

# Building a Web Experience Foundation with AEM, Target, and Analytics

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## Lab Overview



In this lab, we will be integrating AEM with Adobe Analytics and Adobe Target. In doing so, we will leverage Adobe I/O and Launch, by Adobe. We will use Adobe I/O as it is the new centralized hub for integrations into Adobe's products and

technologies. We will use Launch because tag management enables marketers to easily connect and manage their Experience Cloud and third-party solutions without developer intervention.

Integrating these solutions will provide us with the following value:

- We will be able to leverage all of the value of the Adobe Target, Adobe Analytics, and Adobe Launch solutions on our website.
- We will be able to publish Experience Fragments, reusable blocks of content, from Adobe Experience Manager to Adobe Target to use in our personalization and optimization activities.
- We will be able to view performance metrics for our web content directly in the AEM UI. This allows our content authors to have access to analytics data even if they have not been trained in or do not have access to Adobe Analytics.

## Key Takeaways

1. How to leverage extensions, rules, and data elements in Launch to manage your Experience Cloud deployment
2. How to use Adobe I/O to integrate Adobe Launch with AEM
3. How to integrate AEM with Analytics and Target directly
4. When and why to use Adobe Launch for integration vs AEM's legacy integrations
5. How to use AEM Experience Fragments in a Target personalization activity
6. How to view Analytics data directly in AEM

## Prerequisites

We have configured this lab environment for you so that you have everything you require to complete these exercises. If you would like to walk through this lab again at home, we have provided a section at the end that covers how to configure these prerequisites in your own environment. To go through these pre-requisites, you will need access to:

- AEM
- Analytics
- Target
- Launch, by Adobe
- The Adobe I/O Console for your Experience Cloud organization

## Tips for the lab

If you do not already have a lot of experience with the solutions, do not worry, our teaching assistants are here to help.

Additionally, we have provided you with some basic guidance for getting around that you may find helpful.

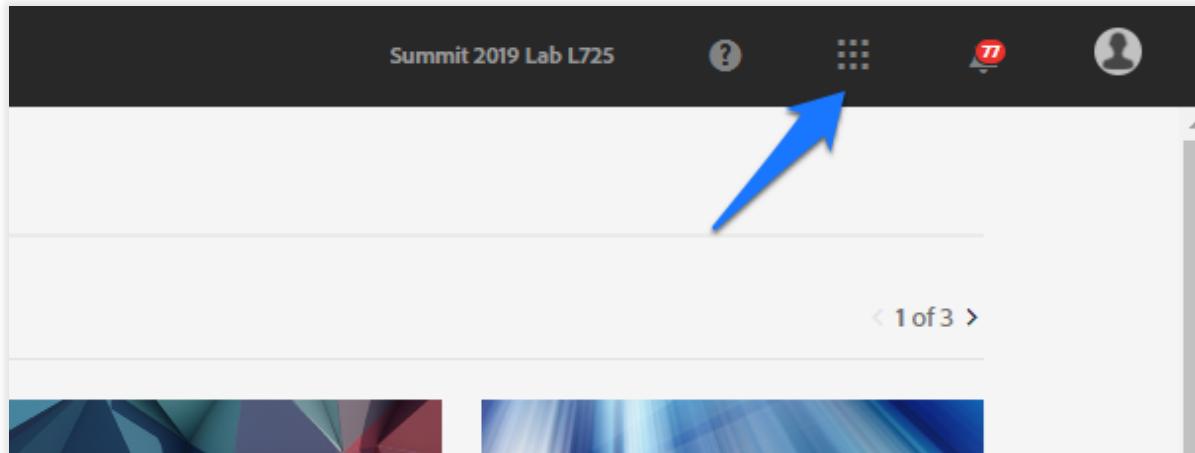


## Accessing the Experience Cloud

We have added browser shortcuts to Chrome for the Experience Cloud solutions that we will be using today. You can also access our Experience Cloud account directly by pointing your browser to <https://summit2019l725.experiencecloud.adobe.com>.

## The solution switcher

Throughout the lab, we will often switch between Experience Cloud solutions. To access the solution switcher from any of the SaaS-based Experience Cloud solutions, click on the **solution switcher icon**.



Note that Experience Manager is not connected to our other solutions through the solution switcher. Thus, Experience Manager is not illuminated in our SaaS-based solutions and our SaaS-based solutions are not illuminated in Experience Manager. During the lab, we will be accessing Target and Activation. All other options can be ignored.

## Accessing Experience Manager

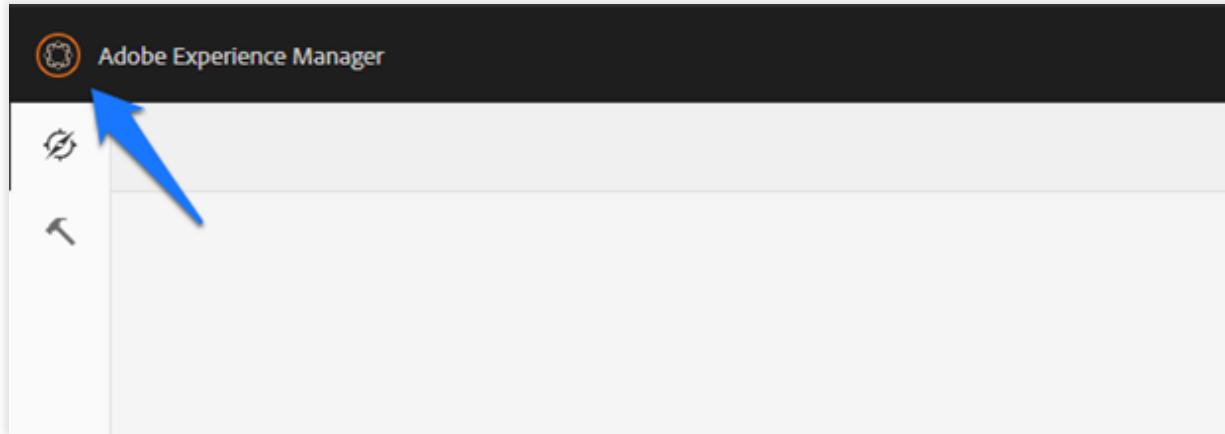
We have installed two different Experience Manager environments on your lab machine: an author environment and a publish environment. The author environment is where we will author our content and configure our integrations. Our authored content and configurations will be **\_published**, **\_activated**, or **replicated** to our publish environment. These three terms are all synonymous. The publish environment in turn will serve our authored website.

At any time, you can access these environments in your web browser by using the provided bookmarks or directly at <http://localhost:4502> for the author environment and <http://localhost:4503> for the publish environment. When prompted to login to the author environment, you may use Experience Manager's default username and password: **admin** and **admin**.



## Getting "Home" in Experience Manager

Whenever you are in one of Experience Manager's consoles and would like to access the central menu, just click on the Adobe Experience Manager icon in the top left of your screen or accessing <http://localhost:4502/aem/start.html>.



**NOTE** - This will be referenced a lot throughout this lab.

If you currently have an item selected in one of the Experience Manager consoles, it is possible that you will not be able to see this icon. In these cases, you can click on the "X" icon in the top right of your screen to deselect all items and dismiss the contextual menu that runs across the top of the screen.

## Changing your view in Experience Manager consoles

Experience Manager's consoles provide several views of your content. In most of our exercises, we have shown how to complete the activity using *list* or *column* view. If your view does not match our instructions, you can change your view.

1. In the current Experience Manager console, you will see an icon in the top-right that matches your current view.
2. At any time, you can click this icon to choose one of the other views that is available.

## Using omnisearch in Experience Manager

Experience Manager provides a feature called **omnisearch** that is useful for navigating the system. In many steps throughout the lab, rather than clicking to navigate to a location, you can click on the magnifying glass in the top bar and type the location that you would like to navigate to. This may come in handy if you have gotten lost and are trying to find a particular screen or console. For example, rather than clicking on **Tools &gt; Cloud Services &gt; Adobe Launch** Configurations to navigate to the

Launch configurations, you can click the magnifying glass, type **Adobe Launch Configurations**, and click on the link that is returned.

# Lesson 1 – Launch Configurations

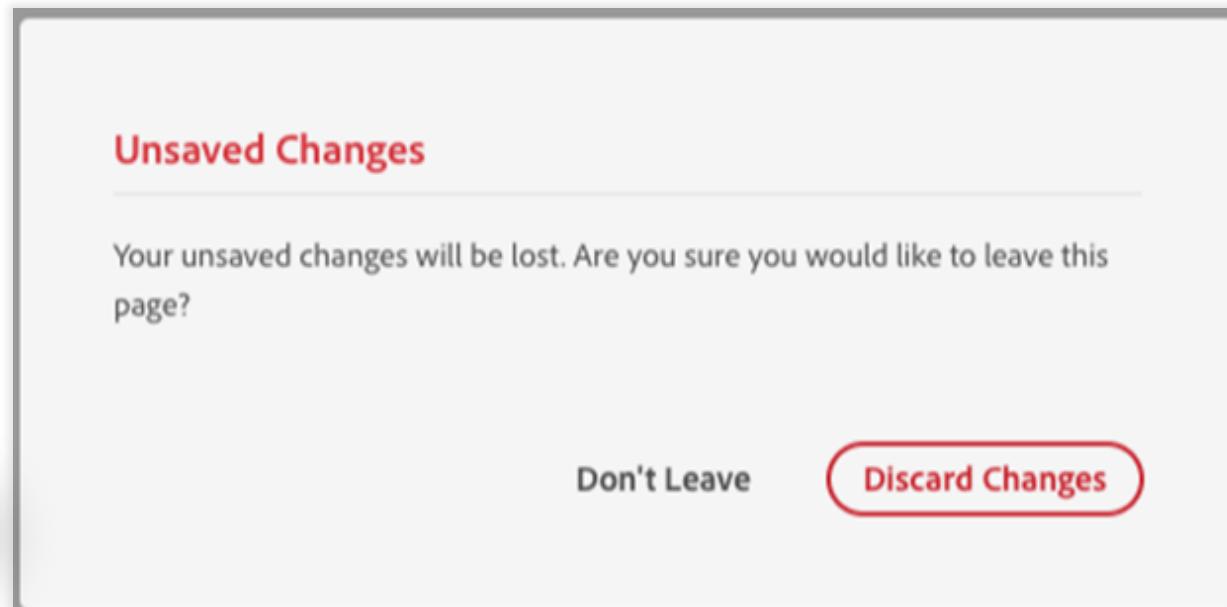
## Objective

1. Understand Launch Extensions, and how they are different from Tools in DTM.
2. Understand Data Elements, and why we use them.
3. Understand Rules, the Rule Editor, and how to use Rules to configure and execute actions against our Experience Cloud solutions.

## Lesson Context

In this lesson, we will review the configurations that have been implemented in preparation for this lab. This will allow you to understand the important role that Launch plays in our Experience Cloud deployment. We will be looking at various settings that have been put in place in preparation for this lab, but since we are all sharing an environment, we will not be updating any of them.

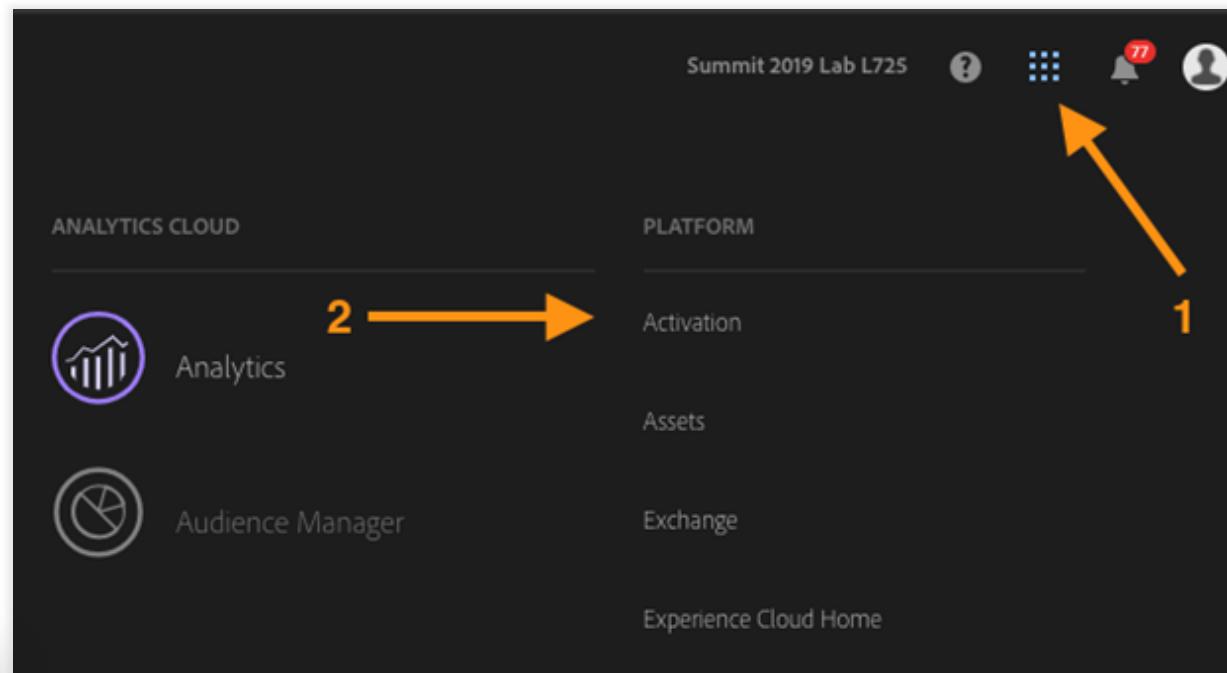
As you close each screen, you may be prompted that you have unsaved changes. In these cases, please choose to **Discard Changes**.



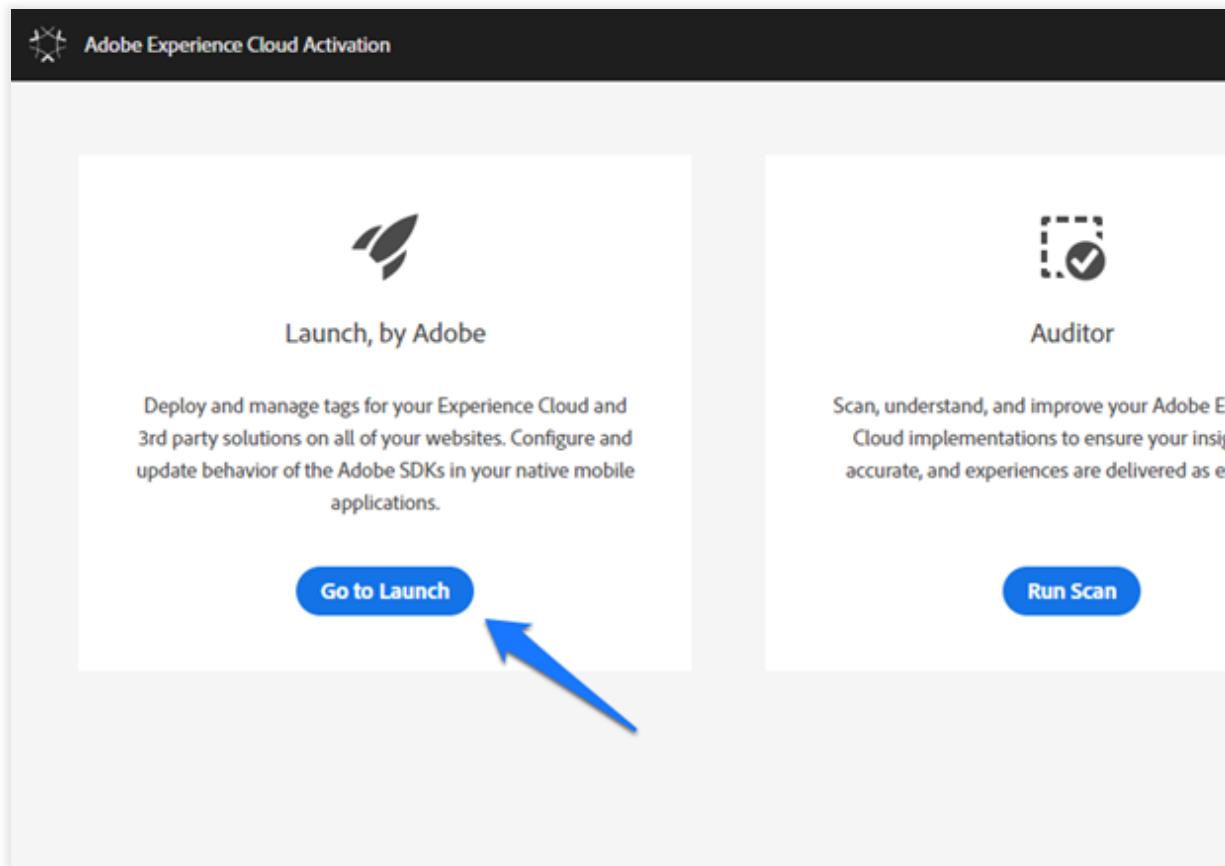
### Exercise 1.1 - Review Launch Extensions

One of the biggest differences that Launch has introduced from its predecessor, DTM, is the concept of *extensions*. Adobe has provided extensions for each of the Experience Cloud products that we implement in Launch, but third-party partners can also implement extensions for their products, much like an App Store for your website. This decentralization is powerful in that it allows Adobe's teams and partner ecosystem to scale independently of the Launch team. In this exercise, we will review the extensions that have been installed for you.

1. Login to the Experience Cloud by clicking the *Experience Cloud* bookmark in Chrome or by going to <https://summit2019l725.experiencecloud.adobe.com>.
2. Click the button that is labeled *Sign in with an Adobe ID*.
3. Click the button that is labeled *Adobe ID Personal Account*.
4. Enter an *Email address* of [ireasor+summitl725@adobetest.com](mailto:ireasor+summitl725@adobetest.com) and a *Password* of **Batman\_Triplet\_Insignia**.
5. Click *Sign In*.
6. Once logged in, click on the solution switcher and select *Activation*.

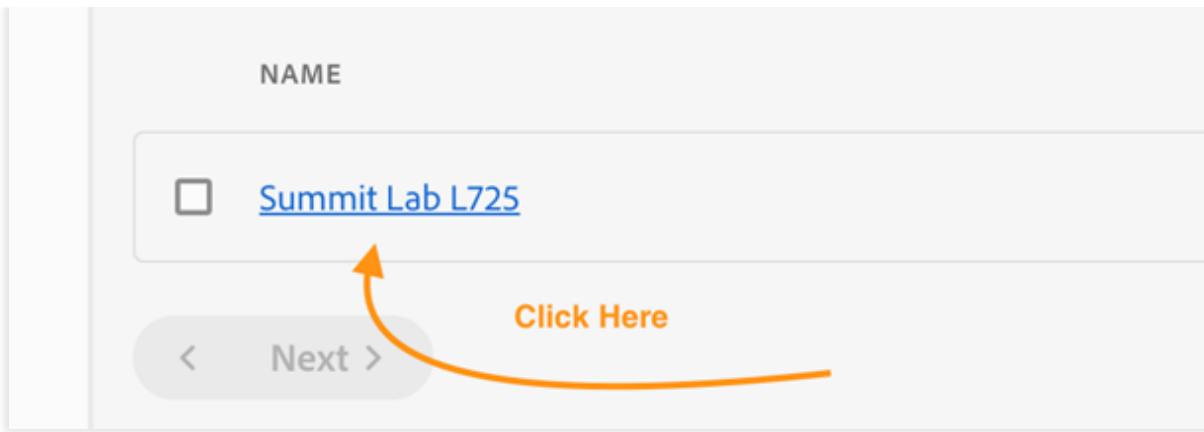


7. On the screen that loads, click Go to *Launch*.

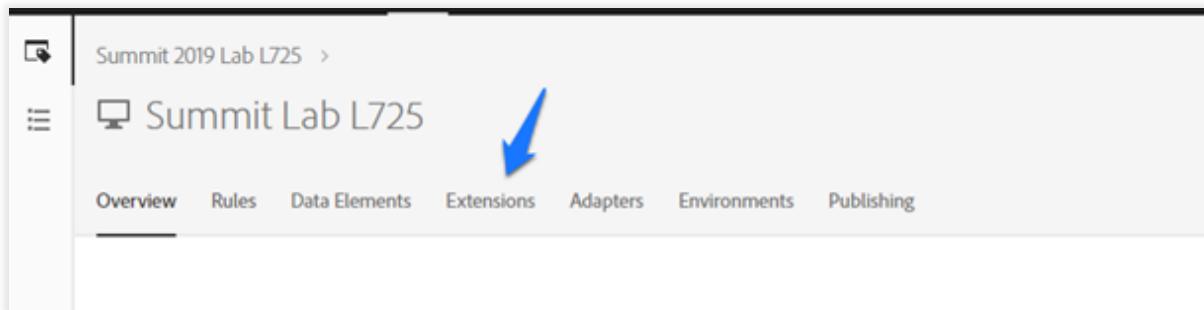


8. In the launch landing page <https://launch.adobe.com/>, click on the link for the property named *Summit Lab L725*.





9. Click on the *Extensions* tab.



10. Note that there are four extensions installed: **Core**, **Adobe Analytics**, **Adobe Target**, and **Adobe ContextHub**.

11. Click on the *Configure* button for the ContextHub extension.



The screenshot shows the 'Extensions' tab selected in the top navigation bar. Below it, there are two tabs: 'Installed' (selected) and 'Catalog'. A search bar is present. Three extension cards are listed:

- Adobe Analytics** (Adobe Systems - v1.5.1): Described as an industry-leading solution for customer intelligence.
- Adobe ContextHub** (Adobe Systems - v1.0.7): Provides the ability to define data elements for ContextHub data.
- Adobe Target** (Adobe Systems - v0.8.2): Adobe Target Launch extension (at.js v1.6.3).

A blue arrow points to the 'Configure' button for the Adobe ContextHub extension.

12. Note that we are using the ***Default ContextHub Data layer***. This is the default data layer that is provided by Experience Manager. However, if our customer has a custom data layer, we can use this extension to map it as well – even if they aren't using Experience Manager.
13. Click ***Cancel***.
14. Click the ***Catalog*** icon to switch to the extension catalog.



The screenshot shows the 'Extensions' tab selected in the navigation bar. A blue arrow points to the 'Catalog' tab, which is also highlighted. Below the tabs is a search bar with the placeholder 'Search'. Two extension cards are displayed:

- AA Product String Builder** (Search Discovery · v1.0.6): The ultimate solution for dynamically building Adobe Analytics Product String and s.events. Supports custom events and merch evars. Actions can be intermixed with Adobe Analytics actions.
- Adobe Analytics for Video** (Adobe Systems · v1.1.0): Adobe Analytics for Video is an add-on to the base Analytics offering that provides clients with robust measurement for content, audio and advertisements. This extension deploys with VHL SDK version 2.1.0.

15. Note that in addition to the extensions that Adobe offers, there are also many third-party extensions in the catalog.
- Exercise 1.2 - Review Data Elements

Launch allows us to map values from our data layer to data elements. These data elements are available throughout the Launch UI in various extensions and rule editors. This helps ensure consistency in our implementation and ease of use for users. In this exercise, we will review the **pagename** data element that we have created.

1. Click on the **Data Elements** tab.

The screenshot shows the 'Data Elements' tab selected in the navigation bar. A blue arrow points to the 'Extensions' tab, which is also highlighted. The page displays a list of data elements, with the first one visible:

- pagename** (System · v1.0.0)

2. Click on the link for the `_pagename_` data element.
3. Note that we have used the Adobe ContextHub extension to map the value from `pagedata.path` to our `pagename` data element. This extension makes it easy for us to access our data layer for mapping to our data elements. Take a look through the values that are available in the Data Item field. Note that it contains all of the values that are exposed in the default AEM Context Hub.

The screenshot shows the 'Edit Data Element' interface. The 'Data Elements' tab is selected in the top navigation bar. On the left, there's a form with fields: 'Name' (containing 'pagename'), 'Extension' (set to 'Adobe ContextHub'), 'Data Element Type' (set to 'Context Hub'), and 'Default Value' (with placeholder 'Enter a Default Value'). On the right, a 'Data item' dropdown is open, showing the option 'pagedata.path'. Three blue arrows point to the 'Name' field, the 'Extension' dropdown, and the 'pagedata.path' option in the 'Data item' dropdown, highlighting these components.

4. Click ***Cancel***.

#### Exercise 1.3 - Review Rules

Installing the Target and Analytics extensions does not help if we do not actually send our Analytics beacon and fire our Target mbboxes. This is where **Rules** come into play. We have set up two rules for this lab environment:

- **Page Top** rule to fire the Target mbox
- **Page Bottom** rule to fire our Analytics beacon

In this exercise, we will look at the rule editor and inspect the two rules that have been created for this lab.

1. Click on the **Rules** tab.



2. Click on the link for the **Page Top** rule.

The screenshot shows a navigation bar with tabs: Overview, Rules, Data Elements, Extensions, Adapters, Environments, and Publishing. The 'Rules' tab is active. Below the tabs is a search bar with a magnifying glass icon and a filter icon. A list of rules is displayed, with each rule having a checkbox and a link. The first two rules are 'NAME' and 'Page Bottom'. The third rule is 'Page Top', which is highlighted with a blue arrow pointing to it. At the bottom of the list are navigation buttons: '< Previous' and 'Next >'.

3. Note that the **If** section of the rule editor contains an event called **Library Loaded (Page Top)**. This means that our rule will fire immediately after the Launch library is loaded at the top of the page.
4. In the **Then** section, note that we are executing two actions: **Load Target** and **Fire Global Mbox**. These actions load the Target at.js library, fire the global mbox, and reveal our hidden page content. We recommend hiding page content until the Target global mbox has fired to prevent "flicker".



The screenshot shows the 'Edit Rule' interface. At the top, it says 'Edit Rule'. Below that, there's a 'Name' field containing 'Page Top'. Under the 'If - Determines when you want the rule to fire' section, there's a 'EVENTS' button with a tooltip '(1)' and a list item 'Core - Library Loaded (Page Top)'. A blue arrow points from the text 'note that we are executing this rule at the bottom of the page.' to the 'Core - Library Loaded (Page Top)' item. Under the 'THEN - Determines what you want the rule to do' section, there's an 'ACTIONS' button with a tooltip '(1)' and a list item 'Adobe Target - Load Target'. Another blue arrow points from the text 'note that we are executing two: Set Variables and Send Beacon.' to the 'Adobe Target - Load Target' item. There's also a 'THEN' button next to the actions.

5. Click **Cancel**.
6. Click the link for the **Page Bottom** rule.
7. In the **Events**, note that we are executing this rule at the bottom of the page.
8. In the **Actions**, note that we are executing two: **Set Variables** and **Send Beacon**.
9. Click on the **Set Variables** action. Be careful not to click on the X icon as this will remove the action.



The screenshot shows the 'Edit Rule' interface. At the top, there is a 'Name' field containing 'Page Bottom'. Below it, under the heading 'If - Determines when you want the rule to fire', there is an 'EVENTS' section with a single item: 'Core - Page Bottom'. Under the heading 'THEN - Determines what you want the rule to do', there is an 'ACTIONS' section with two items: 'Adobe Analytics - Set Variables' and 'Adobe Analytics - Send Beacon'. A blue arrow points from the text in step 10 below to the 'Adobe Analytics - Set Variables' action.

10. In the **Action Configuration** screen, scroll down in the right pane and locate the **Page Name** variable. Note that it has been set to **%pagename%**. This refers to the data element that we previously configured.
11. Click on the **data** icon to the right of this field.



Action Configuration

Extension: Adobe Analytics

Action Type: Set Variables

Name: Adobe Analytics - Set Variables

Add Another

Page Name: %pagename%

Server:

Referrer:

12. Note that our **pagename** data element is listed here. Had we mapped other data elements, those would be listed here as well.
13. You may now close any Launch browser tabs that you have opened as we will not be using them in future exercises.

## Lesson 2 – Experience Manager/Launch Integration

### Objective

1. Review Adobe Launch integrations in Adobe I/O
2. Attach an Adobe Launch configuration to a site in Experience Manager
3. Test that Launch is correctly serving Experience Cloud solutions on our site

### Lesson Context

In this lesson, we will configure Experience Manager to integrate with Launch, which will allow us to deploy the Analytics and Target configurations from the previous chapter to our site. In preparation for this lab, we have pre-configured an Adobe I/O

integration with a public key certificate from your local Experience Manager environment. We will use this configuration to connect our Experience Manager environment with Adobe Launch.

#### Exercise 2.1 - Create the AEM/Launch integration

In this section, we will leverage the Adobe I/O integration that was previously created to create an Adobe Launch Configuration for our site.

1. Navigate to the AEM Author environment by pointing your browser to <http://localhost:4502> or by using the shortcut provided in Google Chrome.
2. Log in with admin as both the username and the password.
3. Click the Tools icon, followed by the Cloud Services menu item, followed by the Adobe Launch Configurations card.



The screenshot shows the Adobe Experience Manager interface. On the left is a vertical navigation bar with various menu items: General, Workflow, Operations, Sites, Assets, Resources, Deployment, Security, Commerce, **Cloud Services**, and Communities. A blue arrow labeled '1' points to the 'Cloud Services' item. Another blue arrow labeled '2' points to the 'Cloud Services' item itself. A third blue arrow labeled '3' points to the 'Adobe Launch Configurations' section in the main content area.

1

General

Workflow

Operations

Sites

Assets

Resources

Deployment

Security

Commerce

**Cloud Services**

Communities

Tools

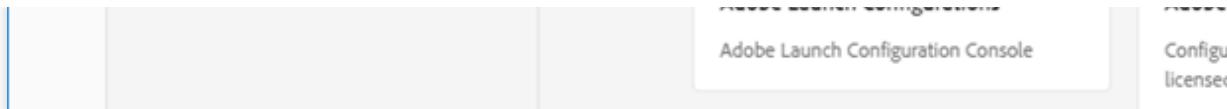
Legacy Cloud Services

Connect to Adobe Experience Cloud

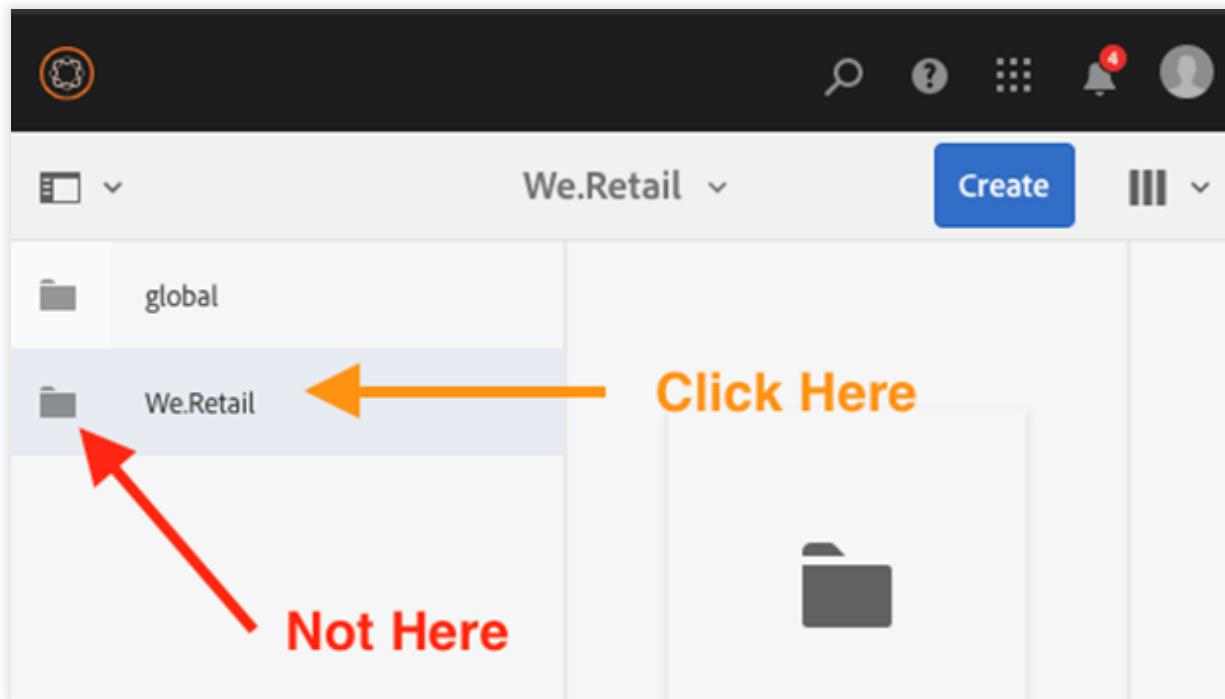
YouTube Publishing Configuration

YouTube Publishing Configuration

Adobe Launch Configurations



4. Click on We.Retail. Note that you will need to click on the label and not the folder icon. If you see a blue checkmark, you have done it wrong. If you see a blue Create button appear, you have done it correctly. Click the **Create** button.



5. Fill in the following values. Note that the **Company** and **Property** fields are dynamically loaded from Launch, so you may need to wait a second for values to appear.
- Title:** *We.Retail Launch*
  - Associated Adobe IMS Configuration:** *Adobe I/O – Launch Integration*
  - Company:** *Summit 2019 Lab L725*
  - Property:** *Summit Lab L725*



Create Adobe Launch Configuration     ● ○ ○

**Title \***

**Associated Adobe IMS Configuration \***

**Company \***

**Property \***

 ⓘ

**Include Production Code on Author**

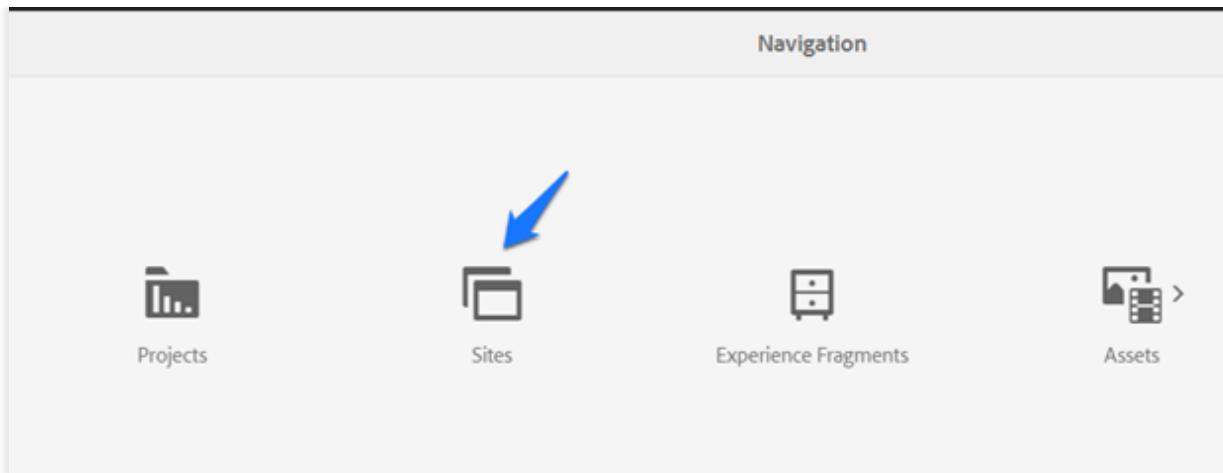
6. As we click through the next screens, you will notice that we will be shown the URLs for our Launch libraries and could select Archive to host the Launch library directly on our AEM instance. While this is considered a best practice, we will not be doing so here for purposes of simplicity in the lab. Click **Next** through each of the following screens and then **Create**.

#### Exercise 2.2 - Publish and Validate

In this exercise, we will publish the integrations that we have configured and validate that we are able to see the Analytics and Target libraries on our site.

1. In Experience Manager, click the **Adobe Experience Manager** icon to return to the home screen.
2. Click the Sites icon.





3. Click on the icon for the **We.Retail** site to select it. Do not click the link for the name of the site as this will open it instead. When you have selected the site, the icon will be overlaid with a blue checkmark.

A screenshot of the Adobe Experience Manager navigation sidebar. The sidebar has a dark header with the "Adobe Experience Manager" logo. Below the header is a list of categories: "Campaigns", "Community Sites", "Screens", and "We.Retail". The "We.Retail" item is highlighted with a blue arrow pointing to its icon. Red text above the "We.Retail" item says "do not click here, on text". Another blue arrow points to the "We.Retail" icon itself with the text "click here, on the icon".

Campaigns	>
Community Sites	>
Screens	>
We.Retail	>

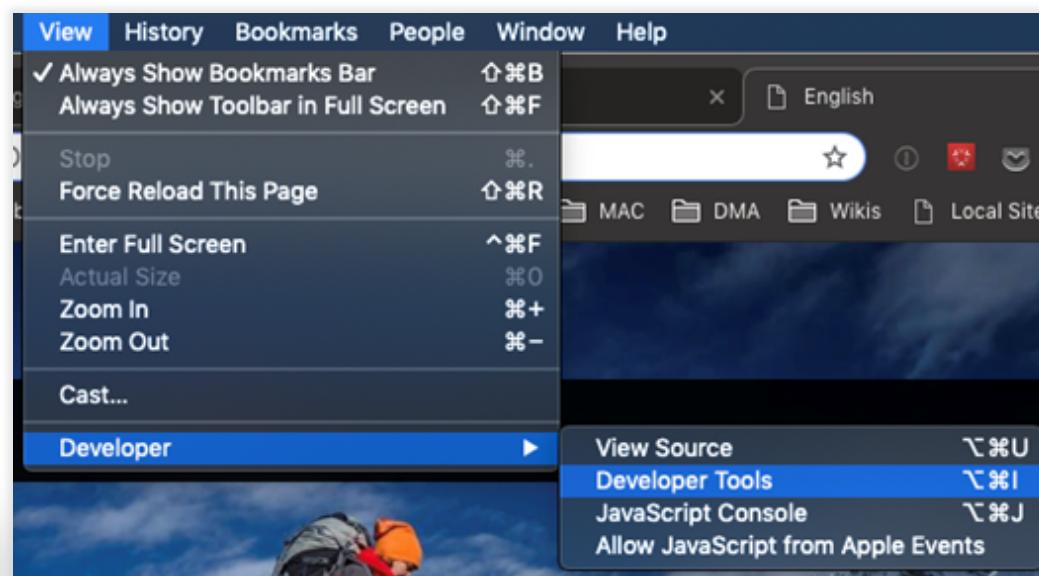
4. With the **We.Retail** site selected, click on **Quick Publish** in the top navigation. When prompted to confirm, click **Publish**.



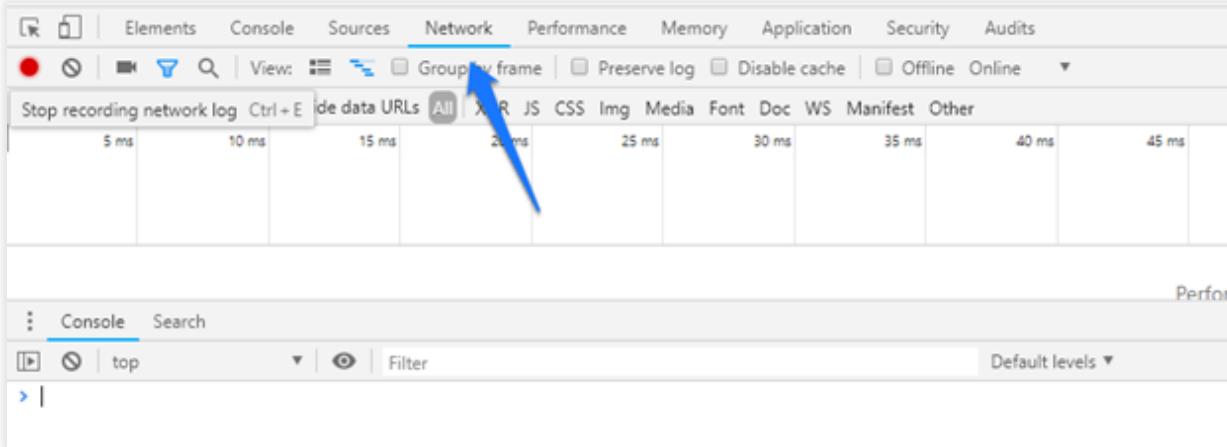
Campaigns  
Community Sites  
Screens  
We.Retail

Title: We.Retail  
Name: we-retail  
Modified: Feb 8, 2016  
Modified By: Administrator  
Language: English  
Published: Not published

5. Open a new browser tab and open your Experience Manager publish environment by pointing your browser to <http://localhost:4503>. You should be redirected to <http://localhost:4503/content/we-retail/us/en.html>.
6. From the OS Chrome menu, select *View, Developer, Developer Tools*.

