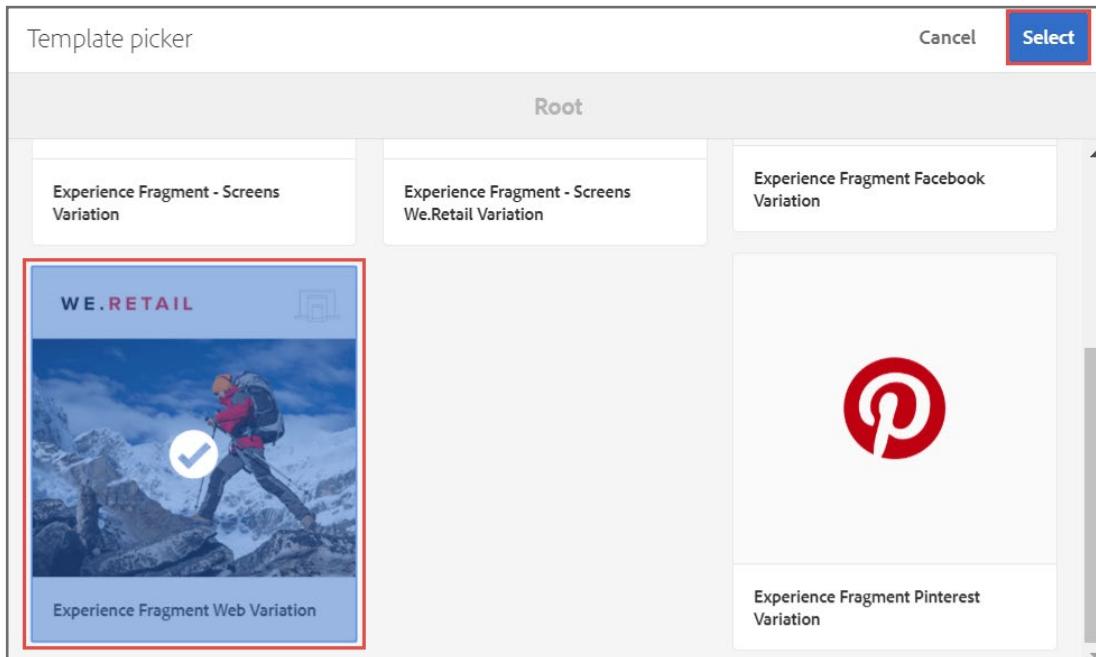
14. Click **Create** and select **Variation**, as shown:



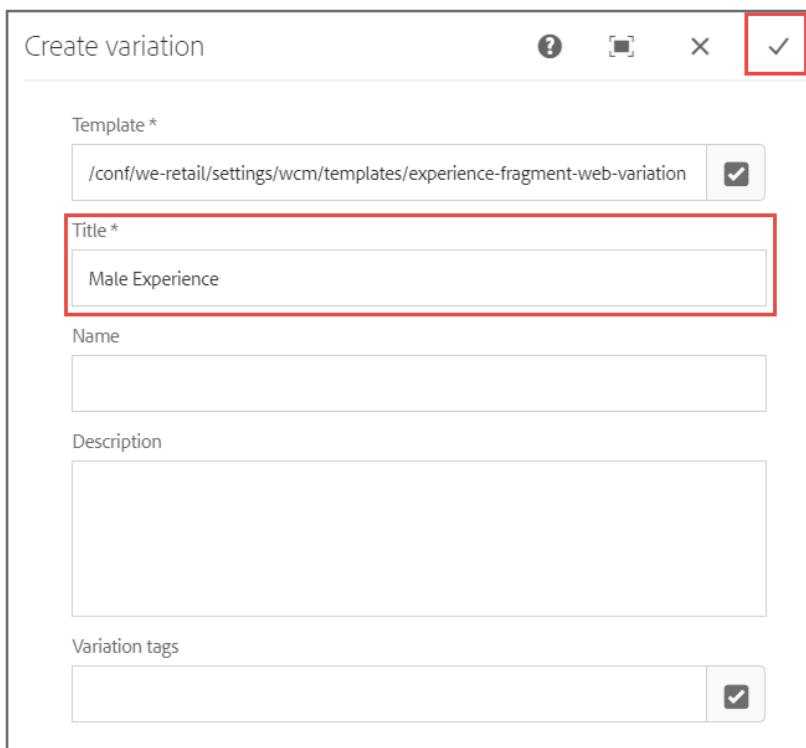
The **Create variation** window appears.

15. Next to the **Template** field, click the **Open Selection Dialog** icon. The **Template picker** page opens.

16. Select the **Experience Fragment Web Variation** template and click **Select**, as shown:

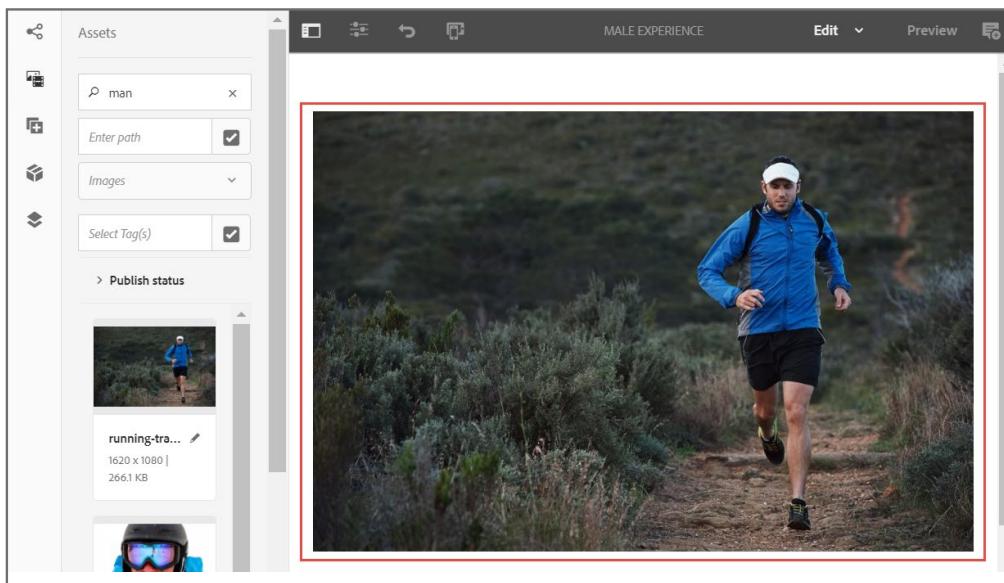


17. In the **Title** field, type **Male Experience** and click the **Done** icon, as shown:



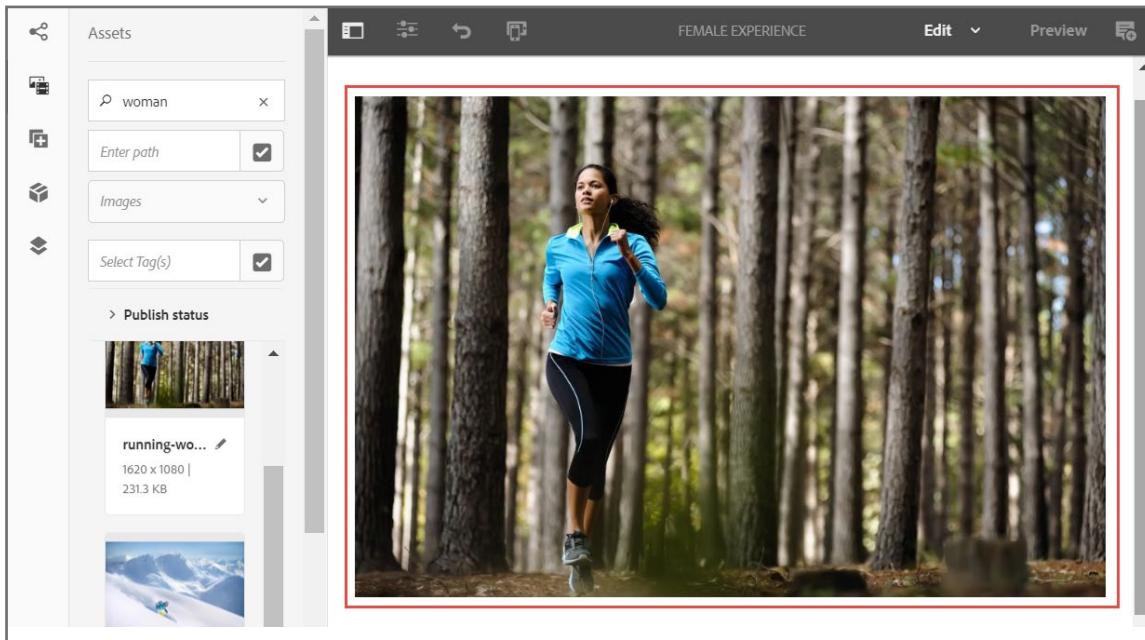
A message, **A new variation has been created: Male Experience**, is displayed on the top of the screen and the Male Experience is added to the variations.

18. Click the **Male Experience** variation and perform the steps 8–10.
19. Select an image from the list of images that appear. For example, you can select the **running-trail-man** image to the **Image** component, as shown:



 **Tip:** You can search for Man in the Filter field to find the running-trail-man image.

20. Similarly, create a Female Experience variation by following the steps 6–17. You can add the **running-woods-woman** image to the **Image** component, as shown, and type **Female Experience** in the **Title** field in the **Create variation** dialog box.

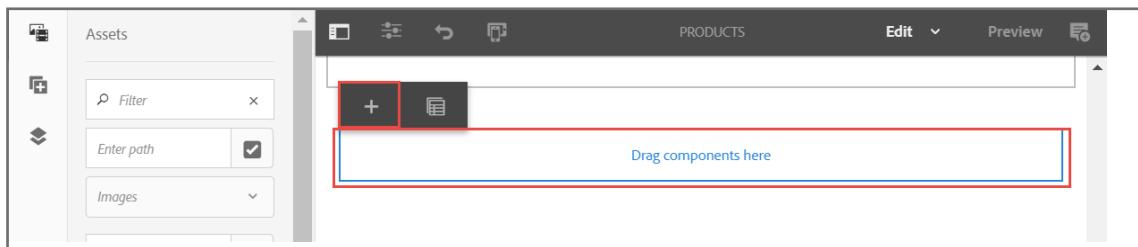


 **Tip:** You can search for woman in the Filter field to find the running-woods-woman image.

Task 2: Target male and female audience with specific XFs

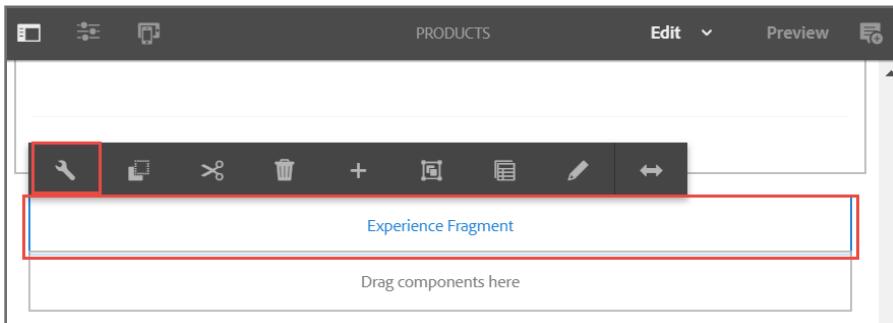
1. Navigate to the browser that has the **Sites** console open. If you do not have the **Sites** console open, click **Adobe Experience Manager** on the header bar, click **Sites** > **We.Retail > User0XX > English**.
2. Select the **Products** page and click **Edit** from the toolbar.
The **Products** page opens in the edit mode.
3. Scroll down the page and select the **Drag components here** area.

- Click the **Insert component** icon from the component toolbar, as shown:



The **Insert New Component** pop-up window appears.

- Select **Experience Fragment**. The **Experience Fragment** placeholder appears above the **Drag components here** area.
- Click the **Experience Fragment** placeholder. The component toolbar appears.
- Click the **Configure** icon, as shown:

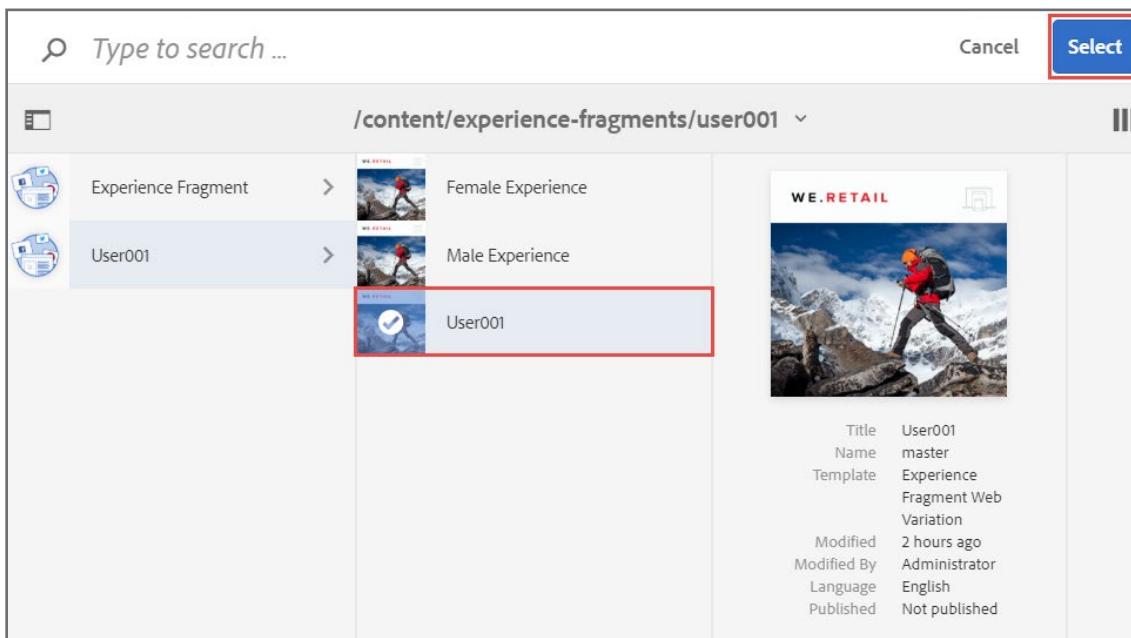


The **Experience Fragment options** window opens.

- Click the **Open Selection dialog** icon next to the **Variation** field, as shown:

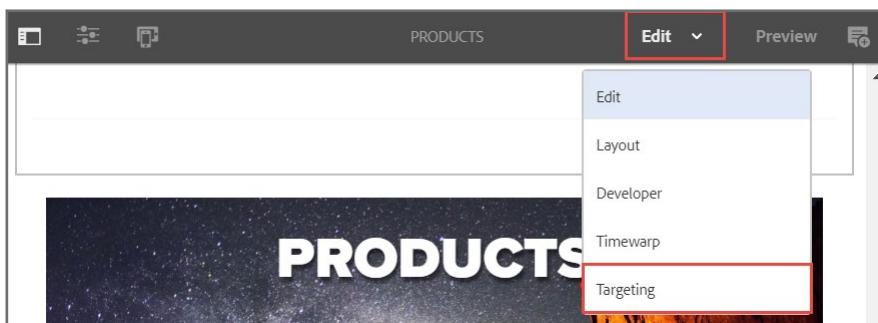


9. Click the arrow beside the **User0XX XF**, select the **User0XX** variation, and click **Select**, as shown:



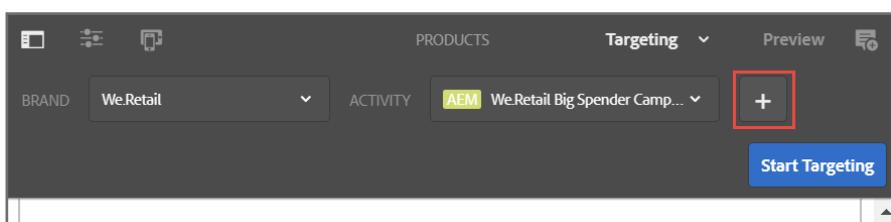
10. In the **Experience Fragments options** window, click the **Done** icon.

11. On the header bar, click **Edit Mode** and select **Targeting** from the menu, as shown:



The **Products** page changes to the targeting mode.

12. Click the + icon next to **ACTIVITY**, as shown:



The **New Activity** window opens.

13. In the **Title** field, type **User0XX Personalized Content** and in the **Name** field, type **User0XX-Personalized-Content**, as shown, and click **Create**.

New Activity

No Adobe Target cloud service configuration is associated with this site.

Title *
User001 Personalized Content

Name *
User001-Personalized-Content

Targeting engine
ContextHub (AEM)

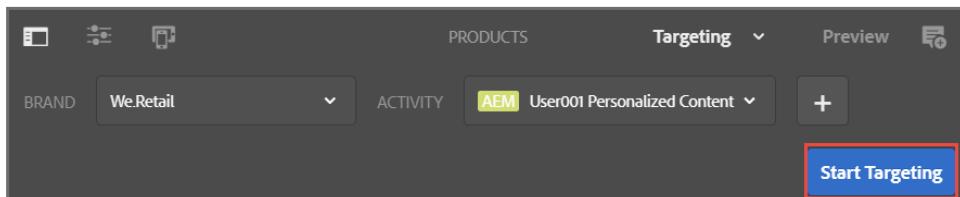
Select a Target Configuration *

Activity type *

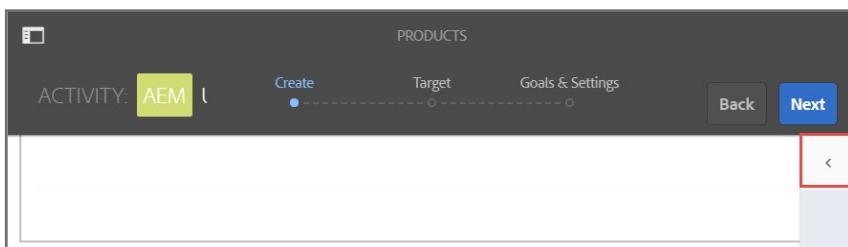
Cancel **Create**

The **User0XX Personalized Content** activity is selected in the **Activity** file automatically.

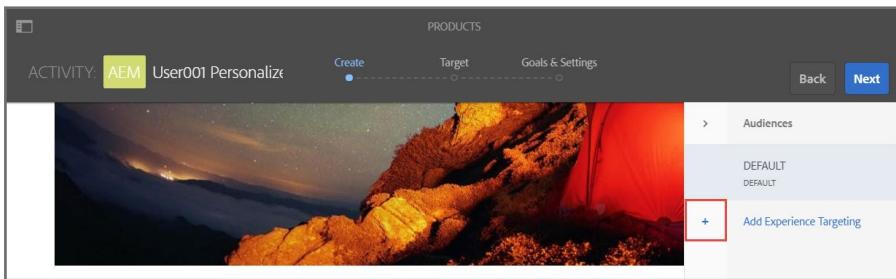
14. Click **Start Targeting**, as shown:



15. Click the **Expand** icon, as shown:



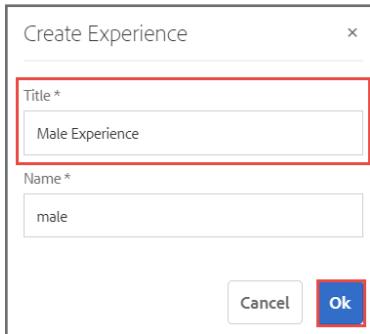
16. Click the **Add Experience Targeting** link, as shown:



The **Choose Audience** window appears.

