

HDX-DEV-100

Web Content Development for Beginners

HCLSoftware U

Creating a new generation of experts

Edition June 2024

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Introduction

This hands-on lab introduces you to the development parts of HCL Digital Experience (DX) Web Content Manager (WCM).

In this DX developer lab, you play the role of Gene, a developer for the fictitious Woodburn Studio company.



Gene Hayes, Developer, based in Chicago (USA)

As a DX Web Developer, you will experience how quick and easy it is to develop Web Content. You will create a Promotion Presentation Template to create and render DX Promotions. You will test this inside and outside of a DX page. You will also associate the Promotion Content Template with the Promotion Presentation Template in a Site Area and as a default association. You will also turn the content to a Page Component, so that Business Users can easily add them to pages.

Optionally, you may discover how to use the WCM Authoring to build new Content Templates and Content, to develop your Presentation Templates with your favorite code editor, how to easily create more WCM Page Components and Templates and how to build a list of Promotion content.

Prerequisites

1. Completion of [HDX-INTRO](#) and [HDX-BU-100](#) courses, including the labs
2. Access to download the Lab Resources. In the same place where you have found this lab, you will find corresponding resources which you may download and unzip in your Desktop. This helps you to run the lab more easily, and you may later replace it by your own ones.
3. A local code editor. This lab provides instructions with Visual Studio Code (VSC): <https://code.visualstudio.com>
4. DXClient deployed and configured. See [HDX-DEV-100 Introduction](#) lesson to learn how to set this up.
5. Optionally, HCL Digital Experience Web Developer Toolkit installed locally. Download and installation instructions are provided here: <https://github.com/HCL-TECH-SOFTWARE/WebDevToolkitForDx>.

You will be using the following user IDs and passwords:

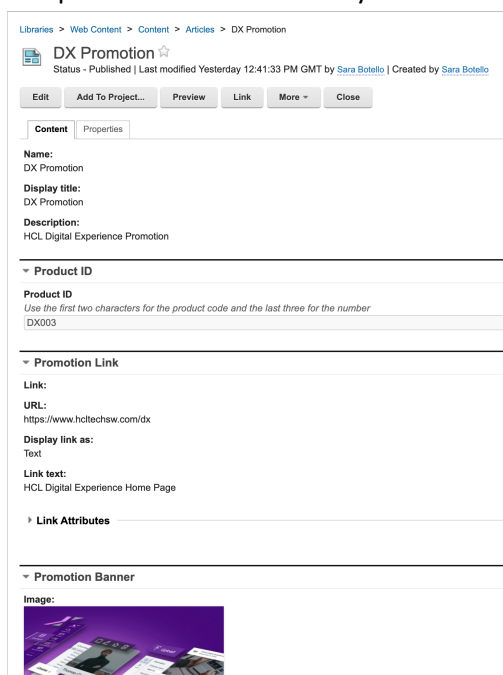
Purpose	User	Password
SoFy Login	Your official email id	Your password
SoFy Solution Console Login	sol-admin	pass
DX Login	ghayes (or wpsadmin)	HCL-Dem0 (or wpsadmin)

Lab Overview

In this lab there are several parts to get you started developing with the DX Web Content Manager. These are shortly introduced now.

Part 1: Check DX Promotion Content and Content Template in WCM Authoring

In the HDX-BU-100 course, you have run a lab with the Content Composer, where you have created a Promotion Content Template and corresponding DX Promotion Content. You will discover how this looks like in WCM Authoring. In **Optional Part 1: Optional: Create new DX Promotion Content Template and Content in WCM Authoring**, you will find an alternative way to build this Content Template and Content directly in WCM Authoring. This is what it may look like:



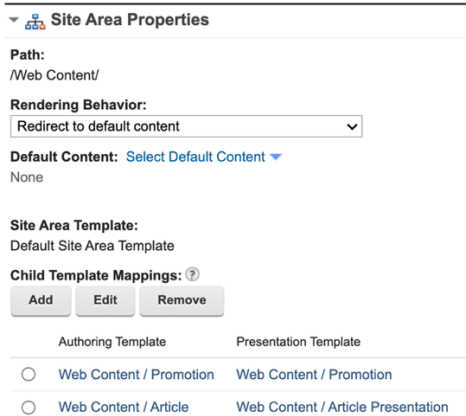
Part 2: Create and Preview Presentation Template for DX Promotion Content

Then you will create a new corresponding Promotion Presentation Template using the tag helpers with view and edit tags and test it with the existing content.

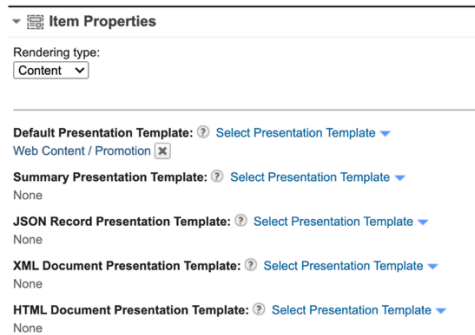


Part 3: Map Promotion Presentation Template with Content Template

You will configure to associate your new DX Promotion Presentation Template with your corresponding Promotion Content Template. This will help to set the default presentation for all content based on the Content Template. You will do this in the Site Area using the Site Template Mappings

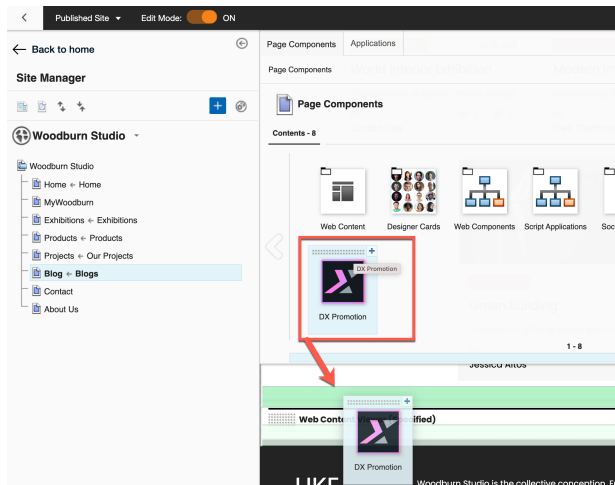


and in the Promotion Content Template.