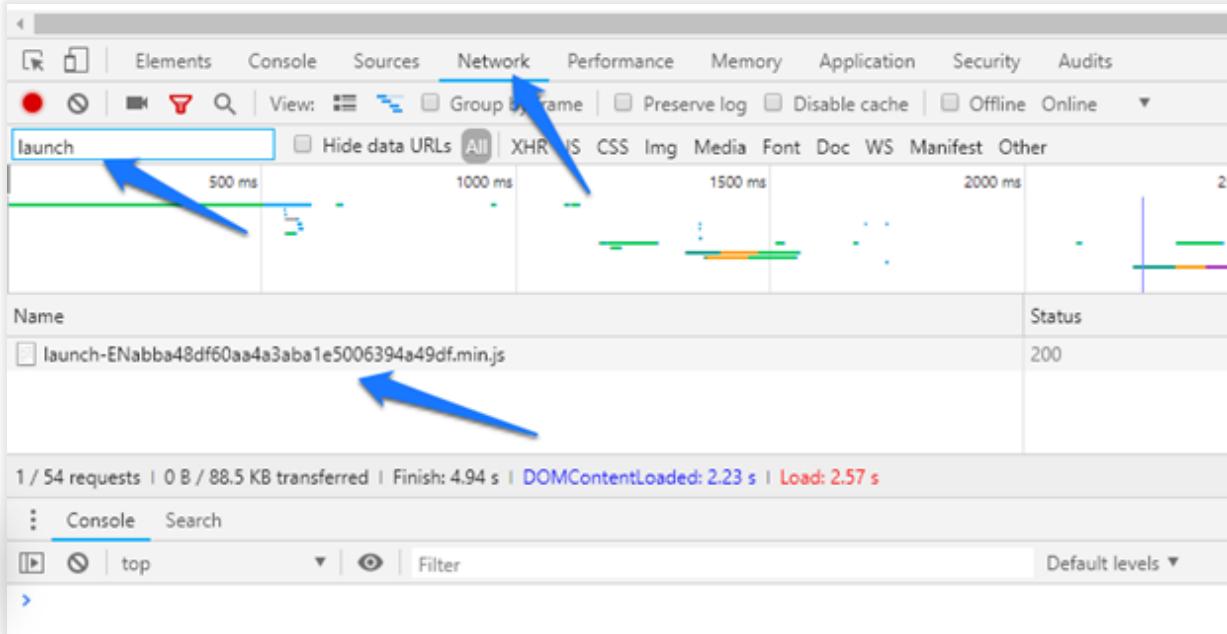


7. This will open a console at the bottom of your browser window. Click on the **Network** tab, then refresh the current page.



A screenshot of the developer tools Network tab. The tab bar at the top has tabs for Elements, Console, Sources, Network (which is highlighted), Performance, Memory, Application, Security, and Audits. Below the tab bar is a toolbar with icons for Stop recording network log (red dot), Hide data URLs (checkbox), Group by frame (checkbox), Preserve log (checkbox), Disable cache (checkbox), Offline (checkbox), and Online (checkbox). A dropdown menu is open next to the Online checkbox. The main area shows a timeline with several network requests. A blue arrow points to the Network tab in the tab bar.

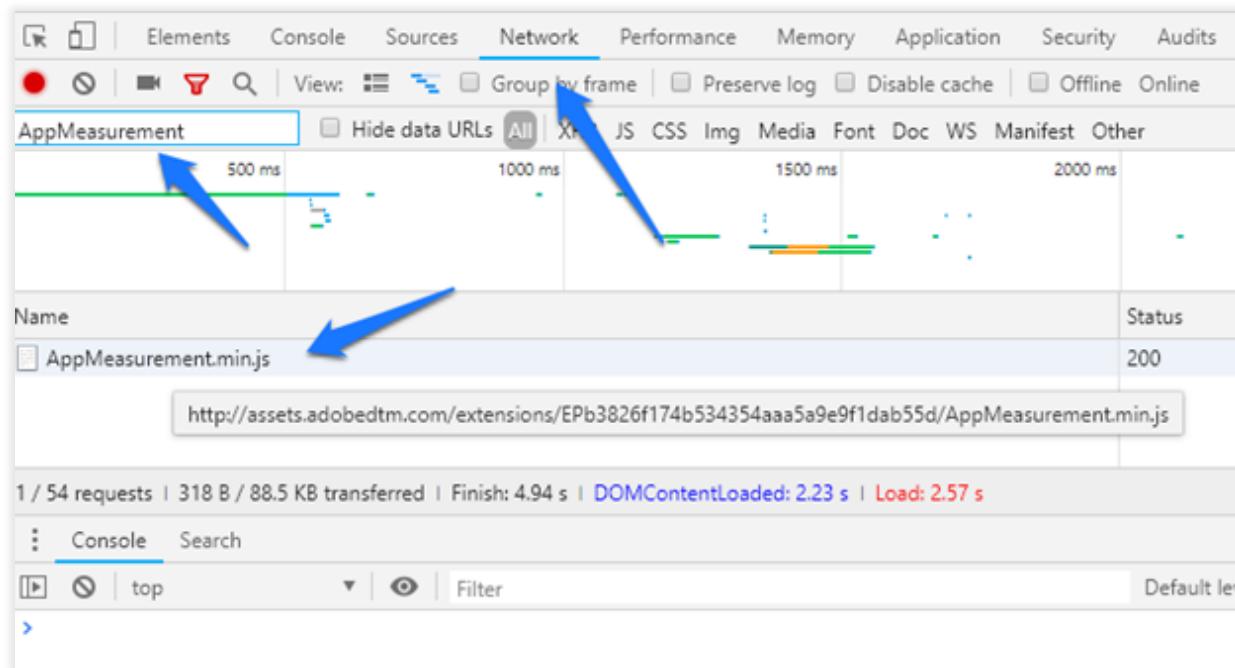
8. Once the page finishes loading, use the search field in the Network tool to search for **launch**. This shows that our Launch code is being successfully loaded.



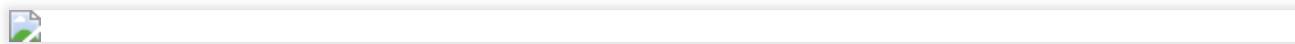
A screenshot of the developer tools Network tab after a search for "launch". The search input field at the top contains "launch". The results table below shows one entry: "launch-ENabba48df60aa4a3aba1e5006394a49df.min.js" with a status of 200. Two blue arrows point to the search input field and the result row in the table.

Name	Status
launch-ENabba48df60aa4a3aba1e5006394a49df.min.js	200

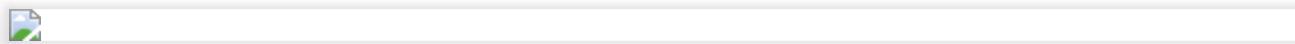
9. Using the search field, search for **AppMeasurement**. This shows that our Analytics library has been successfully loaded.



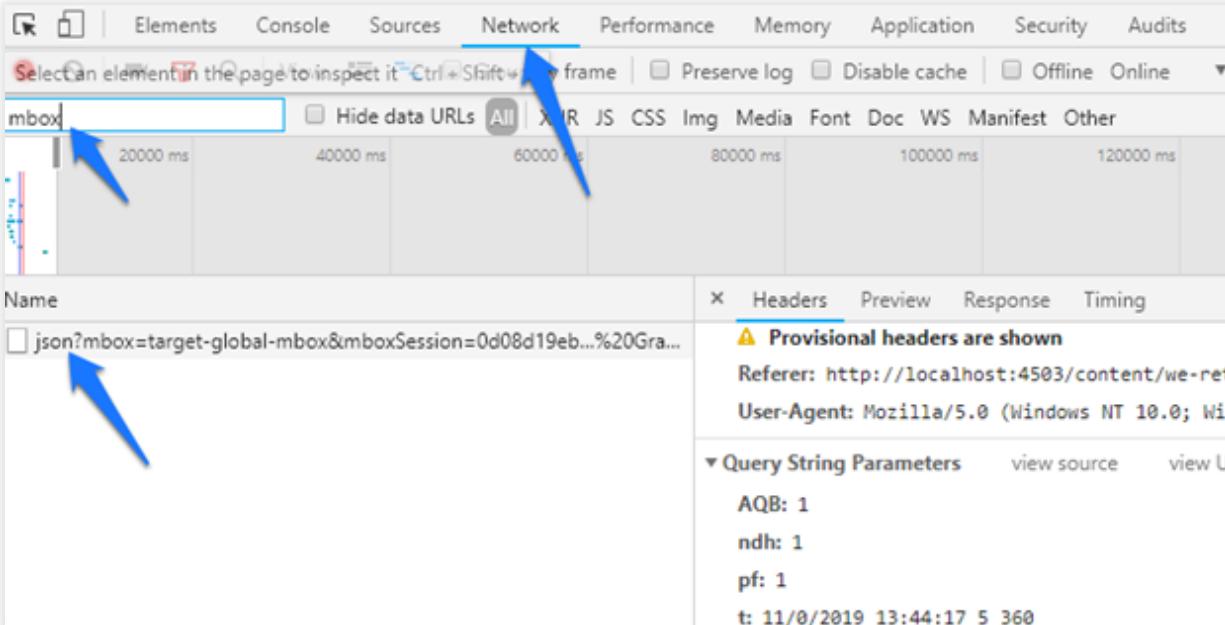
10. Using the search field, search for **b/ss**. This shows the call that we are making to **Analytics** to register our page load.



11. Select the server call and scroll to the **Query String** Parameters section at the bottom of the pane to the right of it. Note that the **pageName** parameter has been set to our page's path. This is due to the mapping that we did when configuring the Analytics rule in Launch.



12. Using the **search** field, search for **mbox**. This call for the global mbox shows that the Target library is being successfully loaded.



The screenshot shows the Network tab of the Chrome DevTools. A blue arrow points to the search bar at the top, which contains the text "mbox". Another blue arrow points to the list of requests below, specifically to the first item: "json?mbox=target-global-mbox&mboxSession=0d08d19eb...%20Gra...". The request has a duration of 20000 ms. The details panel on the right shows the URL "http://localhost:4503/content/we-retail/en/jcr:content/mbox/target-global-mbox.json?mboxSession=0d08d19eb...%20Gra...", provisional headers, and query string parameters: AQB: 1, ndh: 1, pf: 1, and t: 11/0/2019 13:44:17 5 360.

## Lesson 3 – Content Insights

### Objective

1. Configure AEM to import Analytics data.
2. View Analytics data in the Experience Manager UI.

### Lesson Context

In this lesson, we will implement Content Insights. This feature allows us to import Analytics data directly into Experience Manager. This allows authors, even those who do not have Analytics logins or training, to see important performance data about their content directly in the CMS.

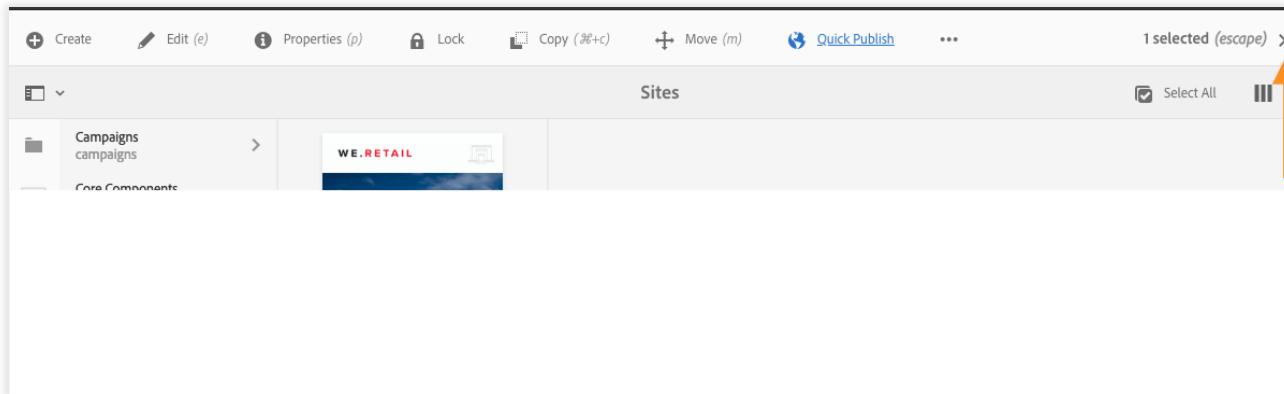
#### Exercise 3.1 - Configure the Analytics Legacy Cloud Service

In this exercise, we will configure the Analytics legacy cloud service to enable importing the impression data and apply it to the We.Retail reference site. It is sometimes confusing as to why we would be implementing **both** the Launch integration **and** the

Analytics integration. This is because the Launch integration controls the client-side loading of the Analytics library and tracking of impression data while the Analytics integration controls the server-side import of reporting data from Analytics. For this reason, we will select ***Do not add tracking tag to page*** when configuring the integration to tell AEM that we are managing the tracking tag through a tag manager.

When configuring the integration framework, note that we will be mapping the `pageName` property from Analytics to the `pageData.path` CQ property. This matches the configuration that we made previously in Launch. This tells AEM how to determine which page it should apply the imported impression data to. If you have a different way of tracking the `pageName` in Analytics, you may need to implement a custom Analytics Page Name Provider Service, but that is beyond the scope of this lab.

1. In your AEM author environment, click the Adobe Experience Manager icon to return to the home screen. If you cannot see the icon, it is likely that you have something selected. Click the X icon in the top right of your screen to escape from any selections.



2. Under **Tools**, **Cloud Services**, select **Legacy Cloud Services**.



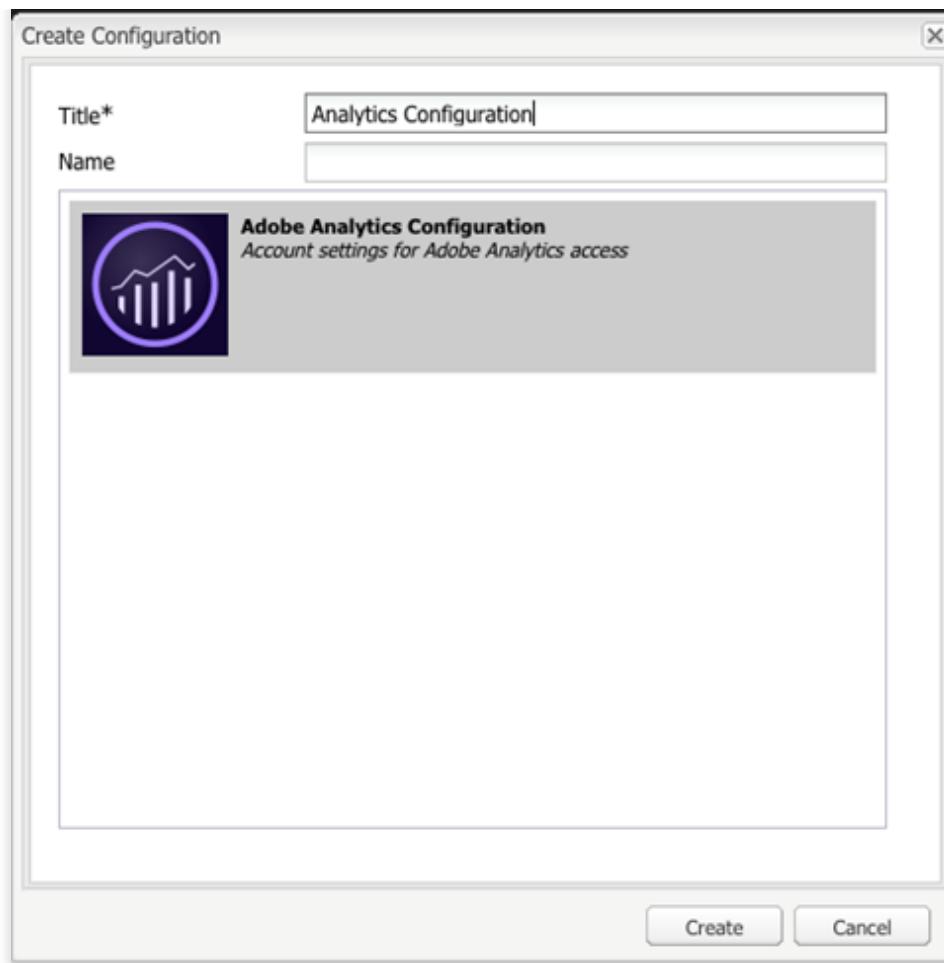
The screenshot shows the Adobe Experience Manager interface. At the top left is the AEM logo and the text "Adobe Experience Manager". The left sidebar contains a navigation menu with the following items: General, Workflow, Operations, Sites (marked with a blue arrow and the number 1), Assets, Resources, Deployment, and Content (partially visible). The main content area features a large cloud icon. Below the icon is a button labeled "Legacy Cloud Services" with the sub-label "Connect to Adobe Experience Cloud". A blue arrow points to this button, and the number 3 is displayed at the bottom center of the screen.

3. In the list of cloud services, locate *Adobe Analytics* and click on *Configure Now*.

The screenshot shows a list of cloud services. At the top, there are 'Learn more' and 'Configure now' buttons. Below them is a section for 'Adobe Analytics', which includes a purple icon, a title, a description, and two buttons: 'Learn more' and 'Configure now'. A blue arrow points to the 'Configure now' button. Below this is another section for 'Adobe Campaign', featuring a yellow icon, a title, a description, and two buttons: 'Learn more' and 'Configure now'.

4. Give your configuration a title of *Analytics Configuration* and click **Create**.





5. Populate the dialog that opens with the following values and then click **Connect to Analytics**. Click OK. After clicking OK, you may see an error message stating that we have failed to obtain the available segment list from the Analytics API Server. It is safe to ignore this message and click **OK** to dismiss it.

- a. **Company:** *Summit 2019 Lab L725*
- b. **Username:** [ireasor+summitl725@adobetest.com](mailto:ireasor+summitl725@adobetest.com)
- c. **Shared Secret:** 9fa70a3724f6c9fb2393353a8738c8a7
- d. **Data Center:** Oregon
- e. **Do not add tracking tag to page:** Checked
- f. All other fields can be left with default values



Edit Component

Analytics Settings

Company: Summit 2019 Lab L725

Username: ireasor+summitl725@adobetest.com

Shared Secret: .....  
Data Center: Oregon

Re-Connect to Analytics

Do not add tracking tag to page

Do not track the page load event

Use AppMeasurement

Use ClientContext

Additional context data: **Click Here**

Add additional context data using "name=value;" format.

Segment:



Then Here



OK

Cancel

6. Next to **Available Frameworks**, click the + icon.



7. Give your framework a title of **Analytics Framework** and click **Create**.





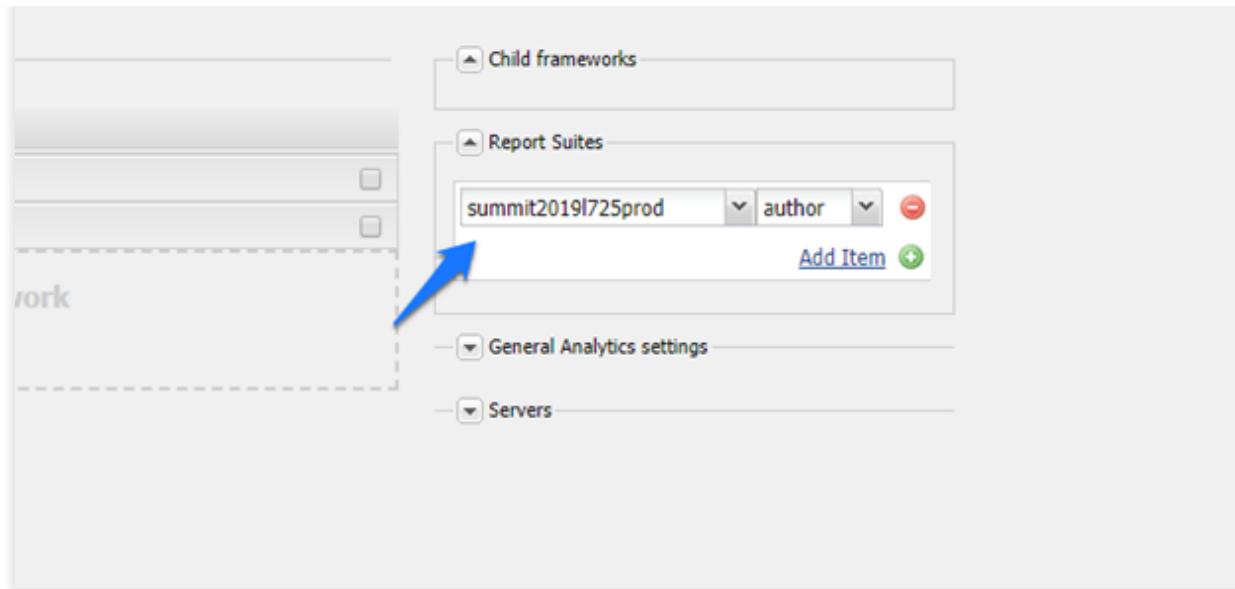
8. In the window that opens, click **Add Item** in the **Report Suites** section. You may need to move the Experience Manager sidekick out of the way to see it.



The screenshot shows the 'Analytics Framework' configuration page in the AEM interface. The 'Report Suites' section is expanded, showing an empty list area with an 'Add Item' button. A blue arrow points to this button. The 'AEM view' tab is selected. On the left, there's a component editor with various AEM components listed under 'General'.

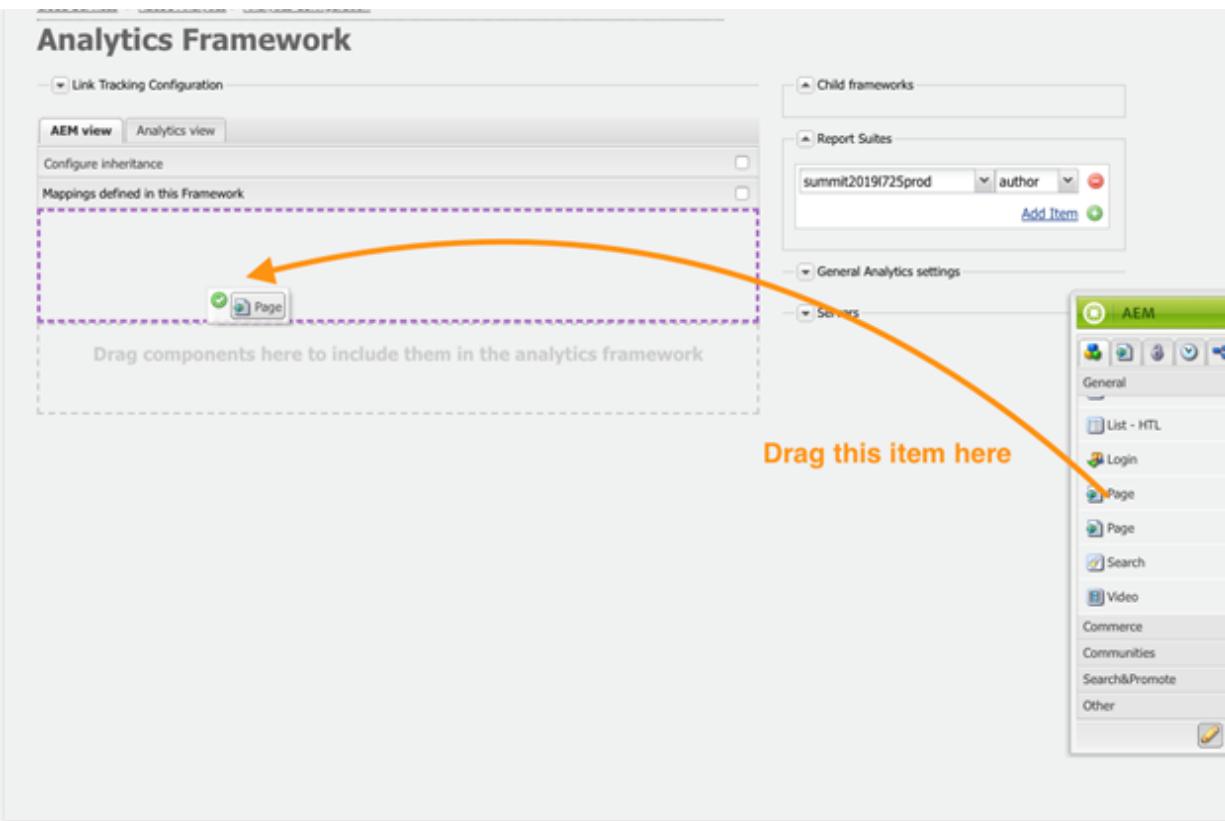
9. In the dropdown that appears, select the **summit2019l725prod** report suite. When prompted to load the default server settings, click Yes. From the runmodes dropdown, select **author**.





10. From the sidekick, scroll down in the **General** section until you see the **Page** components. Drag the first of the two into the **Mappings defined in this Framework** section.





11. From the menu on the left of the screen, drag the **Page Name** item to the **pagedata.path** CQ variable on the right.



make sure you drag it to the "Analytics variable(s)" column and not "CQ variable"

CQ variable	Analytics variable(s)
pagedata.title	
pagedata.path	
pagedata.navTitle	
pagedata.siteSection	
pagedata.subSection	
pagedata.template	
eventdata.events.pageView	

When you have successfully mapped the variable, it will look like:



The screenshot shows the AEM Analytics view interface. At the top, there are tabs for "AEM view" and "Analytics view", with "Analytics view" being active. Below the tabs, there are sections for "Configure inheritance" and "Mappings defined in this framework". A central area contains the message "Drag components here to include them in the analytics framework". To the right, a sidebar titled "AEM" lists various component types: General (Download, Image, Image - HTL), List (List, List - HTL), and Commerce (Login). On the left, a table lists CQ variables and their corresponding Analytics variable(s):

CQ variable	Analytics variable(s)
pagedata.title	
pagedata.path	Page Name (pageName) ←
pagedata.navTitle	
pagedata.sitesection	
pagedata.subsection	
pagedata.template	
eventdata.events.pageView	

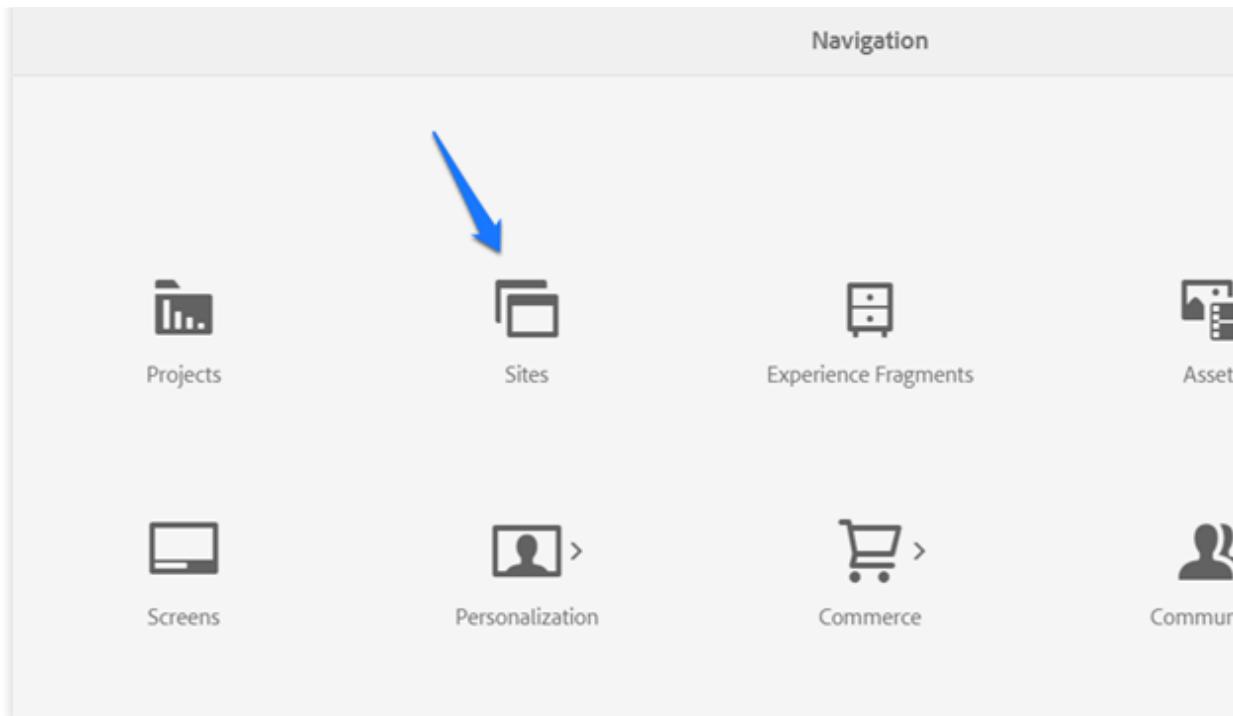
12. Close this browser tab.

#### Exercise 3.2 - Attach the cloud service to the We.Retail site

In this exercise, we will attach the cloud service we have created to the We.Retail site. This will allow Experience Manager to import impression data for these pages from Analytics.

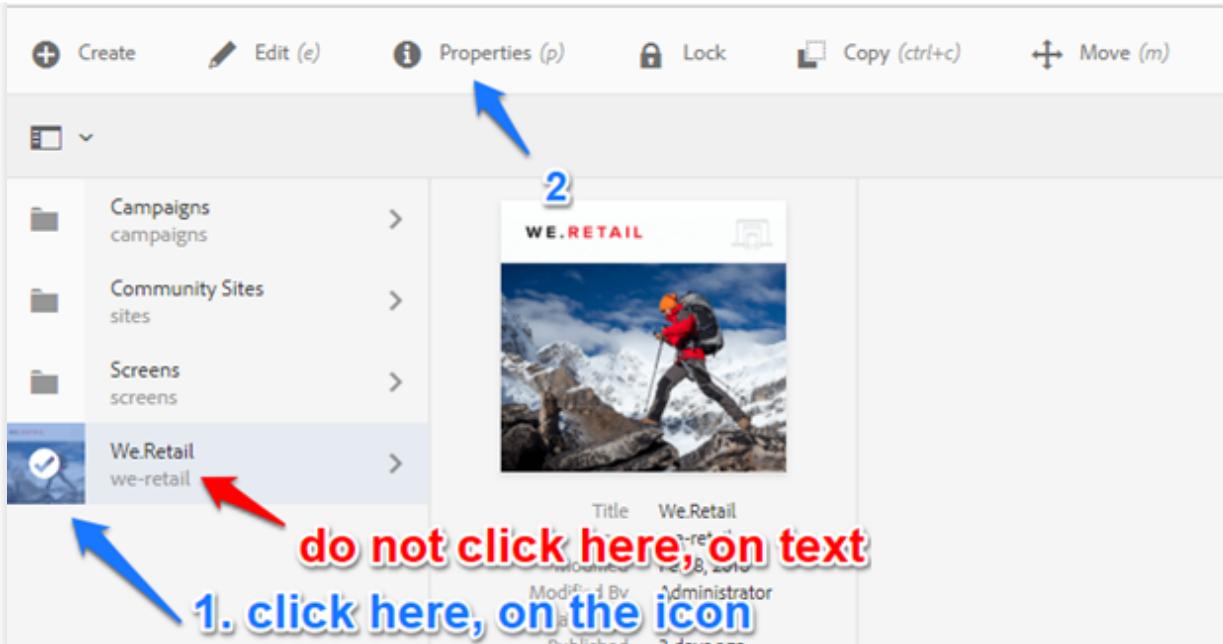
1. Open a new browser tab and load Experience Manager (<http://localhost:4502>).
2. Click on Sites.





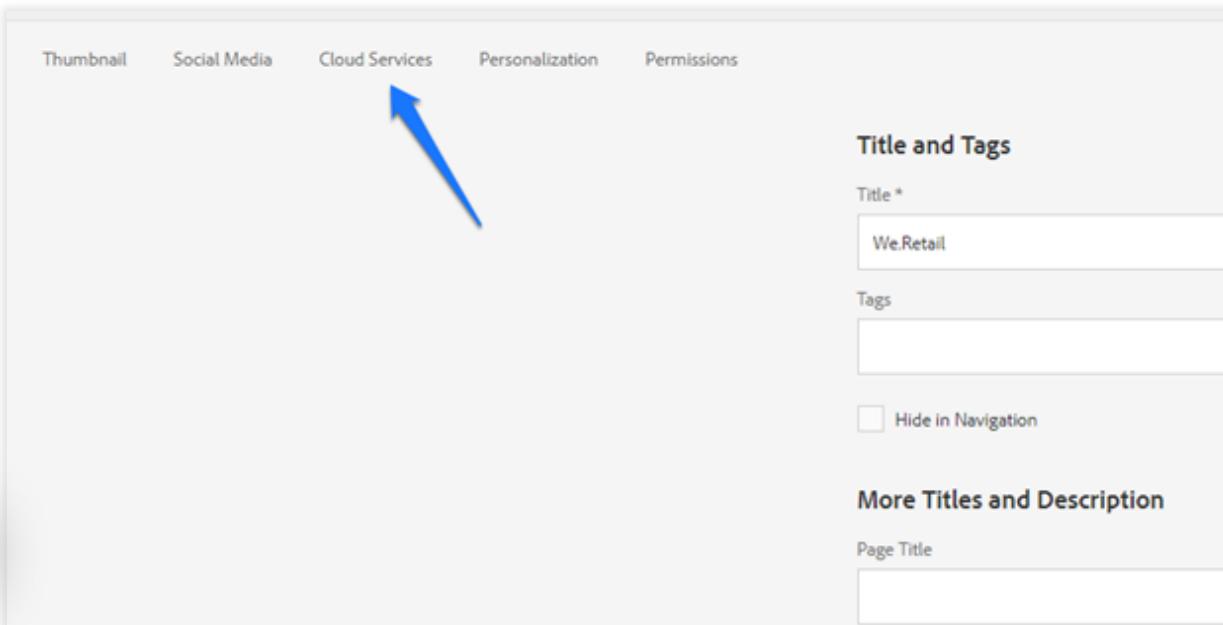
3. Click on the icon for the **We.Retail** site to select it. Do not click the link for the name of the site as this will open it instead.  
In the top navigation, click on **Properties**.





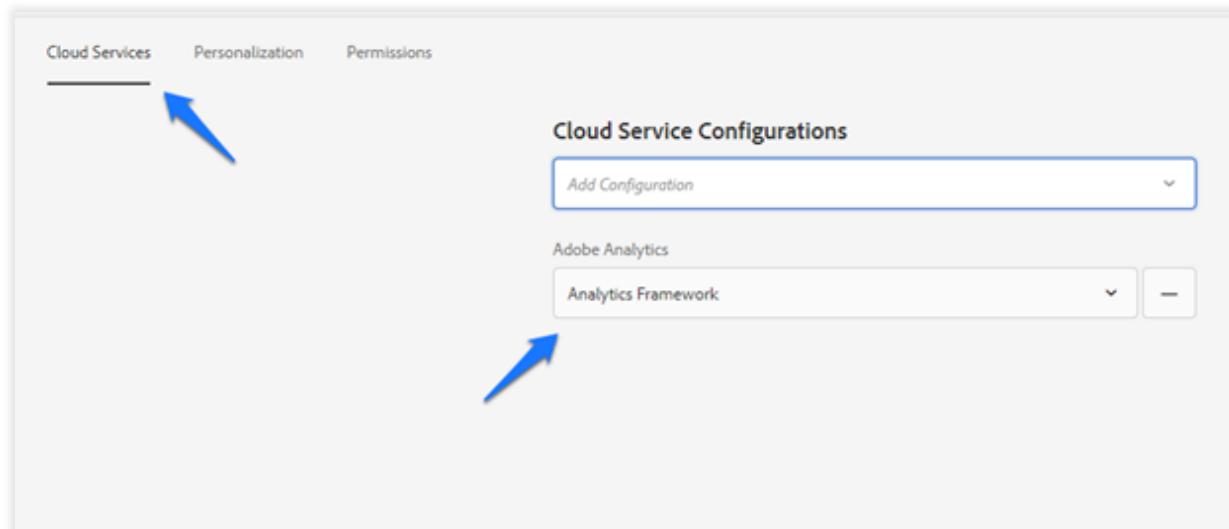
The screenshot shows the Experience League interface with the 'Properties (p)' tab selected in the top navigation bar. A blue arrow points to the 'Properties' tab icon. Below the navigation bar is a sidebar with links: 'Campaigns campaigns', 'Community Sites sites', 'Screens screens', and 'We.Retail we-retail'. The 'We.Retail we-retail' link is highlighted with a red arrow. To its right is a preview card for 'WE.RETAIL' featuring a person climbing a mountain. Below the preview card are details: 'Title We.Retail', 'Modified By Administrator', and a timestamp 'Modified On 11/20/2019 10:30 AM'. A large blue arrow points to the 'Cloud Services' tab in the sidebar.

4. Click on the *Cloud Services* tab.

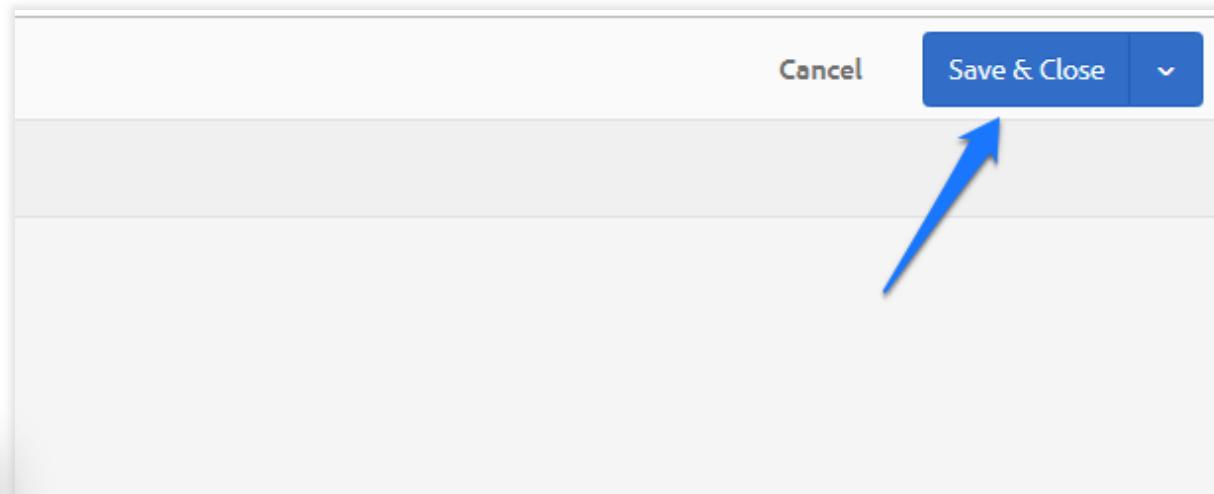


The screenshot shows the 'Cloud Services' tab properties form. At the top, there are tabs: 'Thumbnail', 'Social Media', 'Cloud Services' (which is highlighted with a blue arrow), 'Personalization', and 'Permissions'. The main content area is divided into sections: 'Title and Tags', 'More Titles and Description', and a feedback section. In the 'Title and Tags' section, there is a 'Title \*' field containing 'We.Retail', a 'Tags' field, and a checkbox for 'Hide in Navigation' which is unchecked. In the 'More Titles and Description' section, there is a 'Page Title' field. A circular icon with two speech bubbles is located in the bottom left corner.

5. In the **Add Configuration** dropdown, select **Adobe Analytics** and select the appropriate value. There should only be one framework listed (the one that we created in the previous exercise).



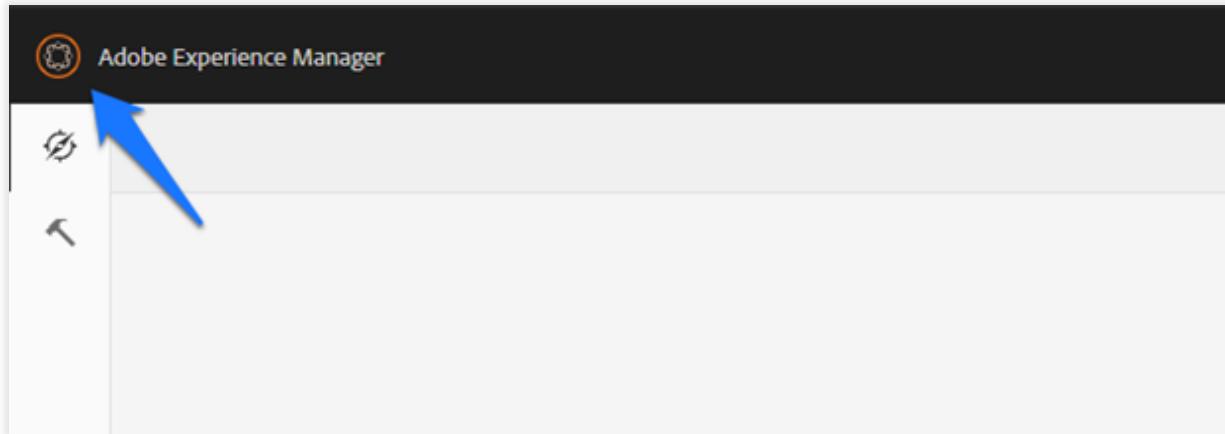
6. Click **Save & Close** on the top right of the screen.