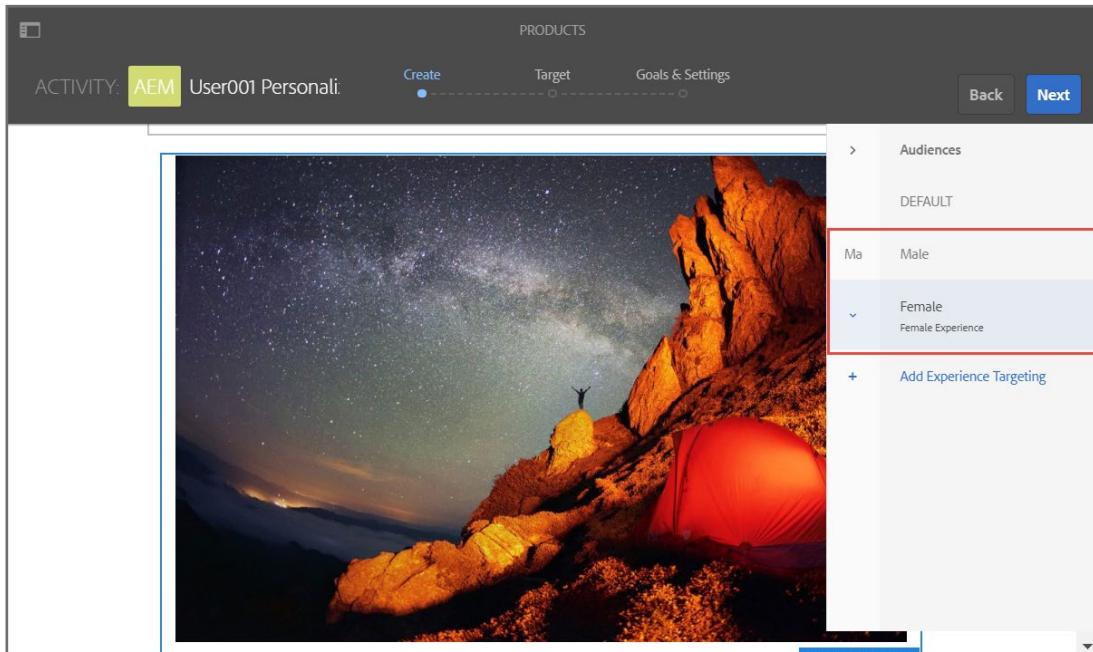
17. Select the **Male** audience. The **Create Experience** pop-up window appears.

18. In the **Title** field, type **Male Experience** and click **Ok**.



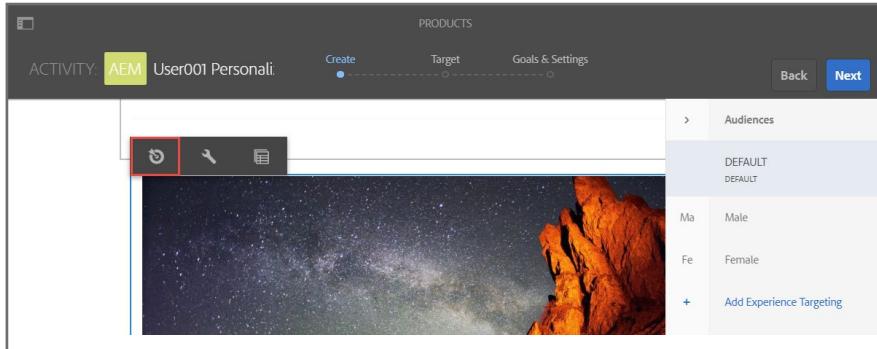
19. Similarly, create a **Female Experience**. Remember to select the **Female** audience.

You should have the **Male** and **Female** audience segments now, as shown:



20. Select the DEFAULT audience and click the XF component on the Products page. The Component toolbar appears.

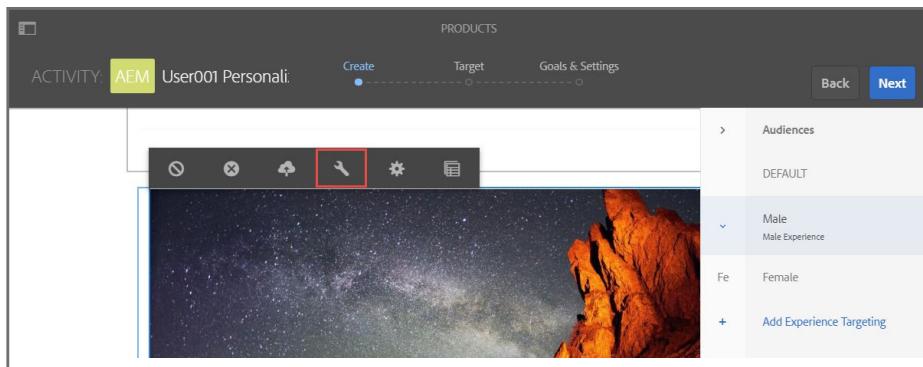
21. Click the Target icon, as shown:



A message, **Component is now targeted**, is displayed.

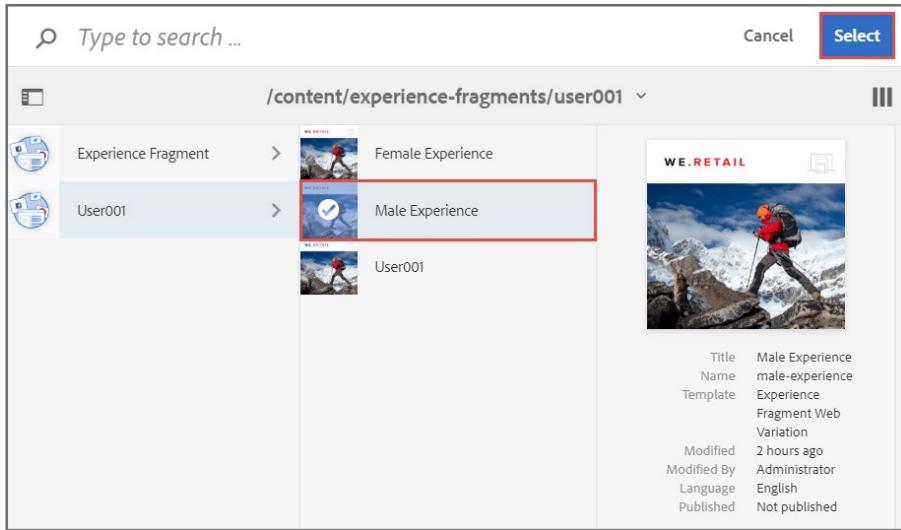
22. Click the **Male Experience** and click the XF component on the Products page. The component toolbar appears.

23. Click the **Configure** icon, as shown:

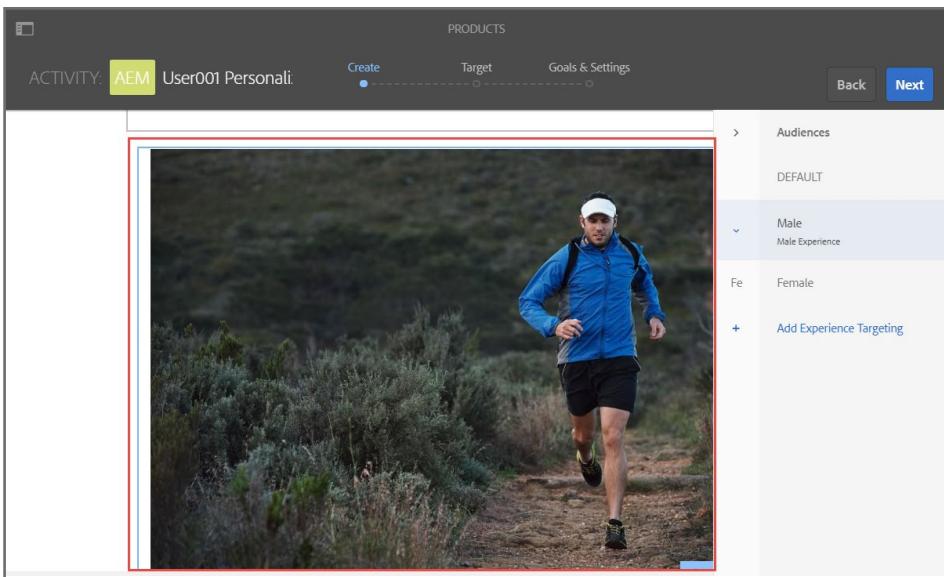


The **Experience Fragment options** window opens.

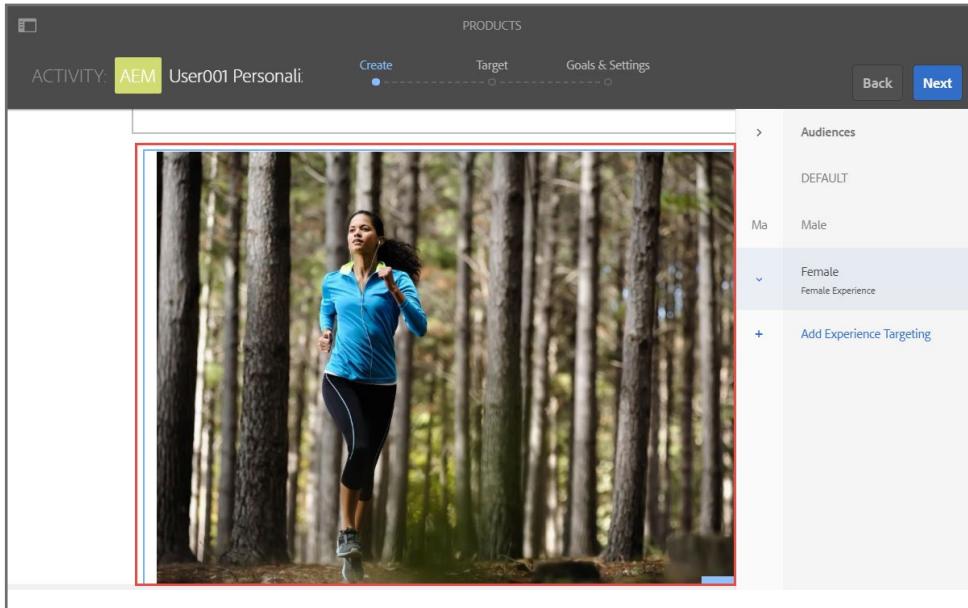
24. Click the **Open Selection dialog**, select the **Male Experience XF** variation, and click **Select**, as shown:



25. In the **Experience Fragment options** window, click the **Done** icon. The **Male Experience XF** variation is added to the **Male** audience, as shown:

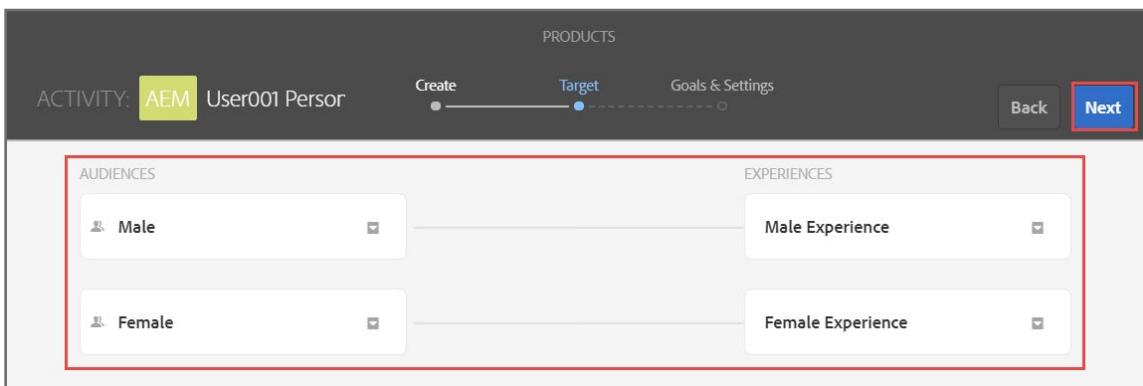


26. Similarly, add the **Female Experience XF** to the **Female** audience. The **Female Experience** content is added, as shown:



27. On the **Targeting** panel, click **Next**. The **Target** page of the **Activity** opens.

28. Verify if the required audiences and the experiences are mapped correctly and click **Next**, as shown:



The **Goals and Settings** page opens.

29. Click **Save**. No changes are required in this step:

A message, **Your activity was saved**, is displayed.

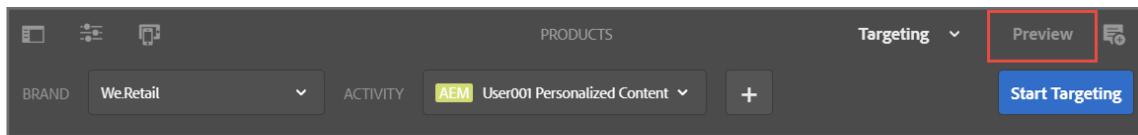
Task 3: Simulate a persona with ContextHub

Another helpful feature of AEM is the ability to simulate a visitor's experience to verify how an experience changes based on the visitor.



Note: You will need to have the profile configured with the right permissions to be able to load different user profiles to simulate user experiences.

1. Click **Preview** from the page toolbar, as shown:



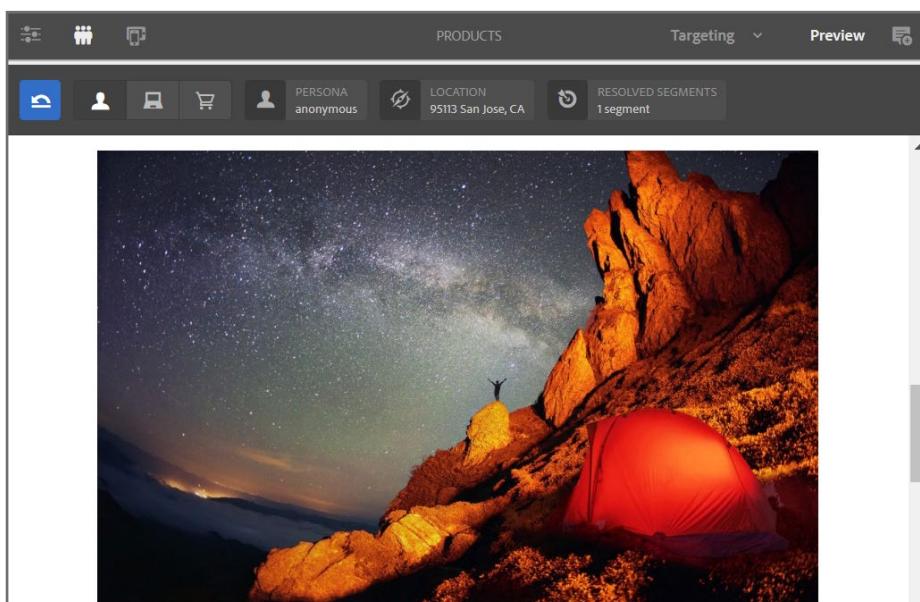
The **Preview** mode is displayed.

2. Click the **ContextHub** icon to display the ContextHub toolbar, as shown:

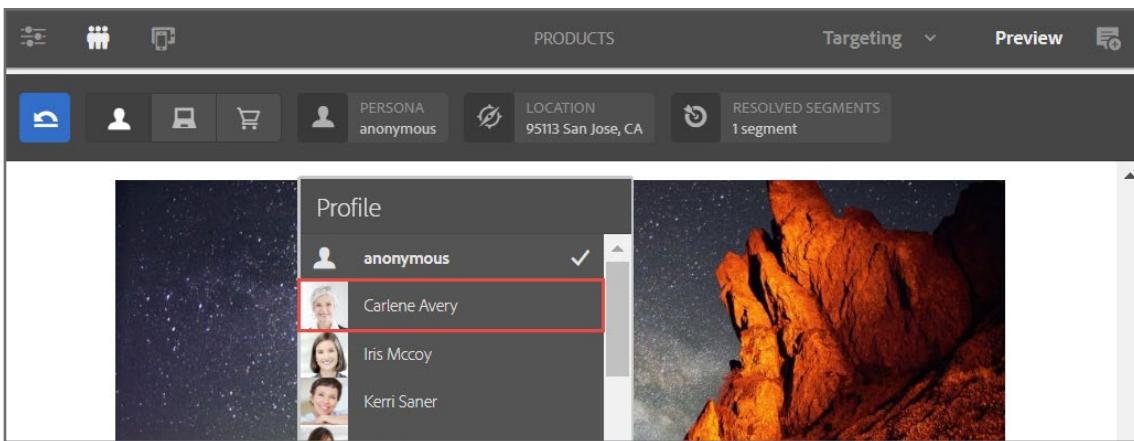


The **ContextHub** toolbar is displayed.