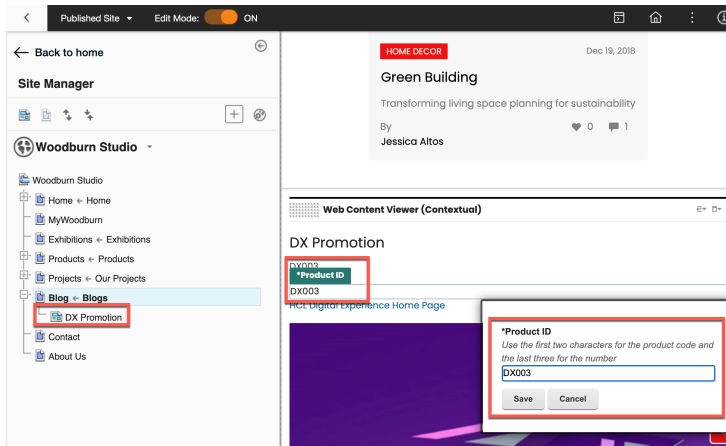


Part 4: Turn Content into a Site Manager Page Component and add to Page

To allow business user to add this new content to a page, you will turn it into a Site Manager Page Component with an easily identifiable image, add it to a page.



And edit it.



And there are a few optional parts with additional optional learning points.

Optional Part 1: Create new DX Promotion Content Template and Content in WCM Authoring

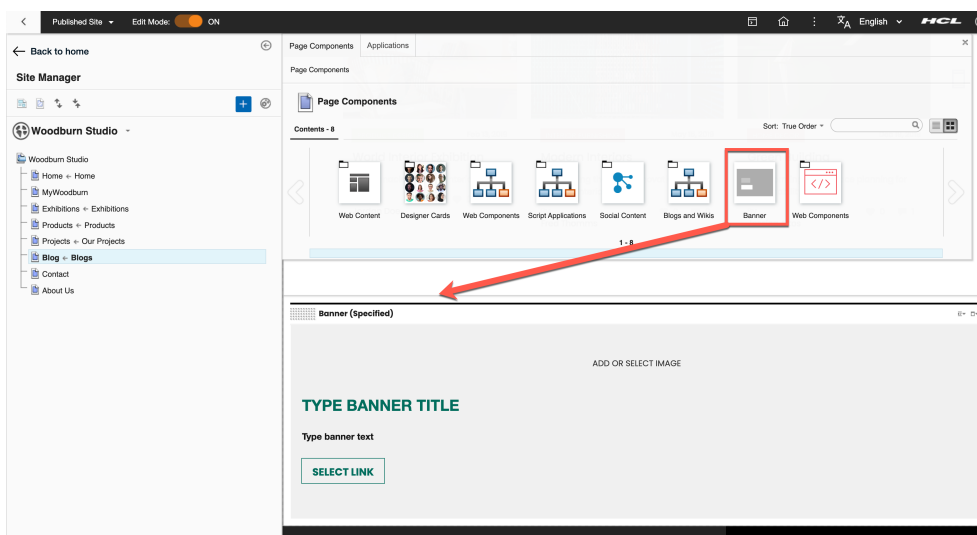
In this optional part, you will learn that you can create the Content Template and Content in WCM Authoring as well.

Optional Part 2: Update locally and push changes to server

Use WebDav or Web Developer Toolkit to access the design of Web Content Manager locally and then push your changes back to the server.

Optional Part 3: Create more Page Component and Templates

Web Content comes with a few ready to use Page Components and Templates. In this optional part, you may create one of these easily. There is a Banner Page component that you may add to a page and then edit.



Optional Part 4: Create and display a content list

Use a Menu Component to build a list of content and then show it on the same page. Create a second promotion for Volt MX and then configure a Menu Component to show all content based on the Promotion Content Template in a specific way, e.g. like

Promotion: DX Promotion

Product ID: DX003

Link: [HCL Digital Experience Home Page](#)

Promotion: Volt MX Promotion

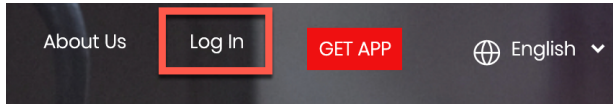
Product ID: MX002

Link: [HCL Volt MX Home Page](#)

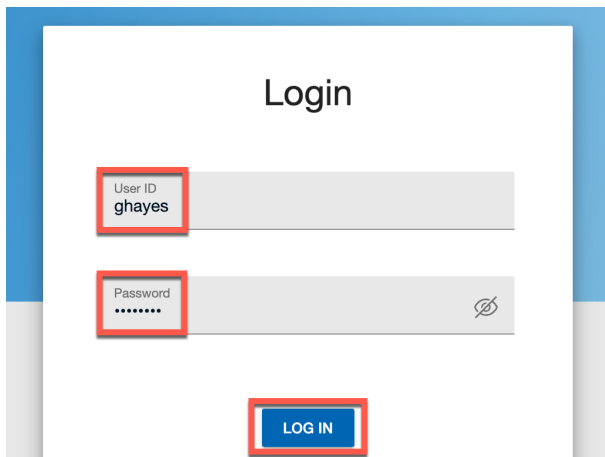
Part 1: Check the Content and Content Template in WCM Authoring

In the HDX-BU-100 course, you have run a lab with the Content Composer, where you have created a Promotion Content Template and corresponding DX Promotion Content. You will discover how this looks like in WCM Authoring. In **Optional Part 2: Create new DX Promotion Content Template and Content in WCM Authoring**, you will find an alternative way to build this Content Template directly in WCM Authoring.