### Exercise 3.3 - Update the polling configuration

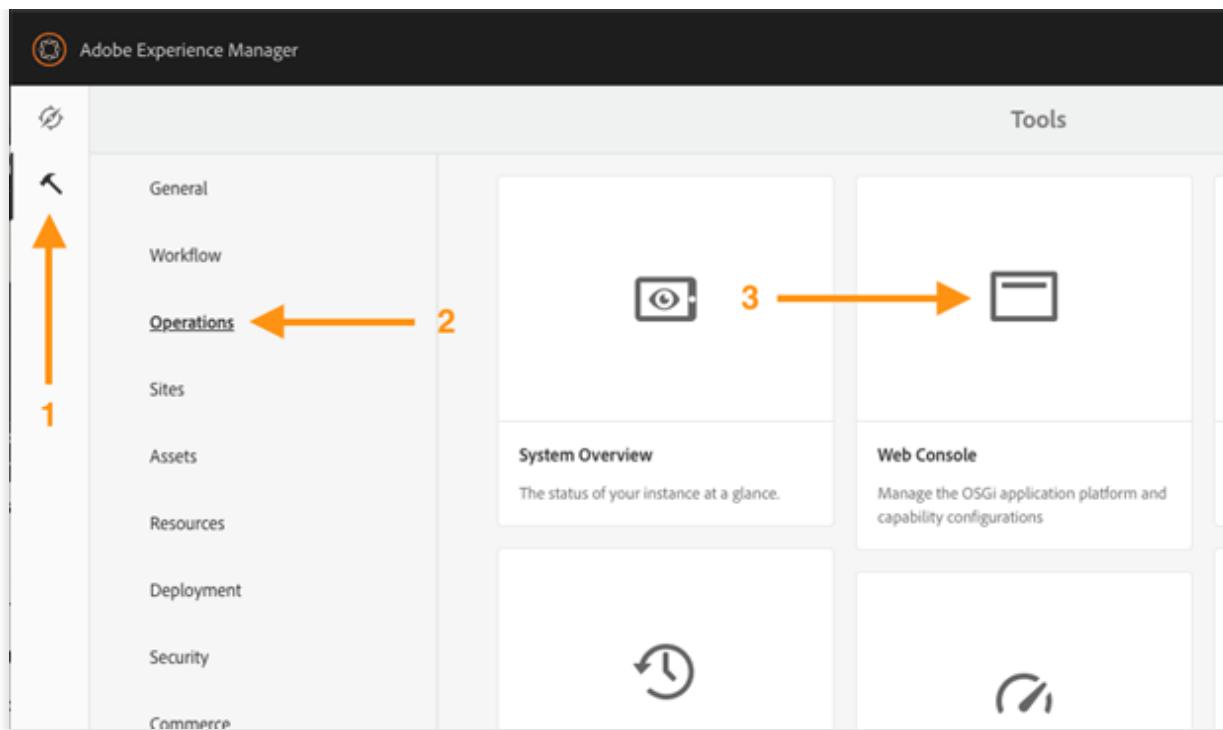
Asset Insights will poll your Analytics environment on a schedule and download new report data whenever this time is reached. By default, new data will be imported every 12 hours. Since we would like to see our impression data while we are still in this lab, we will configure our environments to import data much more often than this.

1. In AEM, click the *Adobe Experience Manager* icon to return to the home screen.



2. Under *Tools*, click on *Operations*, then select *Web Console*.





3. In the console that opens, locate the item in the list that is named ***Adobe AEM Managed Polling Configuration***. You will see several items listed underneath it that are named ***com.day.cq.polling.importer.impl.ManagedPollConfigImpl*** followed by a unique identifier. Click the pencil icon next to the first item listed to open its configuration.



The screenshot shows the 'Adobe Experience Manager Web Console Configuration' interface. At the top, there's a navigation bar with links for Main, OSGi, Sling, Status, and Web Console, along with a Log out button. Below the navigation is a warning message: 'Warning: Before making any changes, please review the list of deprecated configurations by checking the [OSGi Configurations Status](#)'. The main area is titled '1. Browser Find feature' and contains a table with columns for Name, Bundle, and Actions. The table lists various AEM components. A specific row for 'com.day.cq.polling.impl.ManagedPollConfigImpl' is highlighted with a yellow arrow and labeled '2. Click to open configuration'. This row has several entries under 'Name' and a '+' icon for adding more. The 'Actions' column for this row includes edit, export, and delete icons.

4. In the configuration that opens, change the *Poll interval* to 120. This will cause the import to run once every two minutes.  
Click **Save**.



Adobe AEM Managed Polling Configuration

Represents a managed polling configuration

Identifier	aem-analytics-integration-lastYear
	Identifier of this configuration (id)
Enable	<input checked="" type="checkbox"/>
	Enable state for the configuration (enabled)
Is referenced	<input checked="" type="checkbox"/>
	Referenced state for the configuration (reference)
Poll interval	120



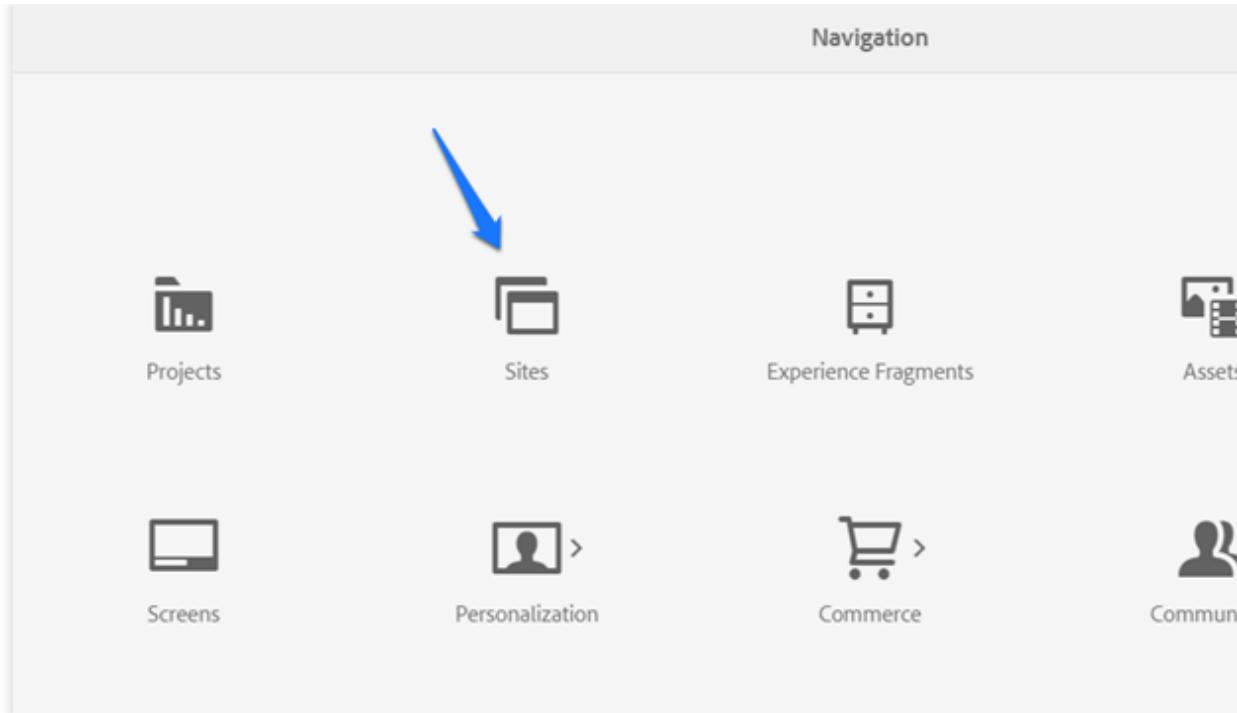
5. Repeat this process for the other five items.

#### Exercise 3.4 - Validate Content Insights

In this exercise, we will view the imported content insight data.

1. Close any open windows and point a new browser window to your AEM author environment at <http://localhost:4502>.
2. Click on **Sites**.





3. Ensure that you are in *List view*. Click on the view switcher in the top-right of your screen and select *List view* from the dropdown.



The screenshot shows a user interface for managing data. At the top, there are buttons for 'Select All' and 'Last 30 Days Data'. To the right of these is a blue 'Create' button. Further right is a 'View' switcher icon with a dropdown arrow. A large blue arrow points from the text in step 4 below to this dropdown menu. The menu itself is a light gray box containing four items: 'Column View' (with a bar chart icon), 'Card View' (with a card icon), 'List View' (with a list icon), and 'View Settings' (with a gear icon). Below the 'View Settings' item is a small ellipsis (...).

4. Click on the view switcher and select ***View Settings***. In the ***Configure Columns*** modal, deselect the ***Template*** and ***Workflow*** checkboxes and select the three checkboxes under ***Analytics: Page Views, Unique Visitors, and Time on Page***. Note that if you do not de-select one of the boxes that is already selected, Experience Manager will not allow you to select all three of these items as it will only allow a maximum of six selections. Click ***Update***.



The screenshot shows the 'Configure Columns' dialog box from Experience League. At the top, it says '40 minutes ago ▲ Administrator'. Below that is the title 'Configure Columns (6/9)'. The dialog is divided into sections: 'TRANSLATION' and 'ANALYTICS'. Under 'TRANSLATION', there are two items: 'Template' and 'Workflow'. Under 'ANALYTICS', there are three items: 'Page Views' (checked), 'Unique Visitors' (checked), and 'Time on Page' (checked). A blue rectangular box highlights the 'ANALYTICS' section. At the bottom of the dialog are two buttons: 'Cancel' and 'Update'.

5. Click on the name of the **We.Retail** site to view its children. Do not click on the icon, as this will select the site instead of descending into it.



	Title	Name	Modified
	Campaigns	campaigns	
	Community Sites	sites	
	Screens	screens	

6. Do the same for the *United\_States* site.

	Title	Name	Modified
	Language Masters	language-masters	Oct 12, Admin
	United States	us	Mar 7, Admin
	Canada	ca	Sep 23, Admin



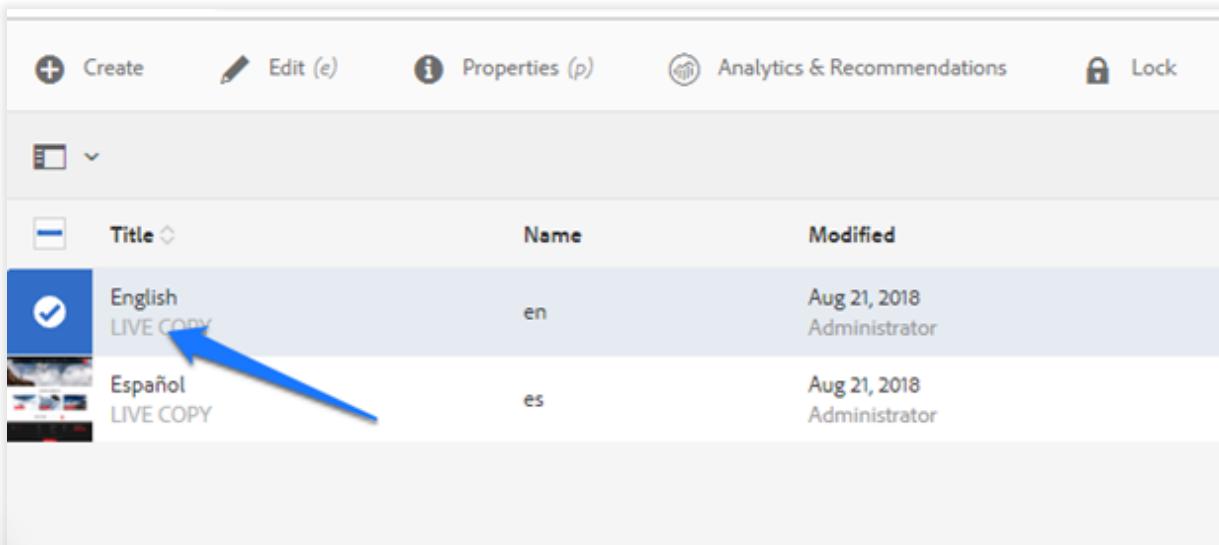
7. Note that the *English* page shows *Page Views*, *Unique Visitors*, and *Time on Page*. Note that the time period for the data can be changed in the action bar. This integration provides data in increments of the last 30 days, the last 90 days, and all data for this year.



The screenshot shows a table of page statistics for the United States. The columns include Title, Name, Modified, Published, Page Views, Unique Visitors, and Time on Page. Two pages are listed: 'English LIVE COPY' (en) and 'Español LIVE COPY' (es). The English page has 5 page views, 2 unique visitors, and an average time on page of 1.2 min. The Spanish page has 0 page views, 0 unique visitors, and 0.0 min time on page. The top navigation bar includes 'Select All', 'Last 30 Days Data', and a 'Create' button.

Title	Name	Modified	Published	Page Views	Unique Visitors	Time on Page
English LIVE COPY	en	Aug 21, 2018 Administrator	Not published	5	2	1.2 min
Español LIVE COPY	es	Aug 21, 2018 Administrator	Not published	0	0	0.0 min

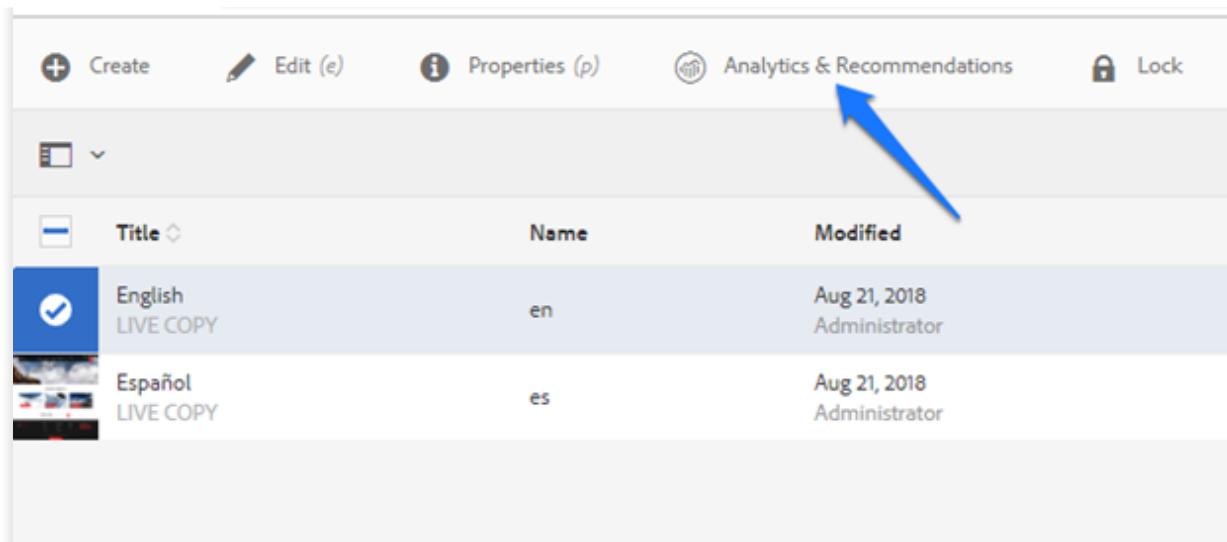
8. Click on the *English* page's icon to select it.



The screenshot shows the properties and recommendations for the selected 'English LIVE COPY' page. The top navigation bar includes 'Create', 'Edit (e)', 'Properties (p)', 'Analytics & Recommendations', and 'Lock'. The main table lists the page details: Title (English LIVE COPY), Name (en), Modified (Aug 21, 2018, Administrator), and a preview thumbnail.

Title	Name	Modified
English LIVE COPY	en	Aug 21, 2018 Administrator
Español LIVE COPY	es	Aug 21, 2018 Administrator

9. Click on the *Analytics & Recommendations* item in the top navigation.

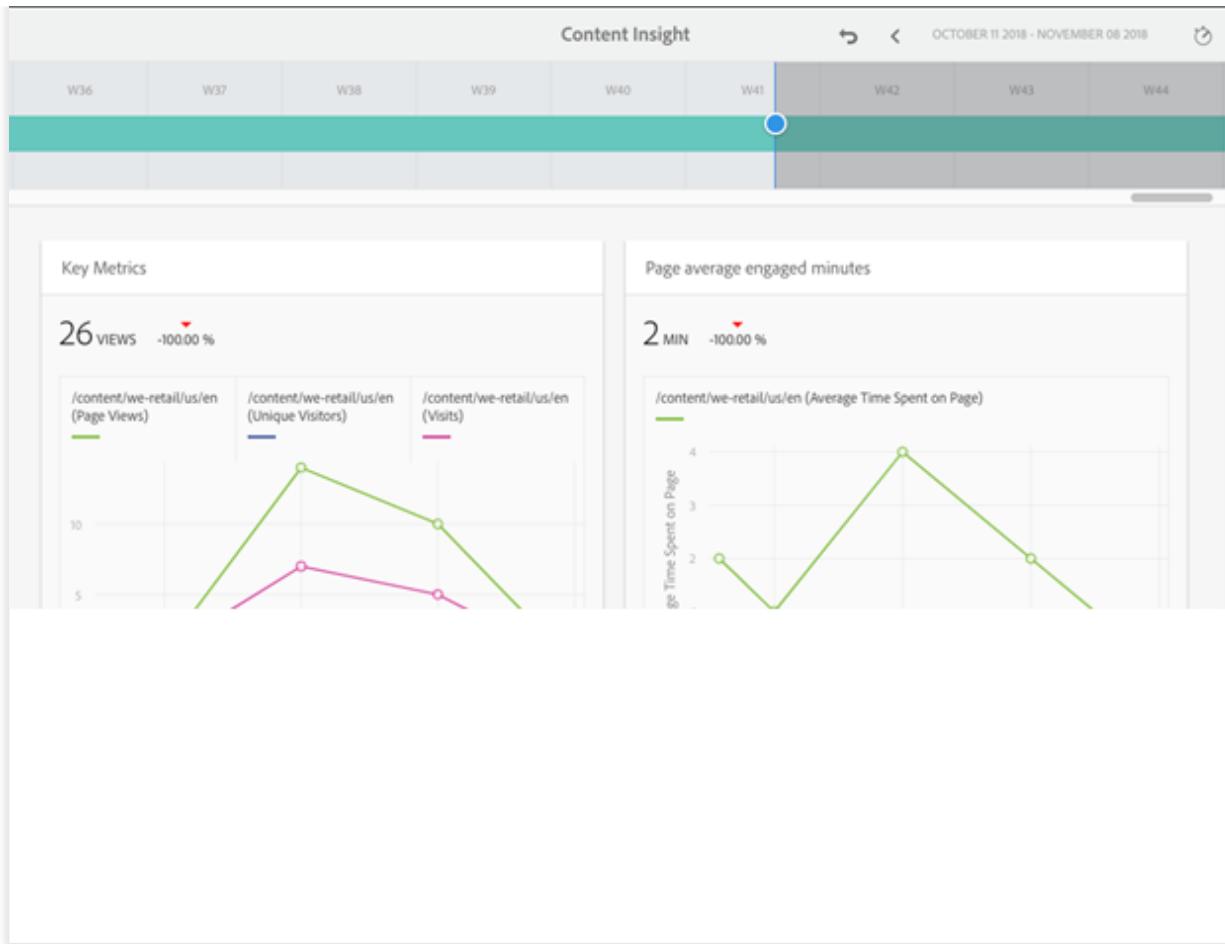


A screenshot of the Experience League Intelligent Guidance interface. At the top, there is a navigation bar with icons for Create, Edit (e), Properties (p), Analytics & Recommendations (highlighted with a blue arrow), and Lock. Below the navigation bar is a dropdown menu icon. The main content area shows a table with two rows. The first row is selected and has a blue background. It contains the title "English LIVE COPY", name "en", and modification details "Aug 21, 2018" and "Administrator". The second row contains the title "Español LIVE COPY", name "es", and the same modification details.

Title	Name	Modified
English LIVE COPY	en	Aug 21, 2018 Administrator
Español LIVE COPY	es	Aug 21, 2018 Administrator

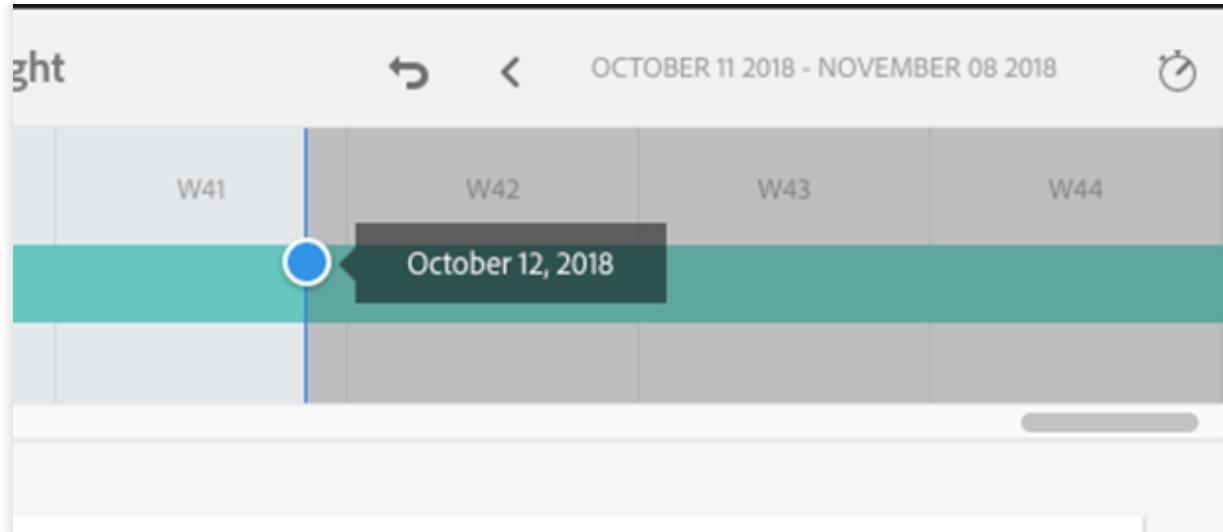
10. In the **Content Insight** window that opens, you can see key metrics, average time spent on the page, bounces, and sources.





11. You can drag the slider on the timeline to change the time frame for which you are viewing data.





## Lesson 4 – Experience Fragments

### Objective

1. Configure AEM to export Experience Fragments to Target
2. Use the Target Visual Experience Composer to author a personalization activity
3. Use reusable content from AEM in a Target activity

### Lesson Context

Experience fragments are groups of one or more authored AEM components that can be reused across experiences. In this lesson, we will be publishing these fragments to Target for use in the Visual Experience Composer (VEC). This allows customers to achieve consistency in experiences between their content authoring and site testing and optimization teams and increase the velocity with which their testing and optimization team operates.

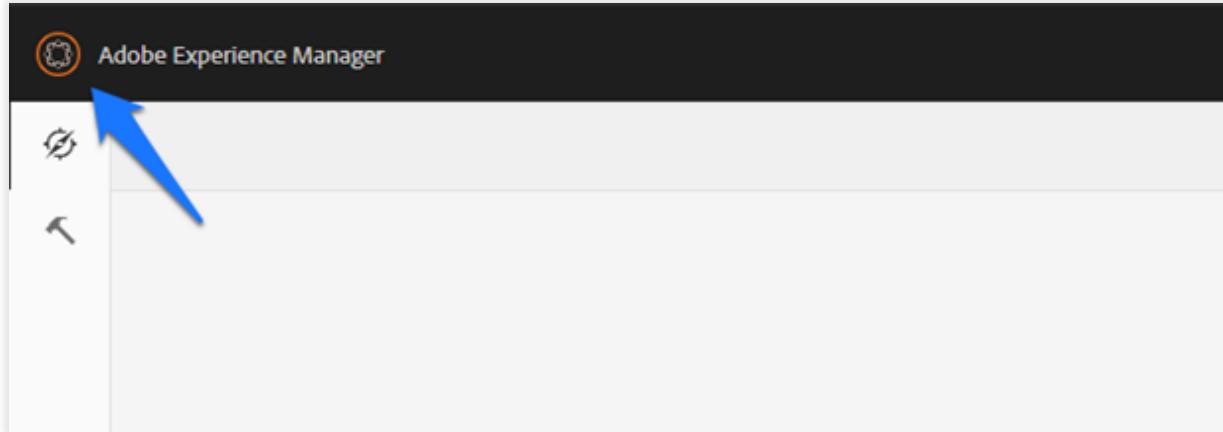
#### Exercise 4.1 - Configure the Target legacy cloud service

In this exercise, we will configure the Target legacy cloud service to enable the export of experience fragments. It is sometimes confusing as to why we would be implementing **both** the Launch integration **and** the Target integration. This is because the Launch integration controls the client-side loading of the Target library and personalized experiences while the Target integration controls the server-side export of experience fragments to Target. For this reason, when configuring the integration,



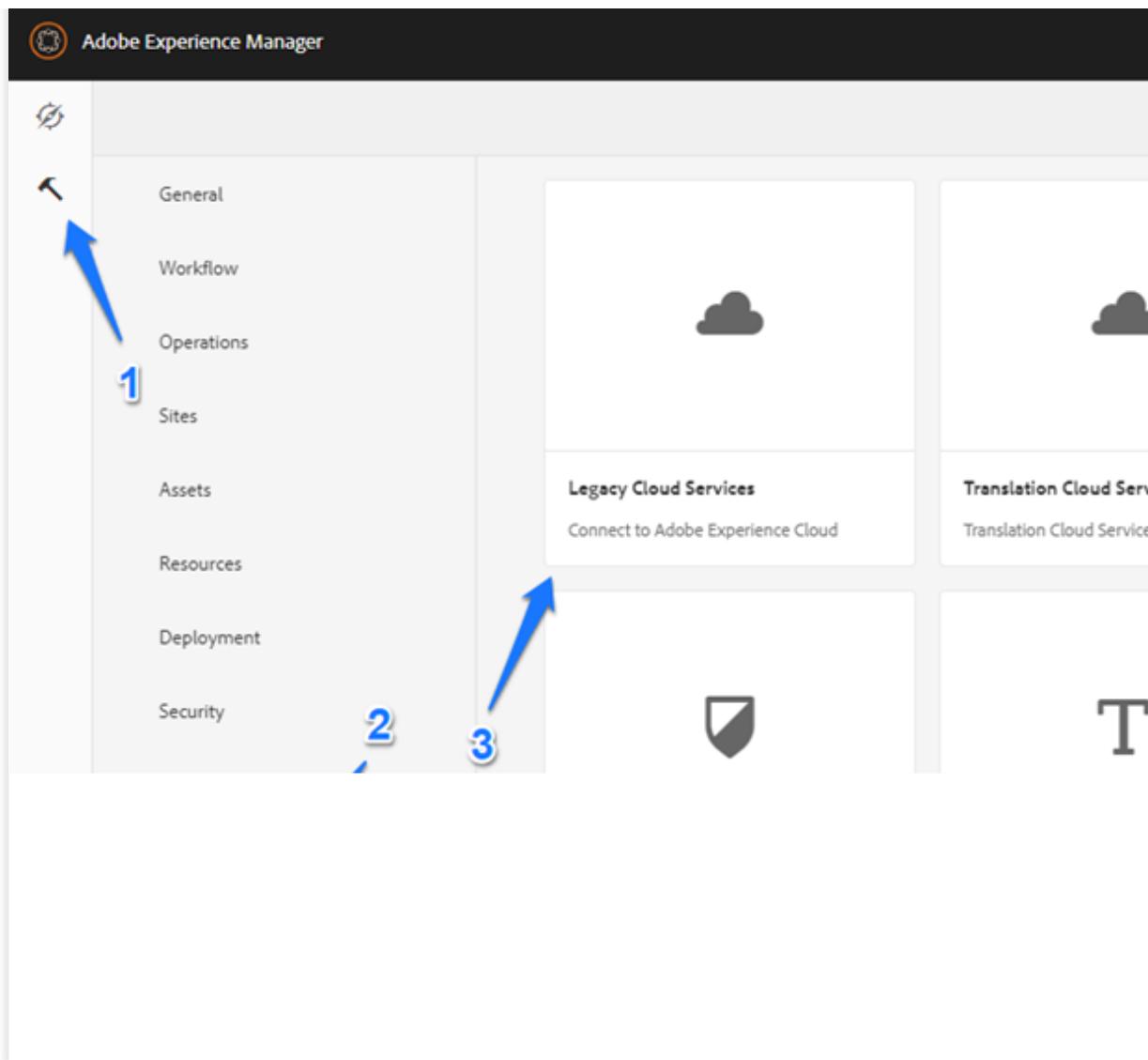
we will select **Use Tag Management System to deliver client library** to tell AEM that we are managing the delivery of AT.js through a tag manager.

1. In AEM, click the **Adobe Experience Manager** icon to return to the home screen.



2. Under **Tools**, select **Cloud Services**, then select **Legacy Cloud Services**. Note that this is the same area where we configured the Analytics integration previously.





3. In the list of cloud services, locate **Adobe Target** and click on **Configure Now**.





### Adobe Search&Promote

Adobe® Search&Promote enables marketers to optimize how visitors browse, find, c

[Learn more](#) [Configure now](#)

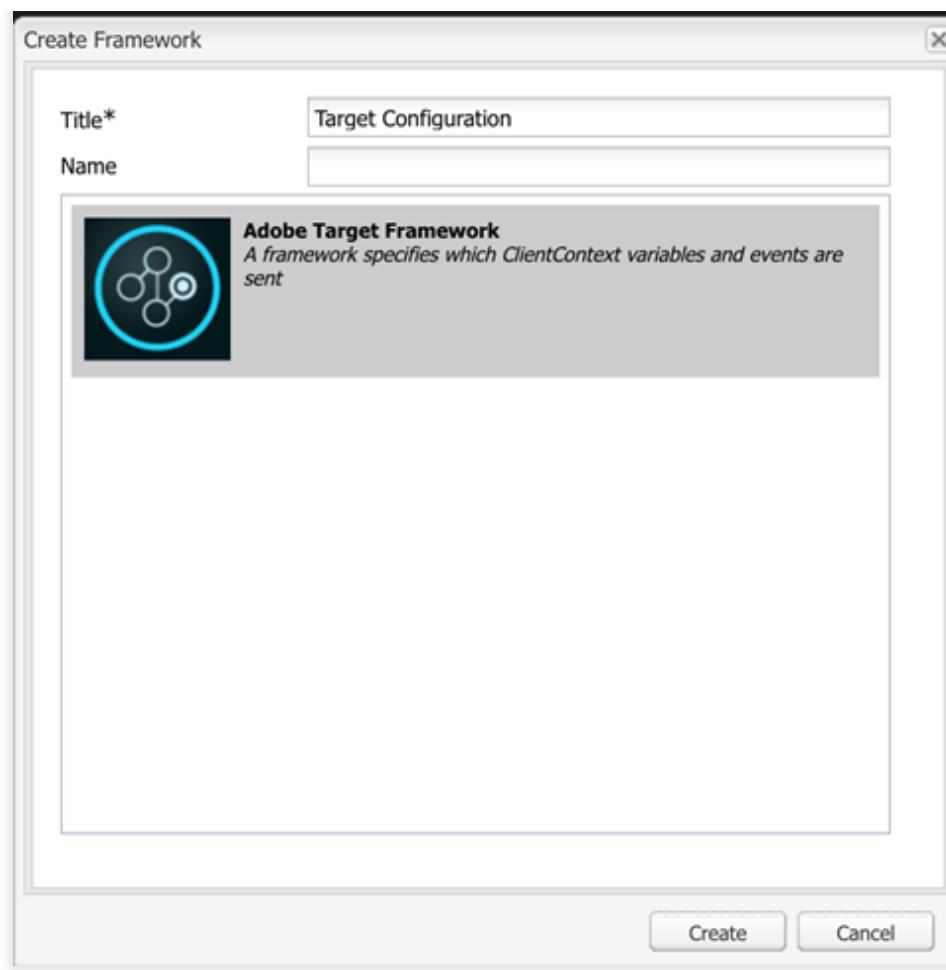
### Adobe Target

Adobe® Target™ gives marketers a conversion website optimization tool with the nec

[Learn more](#) [Configure now](#)

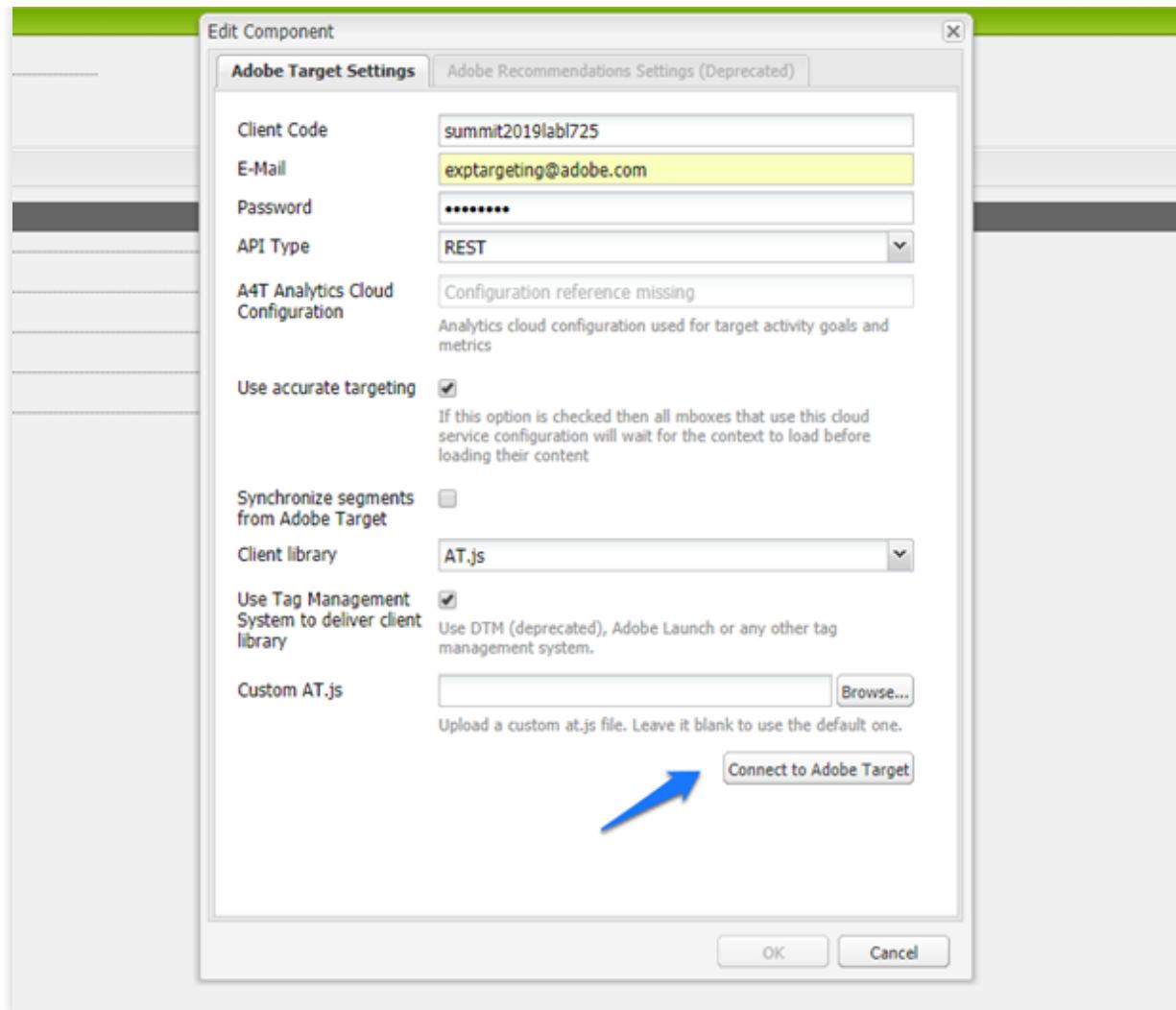
4. Give your configuration a title of ***Target Configuration*** and click Create.





5. In the configuration dialog, enter the following values:
  - a. **Client Code:** summit2019lbl725
  - b. **E-Mail:** [exptargeting@adobe.com](mailto:exptargeting@adobe.com)
  - c. **Password:** Adobe\_05
  - d. **API Type:** REST
  - e. **Use Tag Management System to deliver client library:** true
  - f. Leave all other fields as default values





6. Click **Connect to Adobe Target** and then click **OK**.

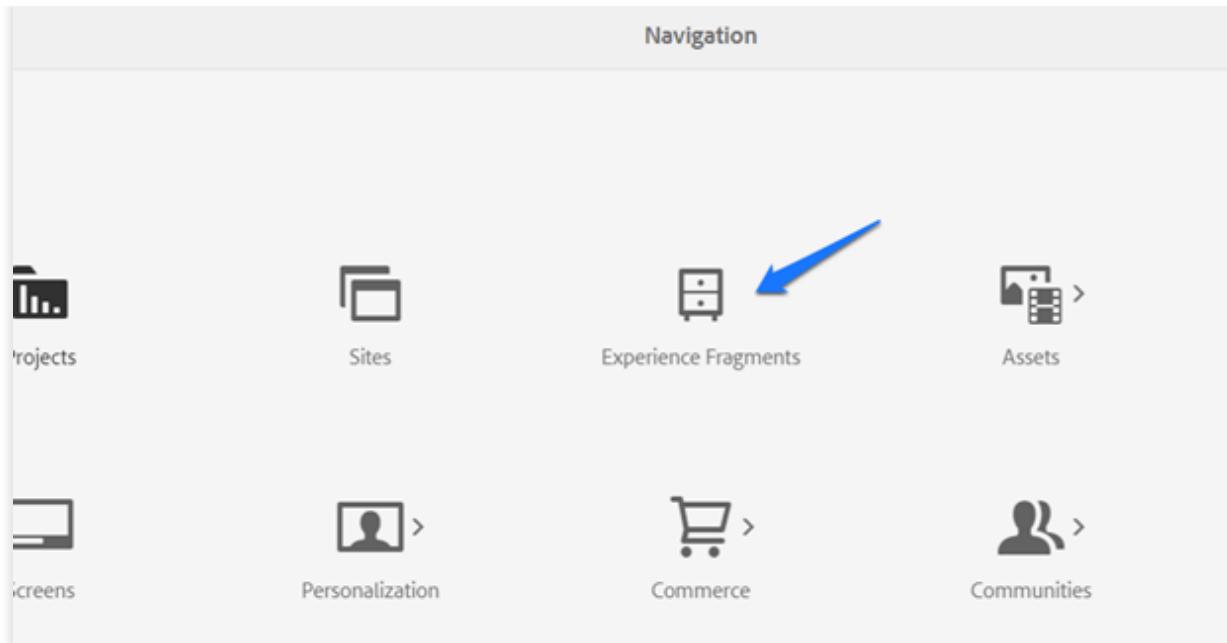
7. Close this browser tab.