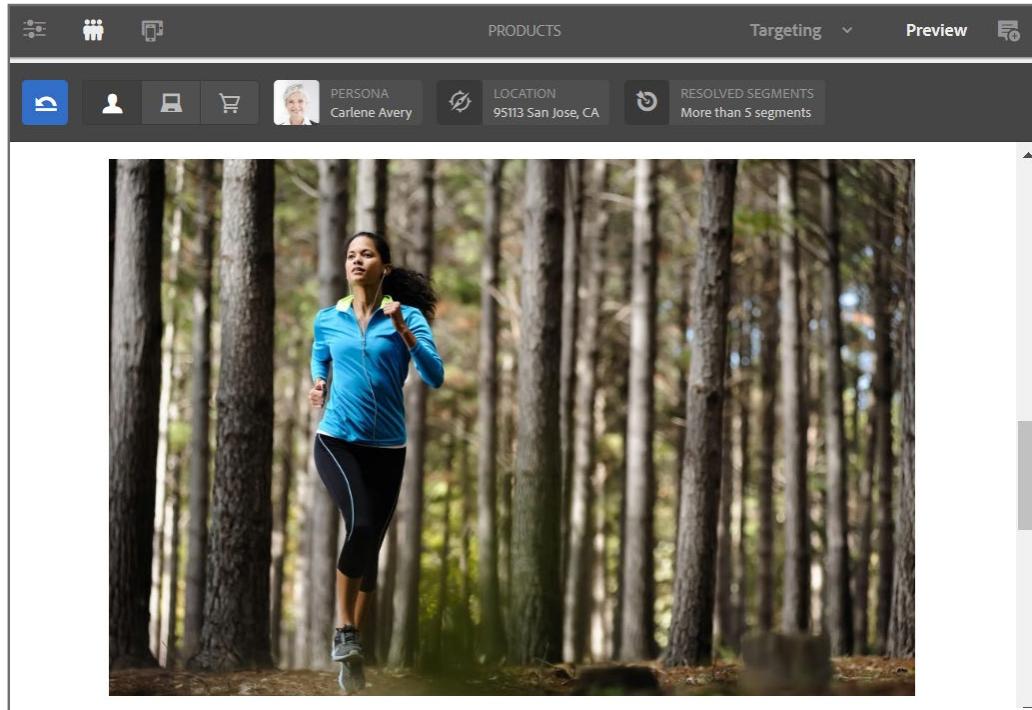
3. Click the **Profile** icon, select **anonymous** from the drop-down list. Notice, the default content is displayed, as shown:



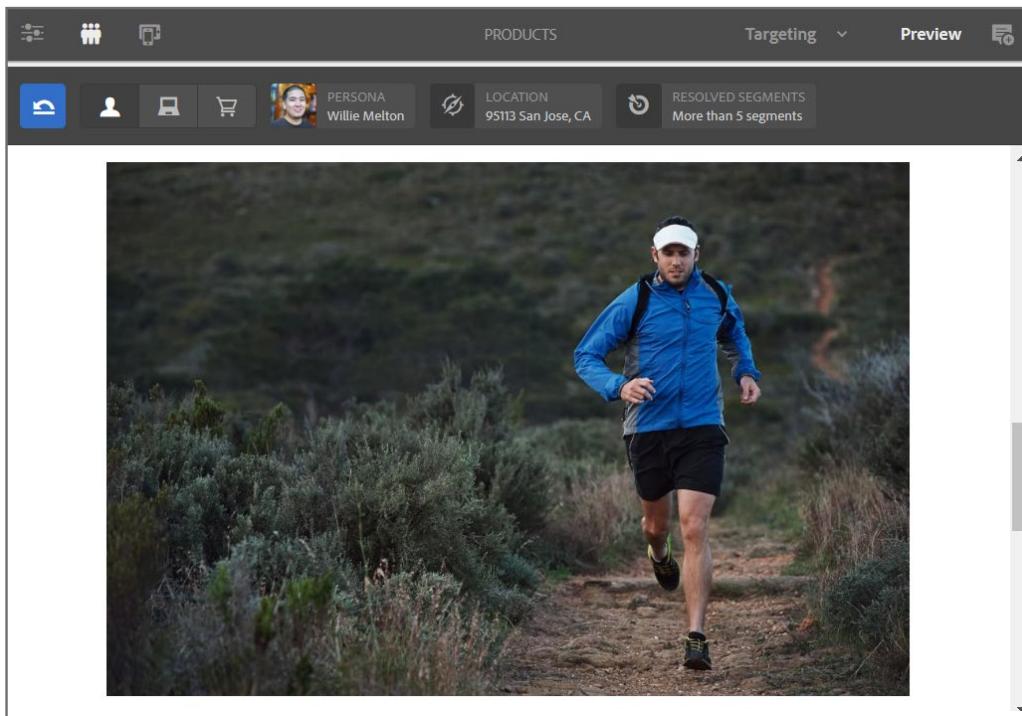
4. Click the **Profile** icon and select **Carlene Avery** from the drop-down list, as shown:



Observe for Carlene, the default image changes to display the image associated with the Female audience, as shown:



5. Select a male persona and observe the image changes to display the image associated with the **Male** audience, as shown:



You have successfully simulated a visitor's experience to verify how an experience changes based on the visitor.

References

Use the following links for more information on:

- [Integrating AEM with Adobe Target](#)
- [Author Targeted Content Using the Targeting Mode](#)

Advanced Site Management

Introduction

After you create pages, you need to perform several administrative tasks, such as adding promotional content on an existing website, creating tags for assets, pages, and content to locate the resources easily, and following a process for website development. In Adobe Experience Manager (AEM), you can leverage Launches, Tags, and Workflows to perform these tasks.

Objectives

After completing this module, you will be able to:

- Explain Launches
- Manage page Launches
- Explain how to manage taxonomies
- Manage tags
- Explain workflow configuration
- Create a workflow to publish multiple pages

Launches

A launch is a copy of a website or website pages where you can implement changes without affecting the content flow of the published version. It enables you to:

- Efficiently develop content for a future release of published web pages
- Mitigate the risks involved with major changes in the content copy and the structure or templates of a published website

After the changes are finalized in a launch, you can publish them in the publish instance.



Note: In AEM, the terms publishing, activation, and replication mean the same thing. You can use these three terms interchangeably.

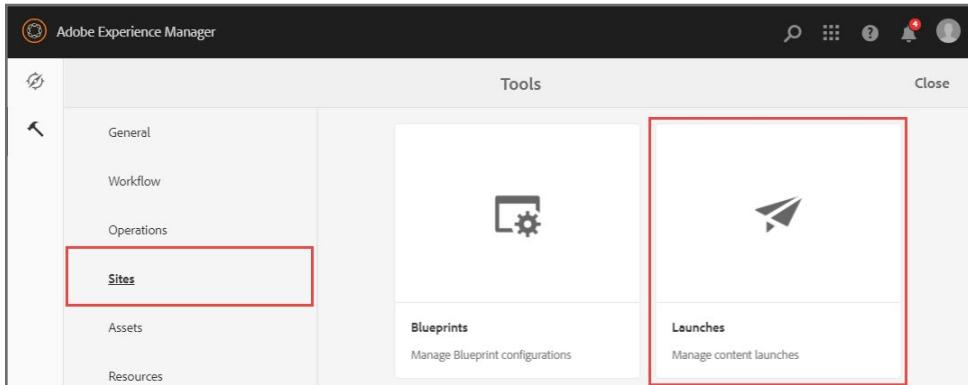
Launch Life Cycle

The Launch life cycle consists of:

- Create: You can create a launch from an already published website. It copies the content and the content structure into a new location on the author server under the path /launch.
- Edit: You can edit a launch like a normal site in AEM.
- Promote: When the changes in the launch are ready to be published, you can review and make a conscious decision to replace the existing content with the new launch.
- Move to production: When the content is promoted in the launch, it is copied to the corresponding path where the published website resides. You can set the time of the copy action to a point of time in the future. All the content that is promoted up to that point of time will be copied.
- Implement changes or delete: After the content is moved to production, you can use the launch to implement further changes for a next release or delete the launch.

Launches Console

You can access the Launches console from **Tools > Sites** menu, as shown:



From the Launches console, you can:

- Create launches and specify the source and properties for the launch.
- Edit properties of the existing launches
- Promote, clone, and delete launches

Launch Properties

On the launch properties page, you can:

- Set the title of the launch
- Select an existing page or select a new template for the launch
- Set the pages to be published automatically after the launch is promoted
- Create a launch to inherit source page live data. Live Copy automatically updates the launch pages as the source pages change. The child pages of the source page are included in the launch by default. The content updates of the launch on the author instance rolls out a blueprint page to synchronize content changes to live copies.

Nested Launches

Nested launches are a launch within a launch. The source of the launch is an existing launch. You can promote the content developed to either of:

- The parent launches from where the launch is directly derived
- The production website
- A nested launch in between the production website and the parent launch

Promoting Launches

When you promote a launch page, the corresponding source page is replaced with the content of the promoted page.

You can promote:

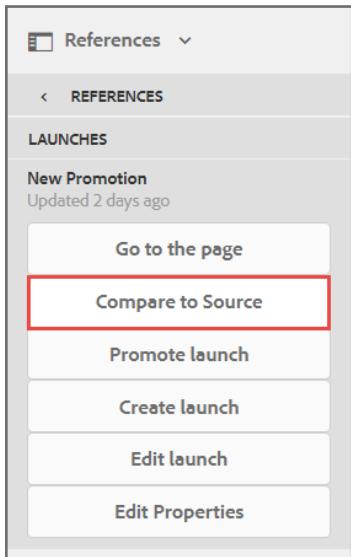
- The current page only
- The page including the child pages of the current page
- The entire launch
- The modified pages only to save a resource
- The approved content only

Launches in the Sites Console

You can view a launch created from a specific website or page in the Sites console by opening the References panel in the Rail Selector. You need to click a specific launch to view the additional tools for managing the launch.

Compare a Launch to the Source

You can compare the launch content to the source content by clicking Compare to Source under the References panel, as shown:



The different view shows launch content on the left and source content on the right, with green borders on any content that is different.

Deleting Launches

If you no longer need a launch, you can delete it from the Launches console. The entire Launch is deleted even if you promoted only one page. You should delete the lower levels first when deleting nested launches.

Exercise 1: Manage page launches

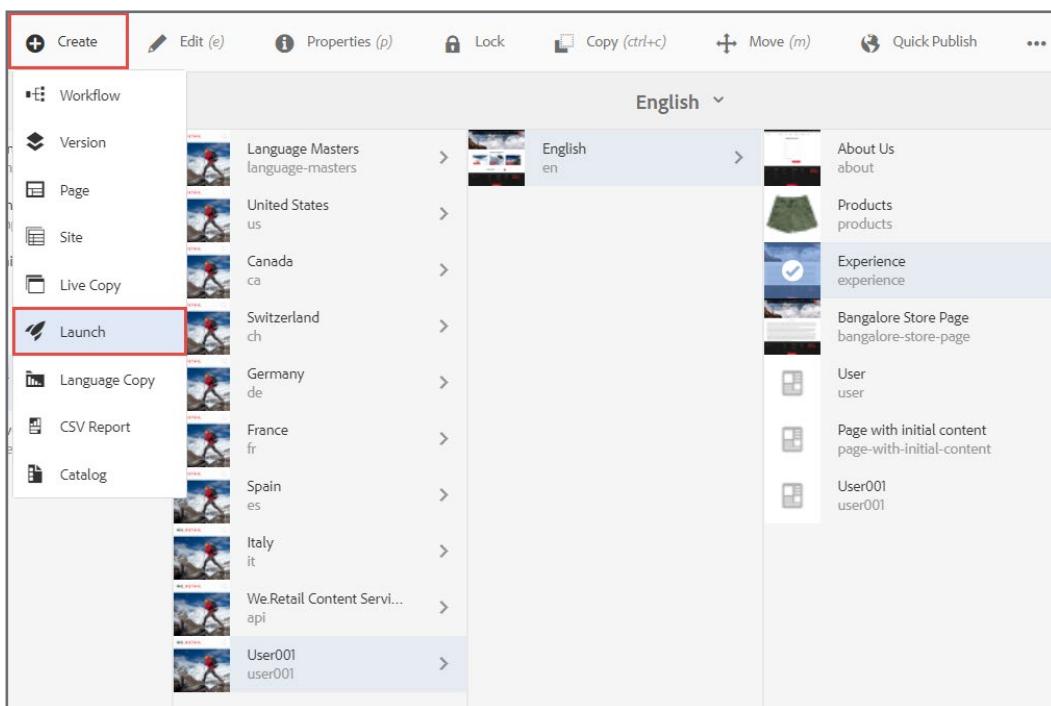
Scenario: Your organization has recently launched a new product and wants to promote it on the company's website. As the author, you need to include the details of the new product in an existing webpage by using the launch feature in AEM.

This exercise has the following tasks:

1. Create a launch
2. Compare the launch content and the source content
3. Promote the launch

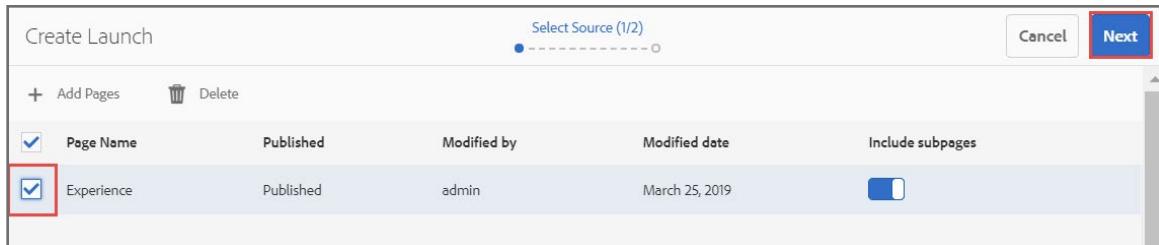
Task 1: Create a launch

1. From the **Sites** console, navigate to **We.Retail > User0XX > English** and select the **Experience** page. The actions bar appears.
2. Click **Create** and select **Launch** from the drop-down menu, as shown:

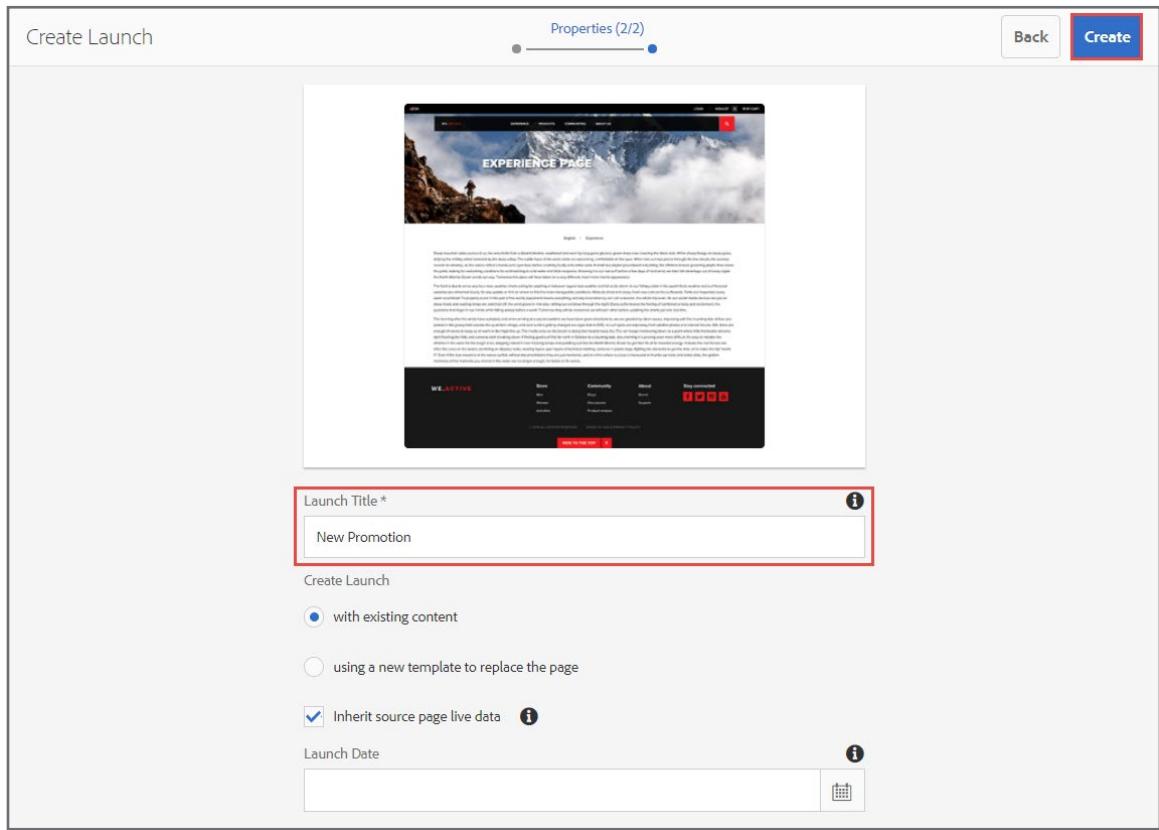


The **Create Launch** wizard opens.

- Select the **Experience** check box as the source in the list and click **Next**, as shown:



- In the **Launch Title** field, type **New Promotion** and click **Create**, as shown:



The **Success** pop-up window appears.

- Click **Done**.

6. Select the **Experience** page again, click the **Rail Selector**, and click **References**, as shown:

The screenshot shows the AEM Experience Editor interface. The top navigation bar includes 'Create', 'Edit (e)', 'Properties (p)', 'Lock', 'Copy (ctrl+c)', 'Move (m)', and a three-dot menu. To the right, it says '1 selected (escape)'. Below the toolbar, there's a 'Rail Selector' dropdown with options: 'Content Only', 'Content Tree', 'Timeline', 'References' (which is highlighted with a red border), and 'Filter'. The main content area shows a tree structure under 'English en'. At the top of the tree is 'About Us about'. Below it are 'Products products' and 'Experience experience' (also highlighted with a red border). Other items in the tree include 'Bangalore Store Page bangalore-store-page', 'User user', 'Page with initial content page-with-initial-content', and 'User001 user001'. To the right of the tree, there's a preview of the 'Experience' page and a detailed properties panel.

The **Rail Selector** appears.

7. Select **Launches**, as shown:

The screenshot shows the AEM Experience Editor interface with the 'Launches' panel open in the Rail Selector. The left sidebar has sections for 'SOURCE' (Blueprint (0)), 'COPIES' (Launches (1) which is highlighted with a red border), 'Live Copies (0)', 'Language Copies (1)', 'CONTENT REFERENCES' (Incoming Links (3)), 'Borrowed Content (0)', and 'Lent Content (0)'. The main content area shows a tree structure under 'English en'. At the top of the tree is 'About Us about'. Below it are 'Products products' and 'Experience experience' (highlighted with a blue border). Other items in the tree include 'Bangalore Store Page bangalore-store-page', 'User user', 'Page with initial content page-with-initial-content', and 'User001 user001'. To the right, there's a preview of the 'Experience' page and a properties panel.

The **LAUNCHES** panel appears.



Note: The ways in which content is originated and copied are displayed in this view.

8. Click **New Promotion** on the **Rail Selector**, as shown:

The screenshot shows the AEM Rail Selector interface. On the left, there's a sidebar with 'REFERENCES' and 'LAUNCHES' sections. Under 'LAUNCHES', the 'New Promotion' item is highlighted with a red border. The main area displays a grid of items under the 'English en' category. The items include 'Language Masters language-masters', 'United States us', 'Canada ca', 'About Us about', 'Products products', and 'Experience experience'. Each item has a small thumbnail icon and a right-pointing arrow indicating it can be selected.

A list of options appears.

9. Click **Go to the page** to edit and add new content to the **Launch**, as shown:

The screenshot shows the AEM Launch interface. On the left, a sidebar lists 'REFERENCES' and 'LAUNCHES'. Under 'LAUNCHES', the 'New Promotion' item is selected and highlighted with a red border. A dropdown menu is open, showing options: 'Go to the page' (which is selected and highlighted with a red border), 'Compare to Source', 'Promote launch', 'Create launch', 'Edit launch', and 'Edit Properties'. To the right of the sidebar, there's a grid of items under the 'English en' category. On the far right, detailed information is provided for the 'Bangalore Store Page bangalore-store-page': Title (Experience), Name (experience), Template (Experience Page), Modified (Mar 25, 2019), Modified By (Administrator), Language (English), Published (Mar 28, 2019), and Published By (Administrator). A preview of the page is also visible.