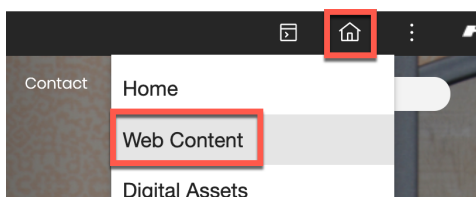
1. Log on to the DX server as Gene Hayes. Click **Log in**.



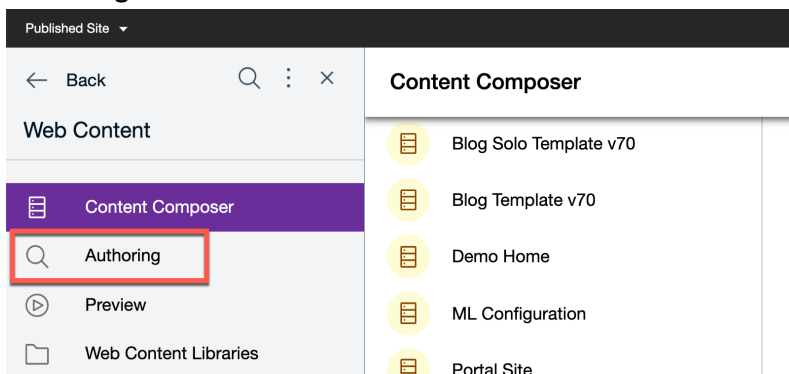
2. Then use the credentials of Gene (User ID: **ghayes**, Password: **HCL-Dem0** – if you do not have these, you may use the default administrator account with User ID: **wpsadmin**, Password: **wpsadmin**)



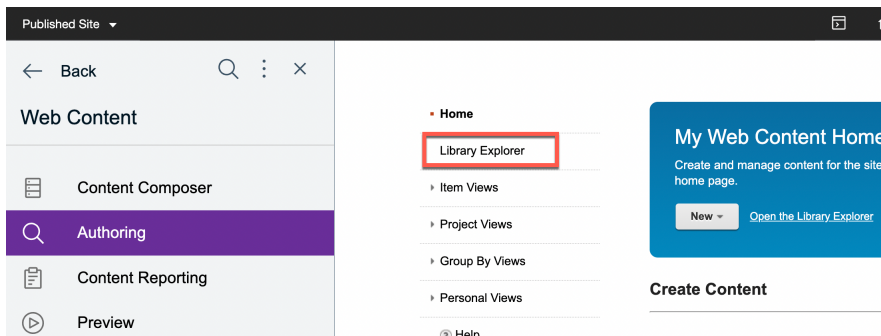
3. Then go to the Web Content in the Practitioner Studio. Open the applications menu and click **Web Content**.



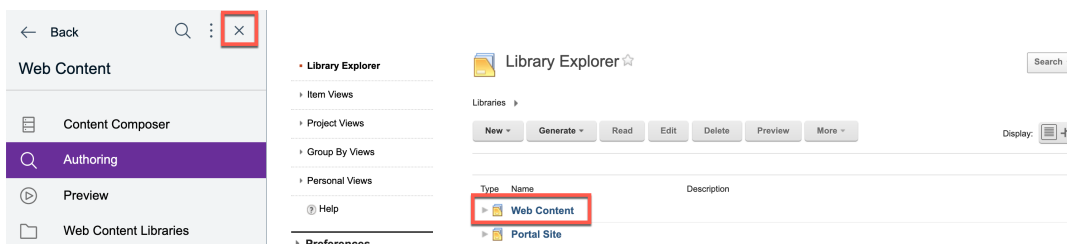
- This opens the “Content Composer”. There are other options available here. In “Web Content Libraries” you can create new and manage the access of Web Content libraries. There is also a dedicated “Preview” page. You will now use the Web Content Authoring. Click **Authoring**.



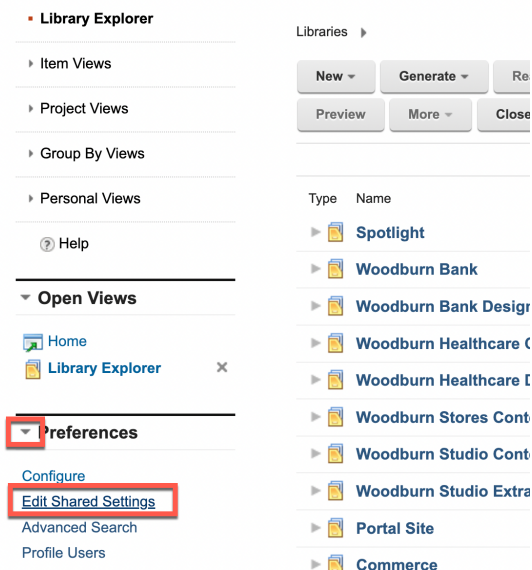
- Then open the Library Explorer. Click **Library Explorer**.