#### Exercise 4.2 - Attach the Target cloud service to an experience fragment folder

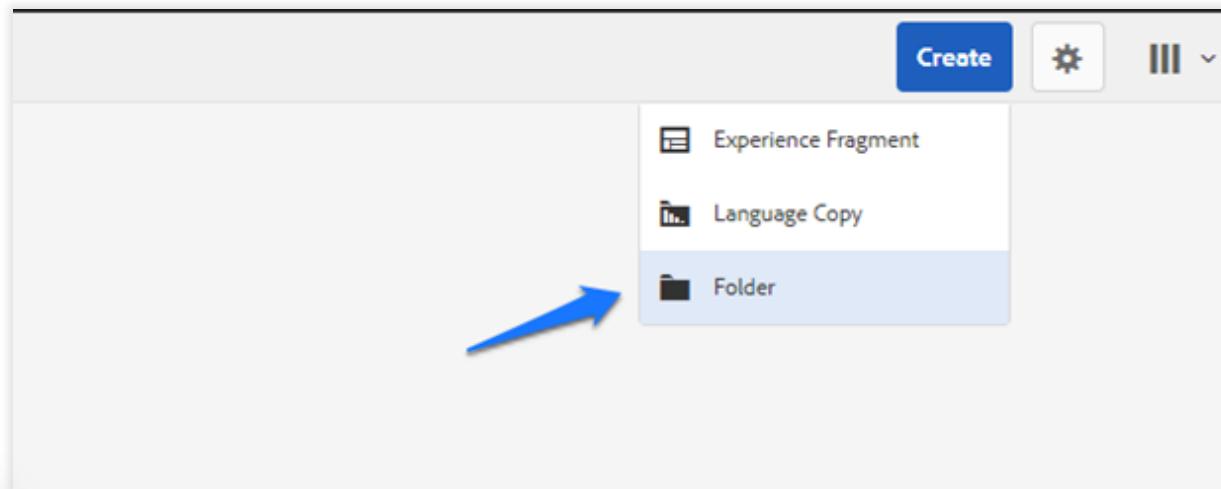
In this exercise, we will create a folder to house our experience fragments and attach the Target cloud service configuration.

1. Open a new browser window and point it to your AEM author environment (<http://localhost:4502>).
2. Click on **Experience Fragments**.

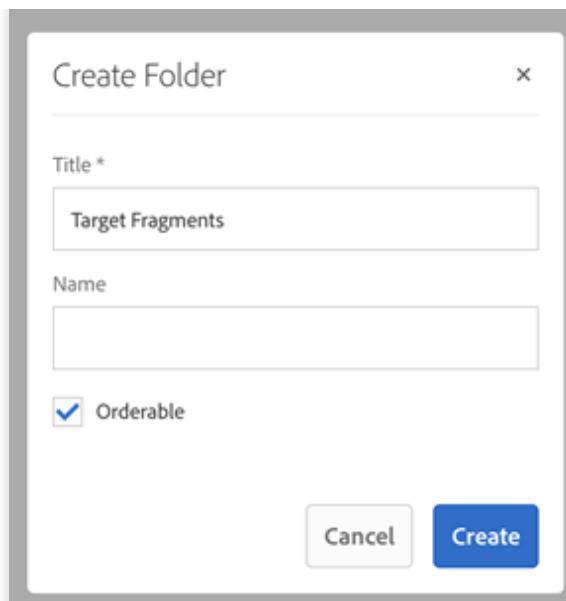




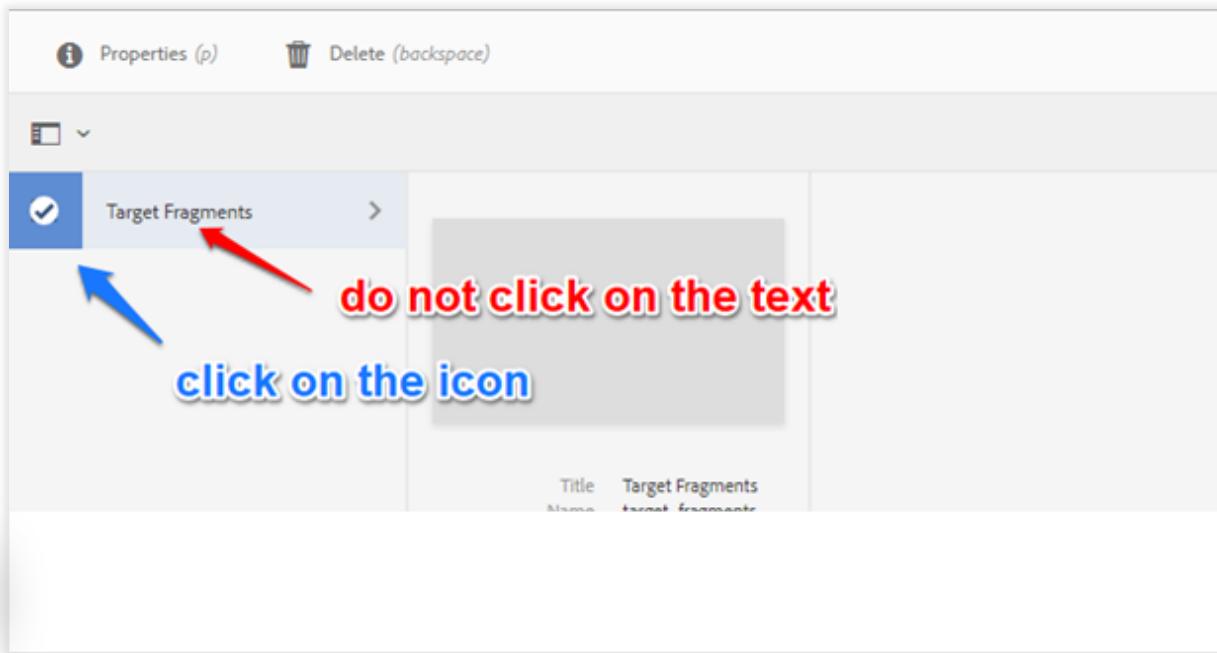
3. Click on the blue **Create** button in the top-right of your screen and then select **Folder**.



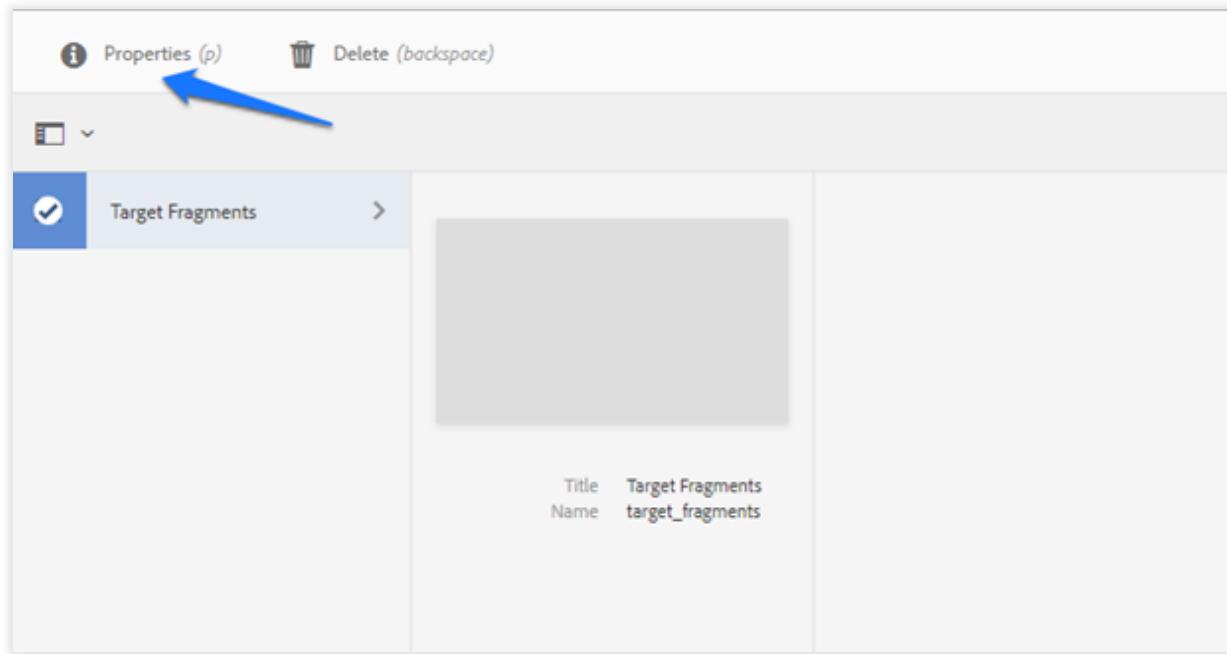
4. Give your folder a title of **Target Fragments** and click **Create**.



5. Select the **Target Fragments** folder that was created by clicking on its icon.

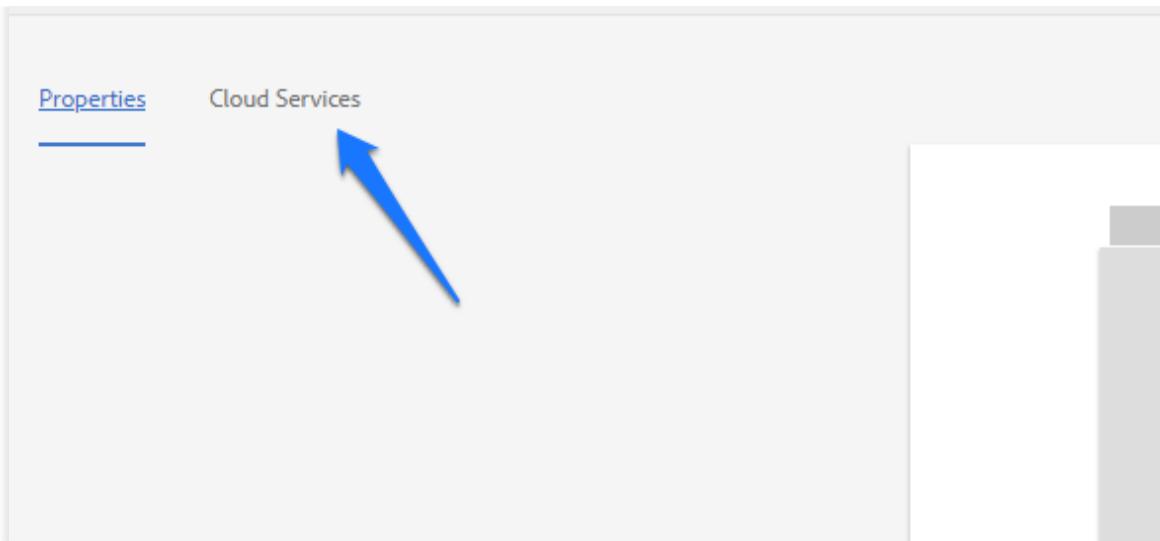


6. Click on *Properties* in the navigation bar.



7. In the window that opens, click on the *Cloud Services* tab.





8. Select **Adobe Target** from the **Cloud Service Configurations** section and leave the **Adobe Target Export Format** set to its default value of **HTML**. In AEM 6.5, we have added the ability to export fragments as JSON as well, but we will not be exploring that capability today.



**Configuration**

Cloud Configuration

Select Configuration Path

**Cloud Service Configurations**

Add Configuration

Adobe Target

Target Configuration

Adobe Target Export Format

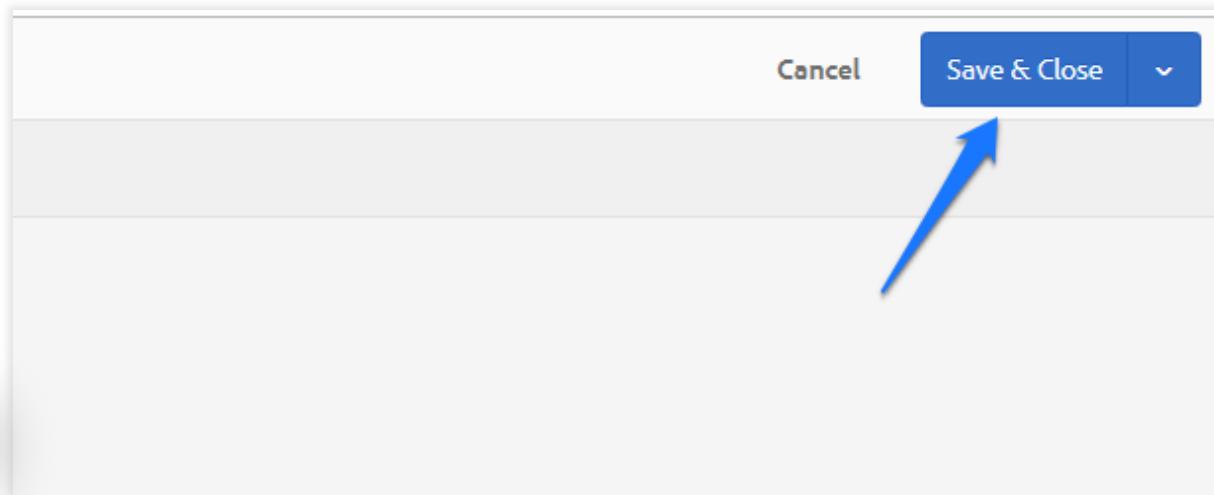
HTML

JSON

HTML & JSON



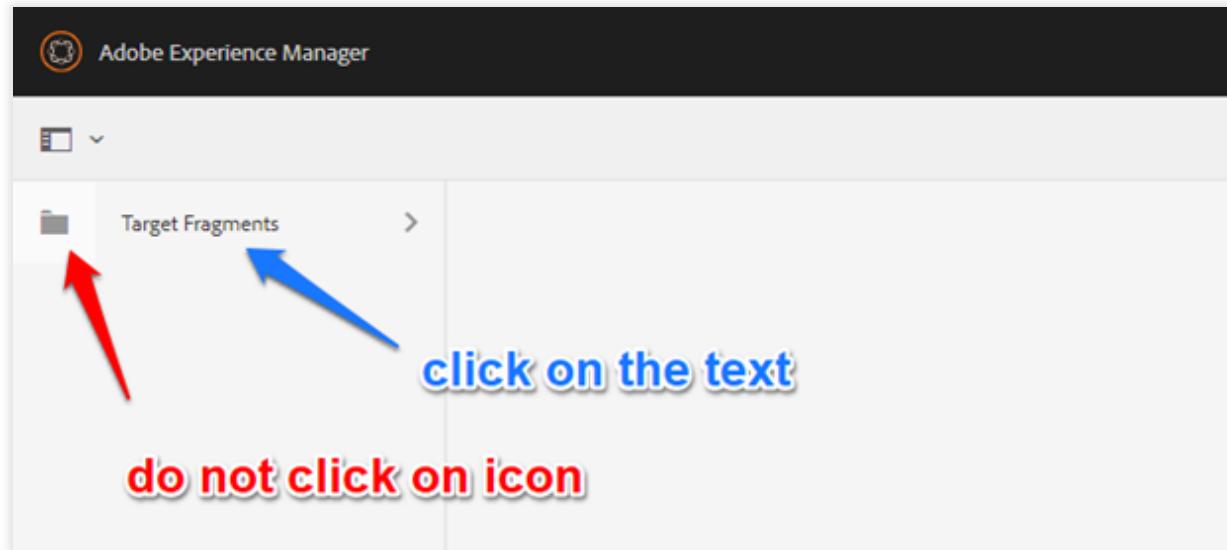
9. Click **Save & Close**.



### Exercise 4.3 - Create and publish an experience fragment

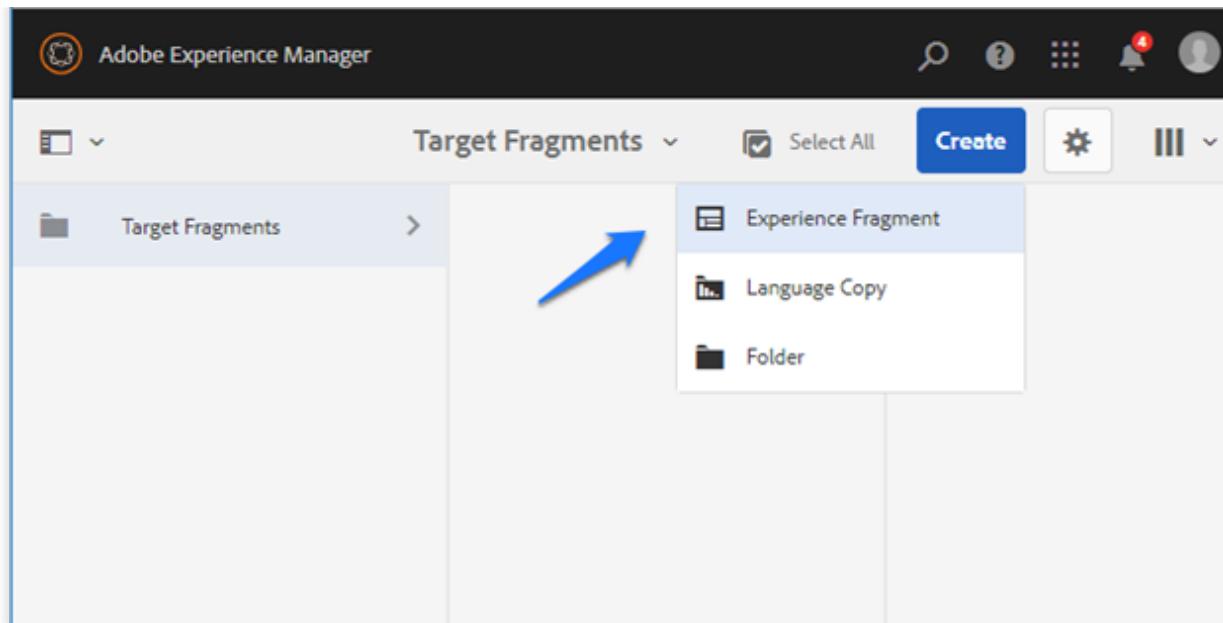
In this exercise, we will create an experience fragment. While we will be publishing the fragment to Target for use in the VEC, these fragments can also be used on pages in AEM Sites, published to social media networks, or served RESTfully to sites or applications that are served from other platforms.

1. Navigate into the folder that we created in the previous exercises by clicking on its name.

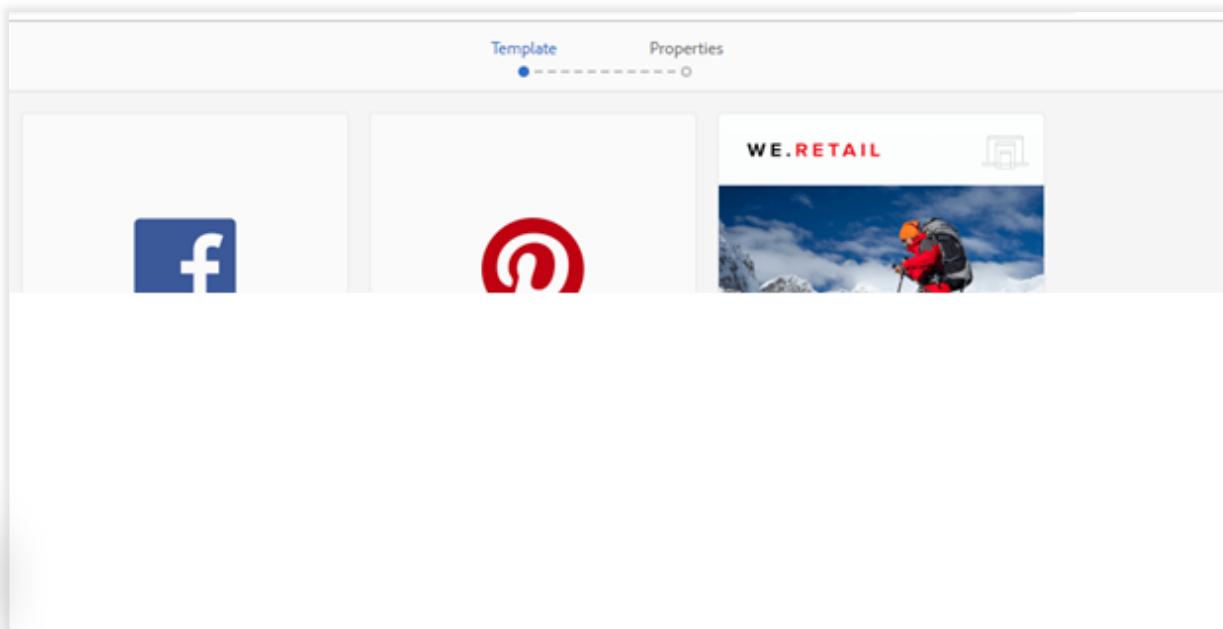


2. Click the blue *Create* button and select *Experience Fragment*.





3. Select *Experience Fragment Web Variation* and click *Next*.



4. Title your experience fragment as <SEAT> – <LAST\_NAME> – Fragment 1. For example, if my name was Jones and I was sitting in seat 42, I would give my fragment the title of **42 – Jones – Fragment 1**. Since we are all sharing the same Target account, this will make it possible for you to find your experience fragment in the Target UI. Click the blue Create button, and then click Open in the Success dialog.

Create Experience Fragm...      Template      Properties      Back      Create

Basic

Title \*

Name

Description

5. If you are prompted with a tutorial for the different editing modes, select the box that is labeled ***Don't show this again*** and click ***Close***.



## Modes

The experience within the editor can be viewed in different modes. Most importantly, there is:

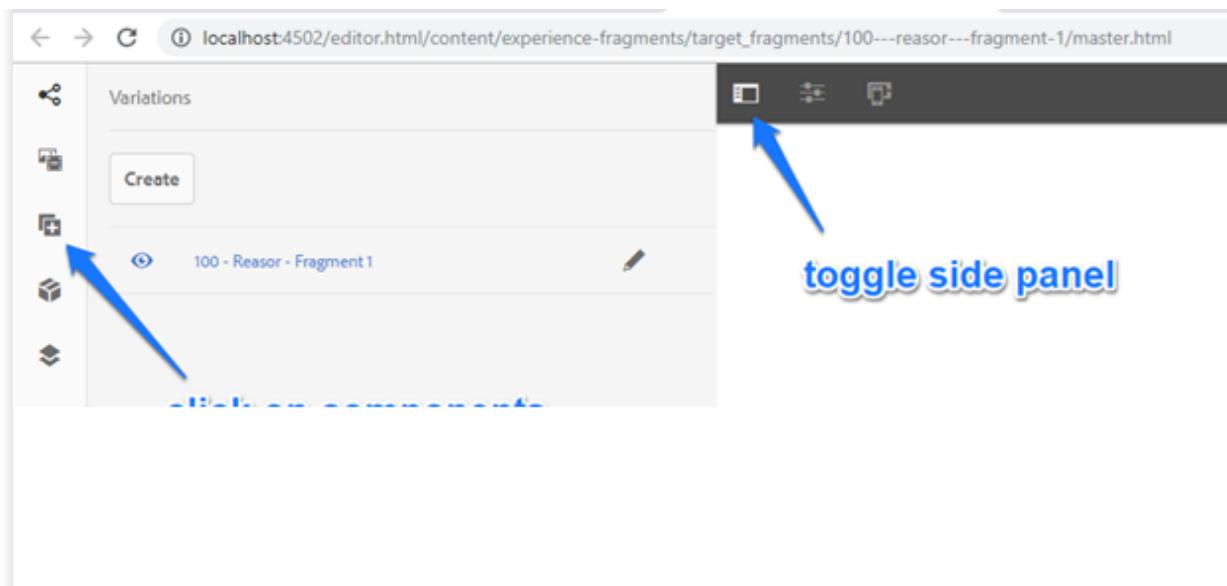
- **Preview:** To navigate the site and see how the page looks once published.
- **Edit:** To make changes to the experience.

The **Ctrl-Shift-M** keyboard shortcut allows you to quickly switch between preview and last selected mode.

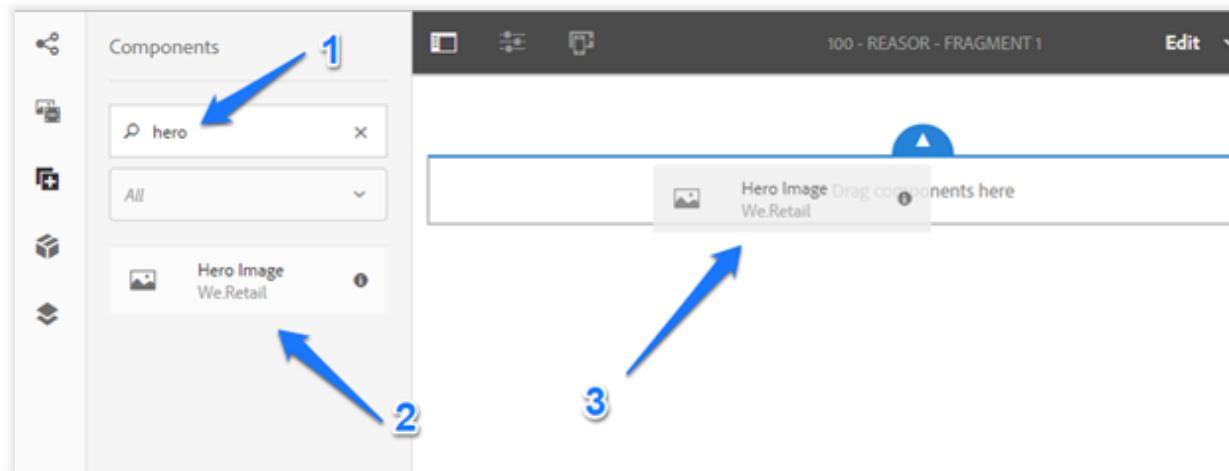


6. In the left navigation, click on Components icon. If the side panel has been collapsed, you can click on the Toggle Side Panel icon to get the side panel into view.

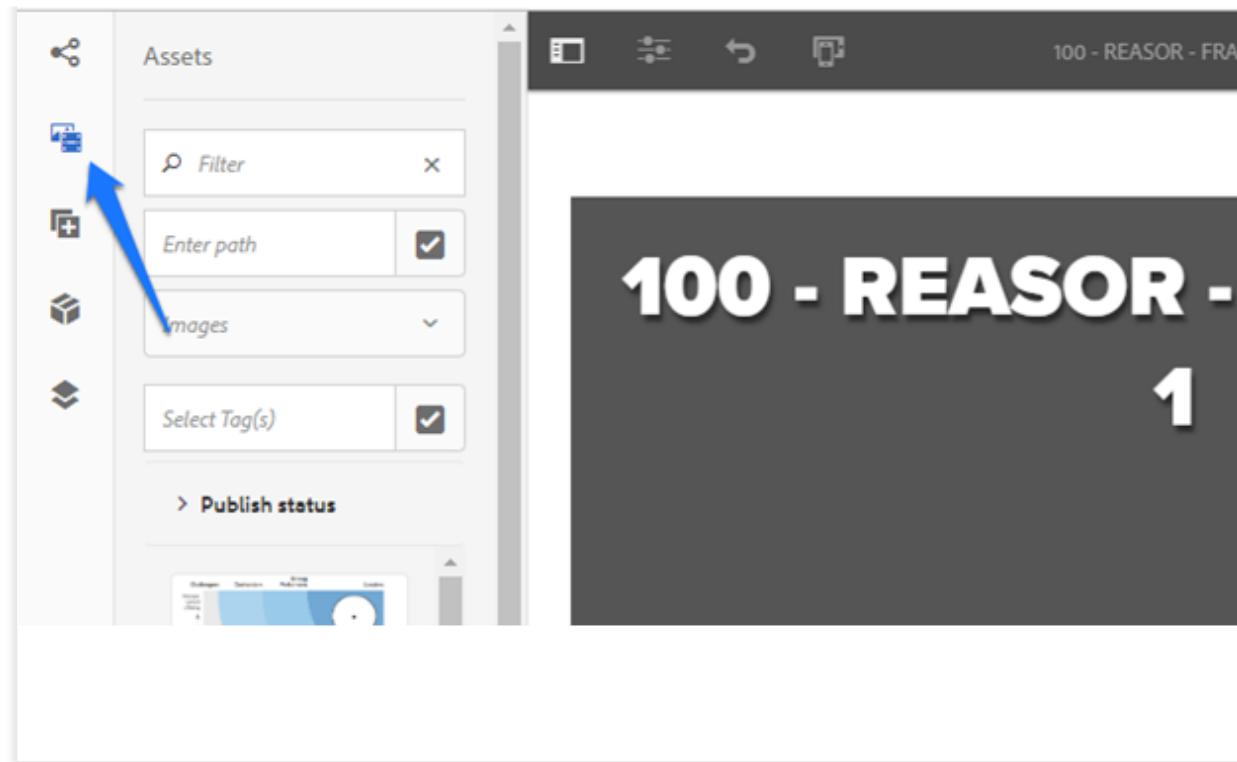




7. In the Components list that appears, locate the Hero Image component and drag it to the area in the editor that is labeled with Drag components here. If you wish, you can use the Filter field to make it easier to find.

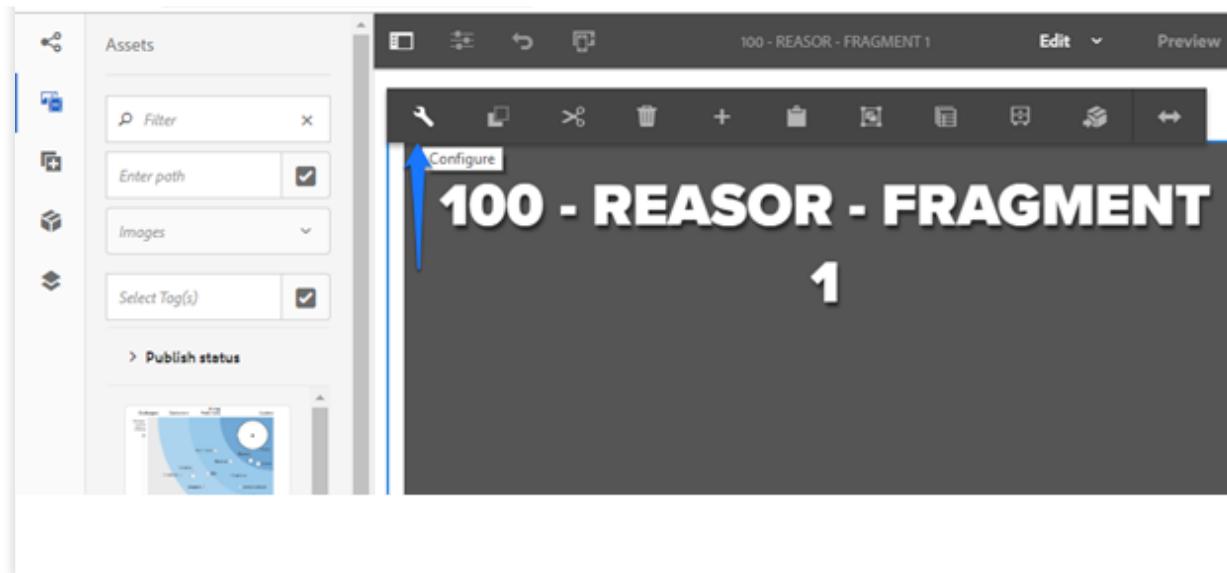


8. In the left navigation, click on the Assets icon.

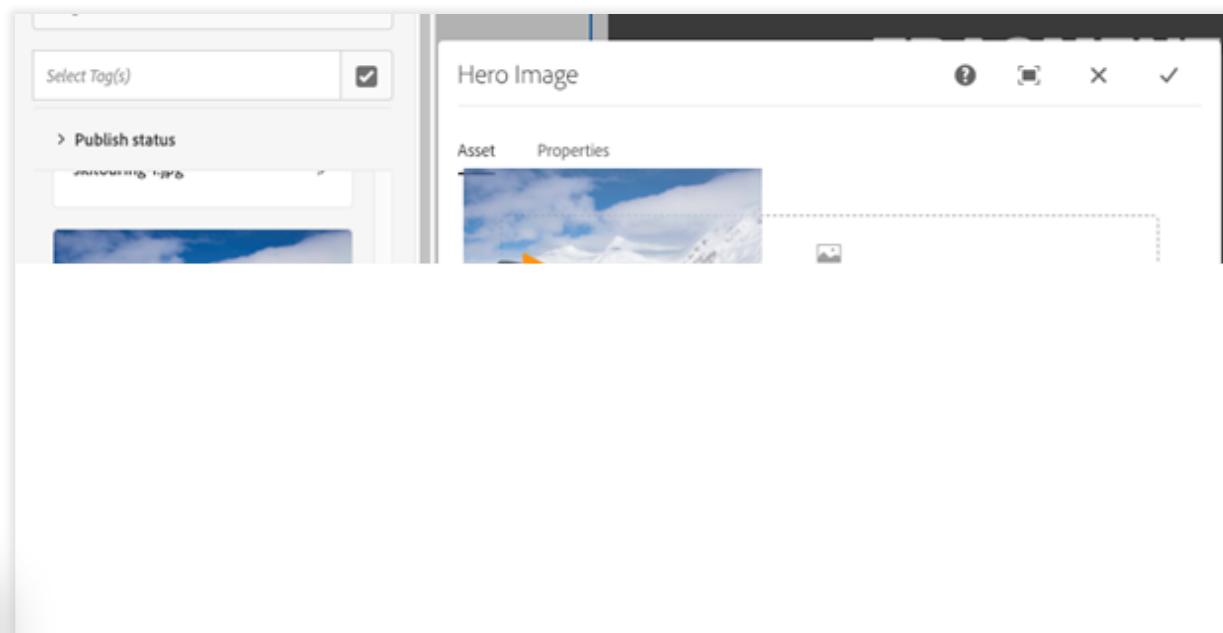


9. In the main content area, select the Hero Image component that we added and then click the Configure icon.

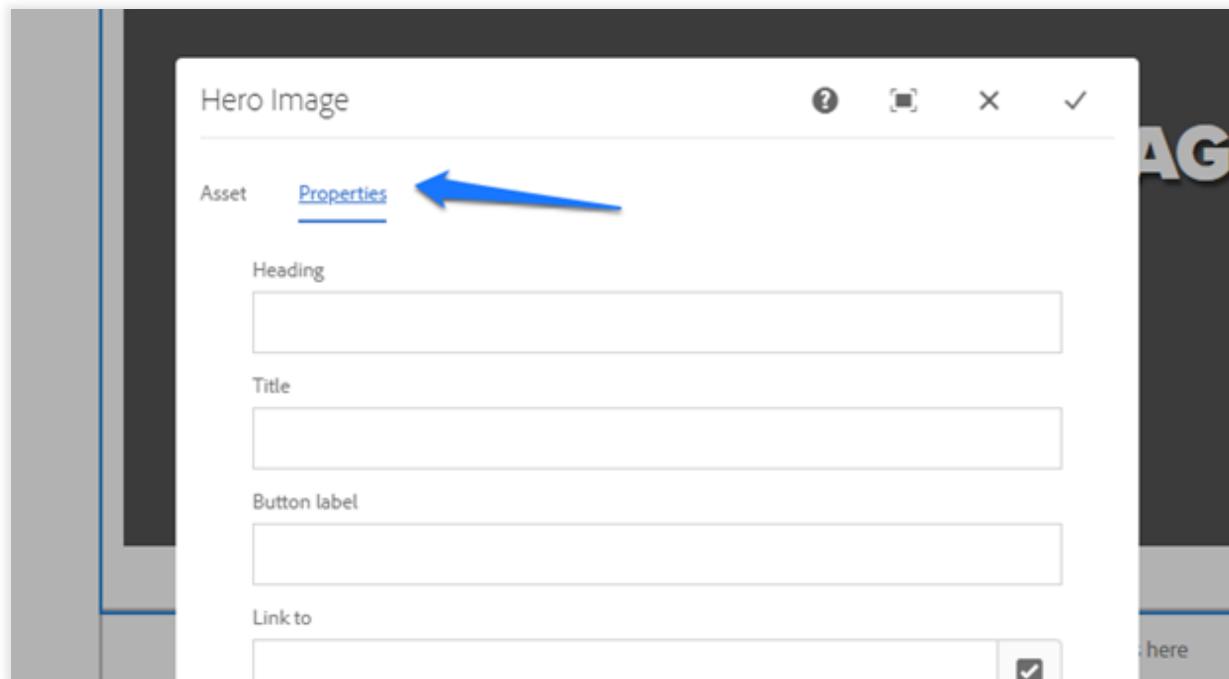




10. Drag any asset from the Assets rail to the asset drop target.

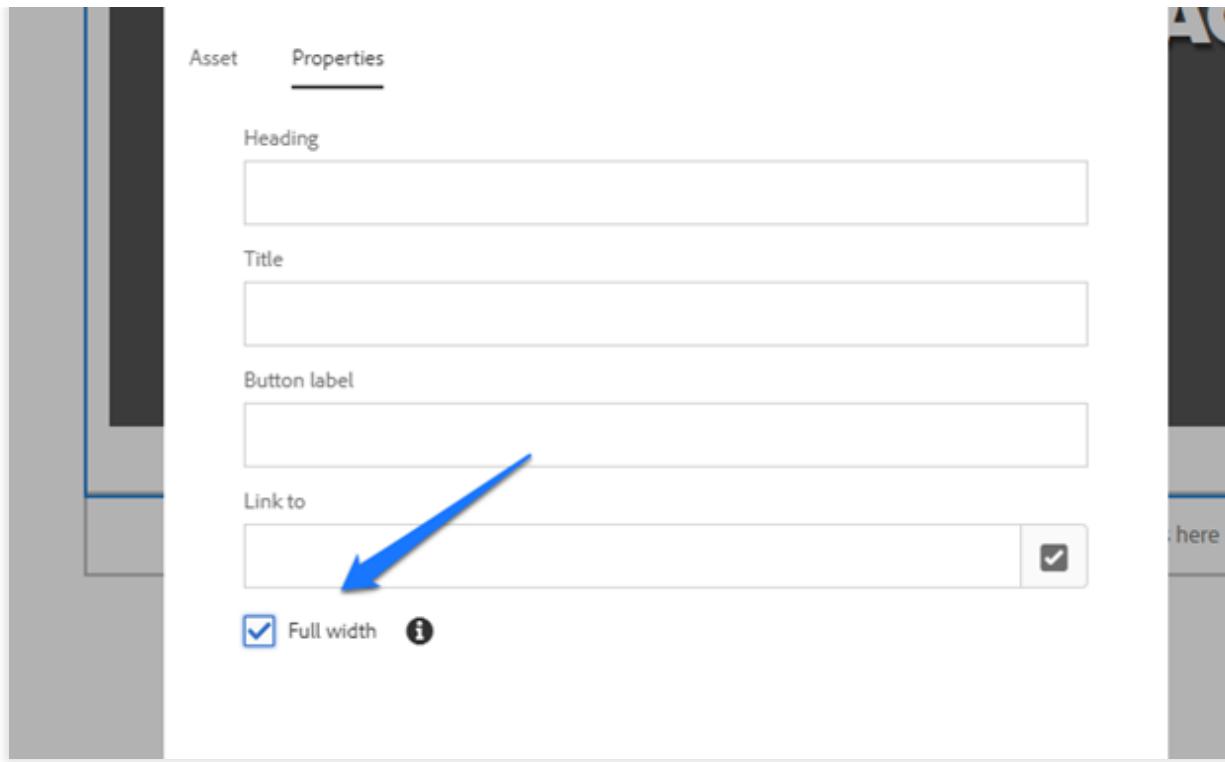


11. Click on the Properties tab.



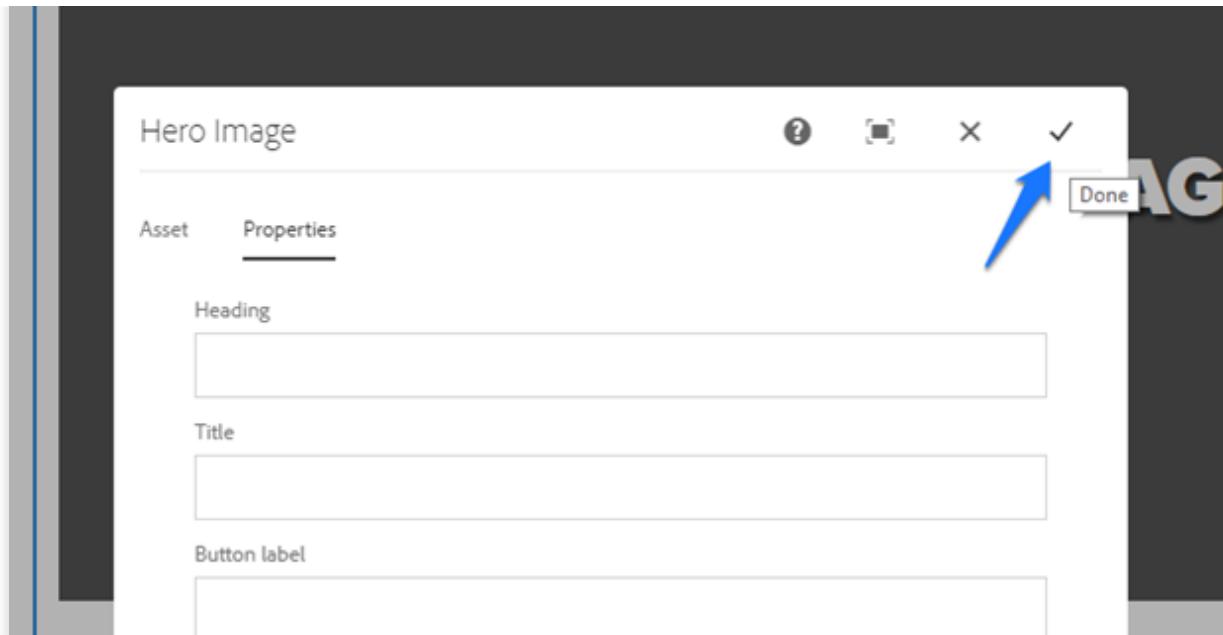
12. Select the *Full width* option.