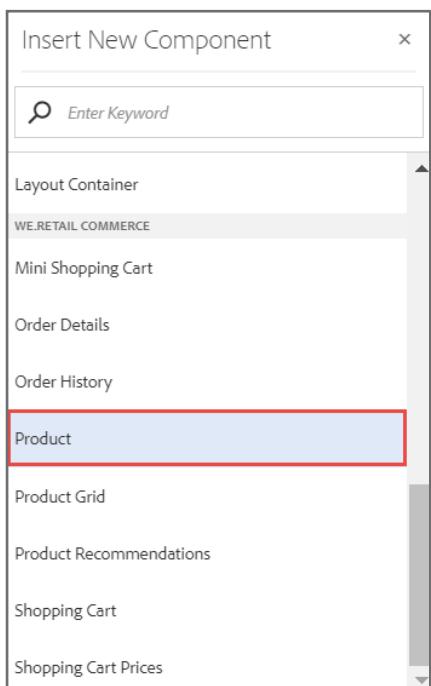
The launch page opens on a new browser.

10. Select the **Layout Container** at the bottom of your **Experience** page and click **Insert Component**, as shown:

The screenshot shows the AEM Experience editor. At the top, there are tabs for 'Edit' and 'Preview'. The main area displays a dark-themed page with a large graphic element featuring a stylized 'X' shape in teal and yellow. The word 'Sites' is prominently displayed in white. At the bottom of the page, there is a horizontal bar with a red-bordered '+' button on the left. Below this bar, a blue-bordered box contains the text 'Drag components here'.

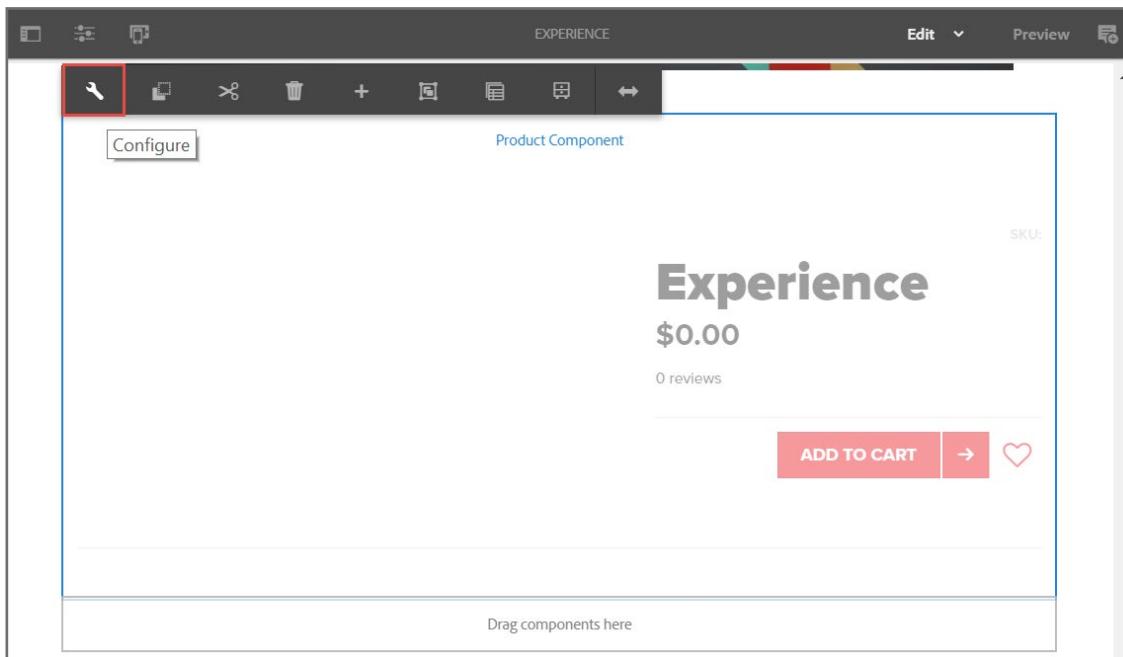
The **Insert New Component** pop-up window appears.

11. Select a **Product** component to add it to the launch, as shown:



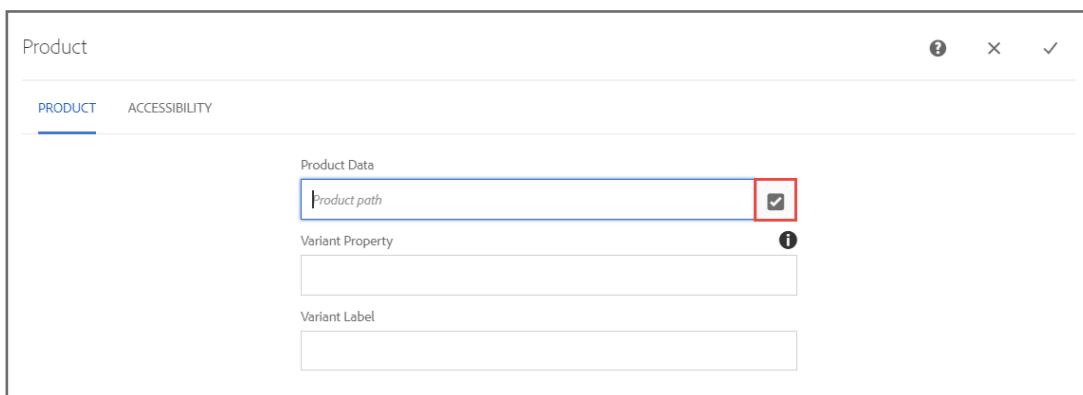
The **Product** component is added to the page.

12. Select the **Product** component and click the **Configure** icon, as shown:

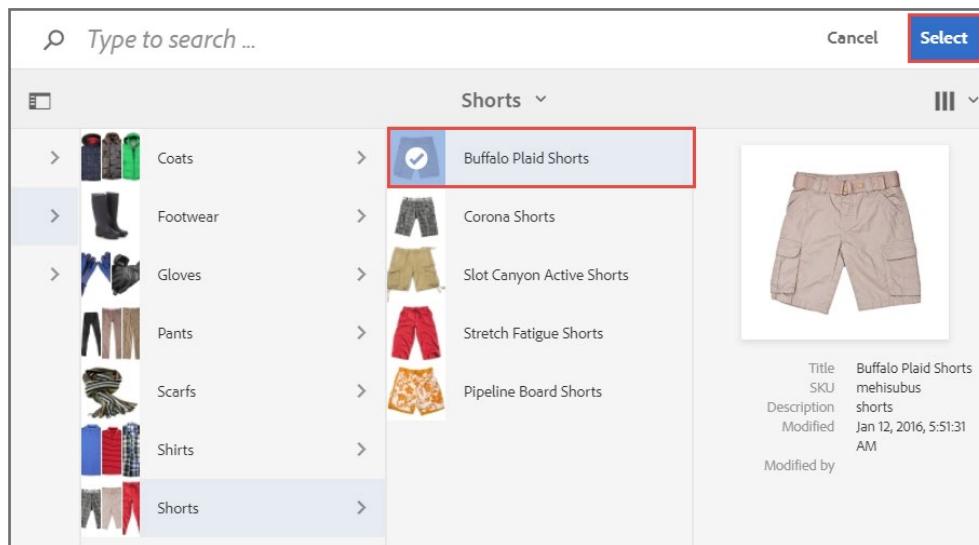


The **Product** configuration page opens.

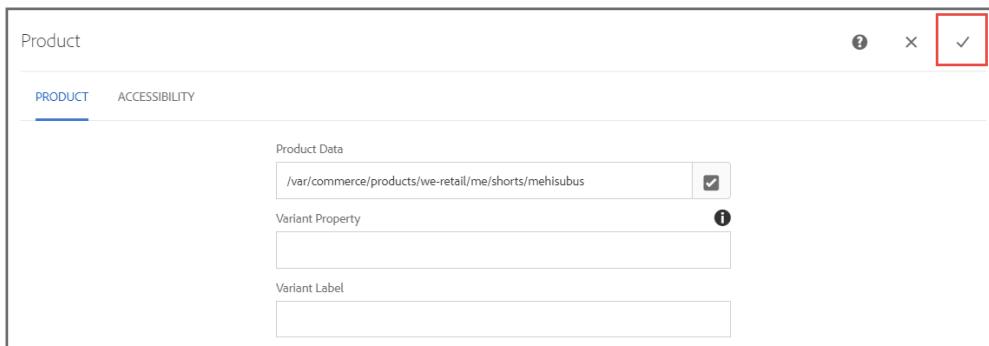
13. Click the **Open Selection Dialog** icon, as shown:



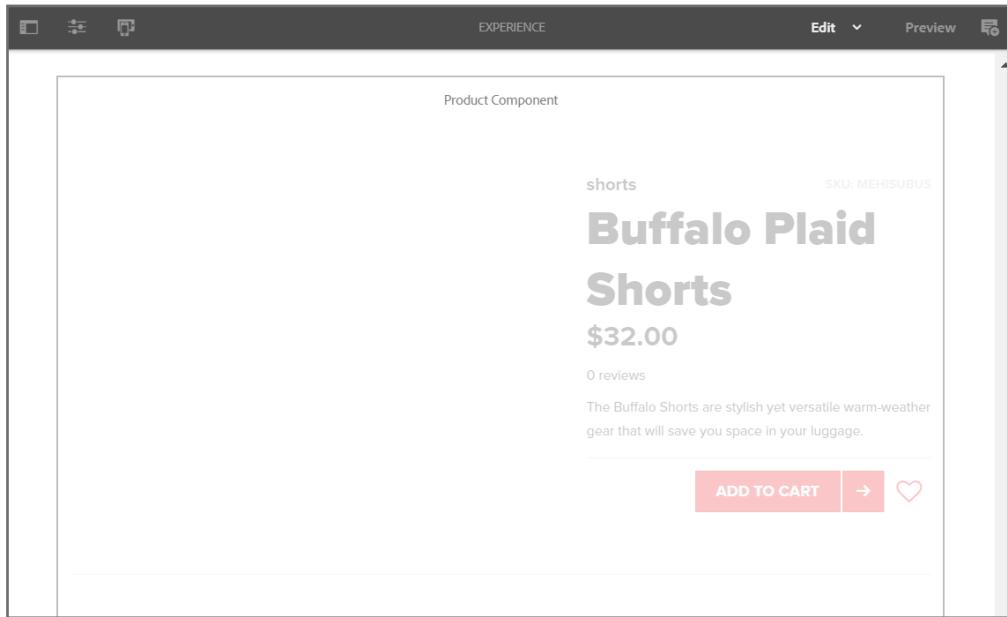
14. Navigate to **We.Retail > Men > Shorts**, select any image. For example, select the **Buffalo Plaid Short**, and click **Select**, as shown:



15. Click **Done** on the **Product** component configuration dialog box, as shown:



16. The Product component is populated with information on the pair of shorts you selected (image, title, price, and so on), as shown:



Task 2: Compare the launch content and source content

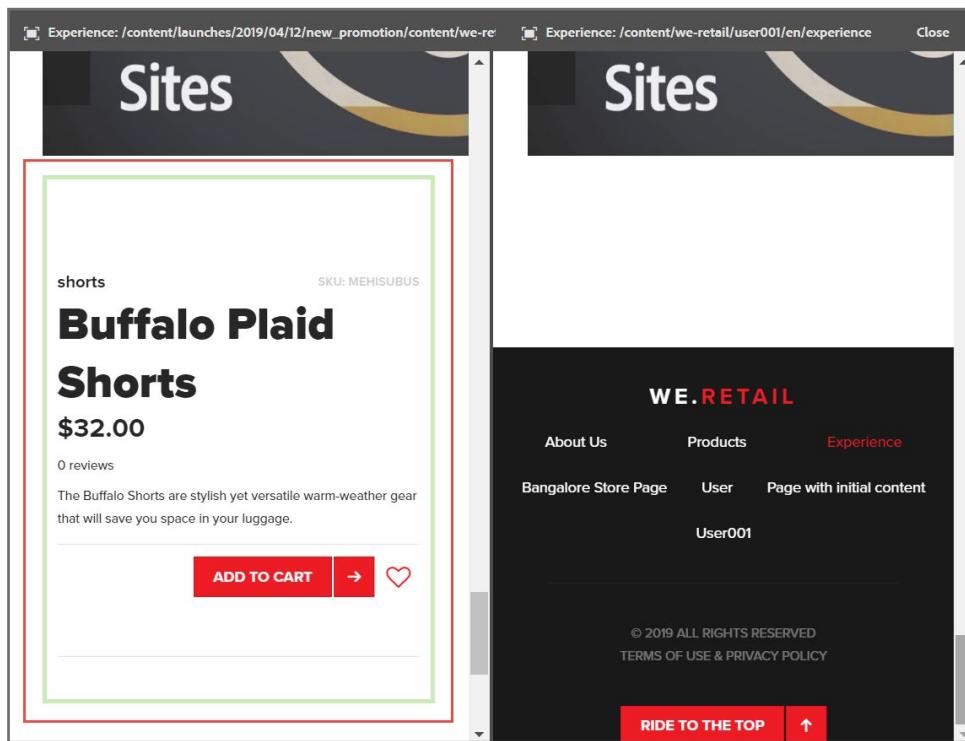
In this task, you will use the AEM Page Comparison tool to compare the launch content to the source content. The comparison tool shows a comparison between two pieces of content, such as a page, and visually identifies what has changed in an iterative authoring process.

1. Navigate to the tab where AEM Sites is open, and select **Compare to Source** from the **References > Launches** pane on the **Rail Selector**, as shown:

The screenshot shows the AEM Rail Selector. The 'Launches' pane is open, displaying a list of launches. One launch, 'New Promotion', is highlighted with a red border. The 'Compare to Source' option in the list is also highlighted with a red border. To the right of the list, there is a preview of a page and a detailed table of content items with their properties.

Title	Name	Template	Modified	Modified By	Language	Published	Published By
Experience	experience	Experience	Mar 25, 2019	Administrator	English	Mar 28, 2019	Administrator
experience							
Bangalore Store Page	bangalore-store-page						
User	user						
Page with initial content	page-with-initial-content						
User001	user001						

The source and the launch content open side by side. Any new content is highlighted with a green outline. Scroll down on the left to identify the Product component you added and notice it is highlighted with a green border, as shown:



2. Click **Close** at the upper right of the page.

Task 3: Promote a launch

In this task, you will promote the New Products launch you created.

1. Select the **Experience** page again.
2. In **Rail Selector**, click to expand **Launches** and click **New Promotion**, as shown:

Category	Item	Description
LAUNCHES	New Promotion	Updated 2 days ago
	About Us	about
	Products	products
	Experience	experience
	Bangalore Store Page	bangalore-store-page
	User	user
	Page with initial content	page-with-initial-content
	User001	user001

A list of action items appears below the **LAUNCHES** panel.

3. Click **Promote Launch**, as shown:

The screenshot shows the AEM interface with the 'Launches' panel open. The 'Promote' item in the 'LAUNCHES' section is highlighted with a red box. To the right, a list of pages is shown with their details. The 'Experience' page is selected.

Title	Name	Template	Modified	Modified By	Language	Published	Published By
About Us	about						
Products	products						
Experience	experience		Mar 25, 2019	Administrator	English	Mar 28, 2019	Administrator
Bangalore Store Page	bangalore-store-page						
User	user						
Page with initial content	page-with-initial-content						
User001	user001						

The **Promote Launch** wizard opens in the **Settings** page.

4. Select **Promote current page** and click **Next**, as shown:

The screenshot shows the 'Promote Launch' wizard in the 'Settings' tab. The 'Target' section shows a preview of the page and a checkbox for 'Delete launch after promotion'. The 'Scope*' section has several options, with 'Promote current page' selected and highlighted with a red box.

The **Review** page of the **Promote Launch** wizard opens.

5. Ensure that the **Experience** page is the only page listed to be promoted and click **Promote**, as shown:

The screenshot shows a user interface titled "Promote Launch". At the top, there are tabs for "Settings" and "Review", with "Review" being the active tab. Below the tabs, there is a button labeled "Back" and a prominent red-bordered button labeled "Promote". The main area is titled "Pages to be promoted (1)". A table lists one page: "Experience" located at "/content/we-retail/user001/en/experience". The table includes columns for "Name", "Modified (Launch)", "Modified (Production)", and "Preview". The "Modified (Launch)" column shows "an hour ago" and "Administrator". The "Modified (Production)" column shows "20 days ago" and "Administrator". A red box highlights the entire row for the "Experience" page.

The page is promoted to production. Notice the **Preview** button (an eyeball) is available beside the **Modified (Production)** column to review the content.

6. From the **Sites** console, navigate to **We.Retail > User0XX > English**. Select the **Experience** page and click **Edit** to edit it. The **Experience** page opens in the **Page Editor**.
7. The content of the launch page is now present on the **Experience** page, as shown:

The screenshot shows the AEM Page Editor interface. The title bar says "EXPERIENCE". On the left, there are icons for "Edit", "Preview", and "Find". The main content area displays a "Product Component" for "shorts" with the SKU "MEHISUBUS". The product is identified as "Buffalo Plaid Shorts" and priced at "\$32.00". It has "0 reviews". A description states: "The Buffalo Shorts are stylish yet versatile warm-weather gear that will save you space in your luggage." At the bottom, there are two buttons: "ADD TO CART" and a heart icon.

Managing Taxonomies

Tags are labels that can be added to an unstructured group of content to add a context to the content. You can tag any type of content irrespective of its nature, location, and the structure of the content.

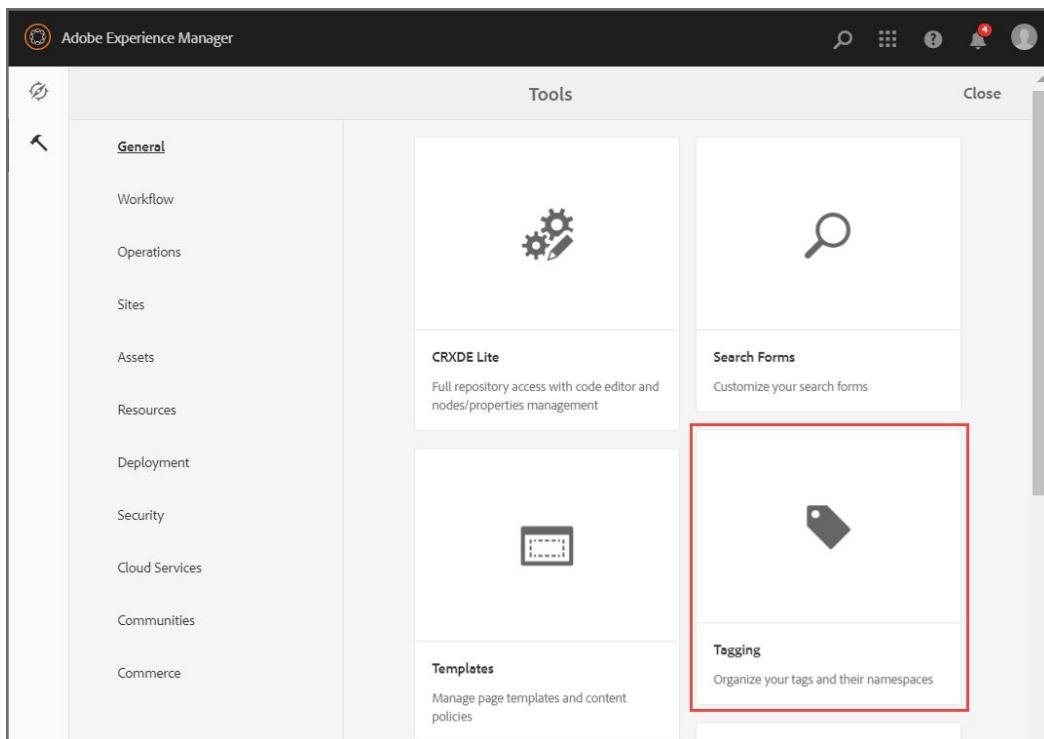
You can manage tags according to:

- **Taxonomy:** A group of subject matter experts decides what a tag means and how it should be used. The system is closed to changes by users. Only the experts can make changes to the taxonomy.
- **Folksonomy:** In a folksonomy, every user can decide upon a tag as necessary. The most well-known folksonomies are followed in Twitter and Instagram with hash tags.