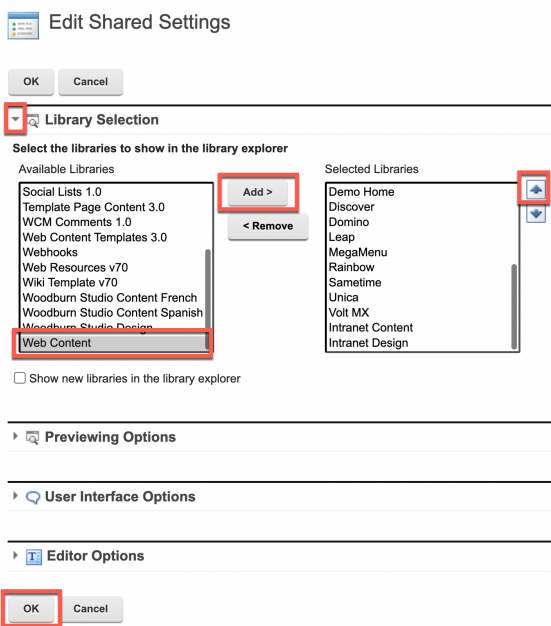
- This shows a different view with some of the same web content libraries as you saw in the “Content Composer”. Close the sidebar to get more space to work and then open the “Web Content” library where you have created the Content Template and Content previously. Click **Web Content**.



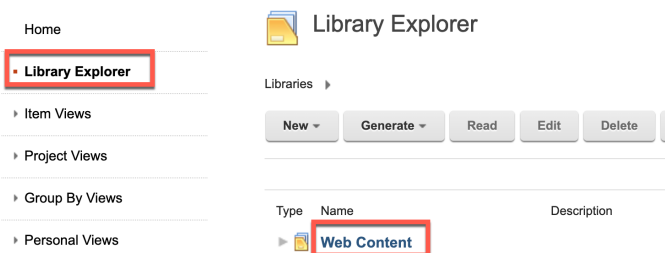
- If this library is not showing, you may need to add it. In that case, open the **Preferences** and click **Edit Shared Settings**.



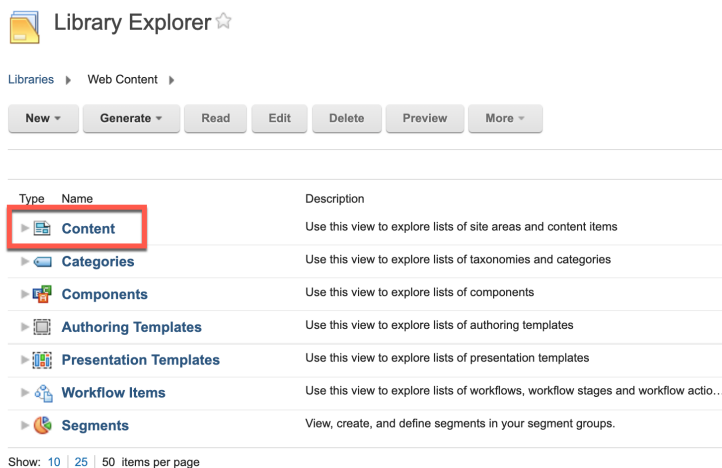
- Then open the **Library Selection**, from Available Libraries select the **Web Content** library, and click **Add >** to move it to the Selected Libraries. You may use the up icon to move this to the top and then click **OK** to save your settings.



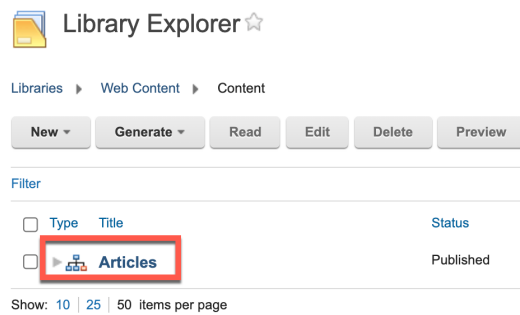
- Select the **Library Explorer** and then **Web Content** library again.



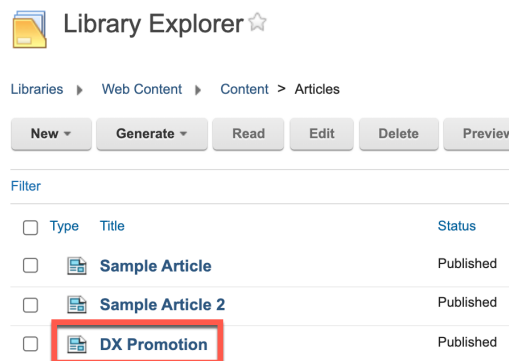
10. Have a look first at the Promotion Content. Later you will review the Promotion Template as well. This is under the Authoring Templates. Click **Content**.