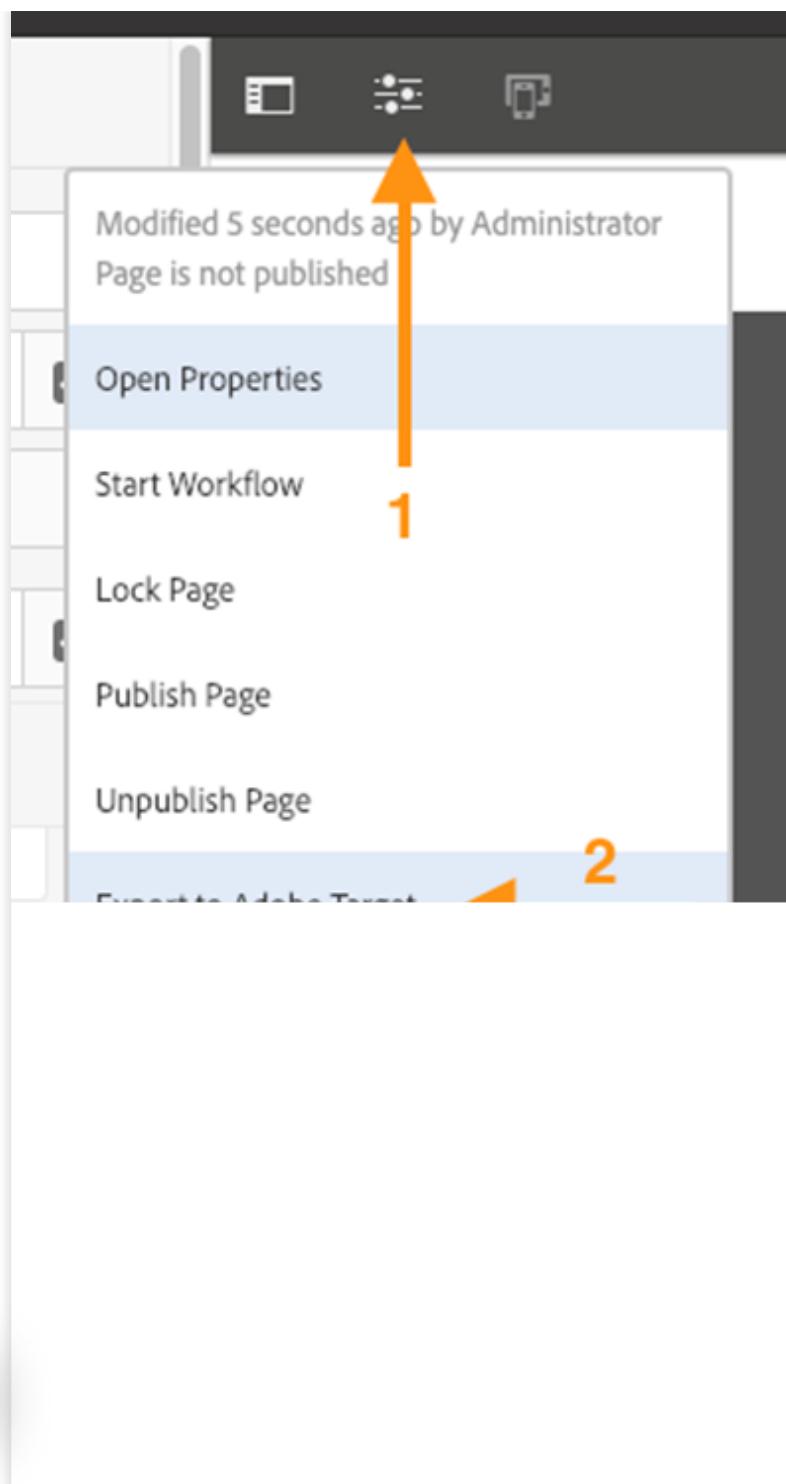
13. Click the *Done* icon.



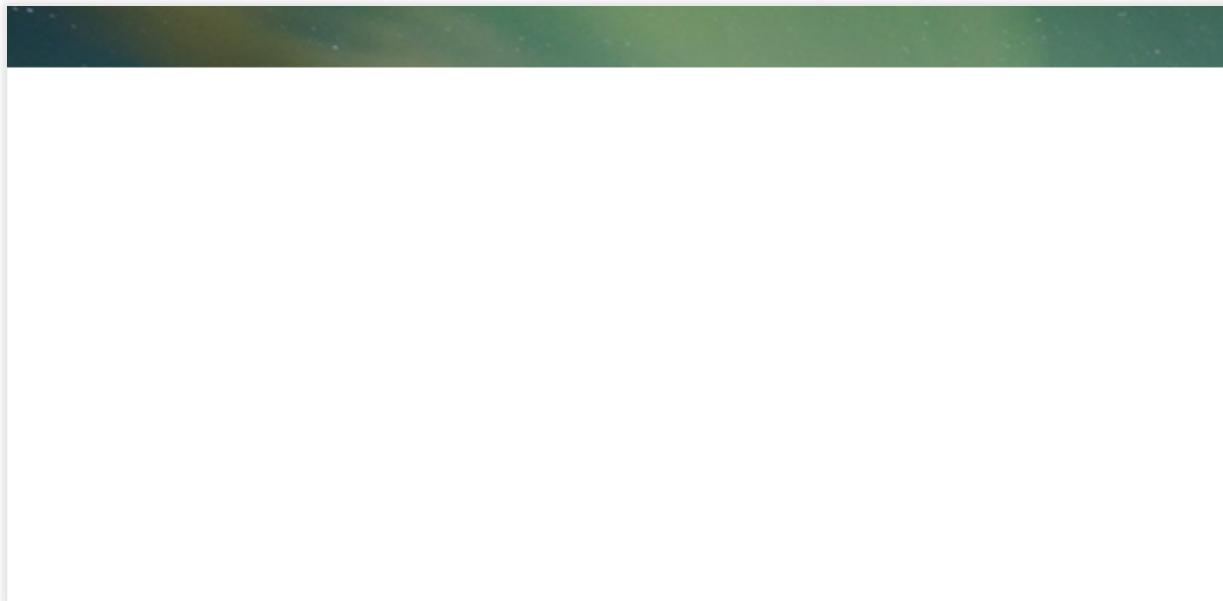


14. Click on the *Page Information* icon and select *Export to Adobe Target*.



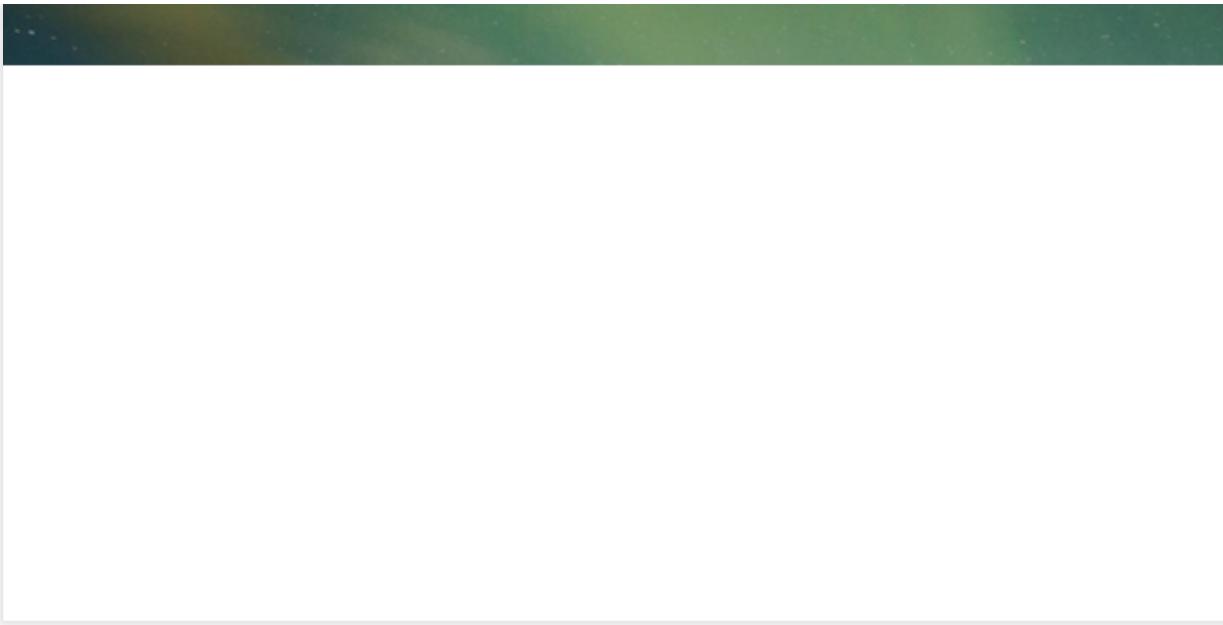


15. When prompted, click **Publish**, and then **OK**. AEM will activate any assets to the publish server that are used in the experience fragment to ensure that it can be properly served from Adobe Target. Note that while these assets will be served from our publish environment, any HTML markup will be served directly from Adobe Target.



You will see:



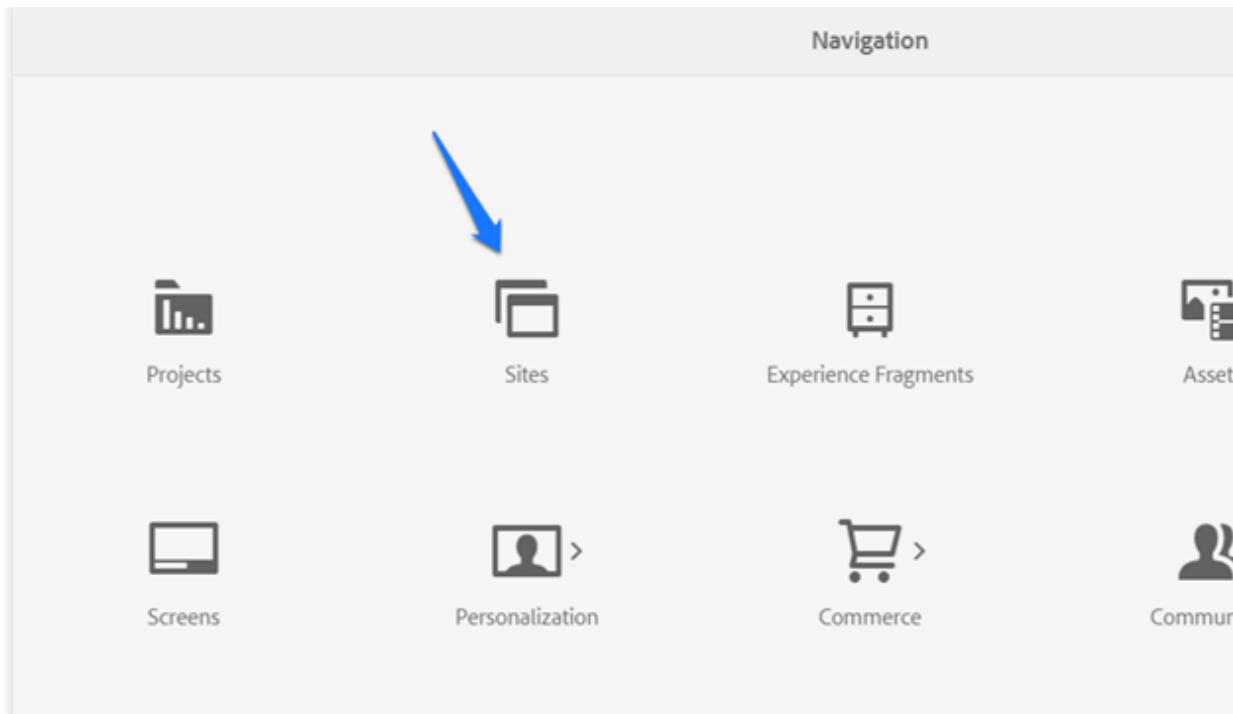


#### Exercise 4.4 - Create a page to test with

In this exercise, we will create and publish a page in AEM to test our Experience Fragment with. This is so that each student can test on their own page, eliminating any possible collisions that would occur if we had multiple Target activities targeting the same page.

1. Open a new browser window for your AEM author environment <http://localhost:4502> and click on the icon for **Sites**.





2. In the List view, click on the title of **WeRetail**, then **United States**, **English**, and finally **Experience**. Do not click on the icon or AEM will select the page rather than showing you its children.



	Title	Name	Modified
📁	Campaigns	campaigns	
📁	Community Sites	sites	
📁	Screens	screens	
	We.Retail	we-retail	3 hours ago <span style="color: yellow;">⚠</span> Administrator

click here on the text

Your screen should look like this illustration:



	Experience ▾				
	Title	Name	Modified	Published	Page View
	Arctic Surfing In Lofoten LIVE COPY	arctic-surfing-in-lofoten	Feb 8, 2018 Administrator	Not published	0
	48 hours of Wilderness LIVE COPY	hours-of-wilderness	Feb 7, 2018 Administrator	Not published	0
	Fly-fishing the Amazon	fly-fishing-the-amazon	Feb 7, 2018	Not published	0

3. Click the blue **Create** button and then select **Page**.

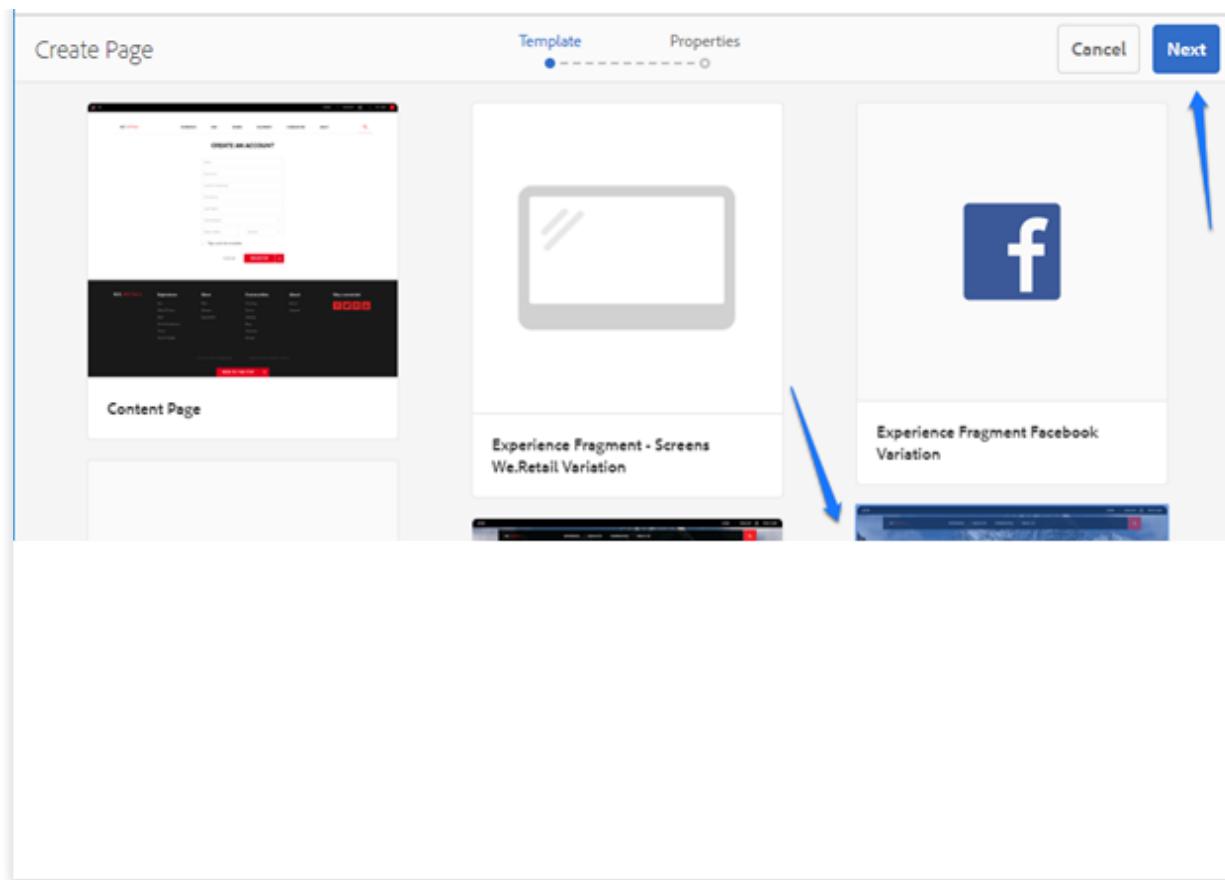


The screenshot shows a list of pages in English. The columns are Title, Name, Modified, Published, and Page Views. There are two items: 'Experience LIVE COPY' and 'Men'. A context menu is open over the 'Experience LIVE COPY' row, specifically over the 'Page Views' column. The menu has three options: 'Page', 'Site', and 'Live Copy'. A blue arrow points from the text '4. Select the *Experience Page* template and click *Next*.' to the 'Page' option in the menu.

Title	Name	Modified	Published	Page Views
Experience LIVE COPY	experience	Feb 7, 2018 Administrator	Not published	1
Men	men	Mar 14, 2016 Administrator	Not published	1

4. Select the *Experience Page* template and click *Next*.





5. Give your page a title of <SEAT> <LASTNAME> Experience Page. For example, if you were sitting in seat 100 and had a last name of Reasor, your page would be named **100 Reasor Experience Page**.



Create Page

Template  Properties

Back Create

Basic Advanced Social Media

**Title and Tags**

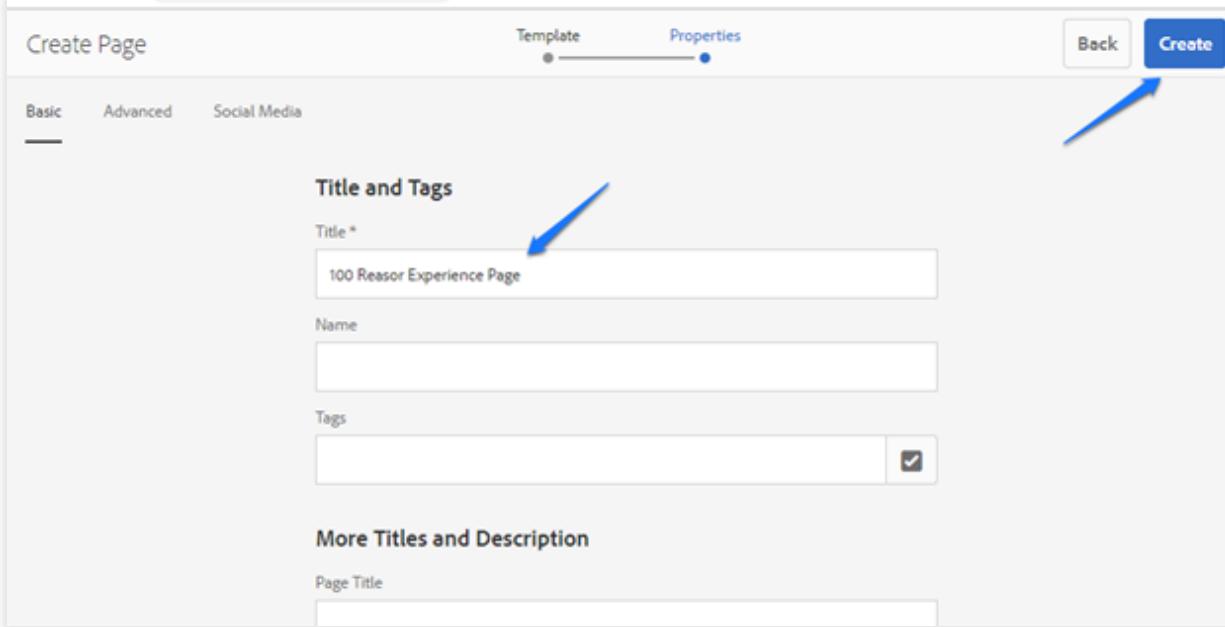
Title \*

Name

Tags

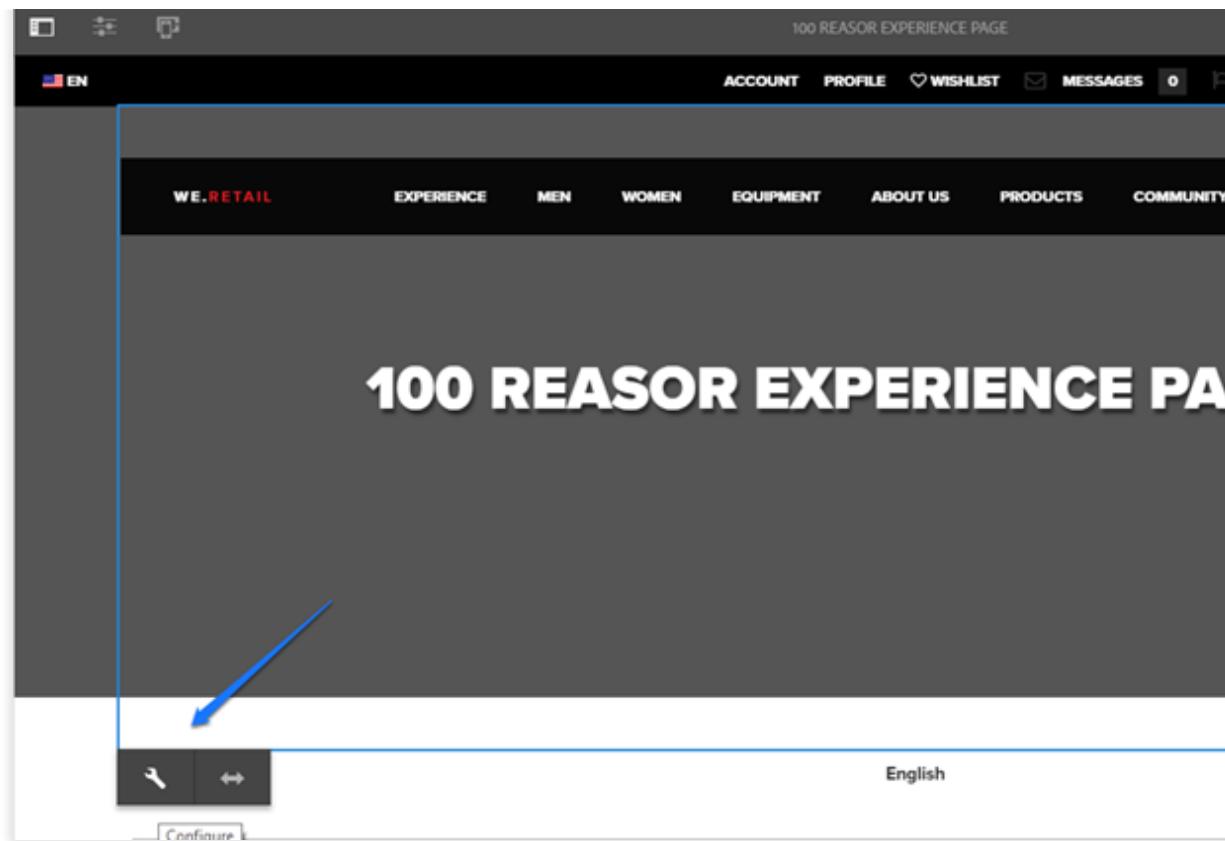
**More Titles and Description**

Page Title



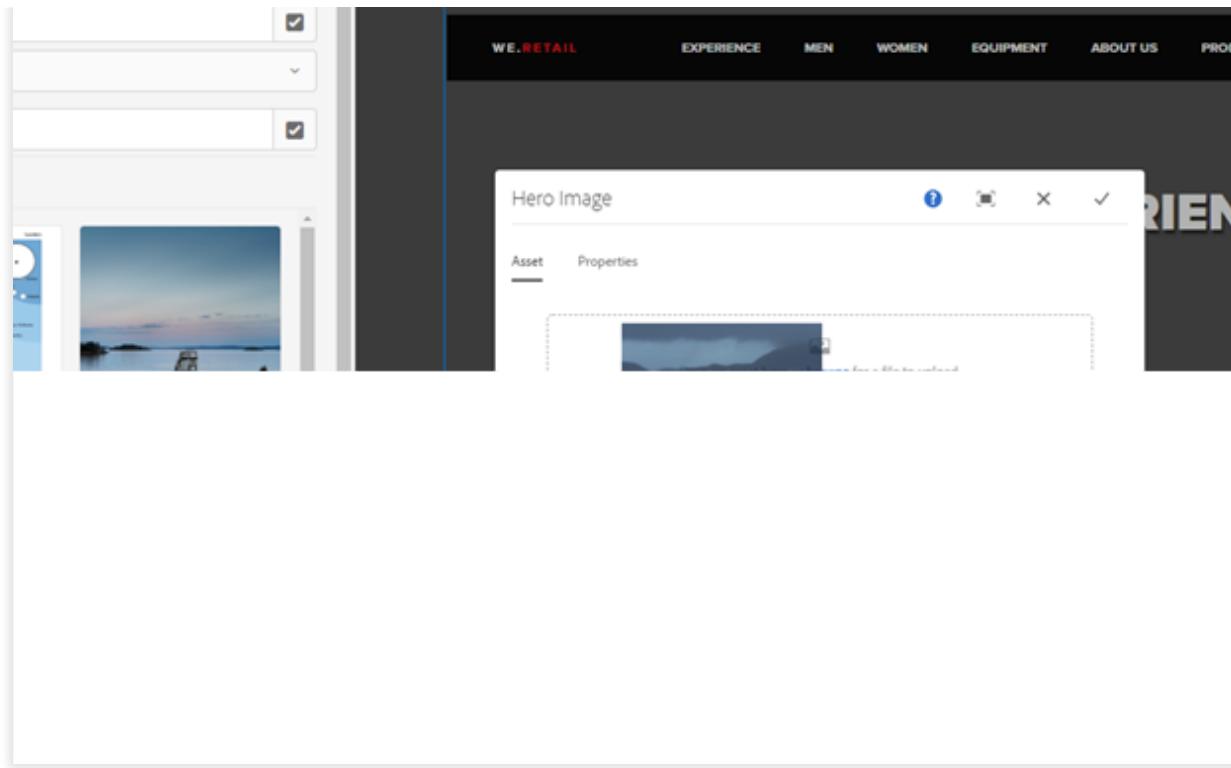
6. Click the blue **Create** button, then click **Open**.
7. Click on the **Hero Image** component and then click the **Configure** icon.





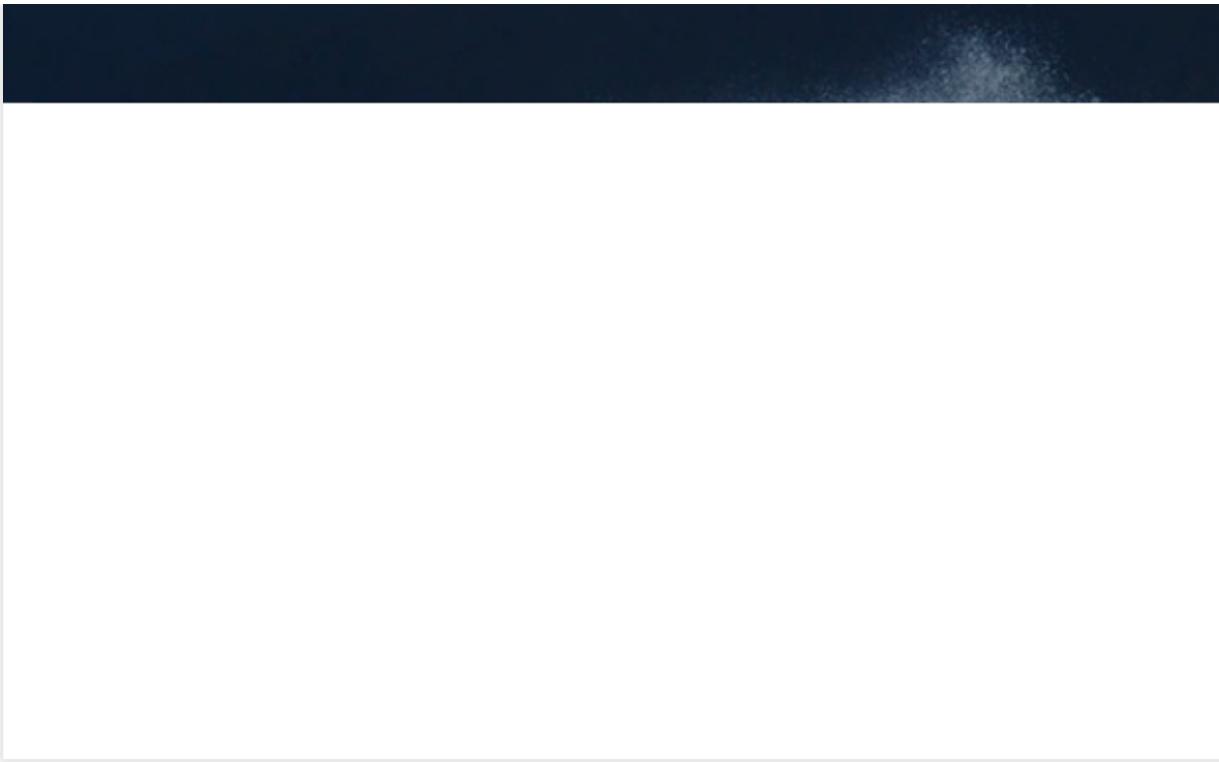
8. Drag an asset from the **Asset Finder** in the left rail to the **Drop an asset here...** call to action. Make sure to choose an asset that is different from the one that you used in the last exercise.





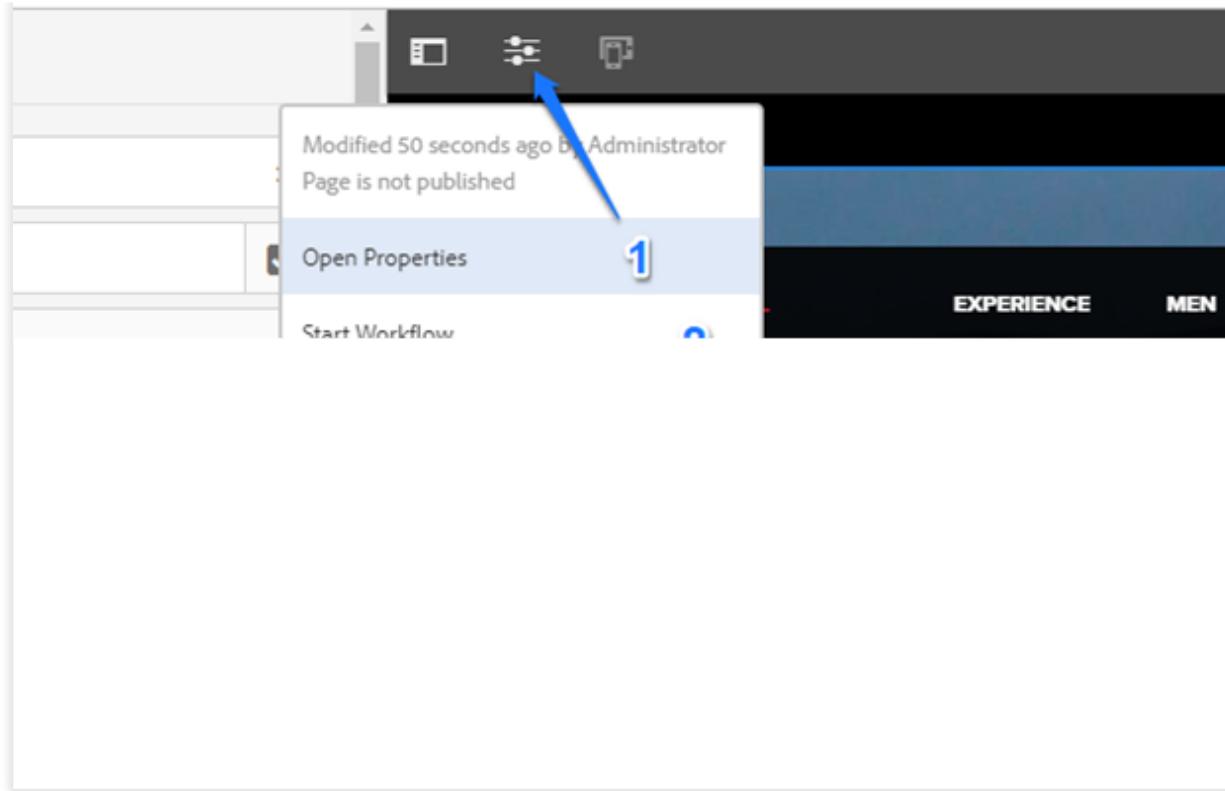
9. Click the ***Done*** checkmark icon.





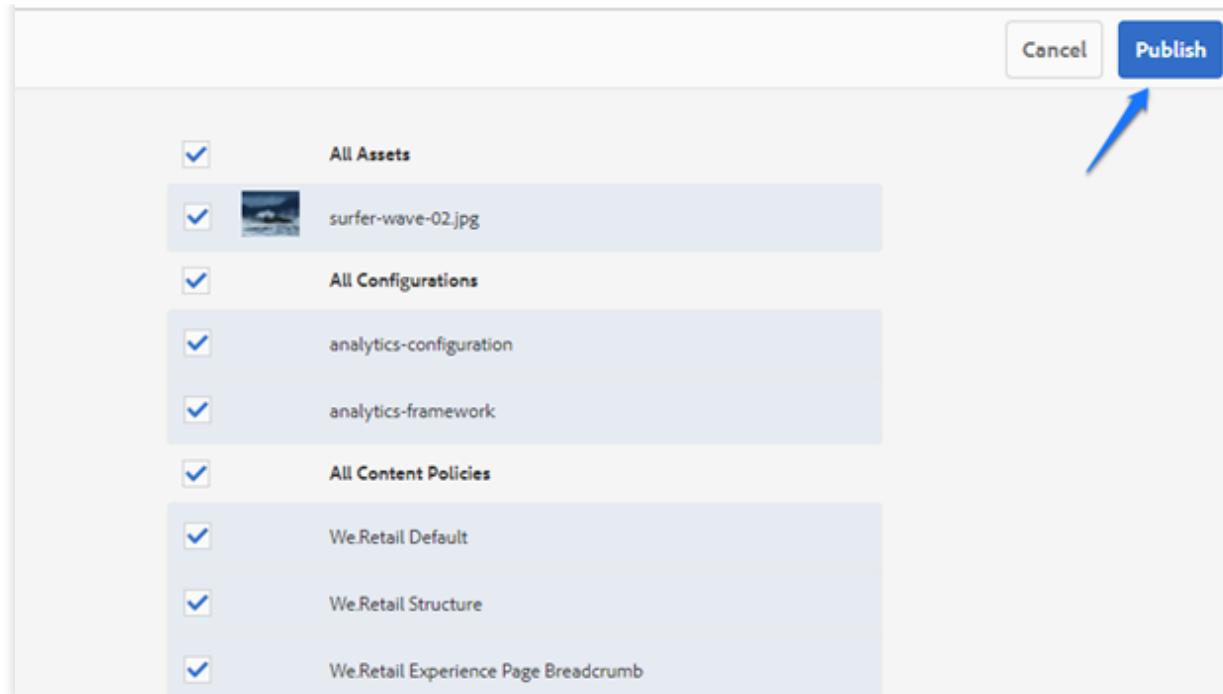
10. Click on the ***Page Information*** icon in the top navigation bar and select ***Publish Page***.





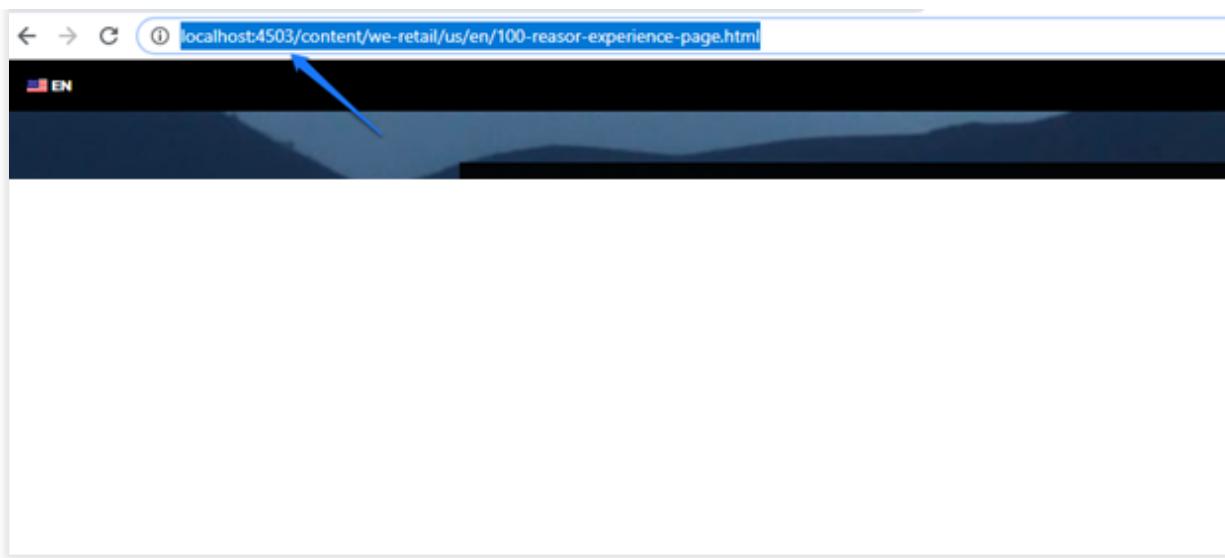
11. A page will open with a list of referenced assets and configurations to be published along with your page. Click **Publish**. When the operation has completed, you will be returned to the page editor.





12. To test that your page has published properly, copy the URL from your web browser into a new browser tab. Remove *editor.html* from the URL and change the port number from **4502** to **4503**. For example, if your URL were <http://localhost:4502/editor.html/content/we-retail/us/en/100-reasor-experience-page.html>, you would change it to <http://localhost:4503/content/we-retail/us/en/100-reasor-experience-page.html>
13. If you see your page without the AEM editor, then your page has correctly activated. Leave this page open as we will need the URL for it in our next exercise.



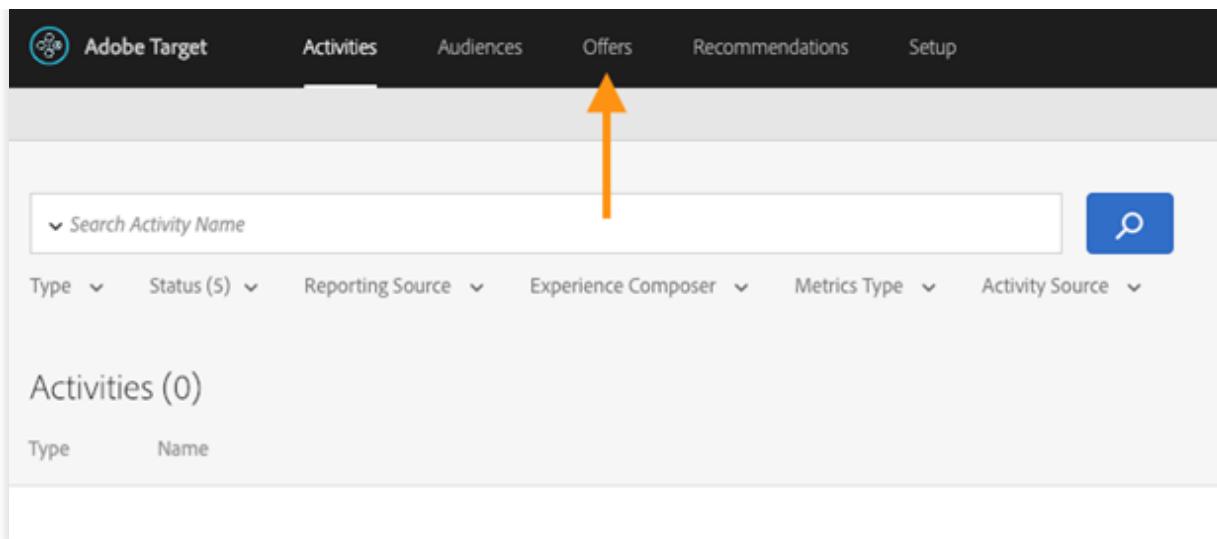


#### Exercise 4.5 - Locate the Experience Fragment offer in Target

When publishing Experience Fragments to Target, there can often be a delay before the fragment appears. In this exercise, we will search for our Experience Fragment in the Target offer library. If your fragment is not yet present, we will walk through some workaround steps so that you can use a pre-created Experience Fragment to complete the exercises.