You can use Tagging console to manage tags and create taxonomies. The users who belong to the Tag Manager group have access to the Tagging console.

Taxonomies are organized in a hierarchical, tree-like structure. At the top of the hierarchy, there is a tag which gives the taxonomy its name and an idea about the taxonomy. That tag is called a Namespace.

You can access the Tagging console from **Tools > General**, as shown:



Creating and Managing Taxonomy

The following table describes the tools available in the Tagging console for creating and managing taxonomies:

Action	Description
Create Namespace	Creates a namespace to start a new taxonomy
Create Tag	Adds a child tag to the selected tag
Edit	Helps edit the title and description
Move	Helps move a tag and all the tags below in the hierarchy to a new location in the taxonomy
Merge	Helps move a taxonomy tree to a new location and eliminate duplicates and combine two tree structures into one
Publish	Activates the tag in the publish environment. Similar to page content, only the selected tag is published, regardless of whether it is a container tag.
Unpublish	Deactivates the tag in the author environment and removes it from the publish environment. If the selected tag is a container tag, all the child tags will be deactivated in the author environment and removed from the publish environment.
Delete	Removes the tag from the author environment. If the tag was published, it is also removed from the publish environment. If the selected tag is a container tag, all the child tags will be removed.

Use Cases for Tags

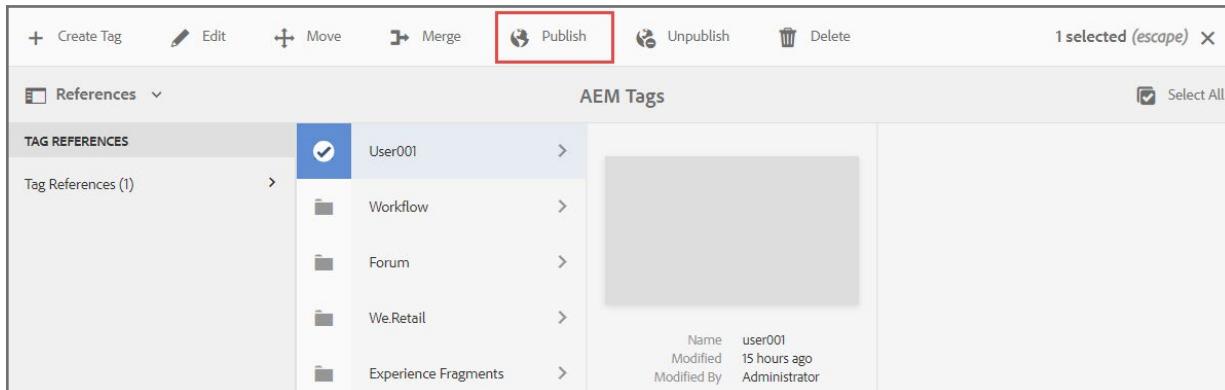
You can use tags to:

- Organize the content by more than one hierarchy. In AEM, all the content is organized into a hierachal structure. However, sometimes the content can be part of more than one organizing principle. With tags, an alternative structure can be defined simultaneously to the underlaying repository structure.
- Display content in the content components. For example, the Teaser component can leverage tag for personalization and the lists component can base the listed content on tags.
- Improve the search experience. Authors can find content in a content repository more easily when content is tagged with a taxonomy. The advanced search in the Rail Selector includes a facet that helps filter the content by tags.

Publishing Tags

You can publish taxonomies on the author server and on the publish server. For example, you can use tags to create the list on a webpage for a list component and the web visitors can create tags to label their favorite products on the site. In either case, if the functions of a website depend on taxonomies, you (as the author) must publish the tags created in the author instance to the publish instance.

You can publish tags from the Tagging console, similar to publishing webpages, as shown:



The screenshot shows the AEM Tagging console interface. At the top, there is a toolbar with buttons for Create Tag, Edit, Move, Merge, Publish (which is highlighted with a red box), Unpublish, and Delete. To the right of the toolbar, it says "1 selected (escape)" and has a "Select All" checkbox. Below the toolbar is a header with the text "AEM Tags". On the left, there is a sidebar titled "TAG REFERENCES" with a section for "Tag References (1)". It shows a list with "User001" checked. To the right of the sidebar, there is a main content area showing a list of items: Workflow, Forum, We.Retail, and Experience Fragments. Each item has a "View" icon and a chevron icon to its right. At the bottom of this list, there is a summary table with columns for Name, Modified, and Modified By. The table shows "user001" as the name, "15 hours ago" as the modified time, and "Administrator" as the modified by user.

Name	Modified	Modified By
user001	15 hours ago	Administrator

Tagging on Multi-Lingual Websites

Tags are often language specific and need to be translated into other languages on multi-lingual websites. You can create a translated version of the tag from the Tagging console. You can add a translation when you edit the tag. You can also translate tags with the help of the translation workflow included in AEM.

Tag References

To find in which page a tag is used, you can view the references to the locations on the Rail Selector in the Tagging console, as shown:

The screenshot shows the AEM Tags interface with the following details:

- Toolbar:** Create Tag, Edit, Move, Merge, Publish, Unpublish, Delete. A status bar indicates "1 selected (escape) X".
- Left Sidebar:** References, TAG REFERENCES. It lists several tag paths:
 - /content/screens/we-retail/apps/virtual-showroom/en/equipment/hiking/hiking-pants (highlighted with a red box)
 - desert-sky-shorts
 - hiking-pants
 - rios-t-shirt
 - bahamas-shorts
- Central Area:** AEM Tags grid showing tag relationships:

From	Relationship	To	Relationship
Workflow	>	Activity	>
Forum	>	Apparel	>
We.Retail	>	Gender	> (highlighted with a red box)
Experience Fragments	>	Season	>
Standard Tags		Equipment	
Asset Properties	>		
Facebook			
- Right Panel:** Shows a summary for the selected tag "Gender":

Name	gender
Modified	1 month ago
Modified By	Administrator

Using Tags: Best Practices

- Always create namespaces to sort and organize the tags. With namespaces, you can create categories of tags to ensure similar tags are grouped together.
- Always ensure tags are unique within a specific namespace. It is possible for one term to exist in different paths below one namespace, but you must try to eliminate them, if possible.
- Always store the tags in a path that is close to the pages that use them.

Exercise: 2: Manage tags

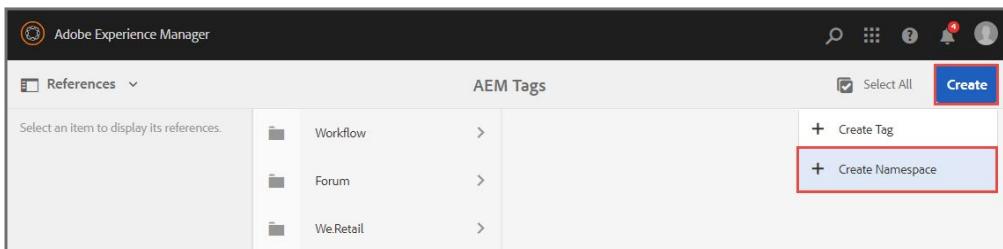
Scenario: You have created multiple webpages and assets for the products of your organization. You want to search for the existing resources related to men, women and equipment using the tagging feature in AEM.

In this exercise, you will perform the following tasks:

1. Create a namespace and add tags to the namespace
2. Apply tags to a page

Task 1: Create a namespace and add tags to the namespace

1. Click the **Adobe Experience Manager** on the header bar and navigate to the **Tagging** console from the **Tools > General** section. The **AEM Tags** console opens.
2. Click **Create** and select **Create Namespace** from the drop-down menu, as shown:



The **Add Namespace** dialog box opens.

- In the **Title** field, type **User0XX** (where 0XX is the user number you were assigned for this training) and click **Create**, as shown:

Add Namespace

Title
User001

Name
user001

Description

Cancel Create

A top-level folder on the Rail Selector is created where you can manage tags.



Note: AEM comes with a tag structure for We.Retail. Several other tag structures are already in place. The structure consists of a main namespace and a series of parent tags and child tags.

- Select the **User0XX** namespace, click **Create** and select **Create Tag** from the drop-down menu, as shown:

Adobe Experience Manager

References AEM Tags Select All Create

User001

Workflow >

Forum >

We.Retail >

Experience Fragments >

+ Create Tag + Create Namespace

Name	user001
Modified	2 seconds ago
Modified By	Administrator

The **Create Tag** wizard opens.

5. In the **Title** field, type **Men** and click **Submit**, as shown. The **Name** field is populated automatically.

Create Tag

Title *

Men

Name *

men

Description

Tag Path

/content/cq:tags/user001

Cancel Submit

6. Perform steps 4 and 5 again to create two more tags, **Women** and **Equipment** in the User0XX namespace:

The User0XX namespace is populated, as shown:

Adobe Experience Manager

References ▾

AEM Tags

Select an item to display its references.

User001 > Men

Workflow > Women

Forum > Equipment

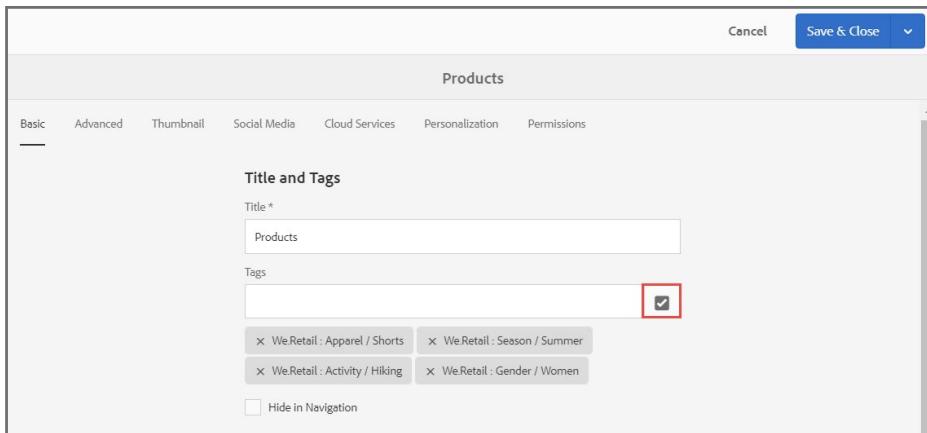
We.Retail >

Select All Create

Task 2: Add tags to a page

In this task, you will use the built-in We.Retail tags and the newly created tags in the namespace to tag pages and assets in AEM.

1. Click the **Adobe Experience Manager** and navigate to **Navigation > Sites** console.
2. From the **Sites** console, navigate to **We.Retail > User0XX > English**, and select the **Products** page. The actions bar appears.
3. Click **Properties** or press the **p** key. The **Products** properties page opens.
4. In the **Basic** tab, click the **Open Selection Dialog** icon beside the **Tags** field to add some tags to the page, as shown:



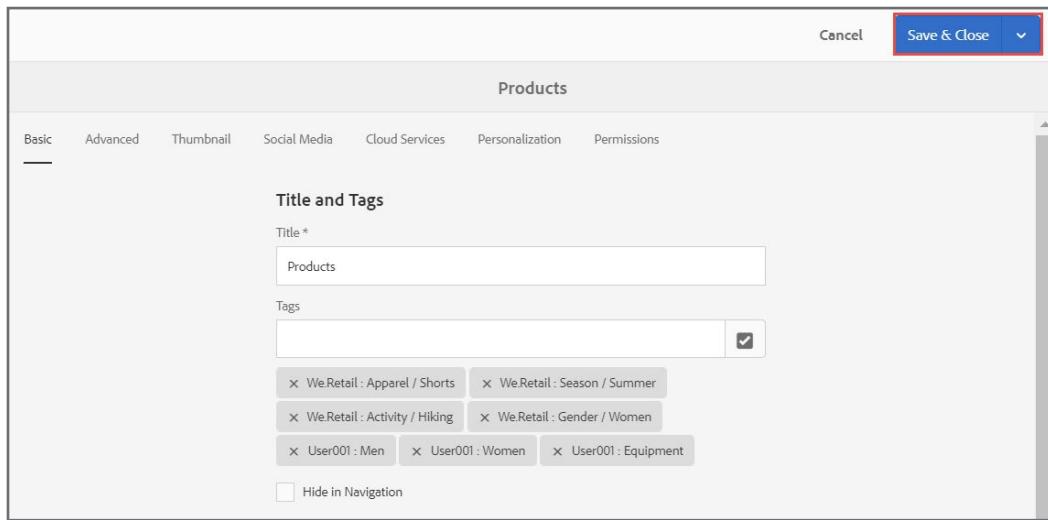
The Select Tags dialog box opens.

5. Select the **User0XX** namespace, select all three tags you created, and click **Select**, as shown:

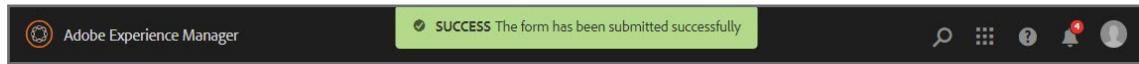


All the three tags of the **User0XX** namespace are added to the existing list of tags for the **Products** page.

6. Click **Save & Close**, as shown.



A message, **The form has been submitted successfully** appears.

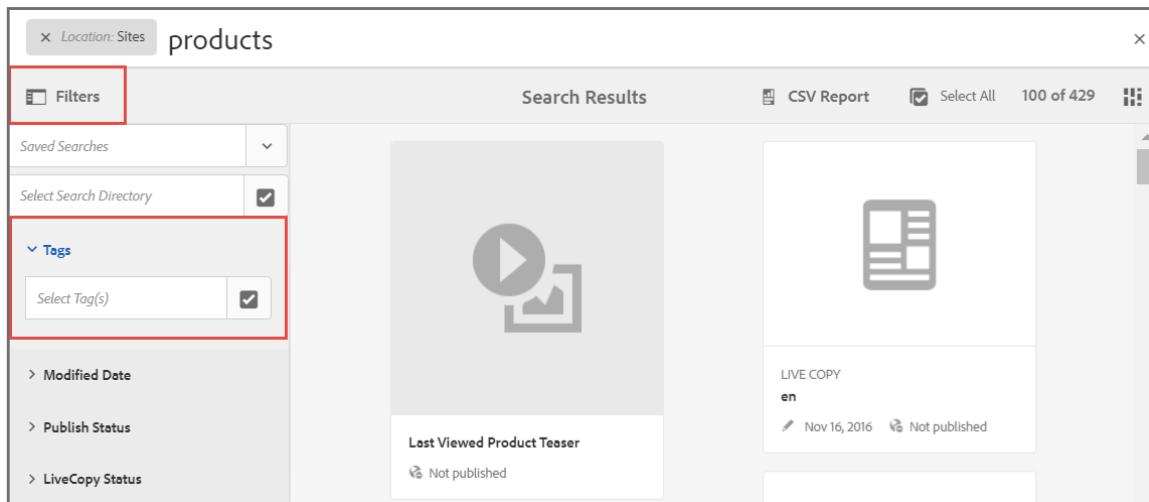


To verify if the tags are added to the **Products** page:

7. On the header bar, click the **Search** icon or press the **backslash (\)** key to search on AEM Sites. Type **products** and press Enter. The search results appear, as shown:

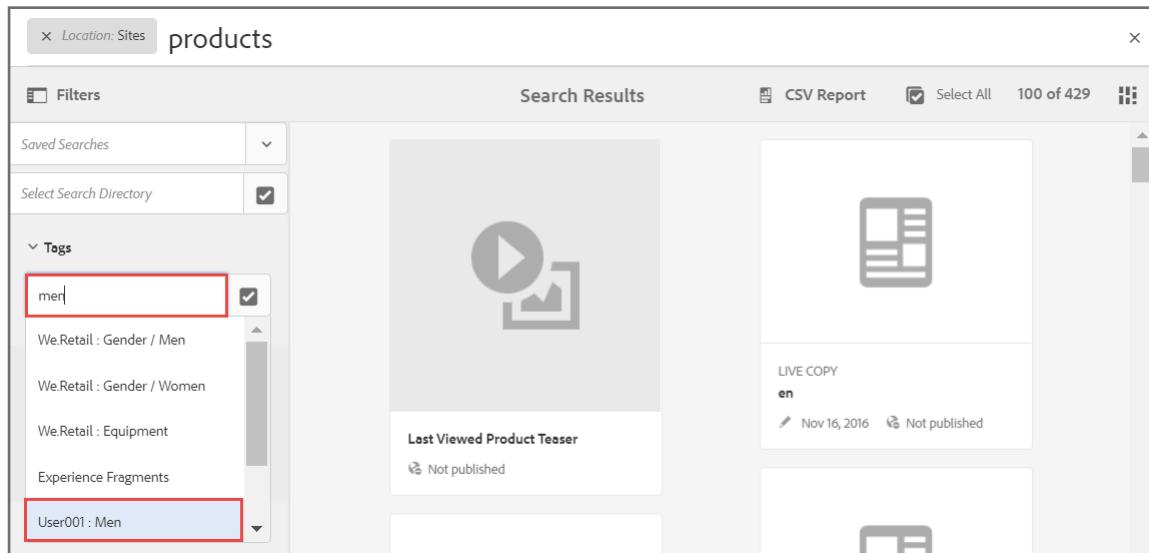
Thumbnail	Title	Published
	Last Viewed Product Teaser	Not published
	LIVE COPY en	Nov 16, 2016 Not published
	LIVE COPY Equipment	Nov 16, 2016 Not published
	Compact Chain Tool	LIVE COPY Not published
	Blast Mini Pump	Nov 16, 2016 Not published
	Comfort Gel Gloves	Nov 16, 2016 Not published

8. Click the **Rail Selector** and click **Tags**. A search field appears, as shown:



The screenshot shows the AEM search interface with the search term "products" entered. The left sidebar has a "Filters" button highlighted with a red box. Below it, the "Tags" section is expanded, showing a search input field "Select Tag(s)" with a red box around it. Other filter options like "Modified Date", "Publish Status", and "LiveCopy Status" are also visible.

9. Type **men** and select the **User0XX: Men** tag, as shown:



The screenshot shows the AEM search interface with the search term "products" entered. The left sidebar has a "Filters" button highlighted with a red box. Below it, the "Tags" section is expanded, showing a search input field "mer" with a red box around it. A list of tags is displayed, with "User001 : Men" highlighted with a red box. Other tags listed include "We.Retail : Gender / Men", "We.Retail : Gender / Women", "We.Retail : Equipment", and "Experience Fragments".