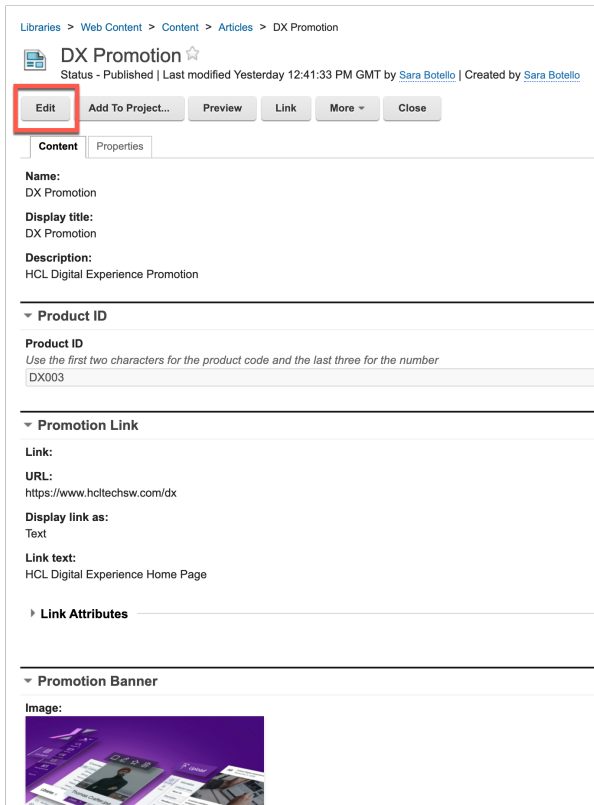
11. You see the only site area in this library. Open it. Click **Articles**.



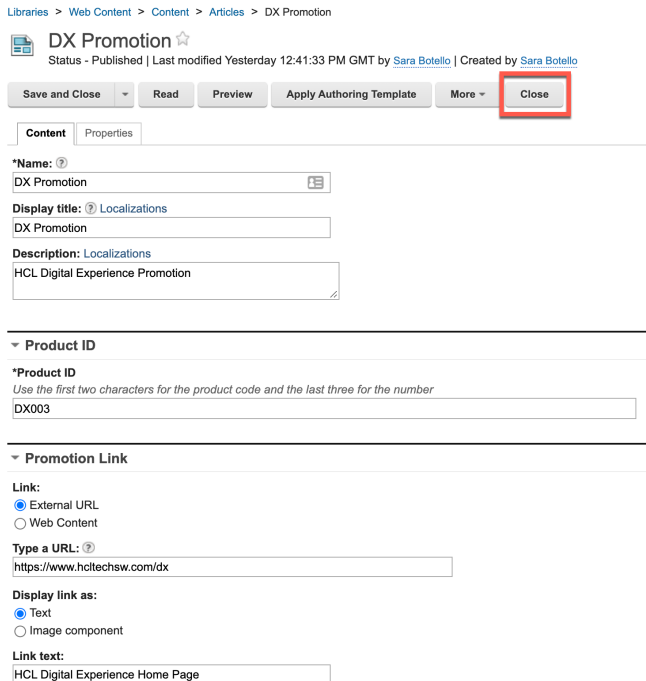
12. And here you the content you have created. Open it. Click **DX Promotion**.



13. You can verify your content **DX Promotion** as below. Now see how it looks like if you edit it. Click **Edit**.



14. Do not make any changes yet and close it. Click **Close**.

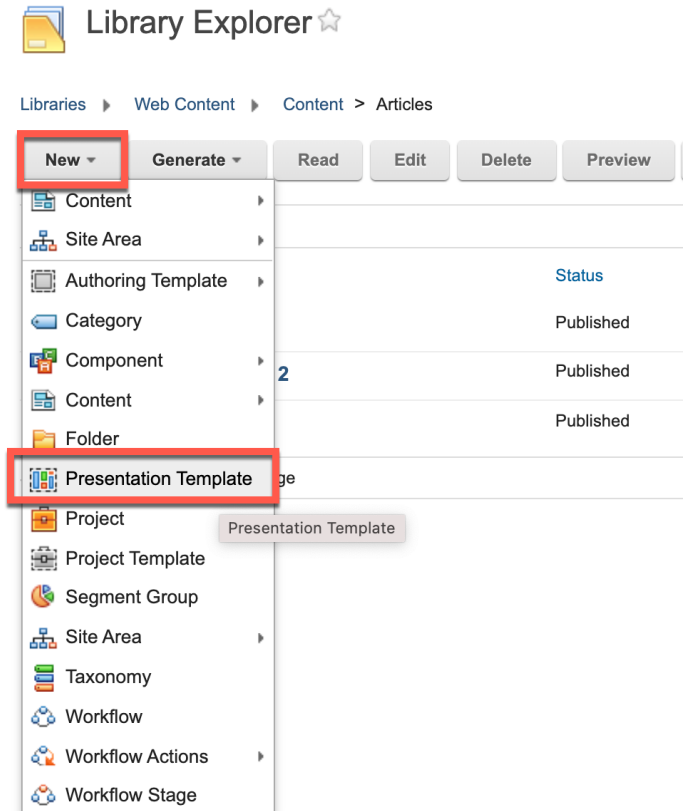


You have successfully started using the Web Content Authoring and navigated through the library, site area and reviewed the content in this different user interface.

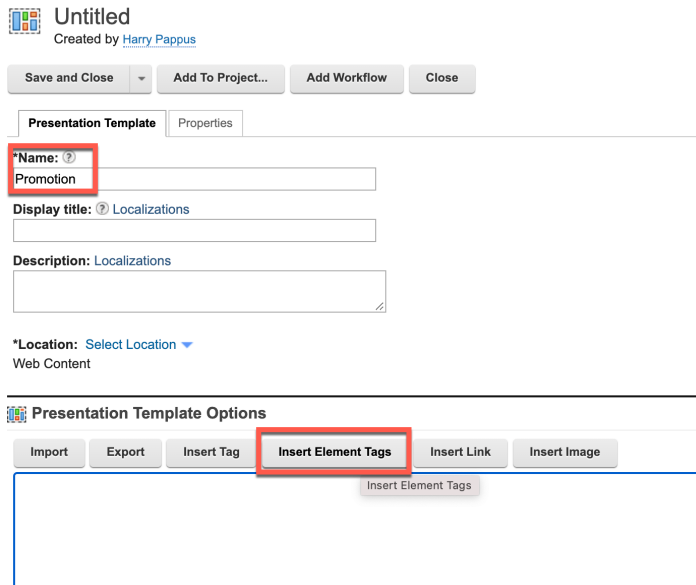
Part 2: Create and Preview a Presentation Template for DX Promotion Content

In this part, you will create a new corresponding Promotion Presentation Template using the tag helpers with view and edit tags and test it with the existing content.