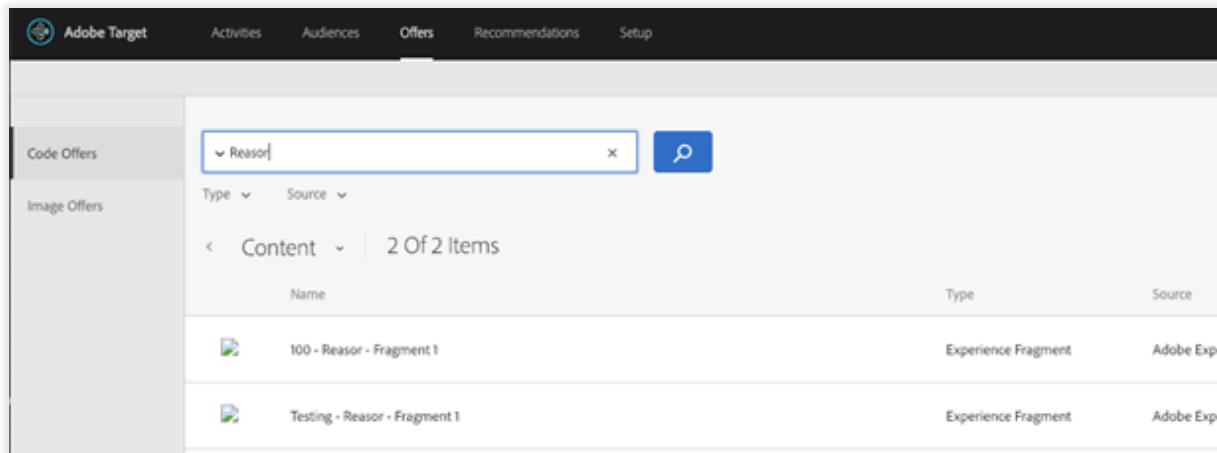
1. Open your browser and click on the bookmark for Adobe Target.
2. Click on the Offers link in the top navigation.





The screenshot shows the Adobe Target interface with the 'Offers' tab selected. The top navigation bar includes links for 'Adobe Target', 'Activities', 'Audiences', 'Offers' (which is highlighted in blue), 'Recommendations', and 'Setup'. Below the navigation is a search bar labeled 'Search Activity Name' with a magnifying glass icon. Underneath the search bar are several dropdown filters: 'Type', 'Status (5)', 'Reporting Source', 'Experience Composer', 'Metrics Type', and 'Activity Source'. The main content area is titled 'Activities (0)' and contains columns for 'Type' and 'Name', with a blank table below.

3. In the search box, type your last name. Target will filter the list of offers shown.

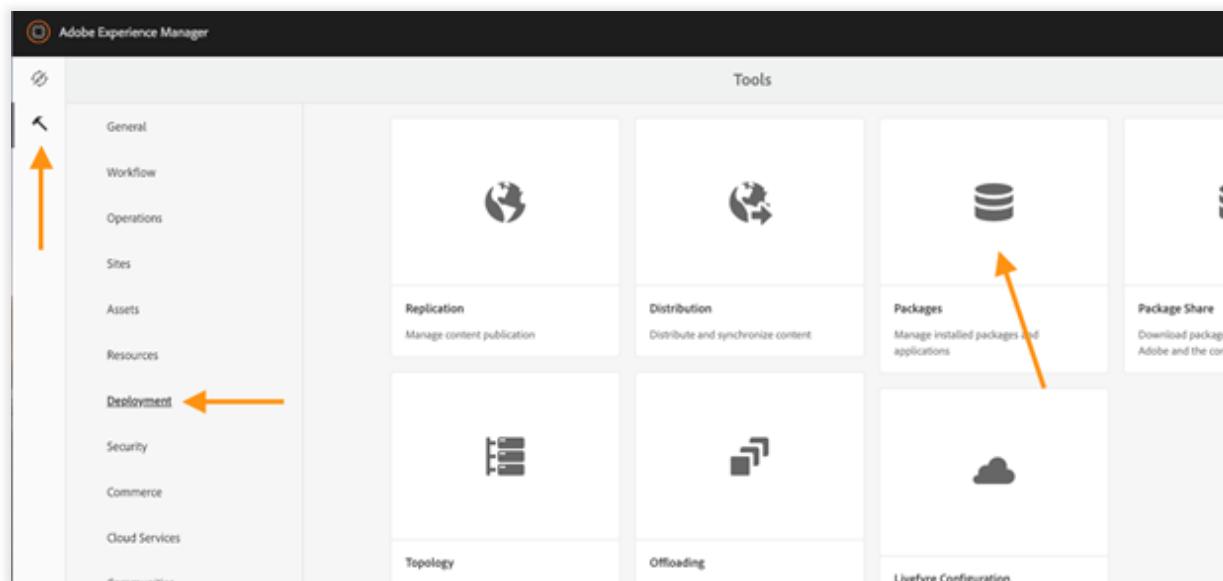


The screenshot shows the Adobe Target interface with the 'Offers' tab selected. The search bar contains the text 'Reaso'. The results table displays two items:

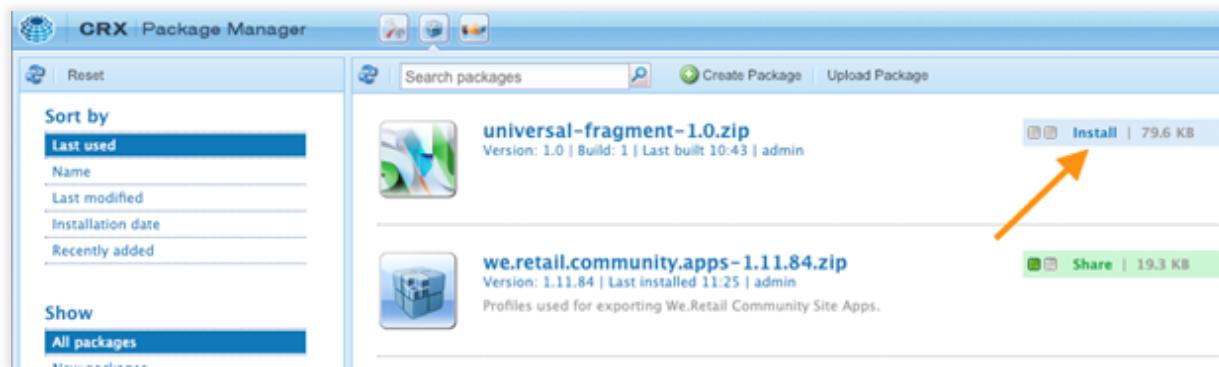
Name	Type	Source
100 - Reaso - Fragment 1	Experience Fragment	Adobe Experience Manager
Testing - Reaso - Fragment 1	Experience Fragment	Adobe Experience Manager

4. If you see the Experience Fragment listed that you published in the previous activity, feel free to use this fragment in the next exercise. You do not need to continue with the rest of this exercise. If you do not see your fragment listed, please continue with the remaining steps in this exercise to install a "universal" fragment that we have provided.
5. Open a browser tab for your AEM author environment (<http://localhost:4502>).

6. Click on Tools > Deployment > Packages.

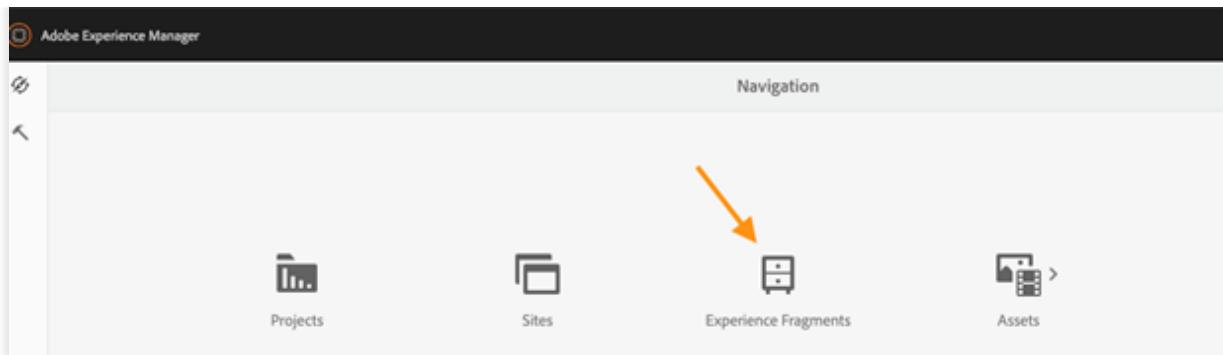


7. Locate the universal-fragment-1.0 package and click Install. Click Install again in the dialog box that opens.

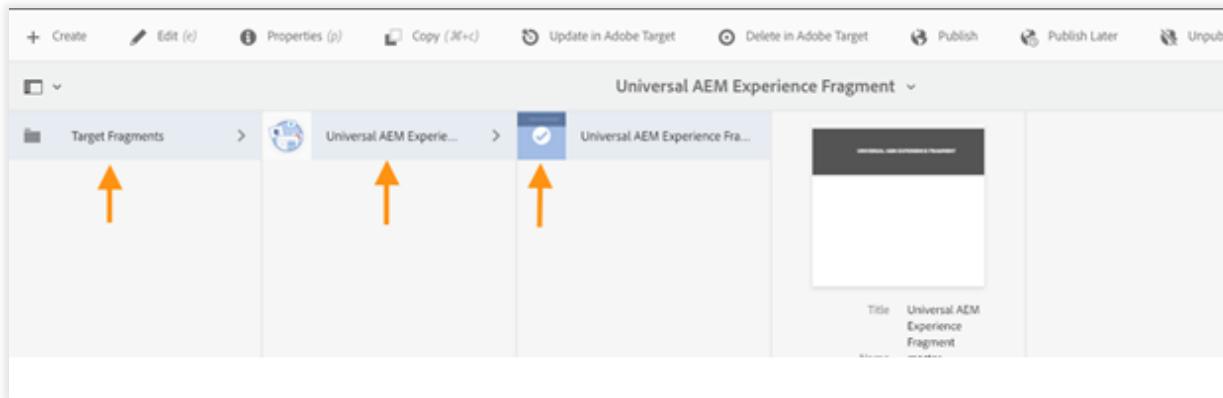


8. Navigate to the AEM home screen via your browser bookmark or by going to (<http://localhost:4502>).

9. Click on Experience Fragments.



10. Click on the name for Target Fragments and then on the name for Universal AEM Experience Fragment. Click on the icon for the Universal AEM Experience Fragment master variation within.



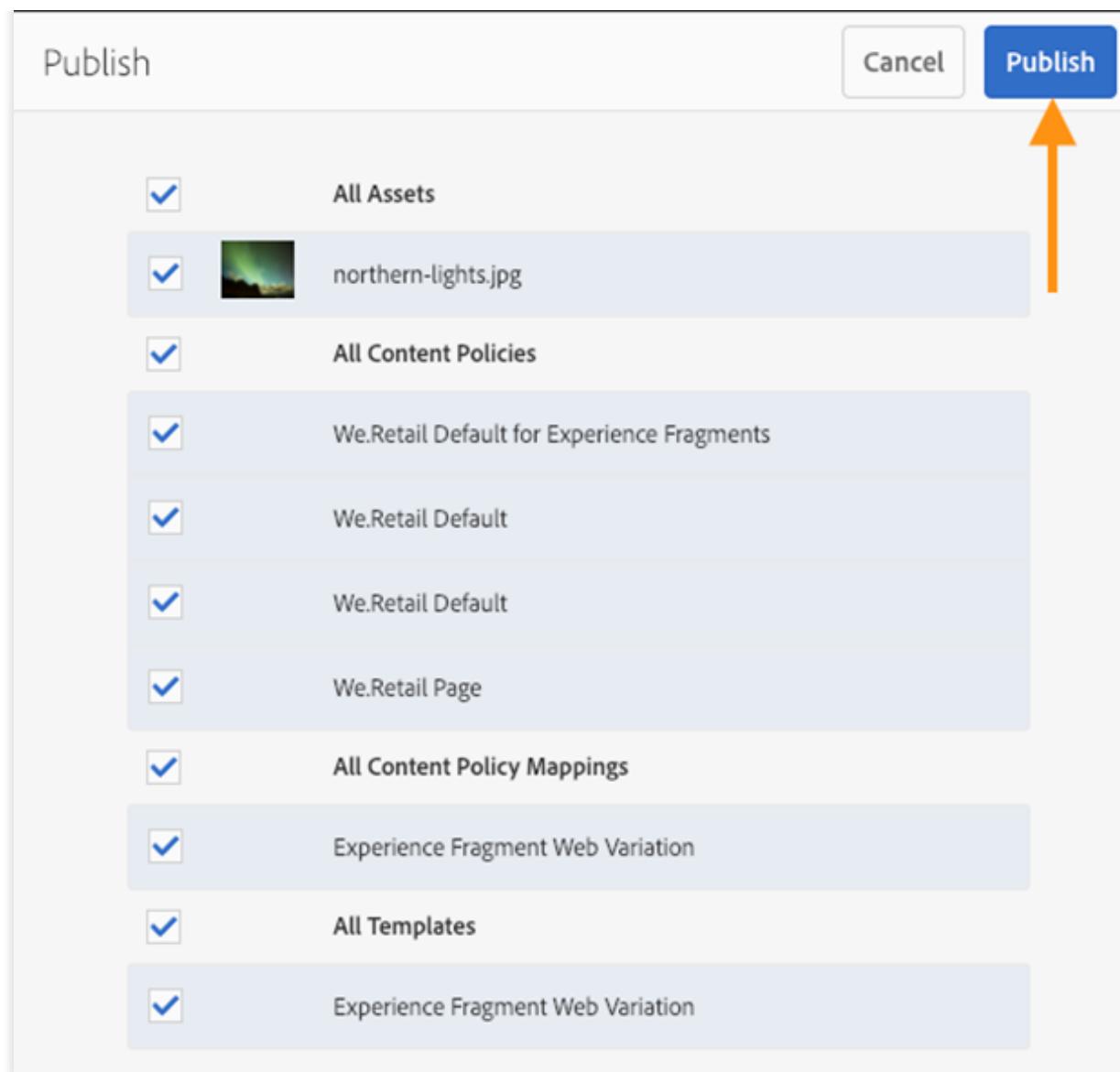
11. Click the Publish icon in the action bar.



The screenshot shows a software interface titled "Universal AEM Experience Fragment". At the top, there is a toolbar with various icons: Create, Edit (e), Properties (p), Copy (⌘+C), Update in Adobe Target, Delete in Adobe Target, Publish (highlighted with an orange arrow), Publish Later, and Unpublish. Below the toolbar, the title "Universal AEM Experience Fragment" is displayed with a dropdown arrow. The main area shows a list of items under "Target Fragments", with one item selected: "Universal AEM Experience Fragment". This selected item has a dark blue background and a checkmark icon. The bottom right corner of the interface displays the text "Title Universal AEM Experience Fragment".

12. In the next screen that appears, click Publish again. Note that some of the items in the screenshot below may not appear in the list on your environment.



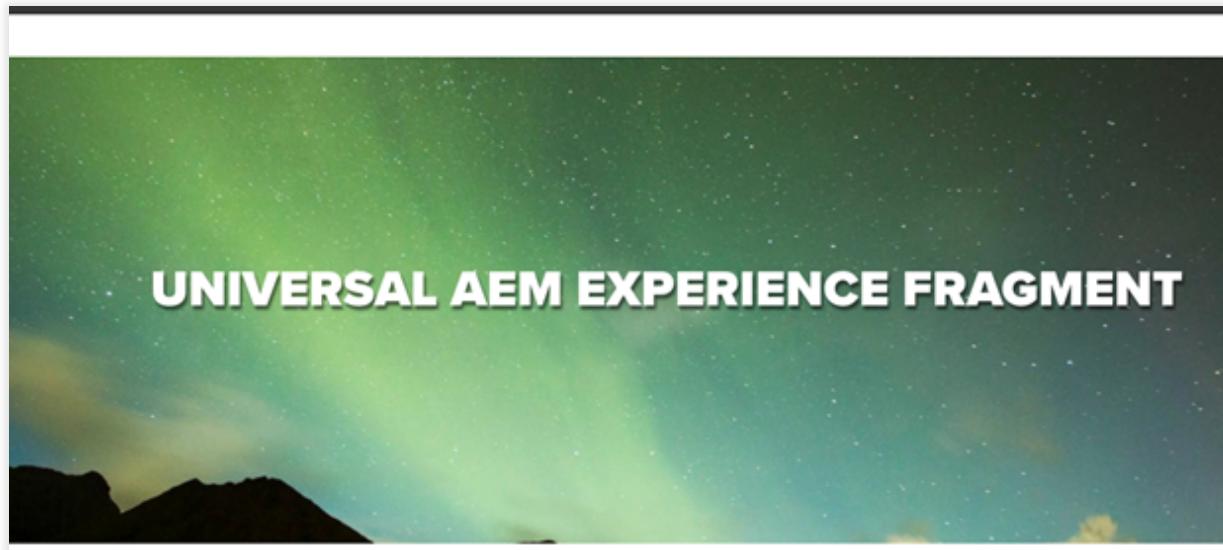


13. Back in the Experience Fragments console, select the Universal AEM Experience Fragment parent element and publish it as well.



The screenshot shows the 'Target Fragments' interface in the Adobe Experience League. At the top, there's a toolbar with options like 'Create', 'Edit (e)', 'Properties (p)', 'Copy (⌘+c)', 'Move (m)', 'Update in Adobe Target', 'Delete in Adobe Target', 'Publish', and more. Below the toolbar, a breadcrumb navigation shows 'Target Fragments > [Selected Fragment] > Universal AEM Experience Fragment'. The main area displays a thumbnail of the fragment, which includes icons for social media and a document, with the title 'Universal AEM Experience Fragment'. An orange arrow points from the 'Publish' button in the toolbar to the 'Published' status indicator next to the fragment's name.

14. Verify that the fragment has been correctly activated by visiting ([http://localhost:4503/content/experience-fragments/target\\_fragments/universal-aem-experience-fragment/master.html](http://localhost:4503/content/experience-fragments/target_fragments/universal-aem-experience-fragment/master.html)). If you see an image and text appear, you have successfully activated it.



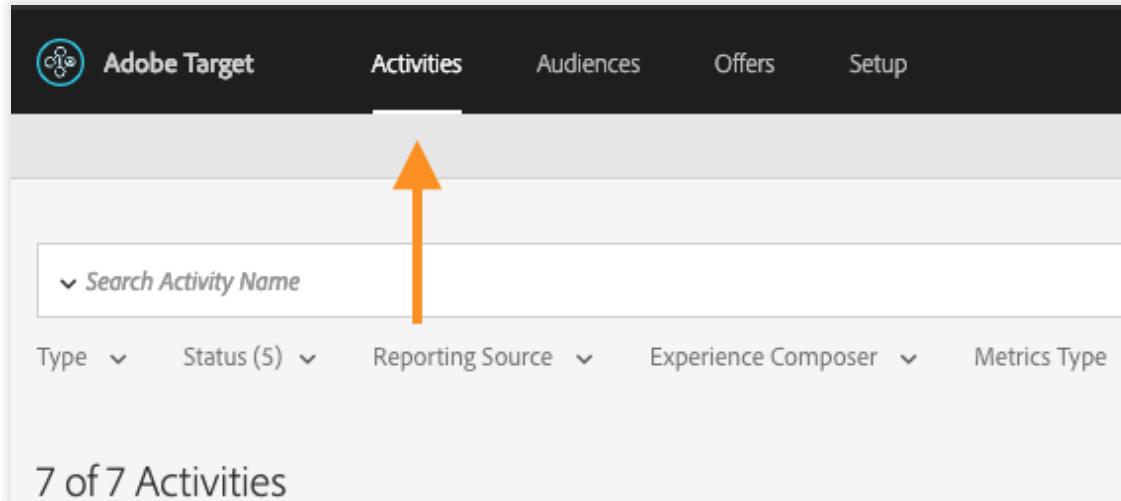
#### Exercise 4.6 - Use the experience fragment in the Visual Experience Composer

In this exercise, we will log into Target and use the published experience fragment in a Target experience targeting activity. We will use a fairly contrived approach of targeting different content to two different browsers. While this is an easy way to show



how this functionality works, in a real-world implementation, you would likely target experiences based on factors such as demographics or past user behavior – often bringing in data from Adobe Analytics or Audience Manager.

1. Open your browser and click on the bookmark for **Adobe Target**. Ensure that the **Activities** tab is selected.



The screenshot shows the Adobe Target interface. At the top, there is a dark header with the 'Adobe Target' logo and five tabs: 'Activities' (which is highlighted with a white background), 'Audiences', 'Offers', and 'Setup'. Below the header is a search bar labeled 'Search Activity Name' with a dropdown arrow. Underneath the search bar are several filter options: 'Type' (with a dropdown arrow), 'Status (5)' (with a dropdown arrow), 'Reporting Source' (with a dropdown arrow), 'Experience Composer' (with a dropdown arrow), and 'Metrics Type' (with a dropdown arrow). At the bottom left of the main content area, it says '7 of 7 Activities'.

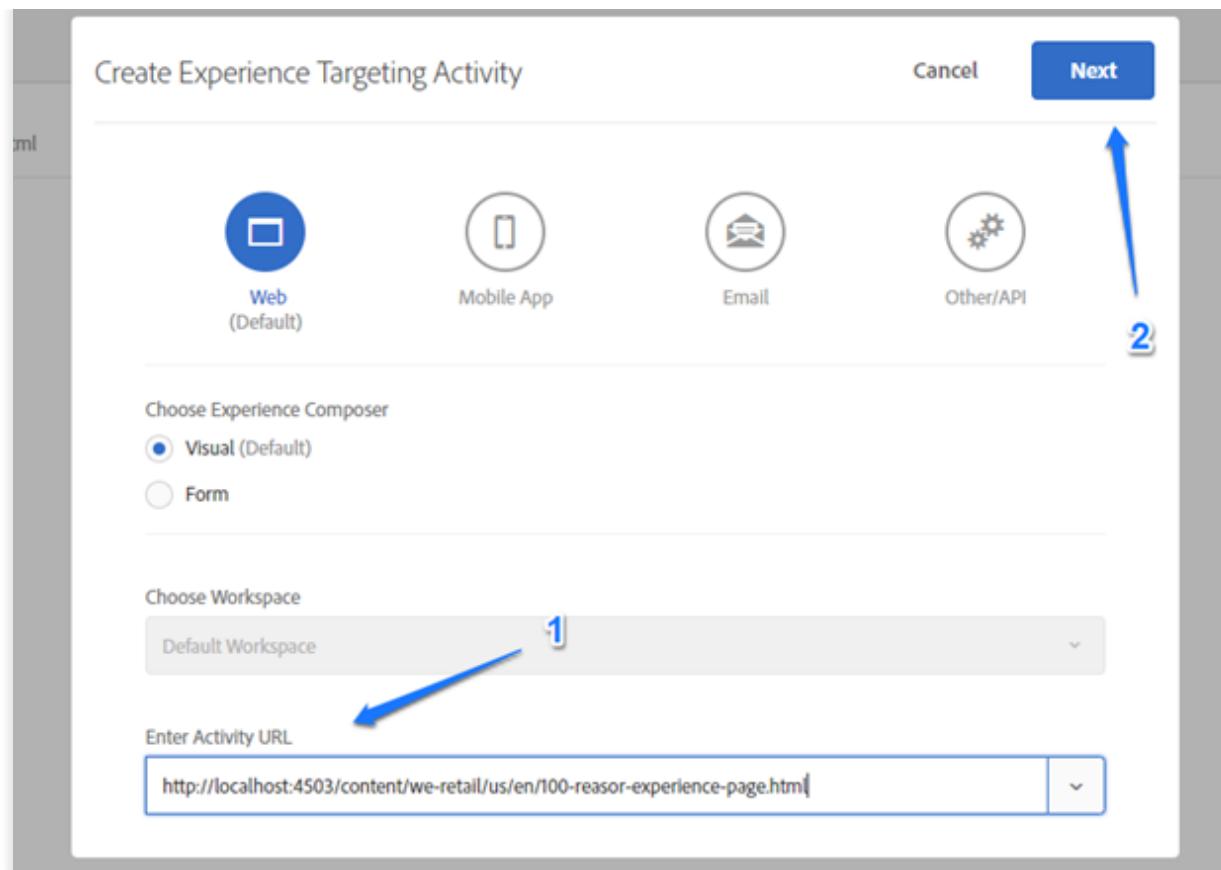
2. Click on the blue button that is labeled **+ Create Activity** and select **Experience Targeting**.



The screenshot shows a user interface for creating an activity. At the top, there are tabs for "Summit 2019 Lab L725 - APPROVER" and "Default Workspace". A blue arrow labeled "1" points to a "Create Activity" button. Another blue arrow labeled "2" points to a dropdown menu that has been opened. The dropdown menu contains the following options: "A/B Test", "Automated Personalization", "Experience Targeting", "Multivariate Test", and "Recommendations".

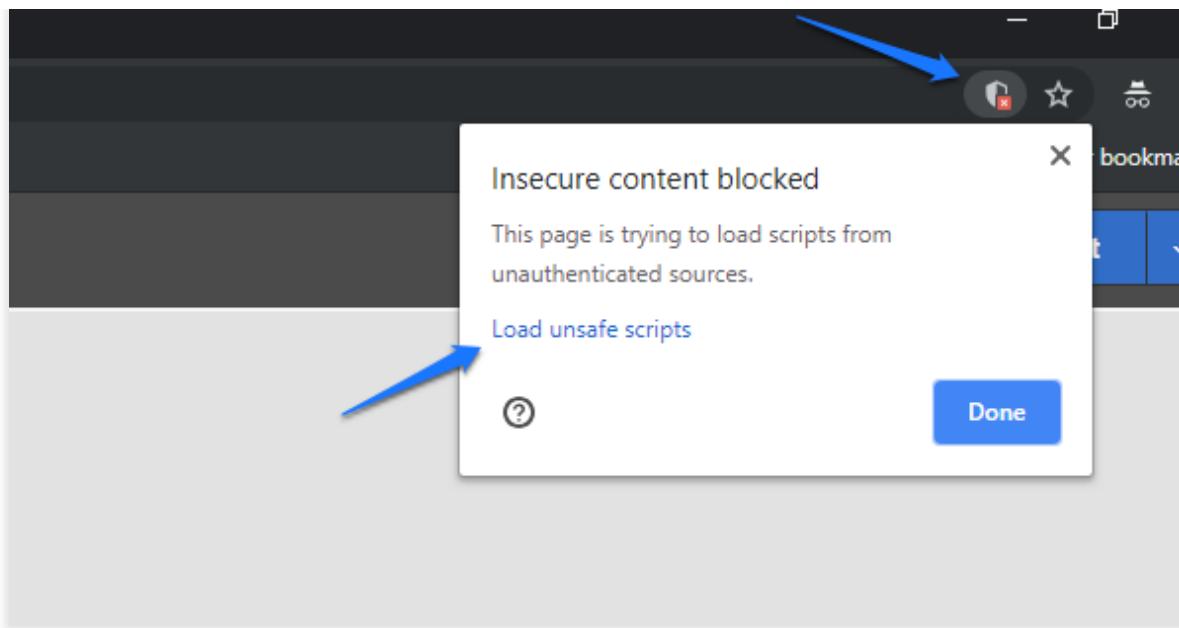
3. In the **Enter Activity URL** field, enter the URL to the published page that we created in the previous exercise. If you have left the page open, you can copy the URL from the browser window. Click **Next**.





4. In your browser's address bar, click on the shield icon and then click on ***Load Unsafe Scripts***. When prompted, choose to ***Reload***.





5. In the top section of the page, click on ***Untitled Activity*** and give your activity a name of <SEAT> – <LAST\_NAME> – Experience Activity 1. This will allow you to differentiate your activity from those of other students. For example, for a student named ***Reasor*** who is sitting in seat 100, they would name their activity ***100 – Reasor – Experience Activity 1***.



The screenshot shows the Experience League Intelligent Guidance interface. At the top, there's a header bar with a yellow 'xr' icon, the title '100 - Reasor - Activity 1', and a 'Experiences' button. Below the header is a toolbar with icons for back, forward, search, and settings. On the left, there's a sidebar titled 'Audiences' with sections for 'All Visitors' and 'Experience A', and a link to '+ Add Experience Targeting'. The main area displays a preview of a website for 'WE.RETAIL' with a banner that says '100 REAS...'. The preview includes a language switcher ('EN'), a 'Container' label, and navigation links for 'WE.RETAIL', 'EXPERIENCE', 'MEN', and 'WOMEN'.

6. In the *Audiences* rail, click + *Add Experience Targeting*.



The screenshot shows the 'Audiences' section of the Adobe Experience League Intelligent Guidance interface. On the left, there's a sidebar with 'All Visitors' under 'Experience A' and a button '+ Add Experience Targeting' with a blue arrow pointing to it. The main area displays a preview of a web page with a dark background. At the top of the preview, there's a blue bar labeled 'Container'. In the bottom right corner of the preview, there's a black box containing the text 'WE.RETAIL'.

7. In the *Audience Library*, locate and select the audience called *Firefox Browser*. Click *Done*.



The screenshot shows the 'Choose Audience' dialog box. At the top, it says 'Choose Audience (1)'. There are two tabs: 'Audience Library' (selected) and 'Activity-Only Audience'. Below the tabs is a search bar containing 'Firefox Browser' with a magnifying glass icon. To the right of the search bar is a 'Done' button. In the center, there's a list titled '1 Of 1 Audience'. The first item in the list is 'Firefox Browser', which has a checked checkbox and a blue background. To the left of the list is a column with a checkbox labeled 'Name' and a 'Modified' dropdown set to 'Modified'. A blue arrow labeled '1' points to the search bar. A blue arrow labeled '2' points to the selected audience item. A blue arrow labeled '3' points to the 'Done' button.

8. Select the image in the content area of the VEC, then click ***Expand Selection***. Your first selection will be the entire area – when you "expand" the selection, it will look smaller. The screenshots below show what your selection areas should look like:

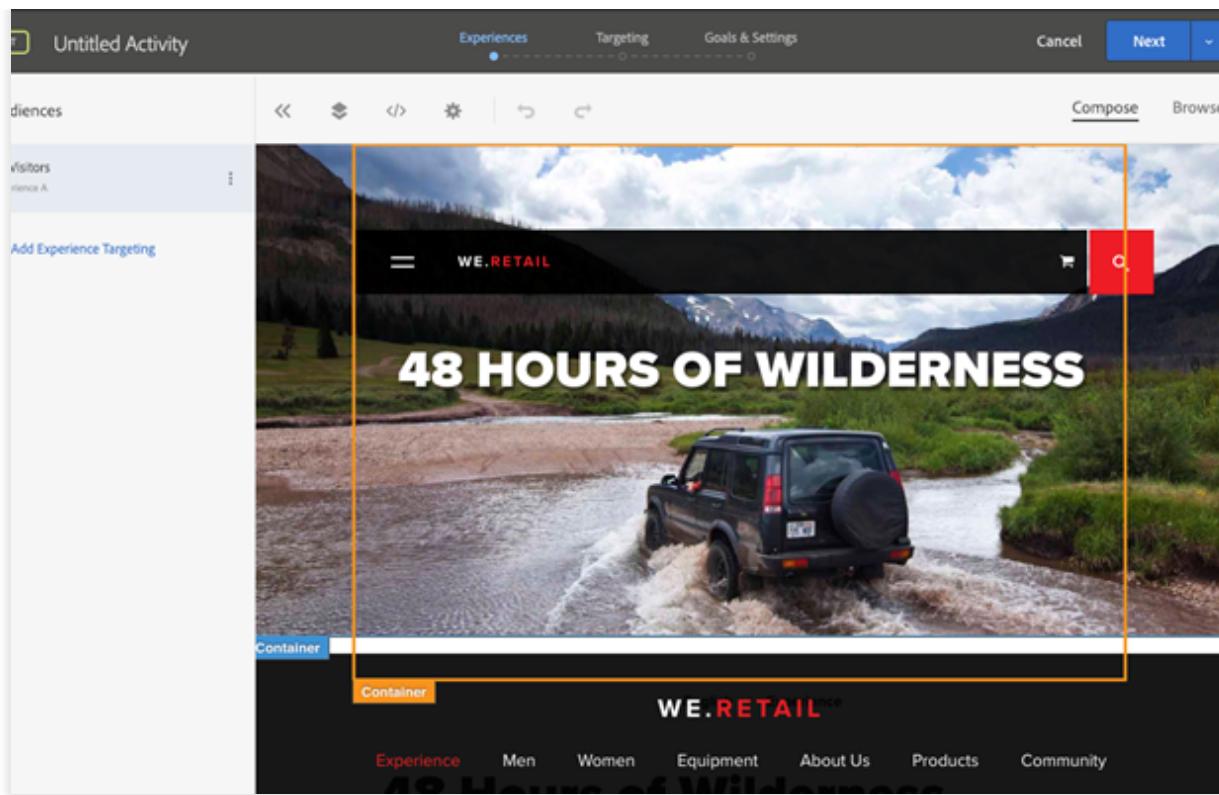
*initial selection*



The screenshot shows the Experience League Intelligent Guidance interface. At the top, there are tabs for 'Experiences', 'Targeting', and 'Goals & Settings'. On the right, there are 'Cancel', 'Next', and a dropdown menu. Below the tabs, there's a sidebar with sections for 'Audiences' (Visitors, Audience A), 'Add Experience Targeting', and a context menu with options like 'Edit', 'Insert Before', 'Insert After', 'Replace With', 'Layout', and 'Expand Selection'. The main area displays a website preview for 'WE.RETAIL'. The page features a banner with the text '48 HOURS OF WILDERNESS' and a black SUV driving through a river. Below the banner is a navigation bar with links for 'Experience', 'Men', 'Women', 'Equipment', 'About Us', 'Products', and 'Community'. The word 'Container' is highlighted in orange at the bottom of the page.

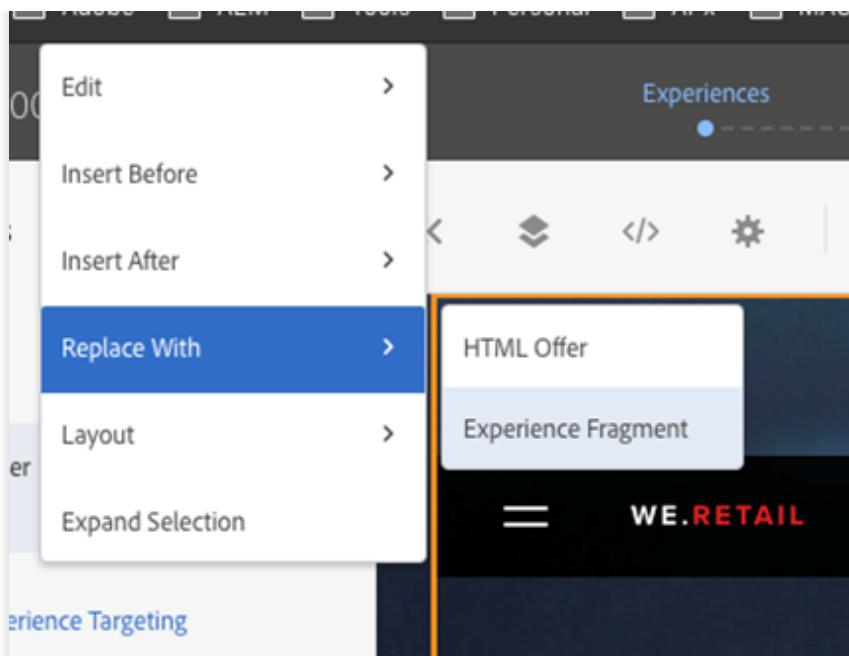
*expanded selection*





9. Click *Replace With* and then select *Experience Fragment*.





10. In the window that opens, locate the experience fragment that we identified for use in the previous exercise. If your fragment was successfully activated, you can locate it by searching for your name. If you had to activate the “universal” experience fragment, try searching for universal. Click on it and then click Done.



Choose An Experience Fragment (1)

Content 2 Of 2 Items

Name	Type	Modified
100 - Reasor - Fragment 1	Experience Fragment	Jan 14 2019 10:45 AM by admin
Testing - Reasor - Fragment 1	Experience Fragment	Dec 18 2018 01:39 PM by admin

Cancel Done

11. Click the blue **Next** button twice.

Compose Browse

MY CART LOGIN

100 REASOR EXPERIENCE PAGE

12. In the Activity Settings screen, scroll down to the MY PRIMARY GOAL section and select a success metric of Conversion > Viewed an mbox > \*\* any mbox \*\*. In a real-world scenario, you would select a metric to help you determine how effective each experience is but tracking and measuring activity success is beyond the scope of this lab.

**Goal Metric\***

▼ MY PRIMARY GOAL

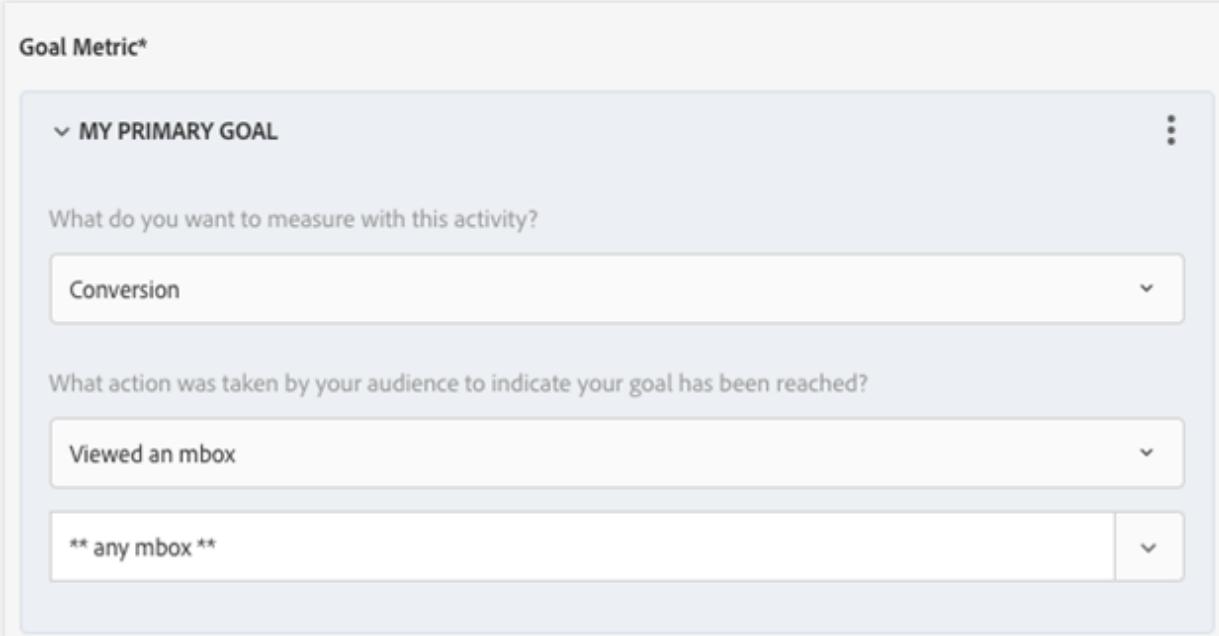
What do you want to measure with this activity?

Conversion

What action was taken by your audience to indicate your goal has been reached?