The **Products** page appears, as shown:

The screenshot shows the AEM search interface with the following details:

- Search Location:** Sites
- Search Tag:** User001 : Men
- Search Term:** products
- Search Results:** One item is displayed, highlighted with a red box:
 - Image:** A pair of green cargo shorts.
 - Title:** Products
 - Timestamp:** 14 minutes ago / Mar 18, 2019
- Filters:** Includes sections for Saved Searches, Select Search Directory, Tags (with a checked checkbox), Modified Date, Publish Status, and LiveCopy Status.
- Buttons:** Cancel (white button) and Save (blue button).
- Header:** CSV Report, Select All, 1 of 1.

Notice at the upper left of the search location (**Sites**), search tag (**User0XX:Men**), and search term (**products**) appear. These search parameters are narrowed by AND to produce the single result you see.

Workflows Configuration

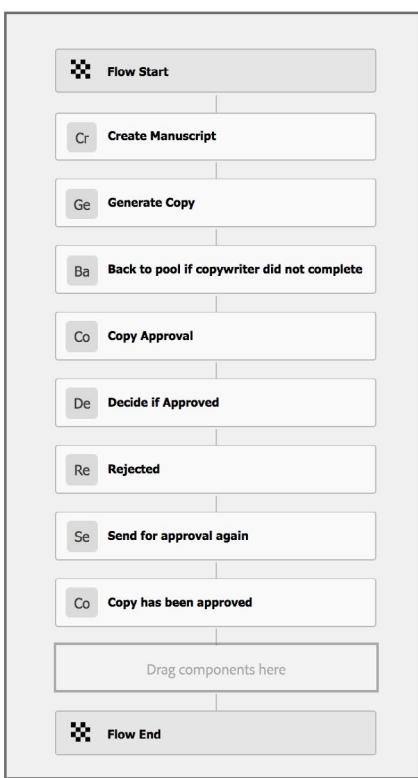
The Workflow function in AEM enables you to automate and coordinate tasks necessary to create, manage, and publish content.

The publishing process for digital content in an organization consists of several sequential or parallel tasks, such as reviews and edits, that need to be performed repeatedly. To improve the efficiency of the process, you can leverage the workflow capability in AEM. It provides the tools to automate steps programmatically if the tasks are to be executed in a completely automated manner. However, if you need your team members to work on specific tasks and make decisions, the task management system informs the AEM users to take necessary actions and allows them to move the workflow process to the next step.

Each workflow process can be modeled as a series of steps. The workflow console helps configure the workflow models by including a graphical workflow editor. AEM includes several predefined workflows. The workflows included fall roughly into the following categories:

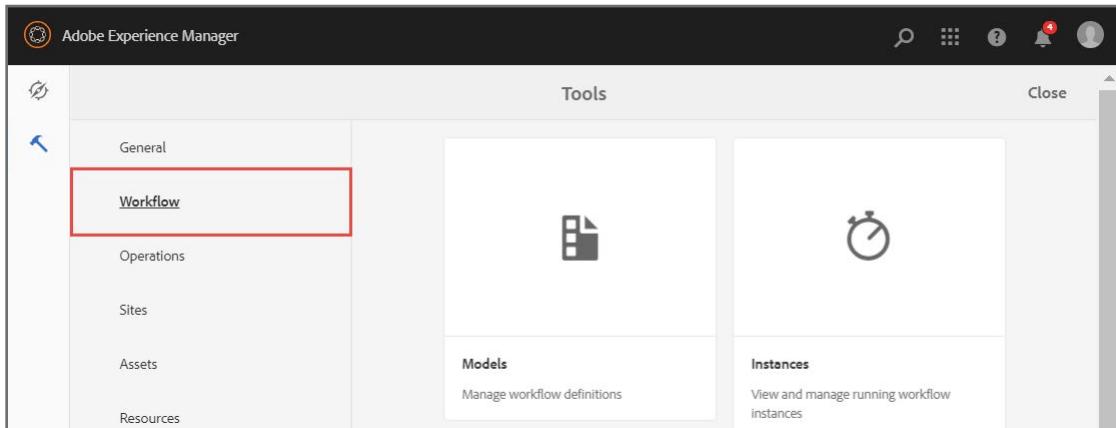
- Examples of how the workflow engine can be used
- Starting points to configure complex and customized workflows
- Workflow models used by AEM processes

Example of a custom workflow is shown below:



Workflow Console

You can access the Workflow console from the **Tools** menu, as shown:



From the Workflow console, you can:

- Model and configure processes with a graphical editor
- Monitor the current state of processes using the workflow engine
- Configure the events that will start workflow processes automatically

The Workflow console consists of:

- Models: Create, edit, or delete workflow models
- Instances: Display active instances of a workflow process. Terminate, suspend, resume and rename instances. View the log of the steps already performed per instance
- Launchers: Configure the automatic start of a workflow process
- Archive: Display the workflow instances that are completed and terminated. You can view the history of the workflow process instance.
- Failures: View failed workflow processes and errors associated with the failure; terminate, retry steps or complete a process

Workflow Steps

Workflow processes are modeled as a series of individual tasks. The tasks are called workflow steps in the workflow editor.

A task or a workflow step can be performed either by:

- The AEM server using a built-in user specifically for executing workflow steps automatically.
- An AEM user such as content editors, template editors, asset management users, and all the other roles performed by users.

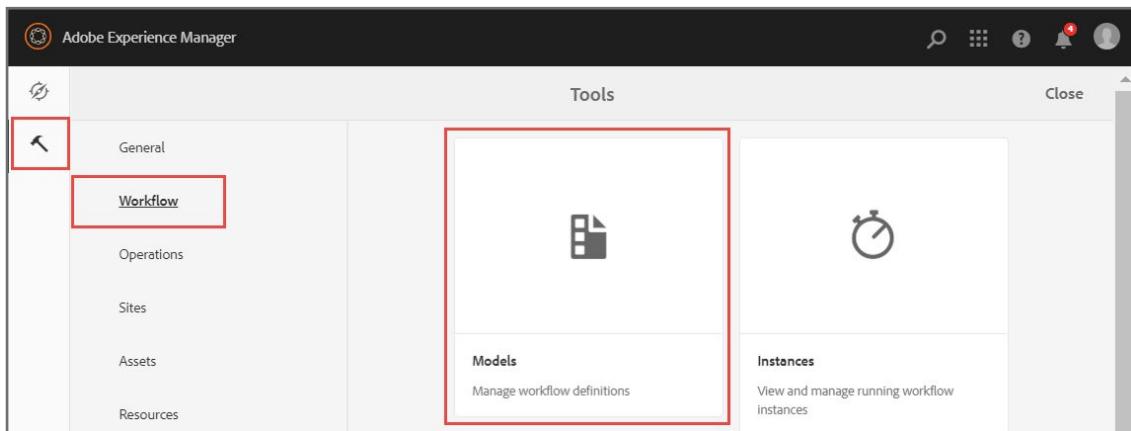
Workflow models implement the flow of a workflow process. It can be configured with the workflow editor. AEM includes a collection of available workflow steps, which are useful in common content management processes. They are grouped by topics in the editor's side panel:

- Workflow: Steps to configure the flow of the workflow
- WCM Workflow: Steps to configure the content management processes
- DAM Workflow: Steps to configure the Asset management processes
- Project: Steps to integrate the workflow engine with the AEM Project tools, specify roles and resource permissions, and view dashboard for status of workflow specific processes

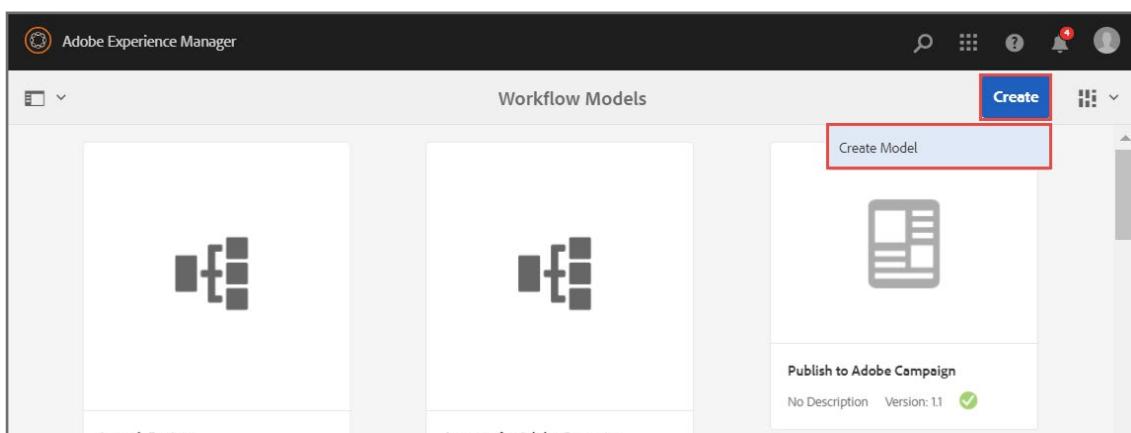
Exercise 3: Create a workflow to publish multiple pages

Scenario: As an author you have created pages and want to publish the pages automatically after the project manager has validated the content. You can create a workflow to perform the tasks of validating and publishing multiple pages at once with notification-based confirmations.

1. Navigate to the tab where the **Sites** console is open.
2. On the header bar, navigate to **Tools > Workflow > Models**, as shown:

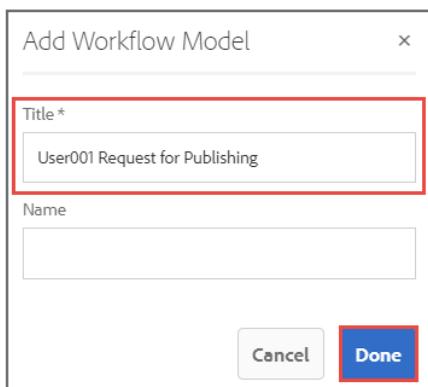


3. Click **Create** and select **Create Model** from the drop-down menu, as shown:

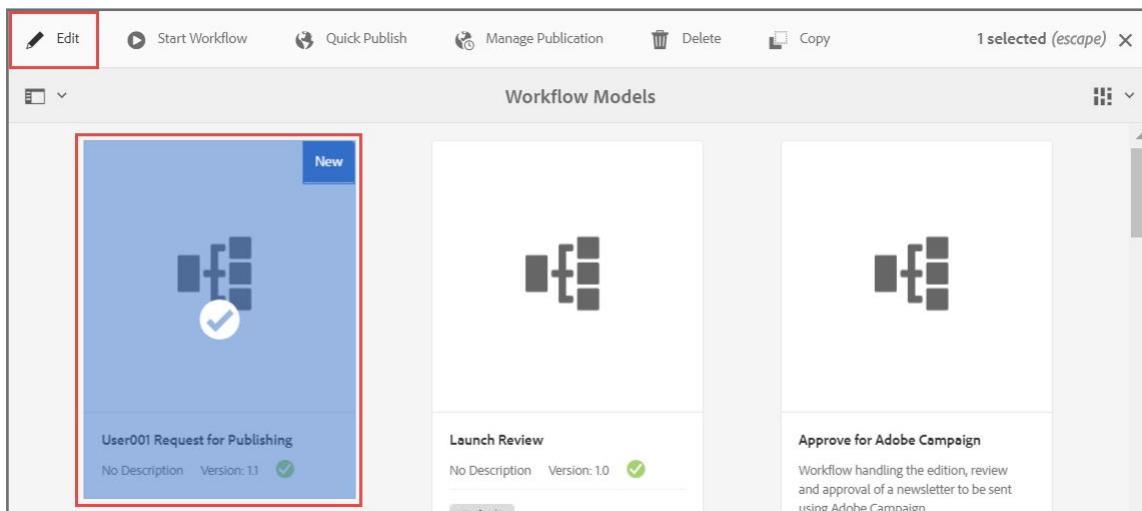


The **Add Workflow Model** dialog box opens.

4. In the **Title** field, type **User0XX Request for Publishing** and click **Done**, as shown:



5. Select the model you created and click **Edit**, as shown:

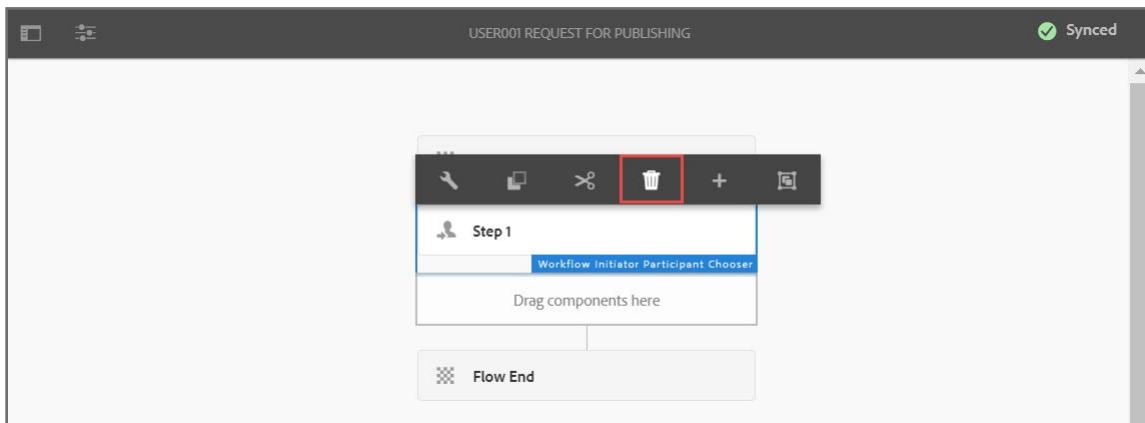


The workflow model opens in a new tab for editing.



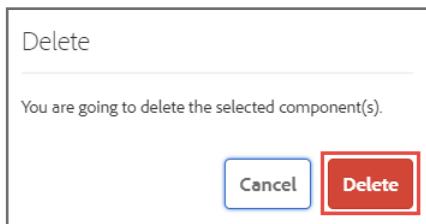
Note: By default, the workflow model will have the **Flow Start**, **Step 1**, and **Flow End** steps.

6. Select **Step 1** and click **Delete** from the toolbar, as shown:

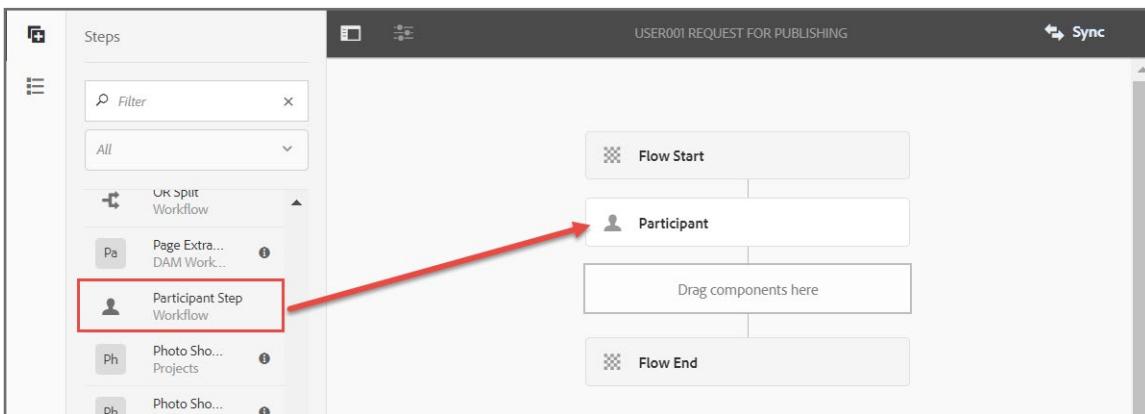


The **Delete** pop-up window appears.

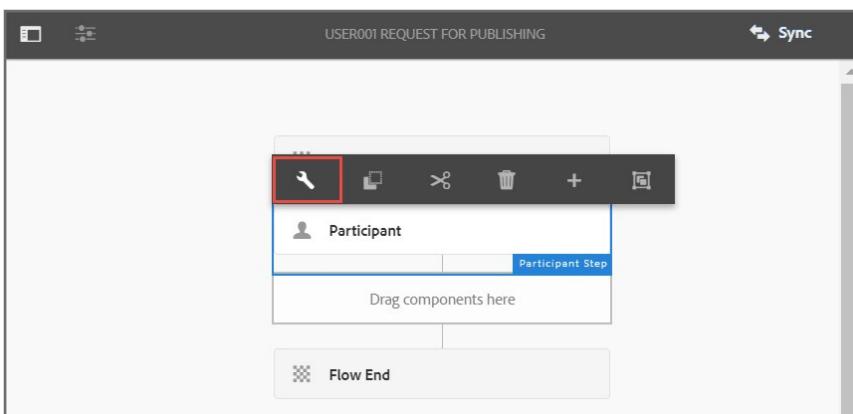
7. Click **Delete**, as shown:



8. Click **Toggle Side Panel** to open the side panel.
9. Scroll down the side panel and drag **Participant Step** onto the **Drag components here** area in the workflow model editor, as shown:



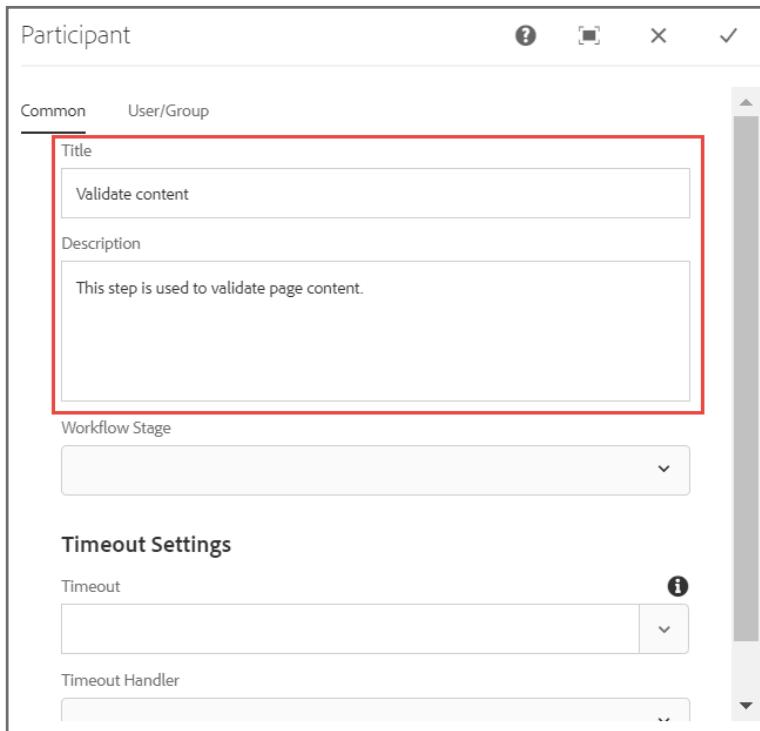
10. Select **Participant** and click **Configure** to configure the workflow step, as shown:



The **Participant** dialog box appears.