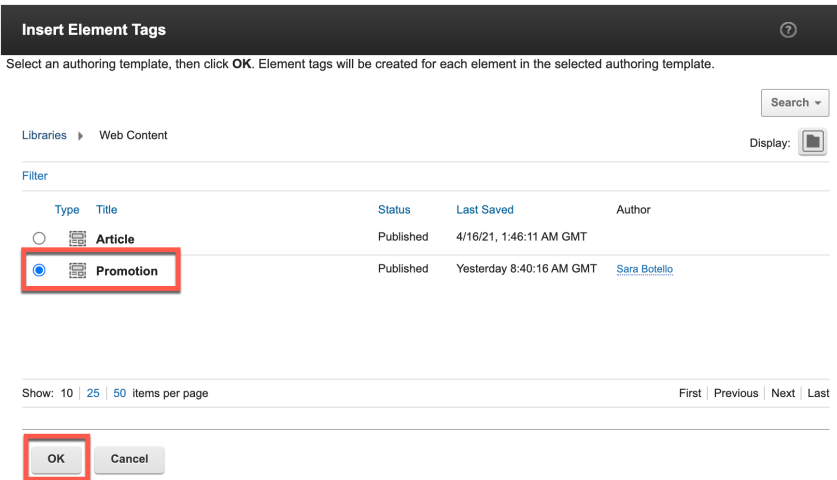
1. Create first the new Presentation Template in the current library. In the Library Explorer, click **New** and then select **Presentation Template** from the dropdown.



- Enter the name of the template **Promotion**. Optionally you can enter the description. Keep the default location selected as **Web Content** library. Then, you want to insert WCM tags that point to the title property and elements of your Promotion Content Template as a starting point. Click **Insert Element Tags**.



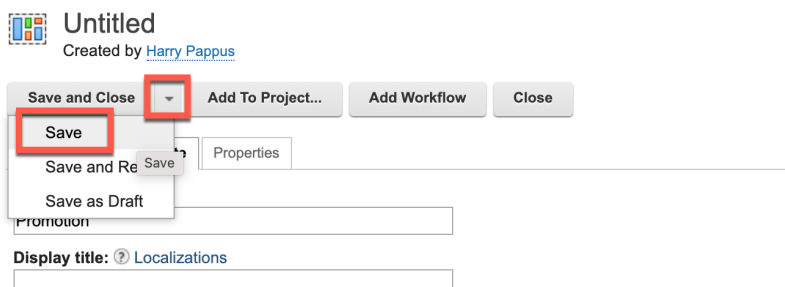
- A pop-up opens to select the Authoring Template from where to insert the elements. Select **Promotion** and click **OK**.



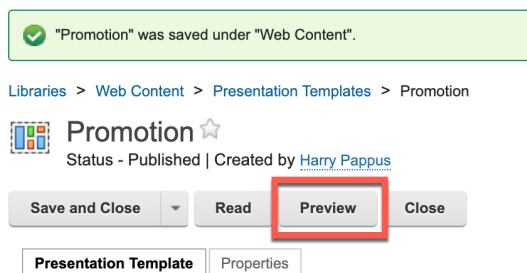
- You can see now that all the elements of the Content Template **Promotion**, have been inserted. There are 2 types of tags, HTML tags like <p> and WCM tags like [Property], for the meta-data, here the title field, and [Element], to view each element. There are different options allowing you to decide how to display it. You may have a look at https://opensource.hcltechsw.com/digital-experience/latest/manage_content/wcm_authoring/authoring_portlet/content_management_artifacts/tags/creating_web_content_tags/wcm_dev_referencing_elements/ and see all possible tags in https://opensource.hcltechsw.com/digital-experience/latest/manage_content/wcm_authoring/authoring_portlet/content_management_artifacts/tags/creating_web_content_tags/.



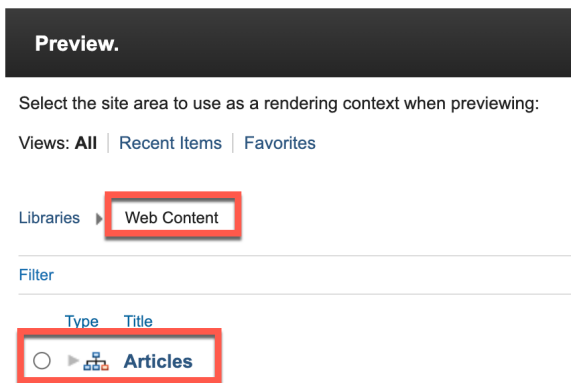
- Now save the new template and test it. Click next to Save & Close to see more options and then click **Save**.