Viewed an mbox

\*\* any mbox \*\*



13. Click the blue **Save & Close** button.



100 - Reasor - Activity1 rename

Experiences Targeting Goals & Settings Cancel Save & Close

Priority

Low  High

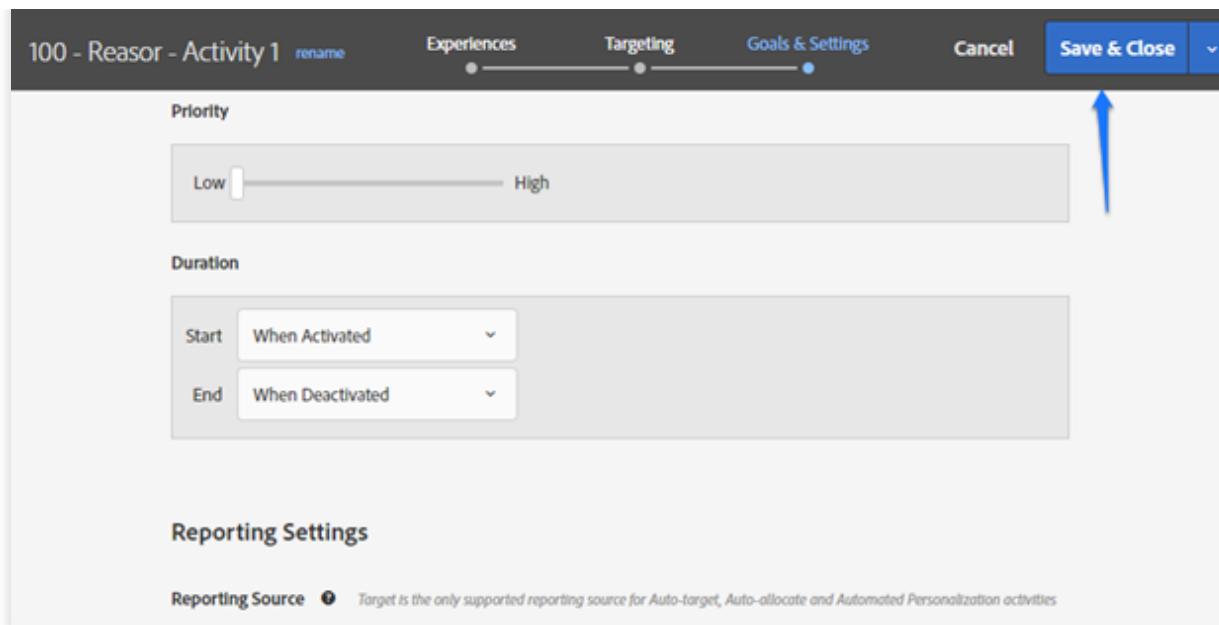
Duration

Start When Activated

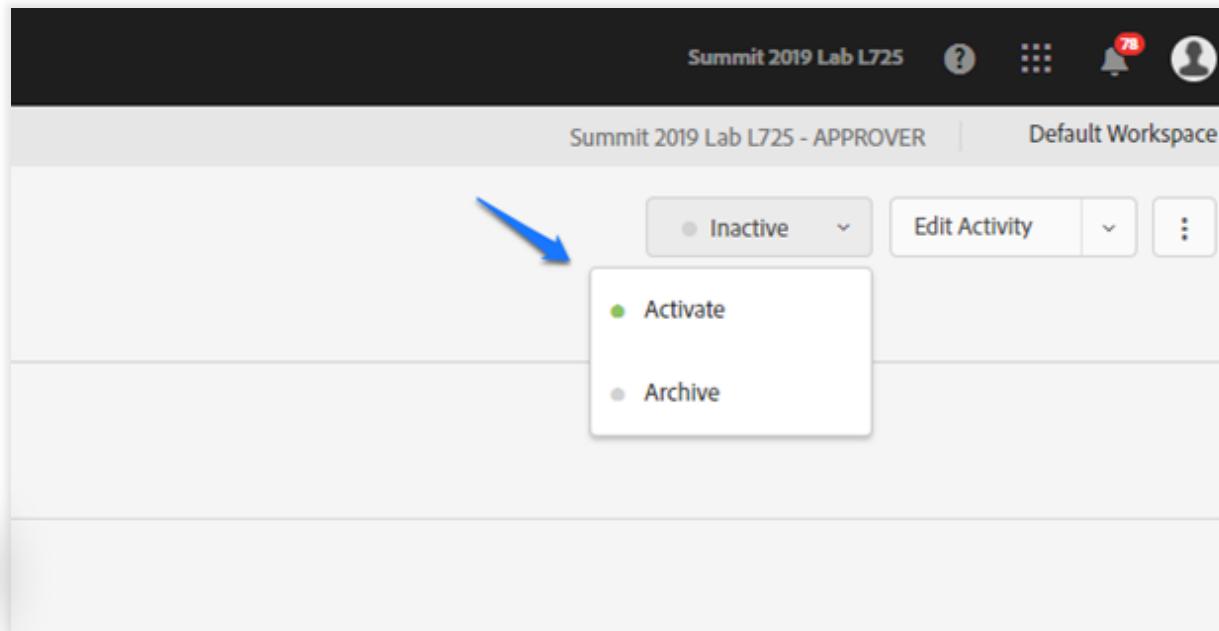
End When Deactivated

Reporting Settings

Reporting Source Target is the only supported reporting source for Auto-target, Auto-allocate and Automated Personalization activities



14. Once the activity finishes syncing, click on the *Inactive* button and choose to *Activate* the activity.



15. Once the activity has finished activating, this indicator will change to *Live*.

The screenshot shows the Adobe Target interface. At the top, there's a navigation bar with back, forward, and search icons, followed by a warning about being 'Not secure' and the URL 'https://summit2019l725.experiencecloud.adobe.com/content...'. Below the bar, the 'Adobe Target' logo is on the left, and 'Summit 2019 Lab L725' is in the center. On the right, there are several icons: a question mark, a grid, a bell with a '78' notification, and a user profile. The main area has tabs for 'Summit 2019 Lab L725 - APPROVER' and 'Default Workspace'. Below these tabs, the title '100 - Reasor - Activity 1' is displayed, with a blue arrow pointing to the 'Live' status indicator. To the right of the title are buttons for 'Edit Activity' and a more options menu. Below the title, there are links for 'Overview', 'Reports', 'Collisions', and 'Change Log', along with a date range 'Jan 14 2019 - present'. The 'Overview' tab is selected. Under 'Workspace', it says 'Default Workspace'. In the 'Activity Location' section, the URL 'http://localhost:4503/content/we-retail/us/en/100-reasor-experience-page.html' is listed. At the bottom left, there's a small link 'Activity OA'.

#### Exercise 4.7 - Verify Target activity

In this section, we will verify that the Target activity we created is working properly on our site.

1. Navigate to the page that we targeted in the previous exercise with Google Chrome. If you still have the window open, you can just refresh the page. Note that the page looks the same.
2. Open up Firefox and copy/paste the URL for your test page into it.
3. Note that the version of your page with the experience fragment is shown.

## Appendix

The following exercises were all performed in advance of Summit to prepare our lab environments. If you would like to go through this workbook at home, you will need to go through these steps to prepare your own environment.



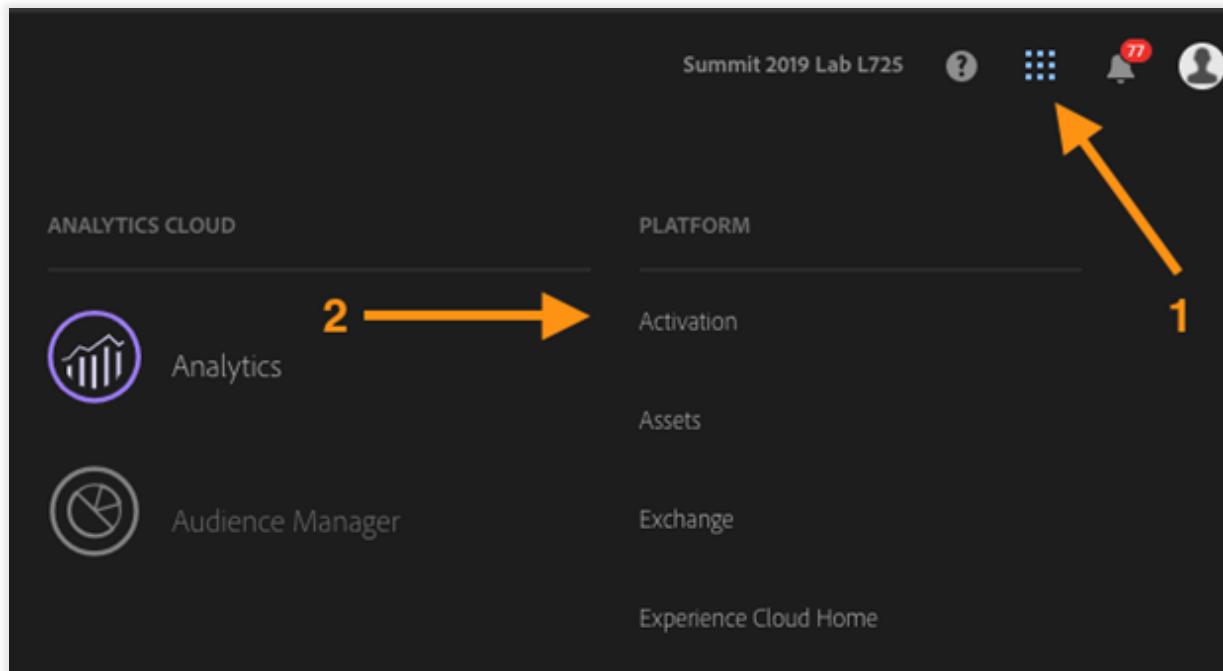
## Exercise 1: Install Launch Extensions

In this exercise, we will create a property in Launch that is specific to our local AEM environments, install extensions for Target, Analytics, and Context Hub, and then configure all three extensions.

## Create a new property in Launch

Launch allows us to have multiple properties per account. This allows customers to have separate properties for each of their websites. For the exercises in this lab, you will need to have a property created in Launch. Feel free to use these instructions to create a new Launch property to go through these exercises with or use them with an existing property if you'd like to use this workbook with your existing site.

1. Log on to your Experience Cloud account.
2. Once logged in, click on the solution switcher and select **Activation**. You can also access this page directly by pointing your browser to <https://activation.adobe.com/>



3. On the screen that loads, click Go To **Launch**. You can also access this page directly at <https://launch.adobe.com/>.





## Launch, by Adobe

Deploy and manage tags for your Experience Cloud and 3rd party solutions on all of your websites. Configure and update behavior of the Adobe SDKs in your native mobile applications.

[Go to Launch](#)

4. In Launch, add a new property. If you have existing properties, you can do this by clicking on the *New Property* button as seen below. Otherwise, you will have a button labeled *Add New Property*.



The screenshot shows the 'Properties' section of the Adobe Experience Cloud interface. At the top, there are navigation links: 'Experience Cloud' (with a gear icon), 'Launch' (selected), 'Feedback', 'Summit 2019 Lab L725' (with a question mark icon), a grid icon, and a user profile icon. Below this, a breadcrumb trail shows 'Summit 2019 Lab L725 > Properties'. A search bar with the placeholder 'Search' is followed by a blue 'New Property' button. The main area displays a table with columns 'NAME', 'PLATFORM', and 'STATUS'. One row is visible, showing 'Summit Lab L725' under 'NAME', 'Web' under 'PLATFORM', and 'Enabled' with a blue dot under 'STATUS'. Navigation arrows for 'Next' are at the bottom left. A large blue arrow points from the text in step 5 to the 'New Property' button.

NAME	PLATFORM	STATUS
Summit Lab L725	Web	Enabled

5. Enter a property name that refers to the site that you will be using. Set the *Domains* property to your site's domain name(s). Click **Save**.



Summit 2019 Lab L725 >

## Create Property

Name \*

Platform \*

 Web  Mobile

Domains (no subdomains, paths, protocols, etc.) \*

Add Domain

> ADVANCED OPTIONS

**Save** **Cancel**

## Install the Analytics extension

Launch provides us with a catalog of extensions that are developed by Adobe and third-party providers. The catalog can be thought of as an app store for tag management. Here, we are installing the Analytics extension and configuring it with some basic properties.

1. Click on the link for your property to open it.



The screenshot shows the 'Properties' screen of the Adobe Experience Cloud. At the top, there's a navigation bar with icons for 'Adobe Experience Cloud' and 'Launch'. Below the navigation bar, the path 'Summit 2019 Lab L725 >' is displayed. The main area is titled 'Properties' and contains a search bar labeled 'Search'. Under the 'NAME' section, there are two entries: 'Summit Lab L725' and 'Summit Rehearsal Lab 725'. A blue arrow points to the second entry. At the bottom left, there are navigation buttons '< Next >'.

2. Click on the **Extensions** link in the navigation bar and then click on the **Catalog** icon.

The screenshot shows the 'Summit Rehearsal Lab 725' environment page. At the top, the path 'Summit 2019 Lab L725 >' is shown. The main content area displays the environment name 'Summit Rehearsal Lab 725'. Below the environment name, there is a navigation bar with tabs: 'Overview', 'Rules', 'Data Elements', 'Extensions', 'Adapters', 'Environments', and 'Publishing'. The 'Extensions' tab is currently selected. Below the tabs, there are two buttons: 'Installed' and 'Catalog'. A blue arrow points to the 'Catalog' button. At the bottom of the page, there is a search bar labeled 'Search'.

3. Find the card for *Adobe Analytics* and click the *Install* button.

The screenshot shows the 'Summit Rehearsal Lab 725' interface with the 'Extensions' tab selected. A blue arrow points from the search bar to the 'Catalog' button. Another blue arrow points to the 'Install' button on the first extension card.

Summit 2019 Lab L725 >

## Summit Rehearsal Lab 725

Overview Rules Data Elements Extensions Adapters Environments Publishing

Installed Catalog

Adobe Analytics

Adobe Systems · v1.5.1

Adobe Analytics is an industry-leading solution that empowers you to understand your customers as people and steer your business with customer intelligence. This extension deploys with AppMeasurement version 2.10.0.

Install

Adobe Analyt

Adobe Systems · v1:

Adobe Analytics for Video is an Analytics offering that provides measurement for content, audi This extension deploys with VH

Install

4. In the *Install Extension* window, populate the report suite names for your development, staging, and production report suites.



The screenshot shows the 'Extensions' tab selected in the top navigation bar. Under 'Library Management', the 'Manage the library for me' option is selected. In the 'Report Suites' section, there are three groups: 'Development Report Suites' (empty), 'Staging Report Suites' containing 'ags959template' (with an 'Add Another' button), and 'Production Report Suites' containing 'agsummit2019l725' (with an 'Add Another' button). At the top right, there are 'Cancel' and 'Save' buttons, with a blue arrow pointing to the 'Save' button.

5. Click **Save**.

The screenshot shows a modal dialog box for selecting a 'Working Library'. At the top, it says 'Working Library: Select an option'. At the bottom, there are 'Cancel' and 'Save' buttons, with a blue arrow pointing to the 'Save' button.



Install the Target extension

1. Click **Catalog** to switch back to the catalog view, locate the **Adobe Target** card and click **Install**.

The screenshot shows the 'Extensions' tab selected in the navigation bar of the 'Summit Rehearsal Lab 725' interface. A blue arrow points from the 'Extensions' tab to the 'Catalog' button in the top navigation. Another blue arrow points from the search bar containing 'Adobe Target' to the 'Install' button for the 'Adobe Target' extension card. The 'Adobe Target' card includes a description and another 'Install' button.

Summit Rehearsal Lab 725

Overview Rules Data Elements Extensions Adapters Environments Publishing

Installed Catalog

Adobe Target

Adobe Target Toolkit

Adobe Target Launch extension (at.js v1.6.3)

This extension lets you create new data elements in Launch that capture data from Adobe Target such as activity and experience IDs and names. These data elements can then be captured by tools such as Adobe Analytics (using a list variable) or any other digital...

Install

2. In the screen that appears, leave the default settings and click **Save**.



The screenshot shows the 'Extensions' tab selected in the top navigation bar. Below it, the 'Install Extension' dialog is open for the 'Adobe Target' extension. On the left, there's a preview icon of a blue circle with three white nodes connected by lines, and extension details: 'Adobe Target' by 'Adobe Systems' v0.8.2, and 'Adobe Target Launch extension (at.js v1.6.3)'. The main area contains configuration fields under the heading 'at.js settings':

Setting	Value
Client Code	summit2019lab0725
Organization Id	657E2AB35C0AE7A60A495EA4@AdobeOrg
Global Mbox Name	target-global-mbox
Server Domain	summit2019lab0725.tl.omtrdc.net
Cross Domain	Disabled
Timeout (ms)	3000

At the top right of the dialog are 'Cancel' and 'Save' buttons.

## Install the ContextHub extension

In this section, we will install the ContextHub extension, which is useful for surfacing data layers in Launch. Note that while we have the option to use AEM's default ContextHub data layer, we can also use this extension to map a custom data layer. Thus, this extension can be used for any implementation, even those that don't leverage AEM.

1. Back in **Catalog** view, find the card for **Adobe ContextHub** and click **Install**.



The screenshot shows the 'Extensions' tab selected in the navigation bar. A search bar at the top has 'Adobe ContextHub' typed into it. Below the search bar, a card for the 'Adobe ContextHub' extension is shown, developed by Adobe Systems and version v1.0.7. The card includes a description: 'The Adobe ContextHub extension provides you with the ability to define data elements for ContextHub data.' and an 'Install' button.

2. For this lab, leave the default settings selected and click **Save**. In a real-world deployment, if you have implemented a custom data layer in AEM, you should select **Customized ContextHub Data layer** and map it to your actual data layer.



The screenshot shows a web-based configuration interface for Adobe Experience League Intelligent Guidance. At the top, there's a navigation bar with links for 'Overview', 'Rules', 'Data Elements', 'Extensions' (which is underlined, indicating it's the active tab), 'Adapters', 'Environments', and 'Publishing'. Above the main content area, there's a breadcrumb trail: 'Summit 2019 Lab L725 > Audit Events > Summit Rehearsal Lab 725'. On the right side of the header, there's a dropdown menu labeled 'Working Library: Select an option'. The main content area has a title 'Install Extension' and features a large icon for 'Adobe ContextHub' (a white circular logo with a stylized orange 'C' shape inside). Below the icon, the text 'Select ContextHub type' is followed by two radio button options: 'Default ContextHub Data layer' (selected) and 'Customized ContextHub Data layer'. A blue arrow points from the text 'Select ContextHub type' towards the 'Default ContextHub Data layer' radio button. Another blue arrow points upwards from the 'Save' button. The 'Save' button is located in the top right corner of the dialog, next to a 'Cancel' button.

## Validation

You should now see four cards showing in the *Installed* view: *Adobe Analytics*, *Adobe ContextHub*, *Adobe Target*, and *Core*.



The screenshot shows the 'Summit Rehearsal Lab 725' page in the Experience League Intelligent Guidance interface. The 'Extensions' tab is selected in the navigation bar. The 'Installed' section displays four extensions:

- Adobe Analytics** (Adobe Systems - v1.5.1): Described as an industry-leading solution for understanding customers and steering business with customer intelligence. It deploys with AppMeasurement version 2.10.0. Includes a 'Configure' button.
- Adobe ContextHub** (Adobe Systems - v1.0.7): Provides the ability to define data elements for ContextHub data. Includes a 'Configure' button.
- Adobe Target** (Adobe Systems - v0.8.2): Adobe Target Launch extension (at.js v1.6.3). Includes a 'Configure' button.
- Core** (Adobe Systems - v1.4.2): Provides default event, condition, and data element types available to all Launch users. Includes a 'Configure' button.

## Exercise 2: Configure Launch Data Elements and Rules

In this exercise, we will configure some data elements and rules to map our data layer into Launch and load our Analytics and Target libraries. If you are using an existing Launch property, many of these configurations will already be in place. It is fine to use these existing configurations, but keep in mind when going through the lab exercises that there may be some variation from our steps due to this difference.

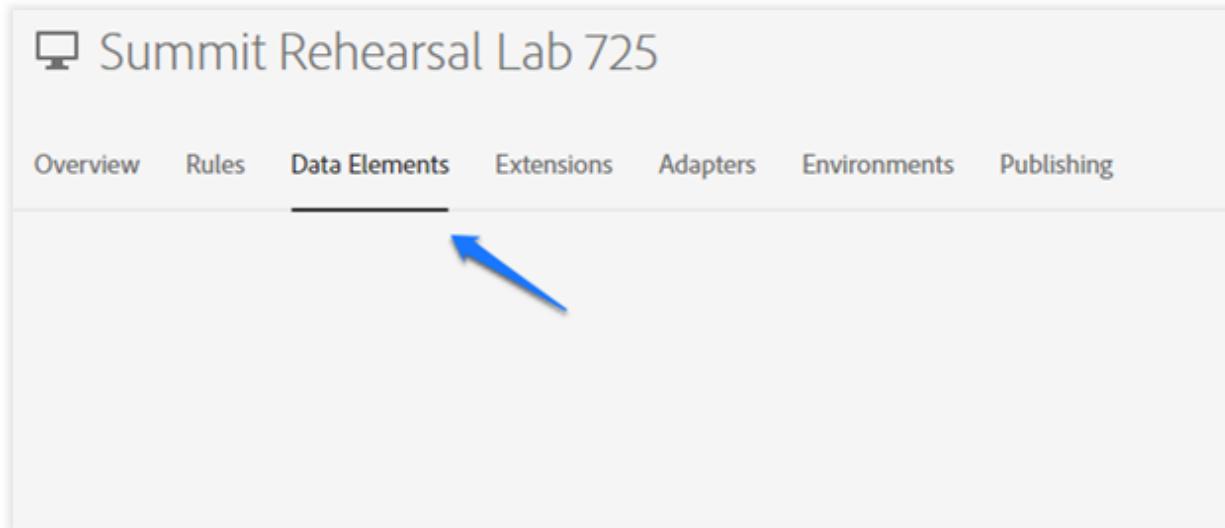
### Map the page name to a data element

In this step, we will be mapping the page path from our data layer to a ***pagename*** data element. This will allow us to use the ***pagename*** value wherever we like in Launch. As we use the ***ContextHub*** extension in this step, note how the ***Data item*** field

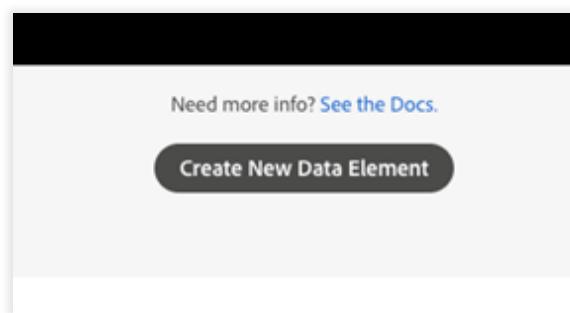


contains all of the values that are exposed in the AEM Context Hub. Had we mapped this extension to a custom data layer, those values would appear here instead.

1. While in Launch, click the **Data Elements** item in the main navigation bar.



2. Click the button to **Create New Data Element**.



3. In the **Create New Data Element** screen, enter the following values:
  - a. Name: pagename
  - b. Extension: Adobe ContextHub

c. Data Element Type: Context Hub

d. Data item: pagedata.path

The screenshot shows the 'Create New Data Element' page. On the left, there's a form with fields for Name (set to 'pagename'), Extension (set to 'Adobe ContextHub'), Data Element Type (set to 'Context Hub'), Default Value (empty), Force lowercase value (unchecked), Clean text (unchecked), and Storage Duration (empty). On the right, a dropdown menu titled 'Data item' is open, showing a list of items: pagedata, pagedata.title, pagedata.description, pagedata.path, pagedata.hits, and pagedata.navTitle. The item 'pagedata.path' is highlighted with a blue background and has a blue arrow pointing to it from the bottom left.

4. Click Save.

## Add a rule to load Target

While installing the Target extension made Target capabilities available to us in Launch, it doesn't automatically load Target on our site. To do that, we need a rule. In a real customer implementation, it is likely that this rule would also contain some parameter mapping into the global mBox as well. We will load the Target library at Page Top, which along with body hiding, will allow us to avoid flicker on the page. When configuring the **Fire Global Mbox** action, note the **Body Hiding** properties that can be used to hide the body until Target has loaded and determined which experiences to show.

1. Click **Rules** in the main navigation bar.



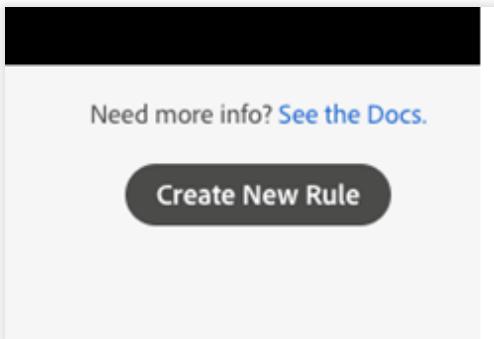
Summit 2019 Lab L725 >

## 💻 Summit Rehearsal Lab 725

Overview    **Rules**    Data Elements    Extensions    Adapters    Environments    Publishing



2. Click the *Create New Rule* button.



3. Give your rule a name of *Page Top*.



The screenshot shows a user interface for creating a rule. At the top, there are tabs: 'Overview', 'Rules' (which is underlined), 'Data Elements', and 'Extension'. Below the tabs, the title 'Create Rule' is displayed. A 'Name' field contains the value 'Page Top', which is highlighted with a blue border.

4. Under **Events**, click **Add**.

The screenshot shows a configuration screen for the 'If' condition. It includes a header 'If - Determines when you want the rule to fire' and a section titled 'EVENTS'. Within the 'EVENTS' section, there is a button labeled '+ Add'.

5. In the **Event Configuration** screen, set the **Event Type** to **Library Loaded (Page Top)**. Leave the other settings to their default values and click **Keep Changes**.



## Event Configuration

Extension: Core

Event Type: Library Loaded (Page Top)

Name: Core - Library Loaded (Page Top)

Order: 50

6. Under **Actions**, click on **Add**.



7. Under **Extension**, select '**Adobe Target**'. Under **Action Type**, select '**Load Target**'. You can leave the **Name** as the default. Click **Keep Changes**.



## Action Configuration

Extension: Adobe Target

Action Type: Load Target

Name: Adobe Target - Load Target

8. Click the + icon to the right of the new action we created to add another action to our *Then* section.

The screenshot shows the 'Rule Editor' interface. At the top, there's a 'CONDITIONS' section with an 'Add' button. Below it is a horizontal line separating the conditions from the actions. Underneath this line is a 'THEN' section with the sub-instruction 'Determines what you want the rule to do'. At the bottom, there's an 'ACTIONS' section containing a box labeled 'Adobe Target - Load Target' with a plus sign (+) to its right. A blue arrow points from the text in step 8 to this plus sign.

9. In the *Action Configuration* screen, set the *Extension* to *Adobe Target* and set the *Action Type* to *Fire Global Mbox*. Click *Keep Changes*.



## Action Configuration

Extension

Adobe Target



Action Type

Fire Global Mbox



Name

Adobe Target - Fire Global Mbox

10. Click **Save** to save your rule.



The screenshot shows the 'Create Rule' interface in the Adobe Experience League Intelligent Guidance. The rule is titled 'Page Top'. It contains one event: 'Core - Library Loaded (Page Top)'. There are no conditions or actions added yet. The 'Save' button is highlighted with a blue arrow.

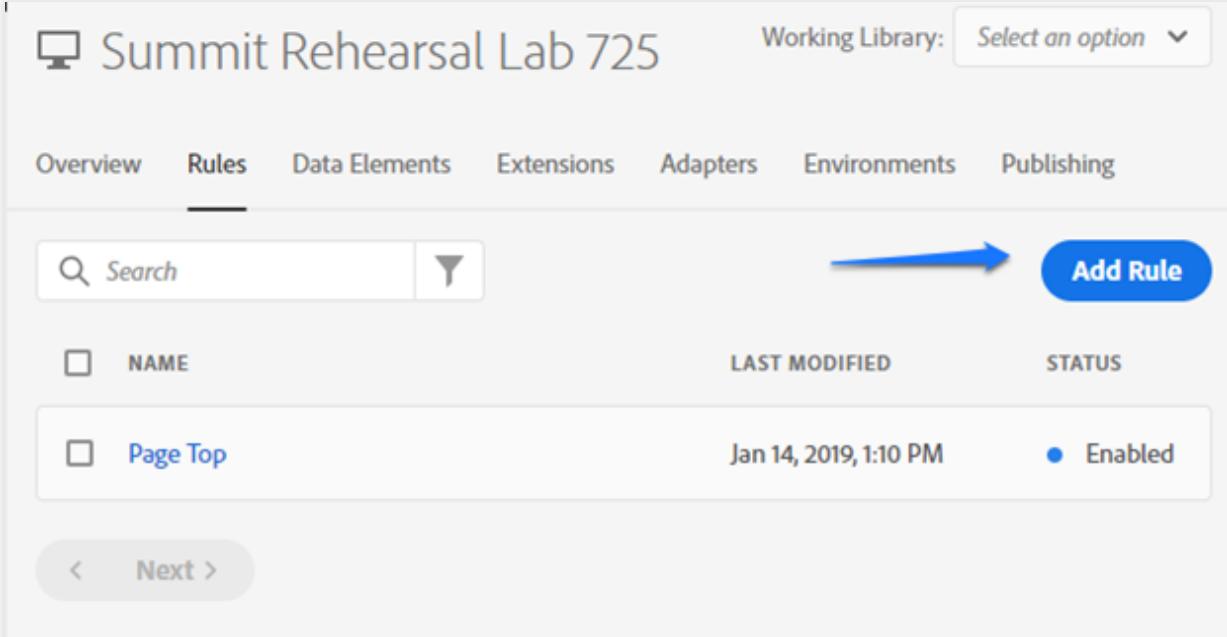
## Add a rule to load Analytics

As in the previous section, we will add a rule to load the Analytics library and fire our page load event. It is common to load Analytics at the page bottom, as this allows our page to fully load and our data layer to be fully populated, but we do run the risk of missing some impressions if a user navigates away before the page is fully loaded. For this reason, some customers choose to load their Analytics library at page top as well.



While configuring this rule, we will map our **pagename** data element to the Analytics page name property. We are mapping this property to illustrate the best practice of mapping a value from a data layer on the page to a Launch data element to the Analytics property. In a real customer implementation, there will be a large number of props and eVars that will be mapped here. They should all follow this practice.

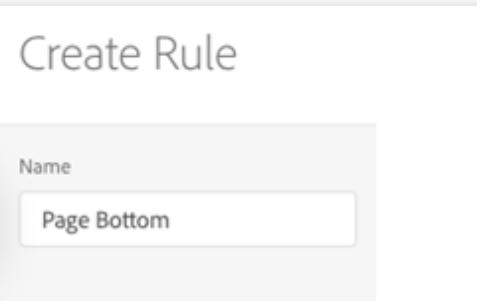
1. In the Launch **Rules** tab, click **Add Rule**.



The screenshot shows the 'Rules' tab selected in the navigation bar of the Launch interface. A search bar and a filter icon are at the top left. On the right, a blue arrow points to a prominent 'Add Rule' button. Below the button is a table listing existing rules. The first rule is named 'Page Top', modified on Jan 14, 2019, at 1:10 PM, and is currently 'Enabled'. Navigation arrows for 'Next' are visible at the bottom.

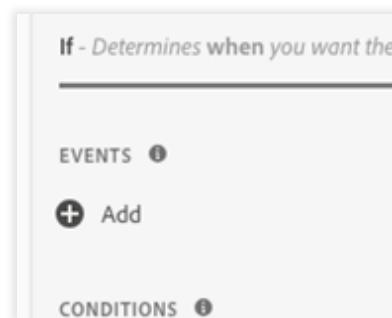
NAME	LAST MODIFIED	STATUS
Page Top	Jan 14, 2019, 1:10 PM	Enabled

2. Give your rule a name of **Page Bottom**.



The screenshot shows the 'Create Rule' dialog box. On the left, there's a circular icon with two speech bubbles. The main area has a title 'Create Rule' and a 'Name' field containing the value 'Page Bottom'.

3. Under **Events**, click **Add**.

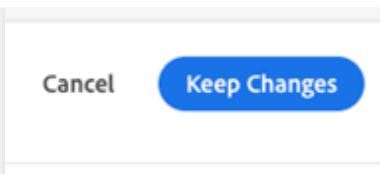


4. For **Event Type**, select **Page Bottom**. Leave all of the other settings at their default values.

The dialog box is titled 'Event Configuration'. It contains the following fields:

- Extension:** A dropdown menu set to 'Core'.
- Event Type:** A dropdown menu set to 'Page Bottom'.
- Name:** An input field containing 'Core - Page Bottom'.
- Order:** A dropdown menu set to '50'.

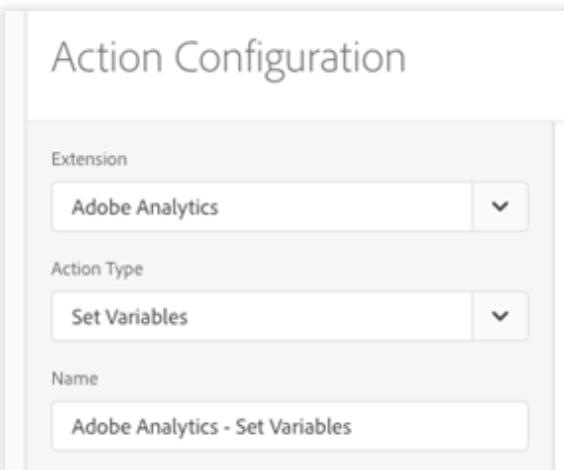
5. Click **Keep Changes**.



6. Under **Actions**, click **Add**.

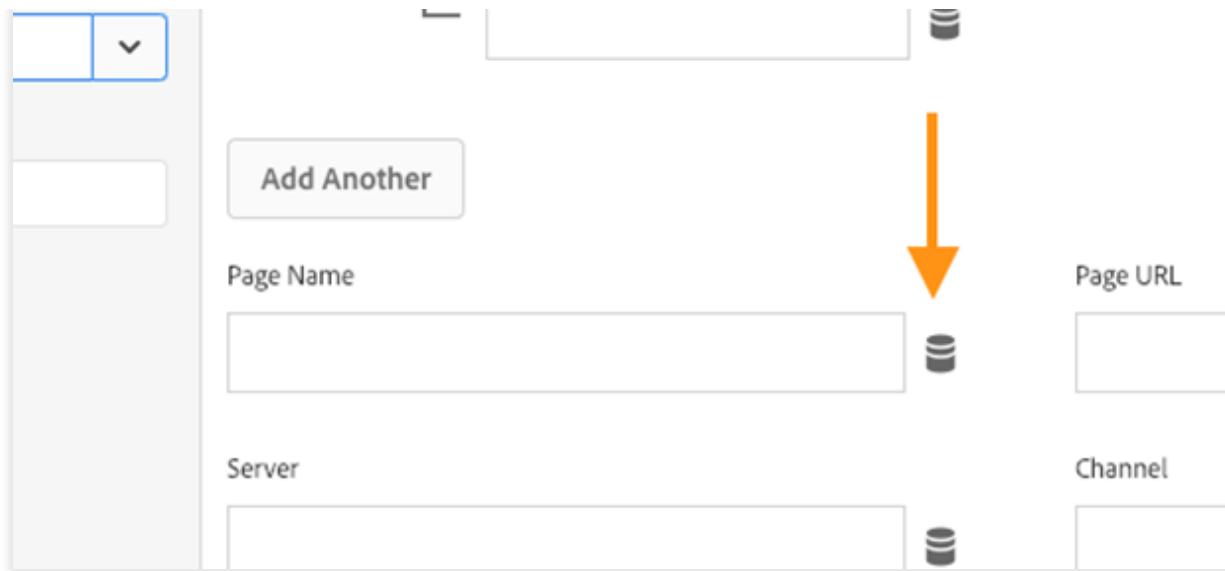


7. Under **Extension**, choose '**Adobe Analytics**'. Under **Action Type**, select '**Set Variables**'.



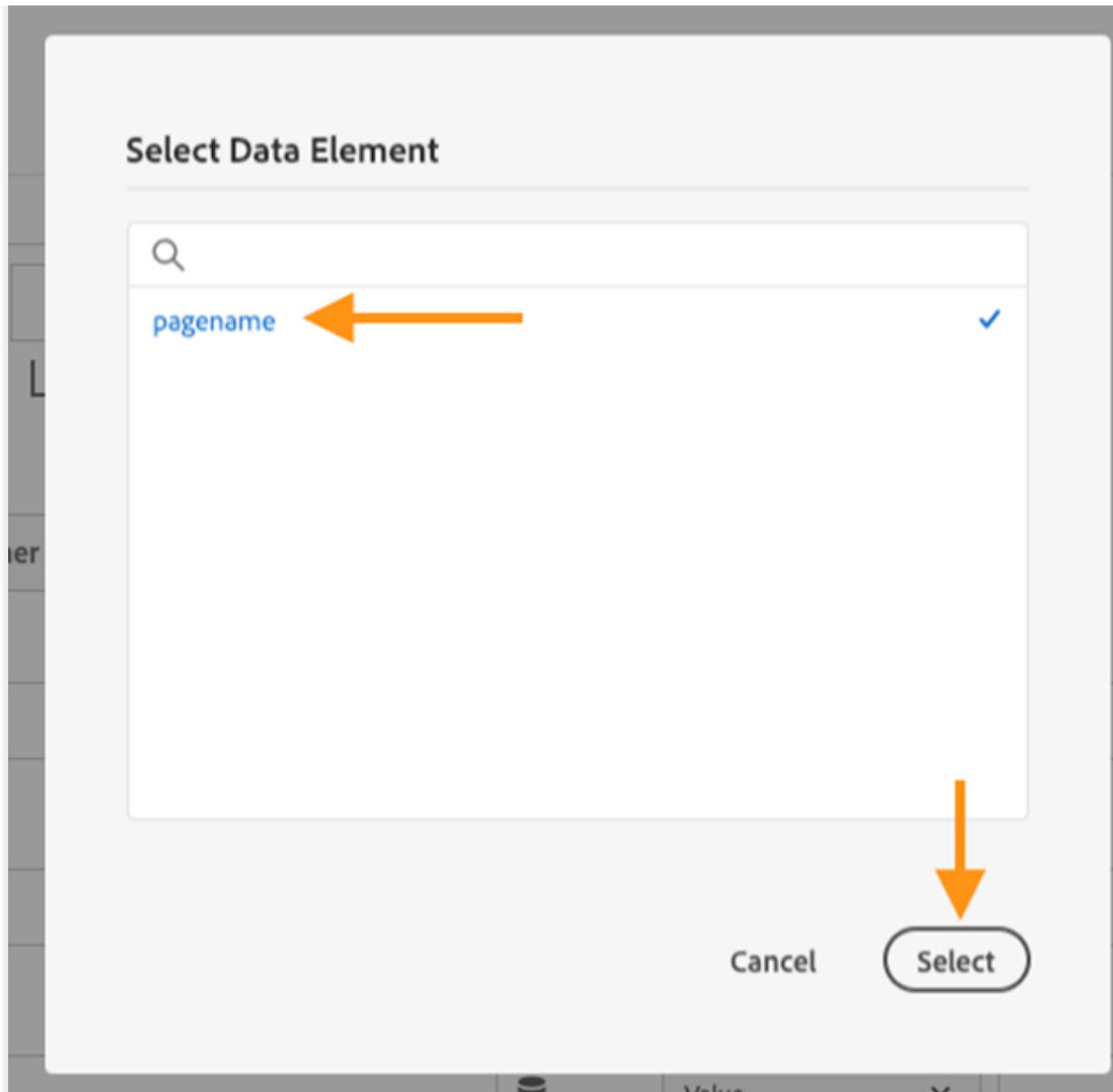
8. In the section to the right, scroll down to the **Page Name** field and click the **data** icon to the right of the field.





9. Select the *pagename* data element that we previously set and choose **Select**.





10. Click *Keep Changes*.



The screenshot shows a software interface for managing a rehearsal lab. At the top left is a monitor icon followed by the text "Summit Rehearsal Lab 725". To the right is a dropdown menu labeled "Working Library: Select an option". Below the title bar is a horizontal navigation menu with tabs: Overview, Rules, Data Elements, Extensions, Adapters, Environments, and Publishing. The "Rules" tab is currently selected, indicated by a bold black underline. Underneath this menu is a large, empty white area labeled "Action Configuration". In the top right corner of this area are two buttons: "Cancel" and a blue rounded rectangle button labeled "Keep Changes".

11. Click the + icon to the right of new action we created, to add another action to our *Then* section.



Create Rule

Name  
Page Bottom

If - Determines when you want the rule to fire

EVENTS ⓘ  
Core - Page Bottom +

CONDITIONS ⓘ  
+ Add

THEN - Determines what you want the rule to do

ACTIONS ⓘ  
Adobe Analytics - Set Variables +



12. Under **Extension**, choose **Adobe Analytics**. Under **Action Type**, choose **Send Beacon**. Leave all other values as their defaults. This Action will capture and send the data to Analytics for tracking. Click Keep Changes.