11. In the **Title** and **Description** fields, enter the following details, as shown:

- **Title: Validate Content**
- **Description: This step is used to validate page content.**



12. Click the **User/Group** tab on the **Participant** dialog box.

13. Type **user0XX** for the **User/Group** field to which this step is to be assigned, and click the **Done** icon, as shown:

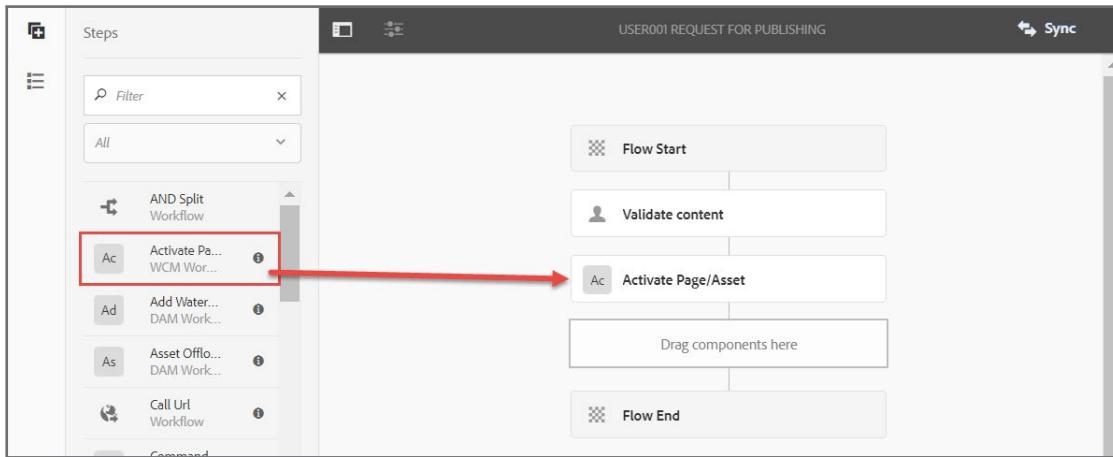


Tip: As you type your username, a drop-down menu appears with auto-complete to locate your username.

14. Click **Done** to save the changes to the workflow step.

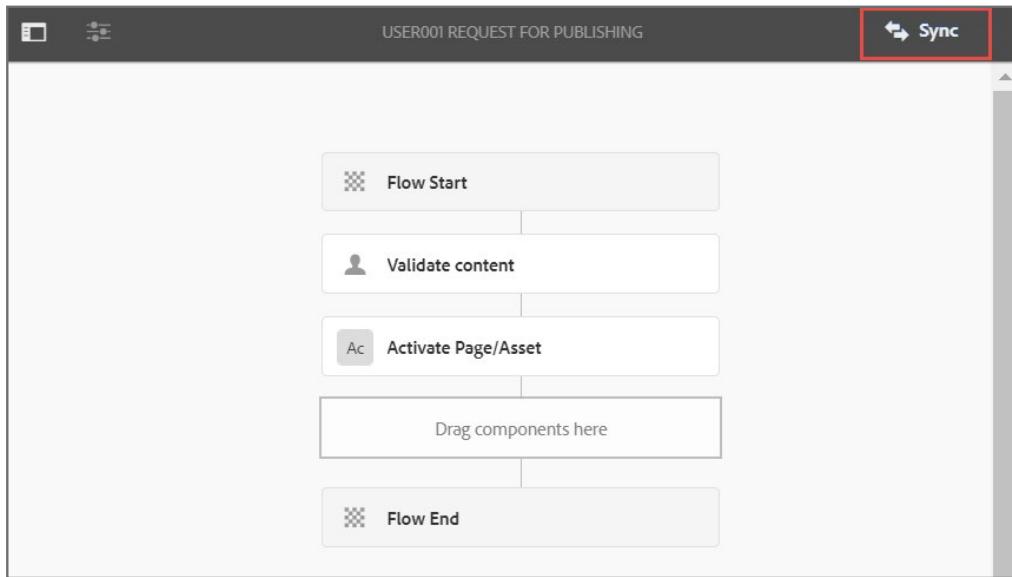
Note: The **User/Group** property has an asterisk next to it because it is required.

15. From the side panel, drag an **Activate Page/Asset** process step onto the workflow below **Validate Content**, as shown:

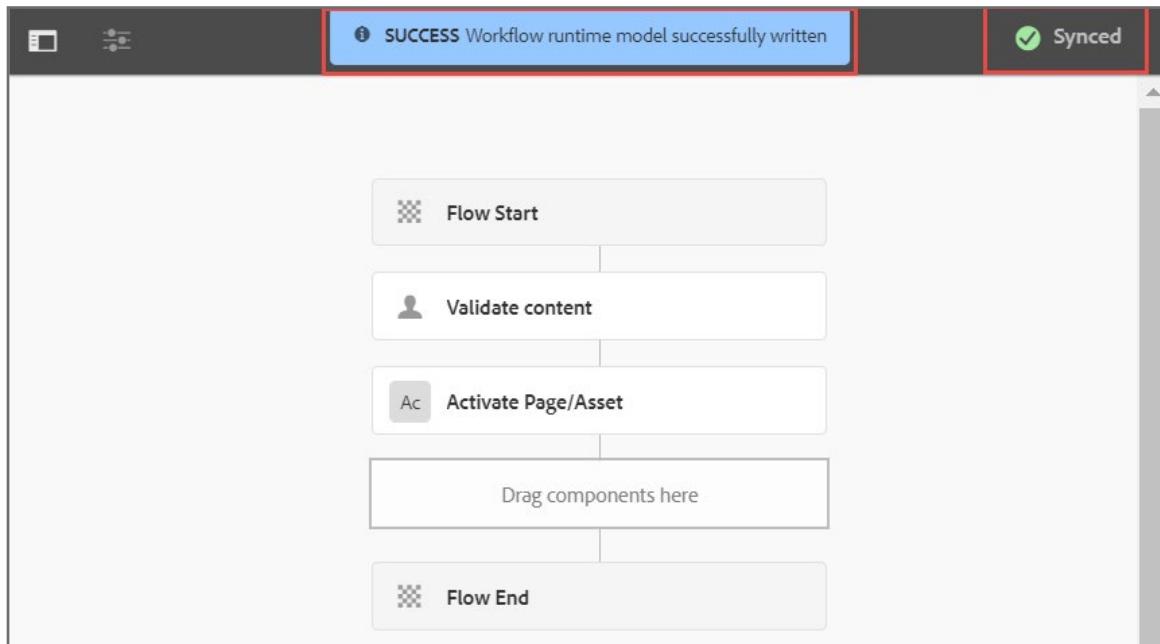


Note: The **Activate Page/Asset** process is a built-in step provided with AEM. You can use it as-is to publish a page or an asset. You do not need to configure this step.

16. At upper right of the workflow editor, click **Sync** to ensure your workflow model is saved and is ready to use, as shown:



A message **Workflow runtime model successfully written** appears, and notice the Sync button is displayed as **Synced** and changed into a dark button with a green checkmark icon, as shown:



17. Return to the Workflow Models tab and clear the **Workflow Model** selection you made earlier.

Tip: If you do not have this page open, skip to the next step.

18. Navigate to **Adobe Experience Manager > Navigation > Sites console > We.Retail > User0XX > English** and select the **User** and **Page with initial content** pages you created in Module 5 – *Editable Templates and Template Management*.
19. With the **User** and **Page with initial content** pages selected, click **Create > Workflow**, as shown:

The **Create Workflow** wizard opens.

20. Select the **User0XX Request for Publishing** workflow model you created.
21. In the **Workflow title** field, type **Publishing Pages**, and click **Next**, as shown:

Properties	Scope
Workflow model * User001 Request for Publishing	
Workflow title * Publishing Pages	
<input type="checkbox"/> Keep workflow package	
Package title *	

22. Select the check box beside the **Title** field to select both the pages, and click **Create**, as shown:

	Title	Modified	Published
<input checked="" type="checkbox"/>	User /content/we-retail/user001/en/user	5 days ago Administrator	Not published
<input checked="" type="checkbox"/>	Page with initial content /content/we-retail/user001/en/page-with-initial-content	Apr 2, 2019 Administrator	Not published

A success message indicating **Workflows are created for selected resources** is displayed.

23. After a few seconds, click the **Notification** icon on the AEM header bar. There should be two additional notifications related to page publishing, as shown. These notifications are known as Work Items.

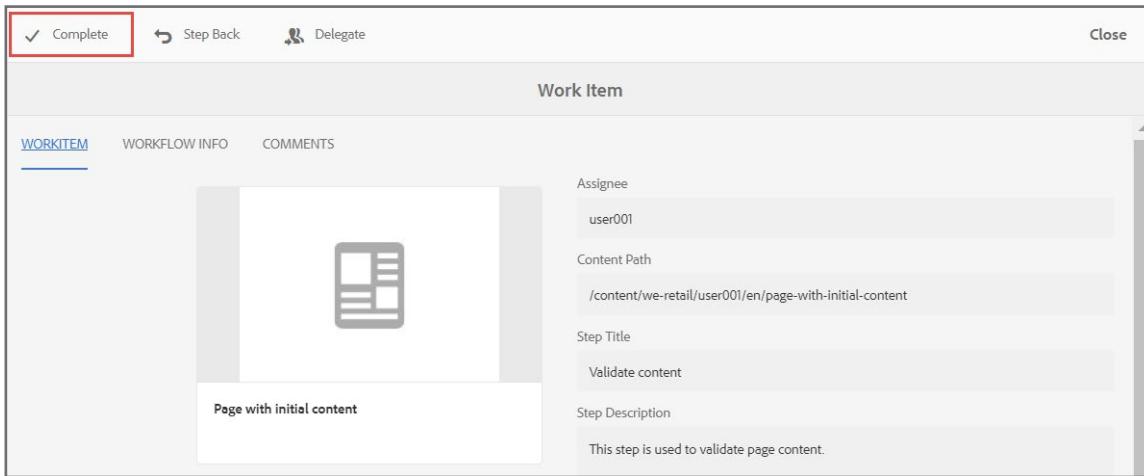
- Validate content**
This step is used to validate page content.
- Validate content**
This step is used to validate page content.
- Configure Analytics & Targeting**
You can opt in for Analytics and Targeting by selecting your configuration and then adding it to your pages.

[View All \(6 New\)](#)

Tip: If you do not see these notifications, or, you see two blank notifications entitled Step 1, go back and ensure your workflow model is synced properly, as described in Step 14. If that does not work, refresh your browser and check for the notifications again.

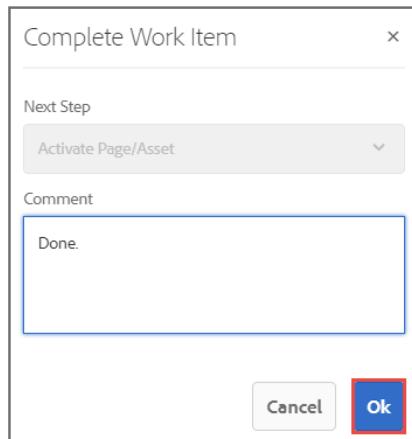
24. Click one of the **Validate Content** notifications. The **Work Items** page opens.

25. Click **Complete**, as shown, to validate the page content.



A **Complete Work Item** dialog box appears.

26. In the **Comment** field, type a comment if necessary and click **Ok**, as shown:



You will be taken back to the **Inbox**.



Note: When you click **Ok** in the dialog, the second step in your workflow executes and the page is published. Your Inbox will also be empty.

27. Perform the steps from 23 to 26 for the other work item from the notification.

28. To ensure that the pages are published, navigate to **Adobe Experience Manager > Sites > We.Retail > User0XX > English**.

29. Select the **User** page you published and observe the information section that the page is published a few minutes ago, as shown:

Title	User
Name	user
Modified	5 days ago
Modified By	Administrator
Language	English
Published	2 minutes ago
Published By	workflow-process-service

30. Similarly, verify if the **Page with initial content** page is published by observing the page information section.



Note: The time of the page published may vary.

31. (Optional) View the published pages on the AEM publish instance. If you are using an AEM Cloud environment for this training, skip ahead to Step 32.



Note: Steps 31 and 32 are optional, as you already did an easier method of verifying if the pages are published.

Perform the following steps if you need to view how the content looks on your publish instance. (Complete the below step only if you are not using an AEM cloud environment).

32. Ensure your publish environment is started and navigate to the below link in the browser to the pages:

<http://<host name>:<port number>/content/we-retail/user0XX/en/page-with-initial-content.html>
<http://<host name>:<port number>/content/we-retail/user0XX/en/user.html>



Note: Instructions for installing and starting your local publish environment are provided in the Appendix of this Student Guide.

33. (Optional): Open a new browser and navigate to the pages you published with the server URL which will be provided to you by your instructor.

It should be something like the ones given below (where ## is the instance number that your class is using and && is the country or region code you are in (us, emea, or apac):

<http://aem##-&&.adobeblab.com/content/we-retail/user0XX/en/page-with-initial-content.html>

<https://aem##-&&.adobeblab.com/content/we-retail/user0XX/en/user.html>

References

Use the following links for more information on:

- [Tags](#)
- [Launches](#)
- [Creating Workflow Models](#)

Appendix I

AEM Installation

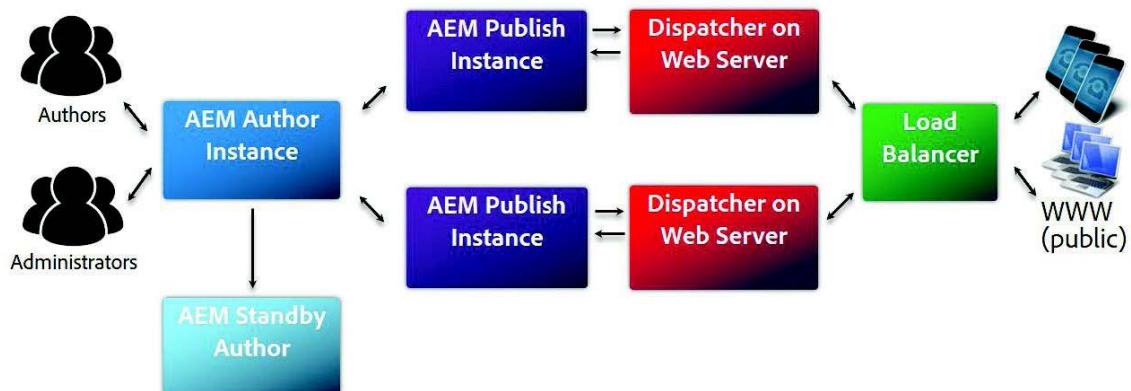
You can install AEM on most operating systems that support Java platform. All client interactions with AEM are done through a web browser.

Instances

In AEM terminology, an instance is a copy of AEM started on a server. AEM installations usually involve starting at least two instances:

- Author: An AEM instance is used to create, upload, and edit content and administer the website. After the content is ready to go live, it is replicated to the publish instance.
- Publish: An AEM instance that serves the published content to the public.

The following diagram depicts a typical AEM implementation:



 **Note:** The Dispatcher is a static web server, such as Apache httpd and Microsoft IIS, augmented with the AEM Dispatcher module. It caches webpages produced by the publish instance to improve performance.

Installation Prerequisites

To install AEM, you need:

- AEM installation and startup JAR file (also known as the quickstart file)
- A valid AEM license key properties file
- JDK version 1.8
- Approximately 4 GB of free space per instance
- Minimum 4 GB of RAM

During installation, you will notice that the JAR file creates a root folder on your system called **crx-quickstart**.

 **Note:** After the installation is complete, the quickstart file is referred to as the AEM startup file. Windows users may need to ensure their system's environment variables are set appropriately to run Java 1.8 before installing AEM. Open a command prompt and type java -version to ensure Java is set up properly. When you run the command, it should show the following result:

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\rhoades>java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
```

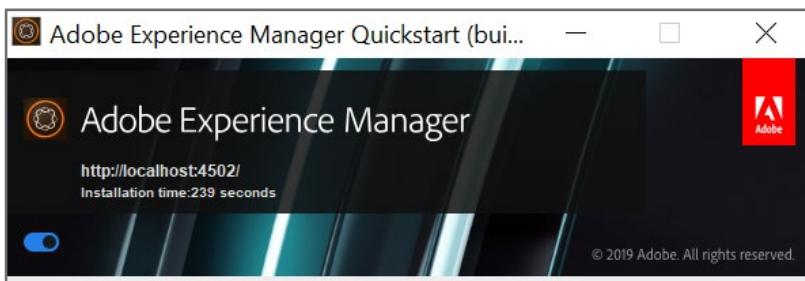
You can download Java 8 for your system from the following link:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Graphical and Command-Line Methods to Install AEM

There are many ways of installing and starting an AEM instance, two of which are:

- **Graphical Method:** This method involves using the *.jar file to start an AEM instance. In a Windows or Mac OS environment, you can double-click the `aem-author-4502.jar` file to start an author instance, or the `aem-publish-4503.jar` file to start a publish instance. The installation will take approximately 5–7 minutes the first time, depending on your system's capabilities. A dialog box similar to the one shown below (also known as the GUI) will pop up:



After AEM starts, the default browser will open a new tab automatically, pointing to AEM's start URL (where the port number is the one you defined on installation).

- **Command Line Method:** When you use the command line method to install and start AEM, you can provide additional performance-tuning parameters to the Java Virtual Machine (JVM) and perform other administrative tasks. On Windows, MacOS X, or *x, you can increase the Java heap size during the installation, which improves performance. When using the Command Line to install and start an AEM author instance prior to the installation, you may want to know which parameters are available to configure quickstart. Enter the following command in the command prompt to display a complete list of optional parameters:

```
java -jar aem-author-4502.jar -h
```

The AEM quickstart installer will show all the available command-line options without starting the server.

In addition, you need to tune the JVM used for starting AEM. Tuning the JVM is an important and delicate task and requires a more realistic environment in terms of resources (hardware and the operating system) and workload (content and requests). You can start the instance (author or publish) by using the following parameters:

- Xms: assigns the initial heap size

Default Value	64 MB for a JVM running on 32-bit machines, or 83 MB for 64-bit machines
Recommended	Specific to physical memory available and expected traffic
Syntax	-Xms512m (sets the initial heap size to 512 MB)

- Xmx: assigns the maximum size to which the heap can grow

Default Value	64 MB for a JVM running on 32-bit machines, or 83 MB for 64-bit machines
Recommended	Specific to physical memory available and expected traffic, but should be equal or greater than the initial size. To start AEM, it is recommended to allocate at least 1024 MB of heap size.
Syntax	-Xmx1024m (sets the maximum size for the heap. In the example, you are letting it grow to 1024 MB. However, in production, this should be higher because AEM consumes a lot of resources).

Example:

```
java -Xms512m -Xmx1024m -jar aem-author-4502.jar
```

Using the Command Line to Install and Start an AEM Publish Instance

If you want to install and start the AEM publish instance using a command prompt, navigate to the directory containing the quickstart jar file (such as `\adobe\AEM\publish`), and enter the following command to install the publish instance:

```
java -jar aem-publish-4503.jar
```

Using the Command Line to Start AEM with the *nosamplecontent* Run Mode

A run mode is a collection of AEM configuration parameters that enable you to tune the AEM instance for a specific purpose. *nosamplecontent* is a predefined run mode available in AEM.



Note: The author and publish instances are the same software stack but two different run modes.

When you install an AEM instance first time without any sample content (AEM includes the reference site content), you should use *nosamplecontent* in the command line, as shown below:

```
java -jar aem-author-4502.jar -r author, nosamplecontent -gui
```

The **-r author** parameter helps set the instance as the author run mode. The **-gui** option turns on the GUI mode that shows the AEM icon window on your system. Therefore, the instructions you provided here specify two run modes, author and *nosamplecontent*. The syntax to specify multiple run modes is:

```
-r runmode1, runmode2, ...
```

You may use the runmode options to install AEM on a production environment, which does not require reference site content. Also, note the *nosamplecontent* option is available only on the first installation of the instance. Run modes are covered in an additional training course in more depth (OSGi Configurations & Run Modes).

Additional Method to Start AEM: Batch Files

After you install AEM using a graphical or command line method, you can use the built-in batch files in the **crx-quickstart** directory to start AEM. You can also configure the start up and additional options using these batch files.

Navigate to the install directory and then to the **crx-quickstart** directory that was created as part of installation. Within `\crx-quickstart\bin` subdirectory, there are batch files (on Windows systems) available for you to start or stop AEM and get status information on the server. The server parameters provided in these batch files are documented using comments or commented-out as appropriate in the case of options that you may want to set for your instances.

Exercise 1: Install AEM author and publish instances

Scenario: As a developer or an administrator, you need to install a development instance of AEM on a local machine and start it, using both the quickstart JAR file and the command line method.

In this exercise, you will perform the following tasks:

1. Install and start an AEM author instance using the graphical method
2. Install and start an AEM publish instance using the graphical method
3. Start an AEM author instance using the command line method

Task 1: Install and start an AEM author instance using the graphical method

In this task, you will install and start the AEM author instance on port **4502** by double-clicking the ***.jar** file.



Note: If you are attending a v/ILT class using ReadyTech, steps 1 through 3 are completed for you.

1. On your file system, create a folder structure where you will store, install, and start the AEM author instance. For example, in:
 - Windows: **C:/adobe/AEM/author**
 - MacOS X: **/Applications/adobe/AEM/author** or *x: **/opt/adobe/AEM/author**
2. Copy the `aem-quickstart-6.4.0.jar` and `license.properties` files from the location provided by your instructor, to the newly created directory.
3. Rename the `aem-quickstart-6.4.0.jar` file to `aem-author-4502.jar`:
 - `aem` signifies Application
 - `author` signifies the Web Content Management (WCM) mode in which AEM will start (in this case, author)
 - `4502` signifies the Port AEM will start in



`license.properties`



`aem-author-4502`

10/17/2018 2:34 PM

4/4/2019 11:07 AM



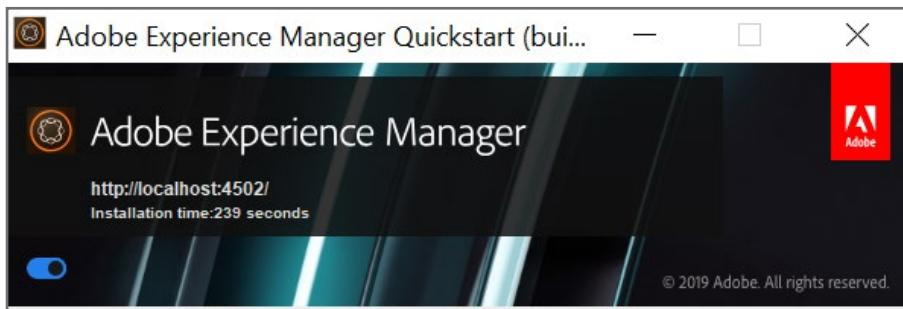
Note: You can, therefore, control the way AEM is installed by defining properties in a file name.

- Double-click the `aem-author-4502.jar` file (located at `C:\adobe\AEM\author` in Windows, if you are using ReadyTech). Installation will take approximately 5–7 minutes depending on your system's capabilities.



Note: When starting for the first time, the quickstart `*.jar` will notice that it needs to install AEM. By renaming the file, you use a convention of passing the instance name (Webpathcontext) and port number through the file name, so no user interaction is needed during the installation process. If no port number is provided in the file name, AEM will select the first available port from the following list in this specific order: 1) 4502, 2) 8080, 3) 8081, 4) 8082, 5) 8083, 6) 8084, or a random port.

- After the AEM author instance has started successfully, the start-up screen (the GUI) will change to similar to the one shown below:

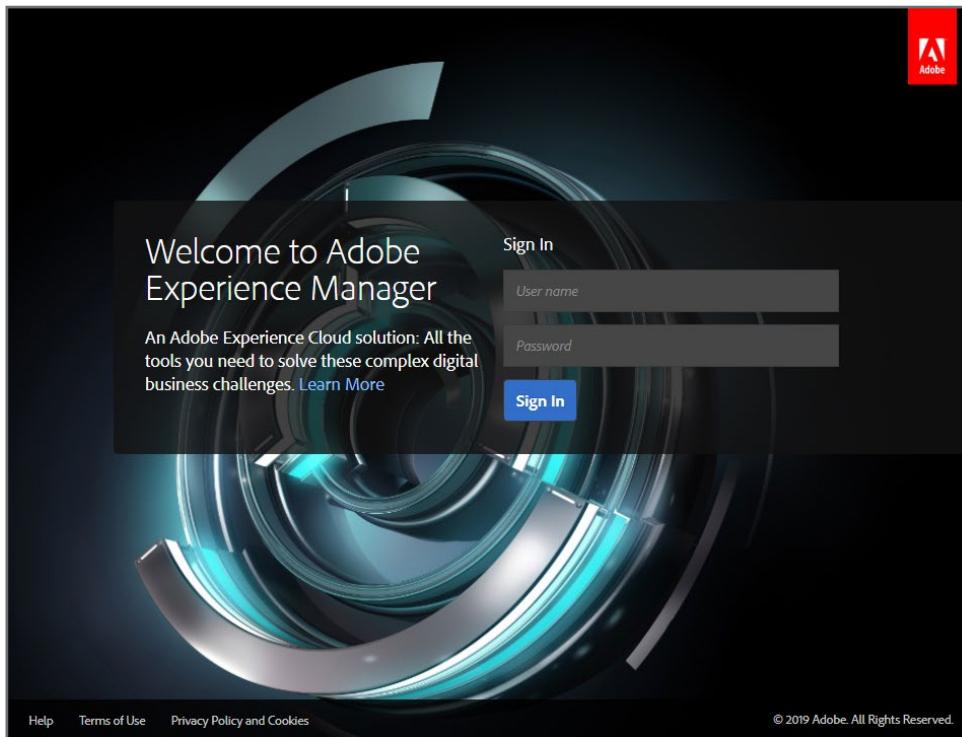


You have now completed the installation of AEM.



Note: To stop the AEM instance, click the **ON/OFF** toggle button in the GUI. Each time you want to start the AEM author instance, follow the same procedure in step 4 to start it. However, on the second time, the startup will be faster by one minute or less, as the initial installation task is performed. In addition, after AEM starts, the default browser will automatically open to AEM's start URL (where the port number is the one you defined on installation). For example: <http://localhost:4502>

A **Sign In** screen is shown below:



6. Enter the **Username** and **Password** and click **Sign In**. If you are using a ReadyTech instance or local installation, use the following credentials to sign in:
 - User name: **admin**
 - Password: **admin**



Note: Notice, a **crx-quickstart** directory is also created on your computer as displayed below:

	license.properties	10/17/2018 2:34 PM
	aem-author-4502	4/4/2019 11:07 AM
	crx-quickstart	4/16/2019 7:16 PM

This is the extracted repository created upon the installation of AEM.

Task 2: Install and start an AEM publish instance using the graphical method

In this task, you will install and start an AEM publish instance on port 4503. The publish instance is a separate run mode where the published content resides for access on the web.



Note: If you are attending a v/ILT class using ReadyTech, steps 1 through 3 are completed for you. Skip ahead to step 4.

1. Create a folder structure on your file system where you will store, install, and start the AEM publish instance. For example, in:
 - Windows: Create **C:/adobe/AEM/publish**
 - MacOS X: Create **/Applications/adobe/AEM/publish** or ***x: /opt/adobe/AEM/publish**
2. Copy the `aem-quickstart-6.4.0.jar` and `license.properties` files from the location provided by your instructor to the newly created directory.
3. Rename the `aem-quickstart-6.4.0.jar` file to `aem-publish-4503.jar`:
 - `aem` signifies Application
 - `publish` signifies the Web Content Management (WCM) mode in which AEM will start (in this case, publish)
 - `4503` signifies the Port AEM will start in

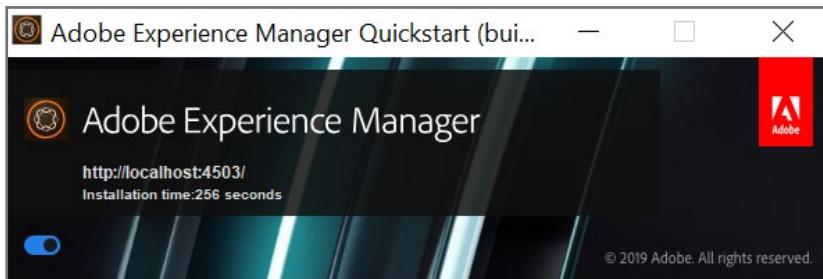
	aem-publish-4503	4/4/2019 11:07 AM	Executable Jar File
	license.properties	10/17/2018 2:34 PM	PROPERTIES File



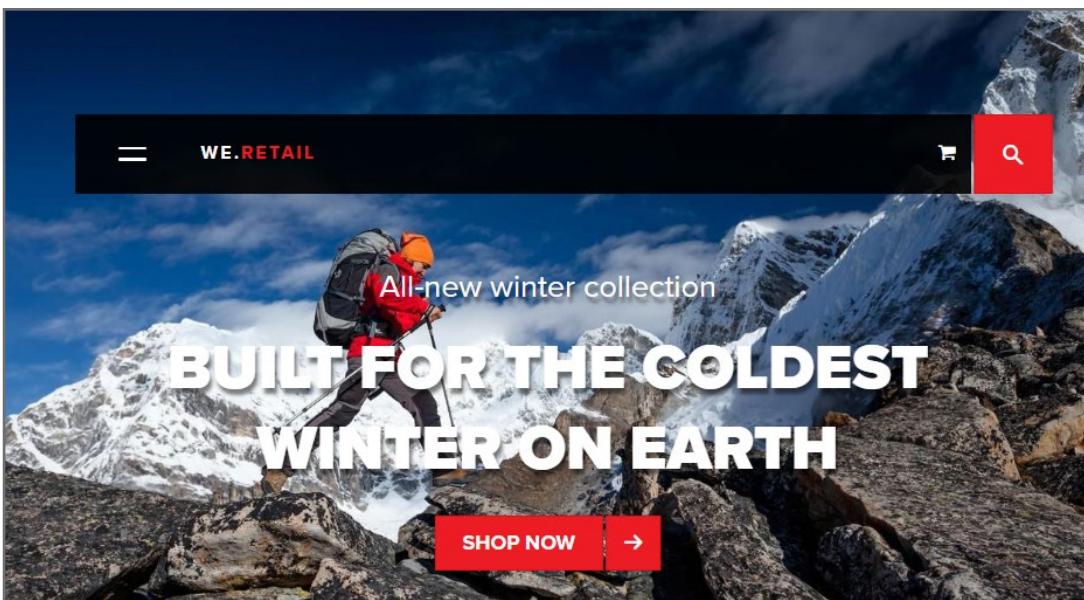
Note: If you have multiple author and publish instances, a best practice to consider is using an even/odd numbering paradigm for port numbers. So, the author instances would be 4502, 4504, 4506, ..., and the publish instances would be 4503, 4505, 4507, ...

4. Double-click the `aem-publish-4503.jar` file (located at **C:\adobe\AEM\publish** in Windows, if you are using ReadyTech). Installation will take approximately 5–7 minutes depending on your system's capabilities.

After the initial installation, each time you start an AEM instance (author or publish), it will take 1–2 minutes. After the AEM publish instance is started successfully on port 4503, the start-up screen (the GUI) will change to as shown below:



The AEM We.Retail page opens in a new tab on the default browser (where the port number is the one you defined on installation). For example, <http://localhost:4503>



 **Note:** We.Retail is a reference implementation that illustrates the recommended way of setting up an online presence with AEM. While We.Retail illustrates a retail vertical, the way the site is set up can be applied to any vertical. Only the product catalog and cart features are retail specific.

 **Tip:** You do not need to manually sign in as the publish instance loads the We.Retail reference site immediately.

You have now successfully installed and started both AEM author and AEM publish instances on localhost. To start the AEM instance in future, double-click the renamed *.jar file (in Windows).

Task 3: Start an AEM author instance using the command line method

In this task, you will start and stop an AEM author instance using the command line method.

1. Open a command prompt in the directory where the quickstart *.jar file is located to start the author instance. If you are using ReadyTech, this is **C:\adobe\AEM\author**.

Tip: To open a directory in Windows Explorer in the command-line, select the directory, hold down the Shift key, and right-click. Then, you will see an option (Open command window here) to open that directory in a commandline window.

Note: You already have an author instance and a publish instance started. To stop the author instance (if it has started), click the **ON/OFF toggle** button in the GUI window.

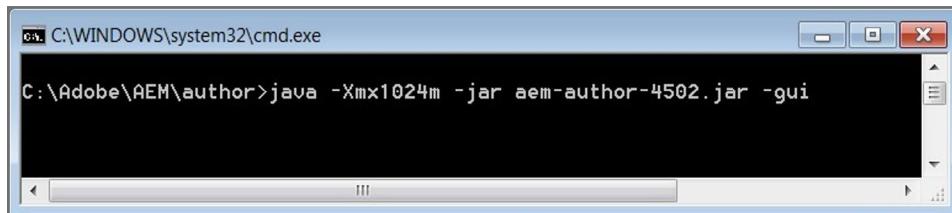
2. Prior to the installation, you may want to know which parameters are available to configure the AEM quickstart. Enter the following command to display a complete list of optional parameters you can use to install and start AEM (this command will not install and start AEM):

```
java -jar aem-author-4502.jar -h
```

Tip: The command may not work if the quickstart file is named differently. If you are using a ReadyTech instance for this training, the file name should be the same as displayed in the command above. If you are not using ReadyTech, the quickstart filename may differ, so anytime you run the commands, ensure you use the exact file name.

3. Start the author instance again by allocating 1024 MB to the JVM by using this command, as shown:

```
java -Xmx1024m -jar aem-author-4502.jar -gui
```



The AEM instance should start up again with a command window available to view the details of the startup. In addition, the GUI window will be available for you to shut down AEM.

4. Instead of using the GUI to stop the AEM author instance, use the command window. For Windows, type **Ctrl+C** in the command window to stop the AEM author instance.

Appendix II

Search Engine Optimization

A huge percentage of website visitors view websites referred by a web search engine. Therefore, web publishers need to consider their search engine ranking and the requirements of search engine indexing algorithms for a favorable ranking, when creating websites.

Search Engine Optimization (SEO) of a website requires ongoing efforts to yield a tangible benefit. The involvement of expert knowledge is recommended to assist with any serious effort to improve search engine indexing and by extension result ranking.

Search engines analyze a website by downloading it entirely to their own servers. To influence the indexing mechanism, web publishers can optimize the web address (technically known as Uniform Resource Identifier (URI)) and the content on the HTML page.

With AEM, the system administrators must address some aspects of SEO in the IT department. Content authors can help the SEO effort by creating optimized web content and by using Adobe Experience Manager's (AEM) editing tools correctly.

Generally, the AEM authors should consider:

- URI structure
- HTML meta information
- HTML elements and attributes
- The actual content

Methods to Optimize the URI

Information Architecture

To be successful in SEO, you should think of a well-structured site structure in AEM. The directory structure and directory names can help the search engine with the classification of the content on the pages.

The structure of the address of a webpage, the URI, depends on the webpage hierarchy in the content repository. If you view the page names in the AEM Sites console, you can see how the page names are mapped to the URI in the address bar of the browser.



Page Names

Search engines have a particular URI format for using several words together. In such cases, words are separated with hyphens. Therefore, if you have a webpage name that contains several words, as a best practice, you must ensure to replace the white space between the words with a hyphen. If you leave the name property empty, AEM derives the name from the mandatory title property and formats the page name by adding hyphens.

Redirects

If a page is moved to a new location, the URI changes. As a best practice, you must add a redirect directive in the vacated location. As a content author, you can do so by adding a Redirect property to the page properties or using the Redirect template. With both the methods, a response with the standard status for redirects in HTTP, 301, informs the users that the location is moved.

Length of the Web Address

When creating websites, you must try to keep the URLs short. System administrators can help with this aspect by implementing rewriting rules. Content authors can create short URLs on an ad-hoc basis by using the Vanity URL feature in the advanced tab of the page properties.

To use the vanity URLs in a production environment, the production system needs to be configured to support that feature. The system administrator of your website can advise whether it is available.

Multilingual Web Addresses

On international websites, you must translate the terms in the URL to be optimized for the local search engines. The alias property on the advanced page property tab can be added to translate the page or folder name in the Sites console.

Methods to Optimize the Webpage Content and HTML code

To optimize the actual content, you must consider the HTML tags and the content together. Some HTML elements have higher importance than other elements.

Title Element

The page properties help edit the title property, which sets the content in the title tag in HTML. The title tag has above average weight and should be paid attention to. In SEO efforts, it is often required that the title should be displayed on the page and the title tag should be diverged. In such a case, you can use the Page Title in the page properties.

The screenshot shows the 'Basic' tab selected in the top navigation bar. The main content area is titled 'Title and Tags'. It contains fields for 'Title *' (set to 'English') and 'Tags' (with a checked checkbox). There is also a 'Hide in Navigation' checkbox. Below this section is a 'More Titles and Description' group containing fields for 'Page Title', 'Navigation Title', 'Subtitle', and 'Description'. At the bottom is a 'Vanity URL' section with a 'Vanity URL' field, an 'Add' button, and a 'Redirect Vanity URL' checkbox.

META Elements

You can configure several meta element values in the page property. The tag property is used to set a META element of type keyword. The description property is used to set the content for the description attribute in the HTML Meta element of type description. Title and description will both be reflected in the search engine results page in a search engine, like Google.

Optimize HTML Elements in the Content Area

You can optimize the content body on a webpage. As a best practice, you should reuse the defining terms of the page in several locations, such as:

- In page title
- In keywords
- In the title component with the element H1 selected
- In the page names with the terms separated with hyphens

If an image is present on the page that supports the content, the value of the alternative text should also mention one more time the term to which the page is optimized towards.

An asset in AEM can have a title and a description property. Both can be considered as an opportunity to reuse the defining terms of the content again.