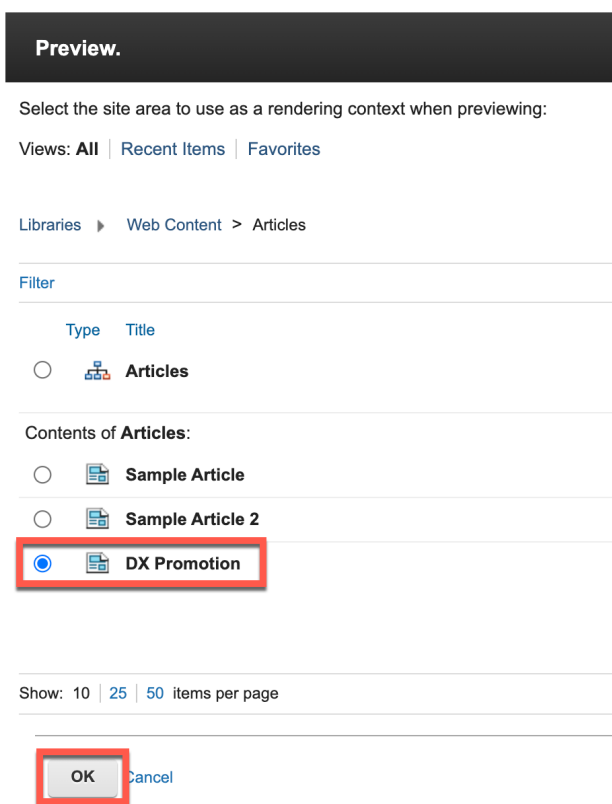
- Notice it has been saved correctly (and you can close that message) and that you can now preview it. Click **Preview**.



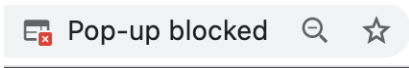
7. Then select your DX Promotion content under Articles. Click **Articles**.



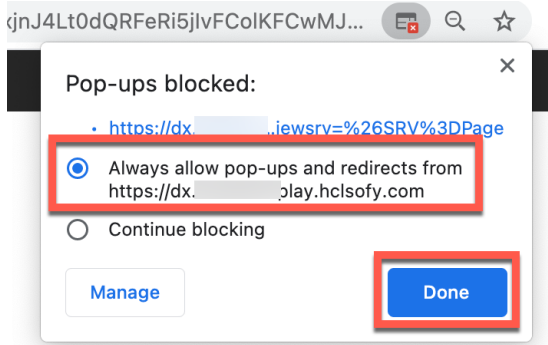
8. And then **DX Promotion** and click **OK**.



9. If no new page shows, it may be that it is blocked by a pop-up blocker.



10. Allow this now. Select **Always allows pop-ups and redirects from https://...** And click **Done**.

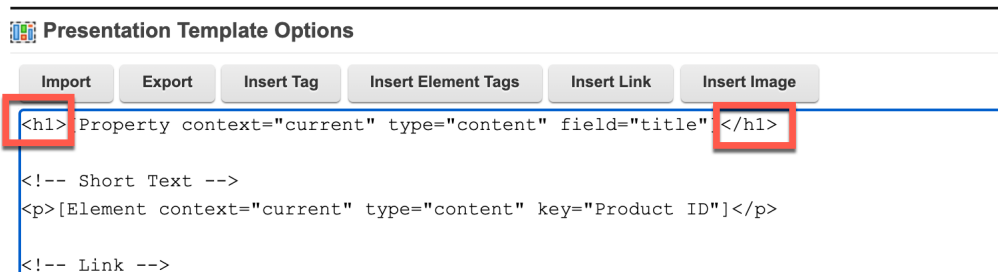


11. Then try Preview again. It now should open a new page that looks like this. Notice the URL that includes the library, site area, content, as well as the presentation template details.

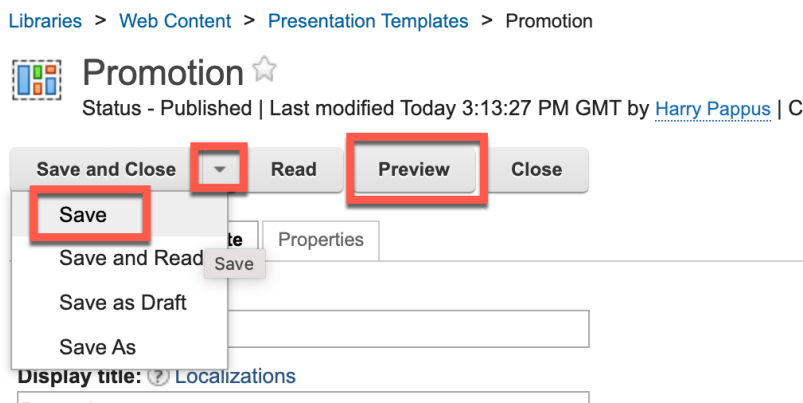


12. Now change the design and make the title a header tag 1. Enter the code and change it to

```
<h1>[Property context="current" type="content" field="title"]</h1>
```



13. Then test it again. Save first and then review again.



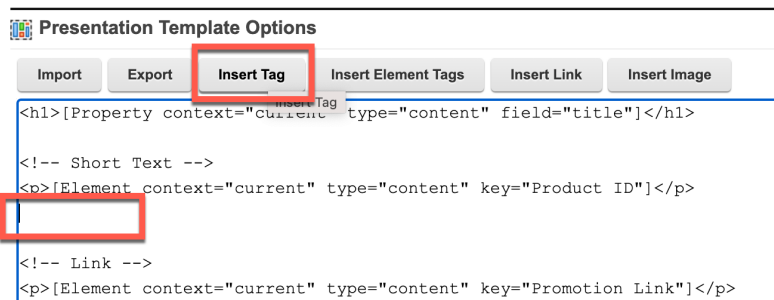
14. And now the title “DX Promotion” shows in header 1:

DX Promotion

DX003

[HCL Digital Experience Home Page](#)

15. Now you want to make the product ID editable in a DX page. For that you will use an EditableElement tag. Go back the presentation template, put your cursor under the Element tag of the Product ID and then click Insert Tag.