Summit Rehearsal Lab 725      Working Library: Select an option

Overview   Rules   Data Elements   Extensions   Adapters   Environments   Publishing

## Action Configuration

Cancel   **Keep Changes**

Extension: Adobe Analytics

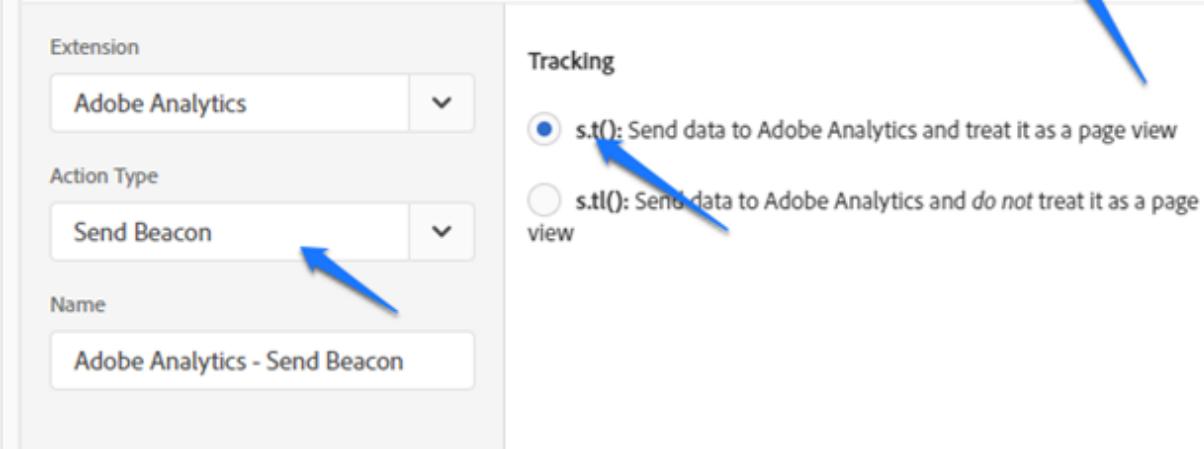
Action Type: Send Beacon

Name: Adobe Analytics - Send Beacon

Tracking:

s.t(): Send data to Adobe Analytics and treat it as a page view

s.tl(): Send data to Adobe Analytics and do not treat it as a page view



13. Click **Save** to save your rule.



The screenshot shows a web-based application interface for managing rules. At the top, there's a header with a computer monitor icon, the text "Summit Rehearsal Lab 725", and a dropdown menu labeled "Working Library: Select an option". Below the header is a navigation bar with tabs: Overview, Rules (which is selected), Data Elements, Extensions, Adapters, Environments, and Publishing. A sub-header "Create Rule" is displayed above a form. The form has a "Name" field containing "Page Bottom" and two buttons at the bottom: "Cancel" and a blue "Save" button. A blue arrow points upwards from the bottom of the "Save" button towards the "Save" text. The main content area below the form is currently empty.



14. You should now have two rules in the list of rules – *Page Top* and *Page Bottom*.

The screenshot shows a workspace titled 'Summit Rehearsal Lab 725'. At the top, there's a 'Working Library' dropdown set to 'Select an option'. Below the title, a navigation bar includes 'Overview', 'Rules' (which is underlined), 'Data Elements', 'Extensions', 'Adapters', 'Environments', and 'Publishing'. A search bar with a magnifying glass icon and a filter icon is followed by a blue 'Add Rule' button. The main area has columns for 'NAME', 'LAST MODIFIED', and 'STATIC'.

## Publish the Launch library

In this section, we will create our environments in Launch and publish our configurations. In DTM, each environment had only two environments: ***Stage*** and ***Production***. In Launch, we also get access to unlimited development environments. We will be pushing our code through each of these environments for expediency, but in a real customer environment, and if you are using an existing Launch property, you should fully test your changes in a development and staging environment before deploying any changes to production.

1. Open the Launch ***Environments*** tab and verify that there are three environments listed: ***Development***, ***Staging***, and ***Production***.



Summit Rehearsal Lab 725

Working Library: Select an option

Overview Rules Data Elements Extensions Adapters Environments Publishing

Search Add Environment

<input type="checkbox"/> NAME	ENVIRONMENT	LAST MODIFIED	INSTALL
<a href="#">Production</a>	production	Jan 14, 2019, 11:58 AM	
<a href="#">Staging</a>	staging	Jan 14, 2019, 11:58 AM	
<a href="#">Development</a>	development	Jan 14, 2019, 11:58 AM	

2. Click on the *Publishing* tab.



The screenshot shows a software interface titled "Summit Rehearsal Lab 725". At the top, there is a "Working Library" dropdown menu set to "Select an option". Below the title, a navigation bar includes links for Overview, Rules, Data Elements, Extensions, Adapters, Environments, and Publishing, with "Publishing" underlined. A horizontal flowchart indicates a process from Development to Submitted to Approved. Under the Development column, there is a search bar labeled "All Libraries" with a dropdown arrow, a magnifying glass icon, and a plus sign. A prominent blue button labeled "Add New Library" is highlighted with a blue oval. To the right of this column are two more columns, each with a "All Libraries" dropdown, a magnifying glass icon, and a plus sign.

3. Under the *Development* column, click the *Add New Library* button.



The screenshot shows the 'Summit Rehearsal Lab 725' page in the Adobe Experience League Intelligent Guidance system. The top navigation bar includes 'Working Library: Select an option'. Below the title, there are tabs for 'Overview', 'Rules', 'Data Elements', 'Extensions', 'Adapters', 'Environments', and 'Publishing', with 'Publishing' being the active tab. A horizontal flow diagram shows the process: 'Development' → 'Submitted' → 'Approved'. Under the 'Development' section, there is a card with 'All Libraries' dropdown, a search icon, a plus sign, and an 'Add New Library' button, which is circled in red and has a blue arrow pointing to it.

4. Give your library a name of *Initial rollout* and set your *Environment* to *Development*.

The screenshot shows the 'Create New Library' dialog box. It has a title 'Create New Library'. There are two input fields: 'Name' containing 'Initial rollout' and 'Environment' containing 'Development (development)'. The 'Environment' dropdown has a dropdown arrow icon.

5. Under *Library Contents*, click on *Add All Changed Resources*.



## Library Contents

---

UPSTREAM RESOURCES 

---

NEW RESOURCES 

No changes



 Add a Resource     Add All Changed Resources

6. You should see all of the changes that we have made appear in the **New Resources** section: both rules we created, our data element, and all four extensions that we installed (including the **Core** extension).



NEW RESOURCES ⓘ				
CHANGE	REVISION	STATUS		
> Rule: <a href="#">Page Bottom</a>	Latest ⓘ	● Enabled	X	
> Rule: <a href="#">Page Top</a>	Latest ⓘ	● Enabled	X	
> Data Element: <a href="#">pagename</a>	Latest ⓘ	● Enabled	X	
> Extension: <a href="#">Adobe ContextHub</a>	Latest ⓘ	● Enabled	X	
> Extension: <a href="#">Adobe Target</a>	Latest ⓘ	● Enabled	X	
> Extension: <a href="#">Adobe Analytics</a>	Latest ⓘ	● Enabled	X	
↓ <a href="#">Edit Changes</a> ↓				

7. Click on the button labeled **Save & Build for Development**.

Overview   Rules   Data Elements   Extensions   Adapters   Environments   Publishing

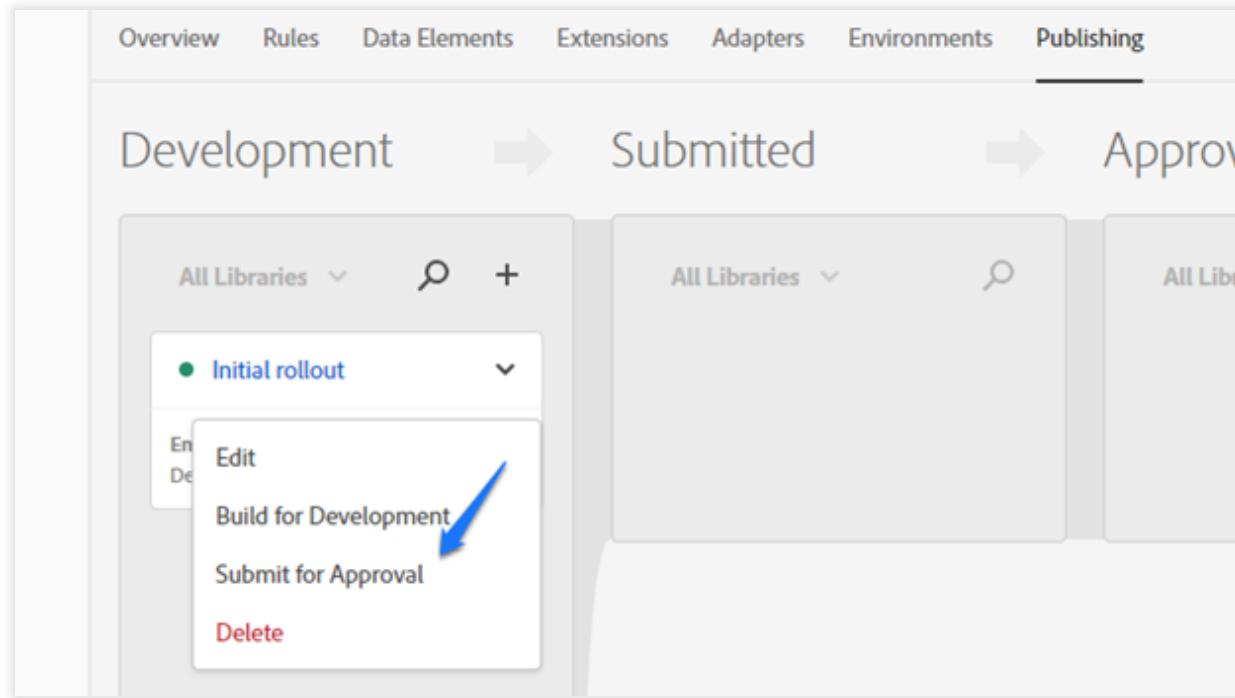
Create New Library   Cancel   **Save & Build for Development** ↴

Name   Environment

Initial rollout   Development (development) ↴

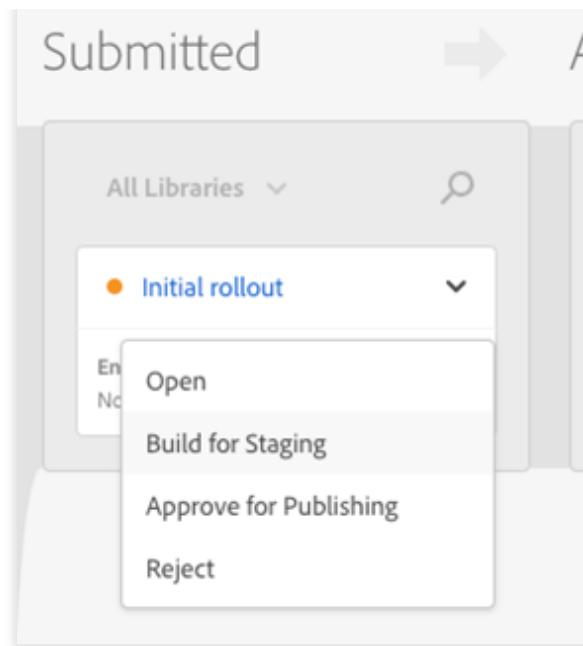


8. After the library has finished building, its icon will turn from a progress indicator to a green circle. In a real-world environment, this is the point at which you would test your changes in your development environment through the use of a tool like **Launch** Command. Click on the down arrow on the library card and select **Submit for Approval**. Click Submit in the confirmation modal.



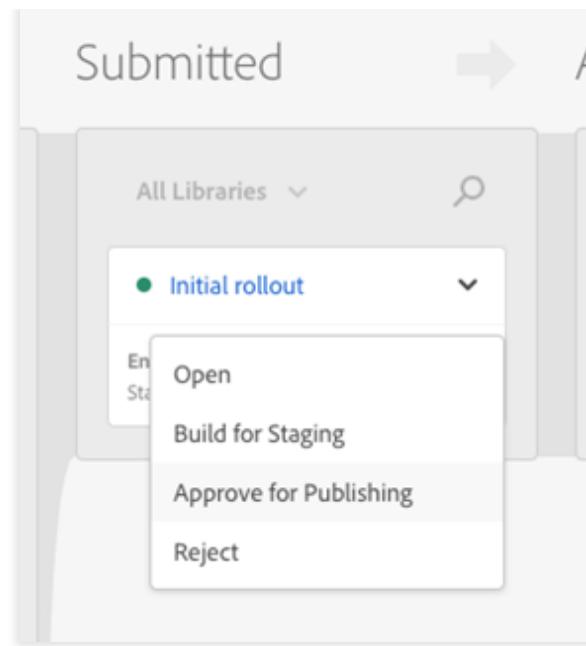
9. Under the **Submitted** column, click on your card's down arrow again and select **Build for Staging**.



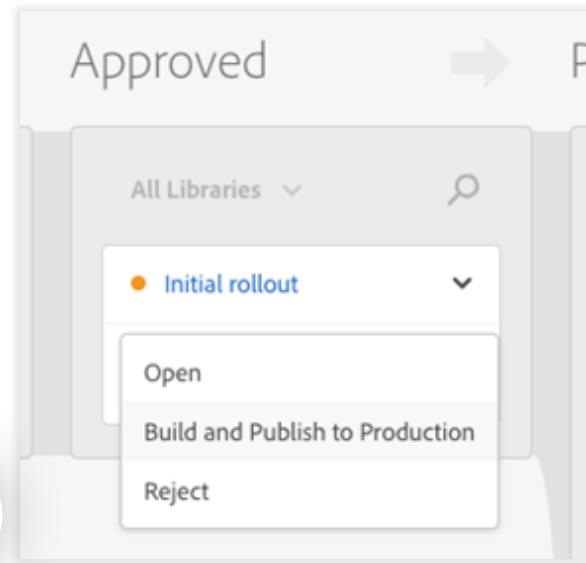


10. Again, in a real-world environment, you would now verify your changes in a staging environment. Once the library finishes building, click on the down arrow and select **Approve for Publishing**. In the confirmation dialog, click **Approve**.

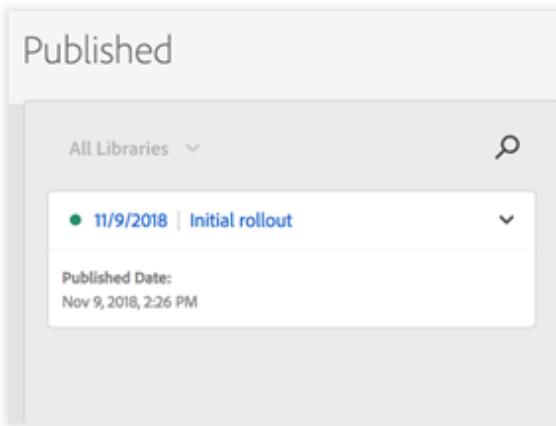




11. Under the **Approved** column, click on your card's down arrow and select **Build and Publish to Production**. In the confirmation modal, click on **Publish**.



12. Once done, you should see the 'initial rollout' under Published environment with green circle

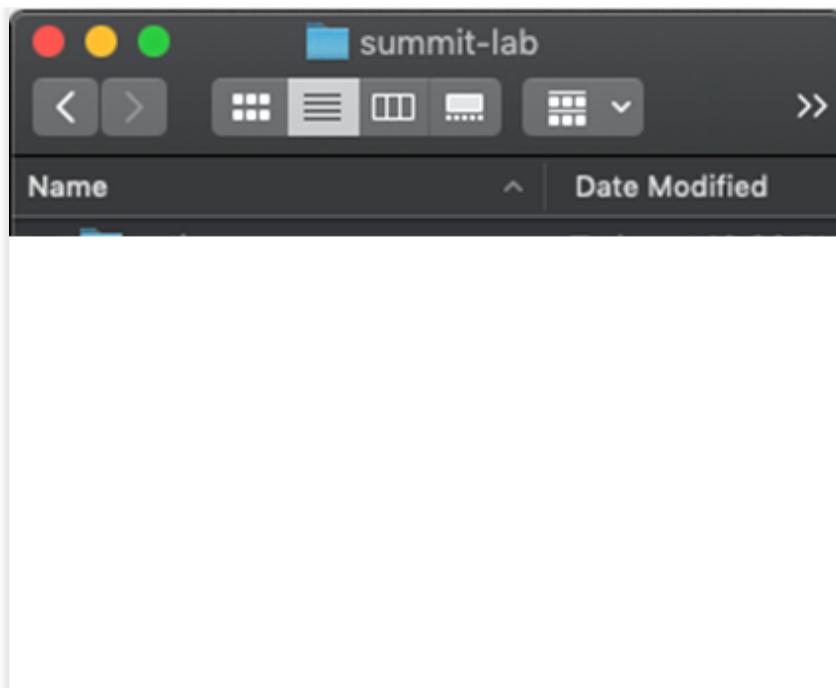


## Exercise 3: Install AEM

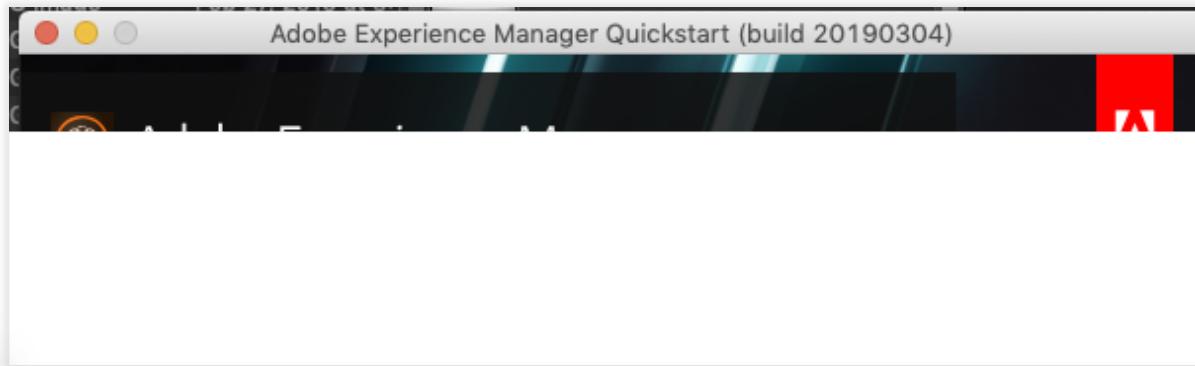
To go through this lab, you will need two AEM environments: an author environment and a publish environment. These instructions assume that you have access to an AEM 6.5 JAR file and a developer *license.properties* file, but the steps to install AEM may differ slightly based on how your AEM environments have been licensed. For information on downloading an AEM JAR file, please contact your Adobe Account Executive or Customer Success Manager.

1. Create a folder to install your AEM instances in. This can be done anywhere on your computer that you would like. Create two subfolders and name them *author* and *publish*.
2. Place your AEM JAR file in the *author* folder alongside your *license.properties* file. Place the same JAR and *license.properties* file in the *publish* folder, but rename the JAR file to *cq-publish-p4503.jar*.





3. Double-click each JAR file. You will see a ***crx-quickstart*** folder created next to each JAR file and windows will appear for your two AEM instances. Once the progress bar in each AEM window reaches the end, a browser window will open for each respective environment.

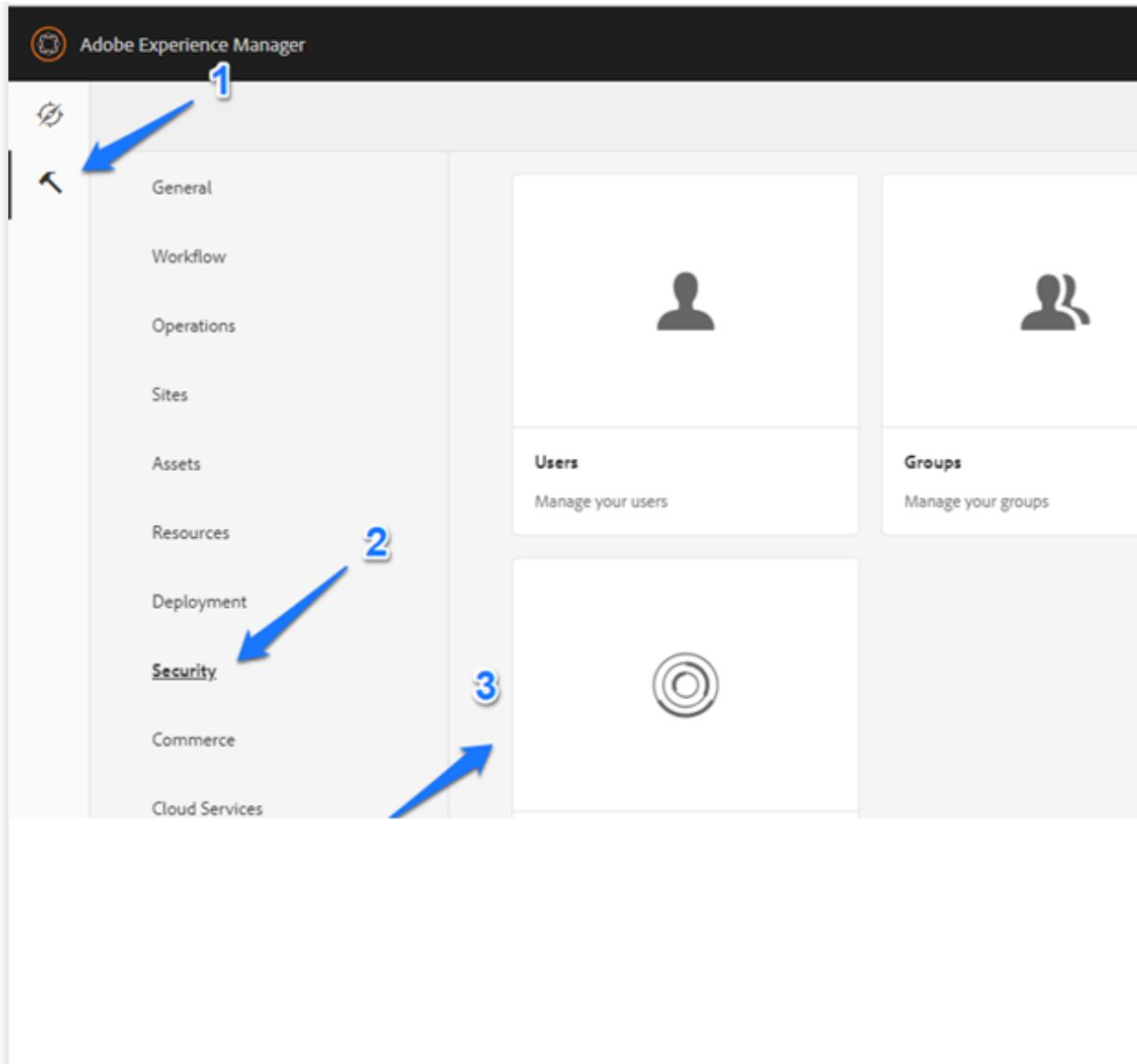


# Exercise 4: Create an IMS Configuration in AEM

AEM integrates with Launch through Adobe I/O. In this exercise, we will use AEM's IMS configurations to configure a certificate that we will be able to use in Adobe I/O for this integration. This certificate will allow Adobe I/O to authenticate the identity of our AEM instance.

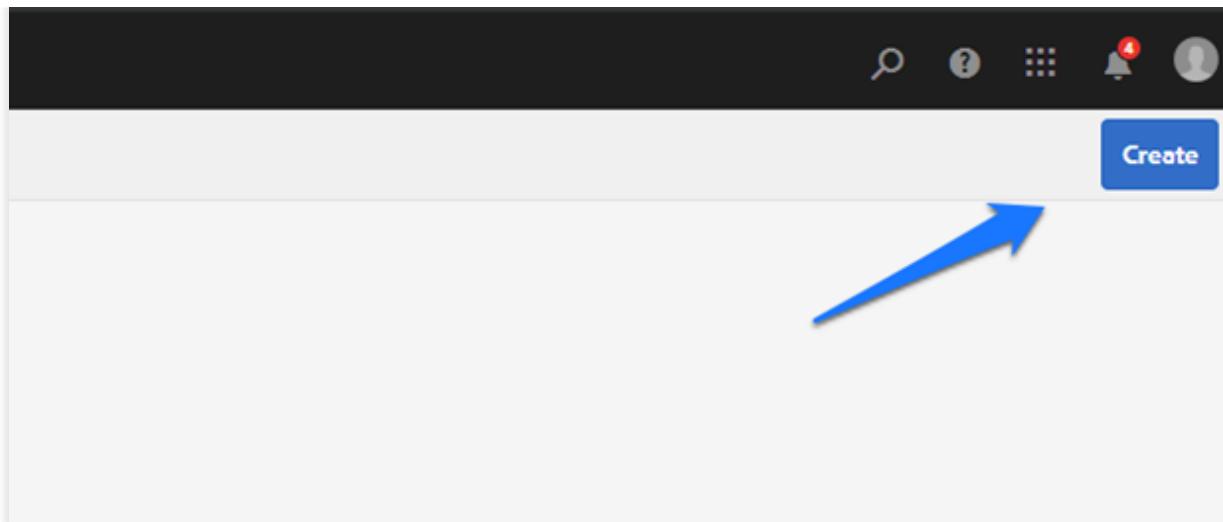
1. Log onto your AEM author environment. The default credentials are admin/admin.
2. Click on the **Tools** icon on the left, followed by the **Security** menu, followed by the **Adobe IMS Configurations** card.





3. Click the blue **Create** button.





4. Select **Adobe Launch** as the *Cloud Solution* and check the box for *Create new certificate*. Give your certificate a name of **local-aem**. Click the blue *Create certificate* button. Click **OK** when prompted.

Certificate      Account

Cloud Solution \*

Adobe Launch

Certificate \*

Please select certificate

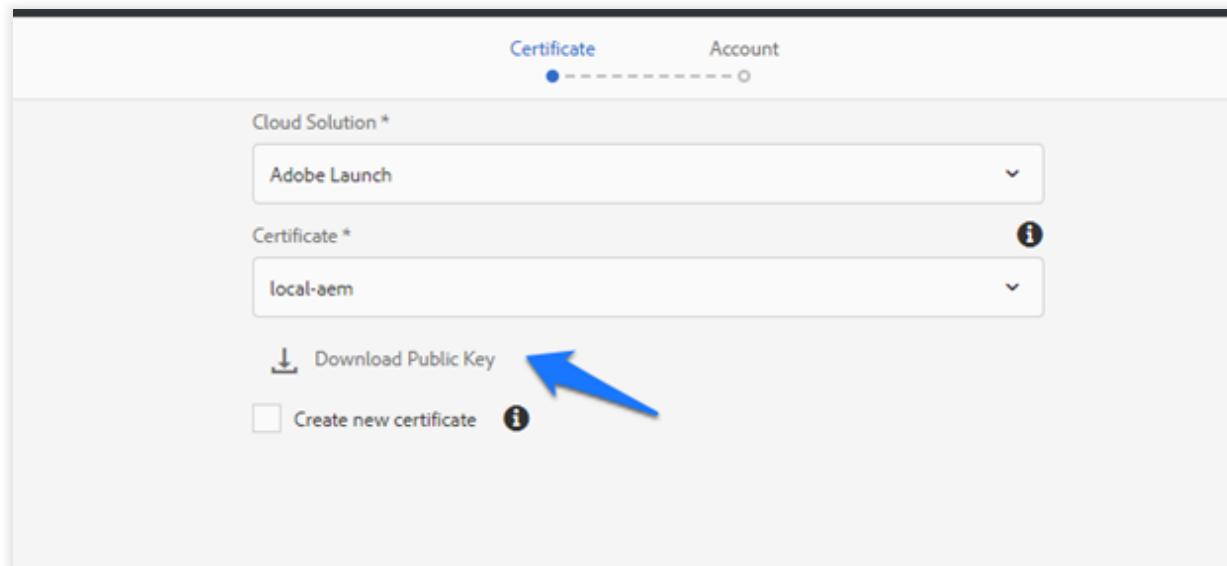
Download Public Key

Create new certificate i

local-aem

Create certificate

5. Click the **Download Public Key** link and click **Download** when prompted.

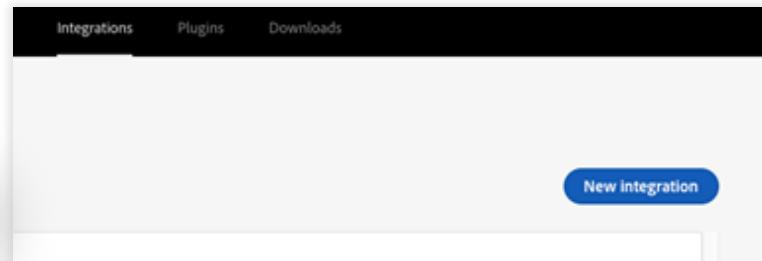


6. Locate the downloaded file in your computer's **Downloads** folder; we will be using it in the next exercise. Leave this browser window open as we go through the next exercise as we will need to revisit this screen soon.

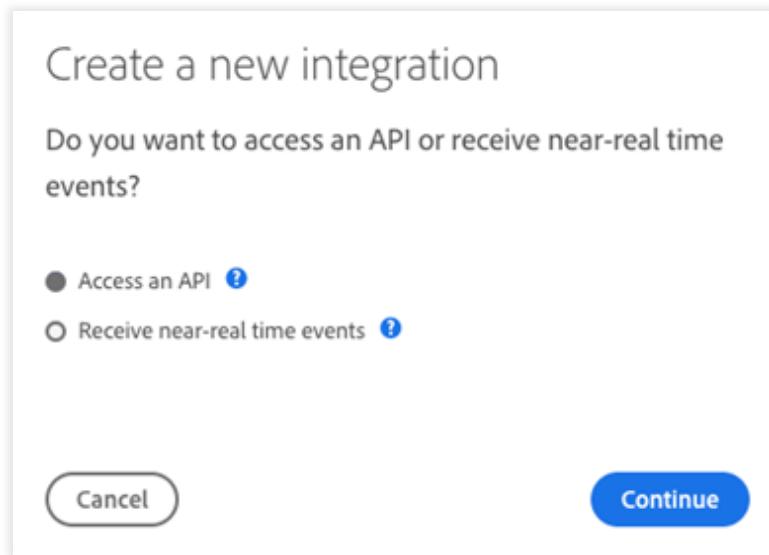
## Exercise 5: Create an Adobe I/O Integration

In this exercise, we will create a Launch integration in Adobe I/O.

1. Log in to Adobe I/O by pointing a web browser to <https://console.adobe.io>.
2. From the Integrations tab, click the **New Integration** button.



3. Choose to *Access an API* and click *Continue*.



4. From under *Adobe Experience Platform*, select *Experience Platform Launch API* and click *Continue*.



# Create a new integration

Select the Adobe service you wish to integrate with.



## Adobe Experience Platform

Experience Platform API

Experience Platform Launch API



## Adobe Sen

Content

Visual s



## Creative Cloud

Adobe Stock

Creative SDK

Lightroom



## Document

PDF Ser

5. When prompted, choose to create a *New integration* and click *Continue*.

### Create a new integration

You may create a brand new integration for this service, or update an existing one.

Create

New integration

Update

AGS385 AEM - ACS

Back

Continue



6. In the **Create a new integration** screen, enter the following values:
- Name: Any name that reflects that this is an integration into Launch.

Create a new integration

Integration Details

Name

`IO_INTEGRATION_NAME`

6 to 25 characters

- Description: Integration to Launch

Description

`Integration to Launch`

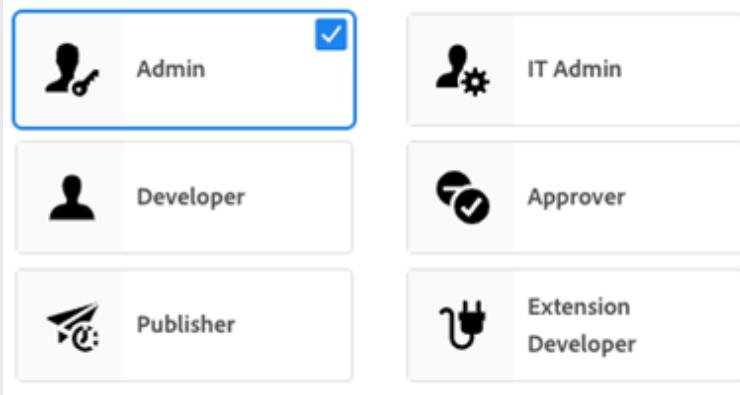
6 to 1000 characters

- Permissions: Admin



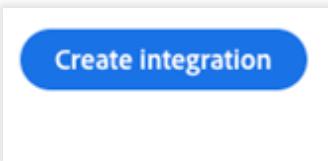
## Experience Platform Launch API Configuration

Permissions - select a role



d. Public keys certificates: The certificate that you downloaded from the IMS configuration that we created in AEM.

7. Click the blue **Create Integration** button.



## Exercise 6: Add Adobe I/O details to AEM

In this section, we will populate AEM with details of the Adobe I/O configuration that we just created. This will tell AEM how to access and authenticate Adobe I/O. In the screenshots below, we have had to obfuscate many of the values for security reasons.

1. Return to the AEM browser window where we created our certificate and click the **Next** button.



The screenshot shows the 'Cloud Configuration' step of a setup process. At the top, there are tabs for 'Certificate' (which is selected, indicated by a blue dot) and 'Account'. Below the tabs are two dropdown menus: 'Cloud Solution \*' set to 'Adobe Launch' and 'Certificate \*' set to 'local-aem'. There are also download and creation options: 'Download Public Key' and 'Create new certificate'. In the top right corner, there are 'Cancel' and 'Next' buttons, with a large blue arrow pointing to the 'Next' button.

2. Populate the fields on this screen with the corresponding information from Adobe I/O:
  - a. Title: Adobe I/O – Launch Integration
  - b. Authorization Server: Click the **JWT** tab in Adobe I/O and copy the server hostname and protocol from the **aud** property in the **JWT payload**. We basically want to copy everything after the opening quote mark and before the third slash. In the screenshot below, the authorization server is <https://ims-na1.adobelogin.com>. See the highlighted string of text below for an illustration of the text that you should copy.



## Summit Lab L725

Overview   Insights   Services   Events   **JWT**

### Generate your JWT

#### JWT payload

```
1 v {  
2   "exp": 1547244954,  
3   "iss": "657E2[REDACTED]eAdobeOrg",  
4   "sub": "F64E[REDACTED]t.adobe.com",  
5   "https://ims-na1.adobelogin.com/s/ent_reactor_admin_sdk": true,  
6   "aud": "https://ims-na1.adobelogin.com/c/5[REDACTED]80843c12b"  
7 }
```

Paste private key ?

Paste your private key to generate the JWT

c. API Key: Listed as the **API Key (Client ID)** in the *Overview* tab in Adobe I/O.



The screenshot shows the 'Overview' tab of the Adobe I/O interface for a lab named 'Summit Lab L725'. The tab bar includes 'Overview', 'Insights', 'Services', 'Events', and 'JWT'. The 'Overview' tab is active, indicated by a blue arrow pointing to its title. Below the tabs, there's a section titled 'Client Credentials' containing three fields: 'API Key (Client ID)', 'Technical account ID', and 'Technical account email'. Each field has a corresponding 'Copy' button to its right. The 'API Key (Client ID)' field contains the value '8fb6...'. The 'Technical account ID' field contains a long string of alphanumeric characters. The 'Technical account email' field contains a long string of characters. To the right of the 'Copy' buttons, there are partially visible sections labeled 'In', 'Na', '6 t', 'De', and 'D'.

d. Client secret: Click the *Retrieve client secret* button in the *Overview* tab in Adobe I/O.



Technical account email



Organization ID



Client secret

[Retrieve client secret](#)



e. Payload: Copy the *JWT payload* from the *JWT* tab in Adobe I/O.

### Summit Lab L725

Overview   Insights   Services   Events   **JWT**



#### Generate your JWT

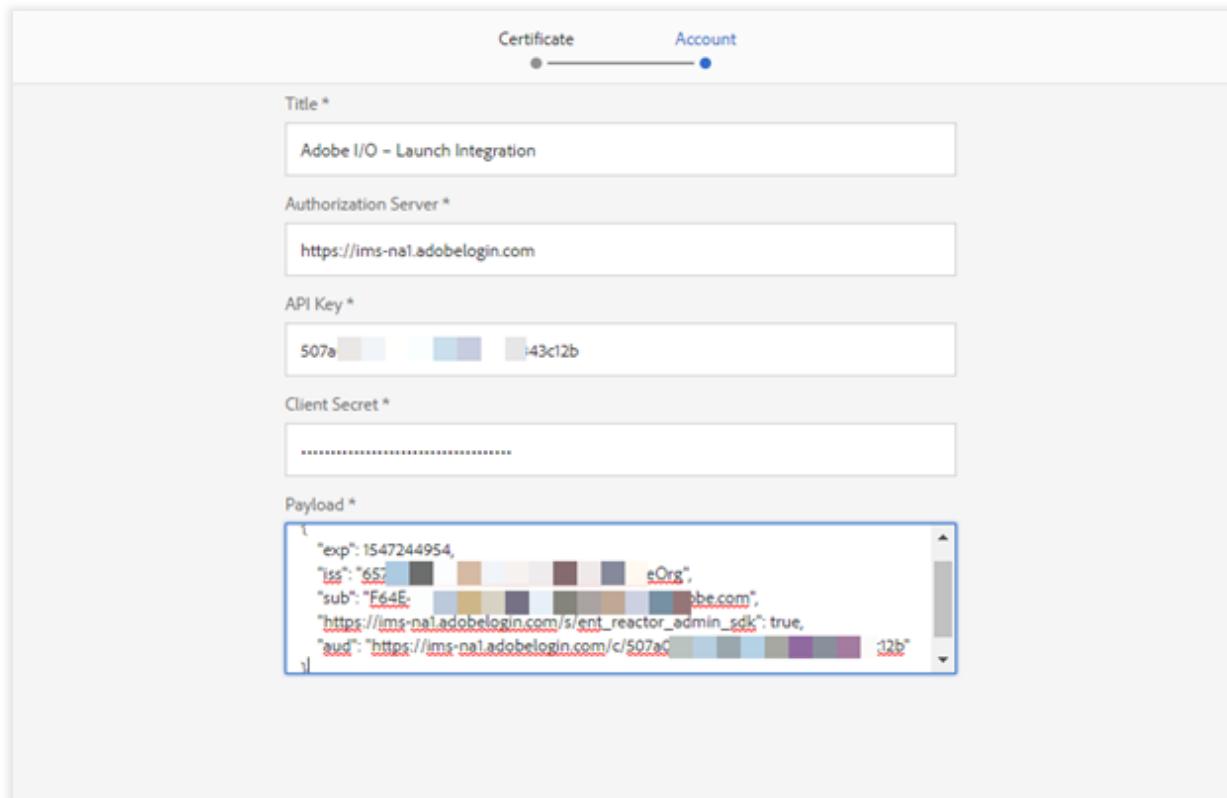
JWT payload

```
1 + [
2     "exp": 1547244954,
3     "iss": "657E2[REDACTED]beOrg",
4     "sub": "F64E4[REDACTED]dobe.com",
5     "https://ims-na1.adobelogin.com/s/ent_reactor_admin_sdk": true,
6     "aud": "https://ims-na1.adobelogin.com/c/507af[REDACTED]13c12b"
7 ]
```

Paste private key 

Paste your private key to generate the JWT

3. After populating all values, your configuration should look something like this:



The screenshot shows a configuration interface for an Adobe I/O integration. The 'Account' tab is active. The form fields are as follows:

- Title: Adobe I/O - Launch Integration
- Authorization Server: https://ims-na1.adobelogin.com
- API Key: 507a...i43c12b
- Client Secret: (redacted)
- Payload: A JSON object containing the following keys and values:

```
{
  "exp": 1547244954,
  "iss": "652...eOrg",
  "sub": "F64E...obe.com",
  "https://ims-na1.adobelogin.com/sent_reactor_admin_sdk": true,
  "aud": "https://ims-na1.adobelogin.com/c/507aC...12b"
}
```

4. Click the blue **Create** button.

You have now successfully completed the pre-requisites for this lab. In doing so, you have learned how to configure Launch for an Experience Cloud deployment, how to install an AEM environment, and how to integrate AEM with Launch through the Adobe I/O console.