16. This pops up the Insert a Tag window. By default, it is set to use the Property tags with the content title selected. Click on Select a property field to see all available properties.

Insert a Tag

Select the type of tag to create, and then define parameters for the insert the tag at the current cursor location.

Tag:

[Property field="title"]

Select a tag type:

Property ?

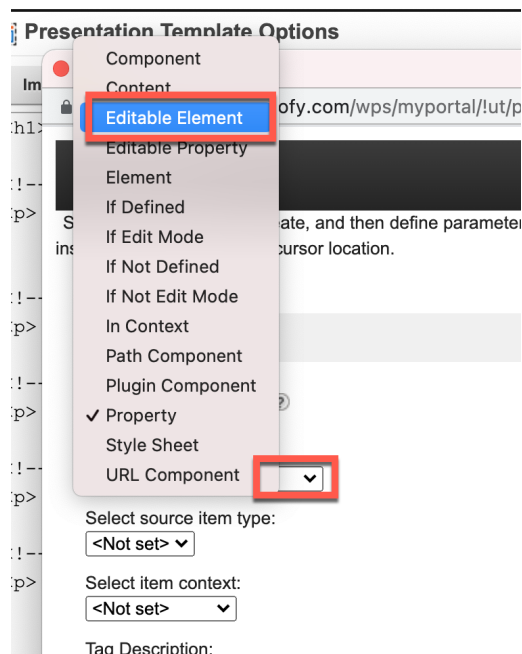
Select a property field:

Title

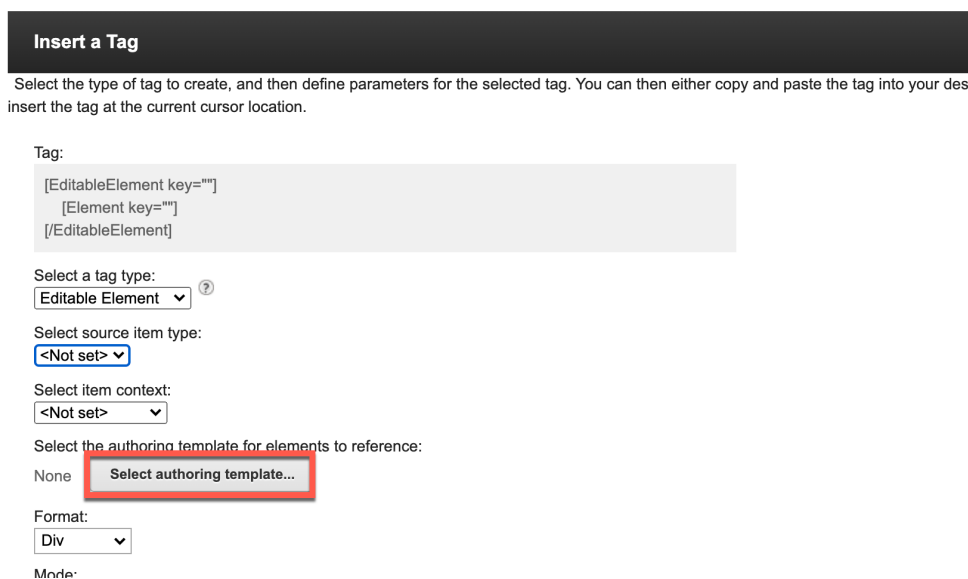
Select source item type:

<Not set>

17. As you can see there are many to choose from, in addition to name, title and description. Close it and then change the tag type from Property to EditableElement.



18. Notice different options and select the Promotion Content Template. Click **Select authoring template...**



19. Then select **Promotion** and click **OK**.

Select an authoring template

Select the authoring template to be used as the definition of the elements to select

Views: **All** | Recent Items | Favorites

Libraries ▶ Web Content

Filter

Type	Title	Status
<input type="radio"/>	Article	Published
<input checked="" type="radio"/>	Promotion	Published

Show: 10 | 25 | 50 items per page

OK | None | Cancel

20. Notice how this builds the tag for you. Then click **OK**.

Insert a Tag

Select the type of tag to create, and then define parameters for the selected tag. You can then either copy and paste the tag into your design, or click **OK** to insert the tag at the current cursor location.

Tag:

```
[EditableElement key="Product ID" format="div" mode="dialog"]
 [Element key="Product ID"]
[/EditableElement]
```

Select a tag type: Editable Element

Select source item type: <Not set>

Select item context: <Not set>

Select the authoring template for elements to reference: Web Content/Promotion **Select authoring template...**

Select the element to edit: Product ID

Format: Div

Mode: Dialog

Tag Description: The EditableElement tag is used to make elements from content items and site areas editable when rendered using a web content viewer portlet when the page is in edit mode.

Include tag start and end.

OK | Cancel

21. Check that you now have two tags to show the Product ID. Now save an preview it again.

Libraries > Web Content > Presentation Templates > Promotion

Promotion ☆
 Status - Published | Last modified Today 4:11:44 PM GMT by [Harry Pappus](#) | Created by [Harry Pappus](#)

Save and Close Read **Preview** Close

Save
 Save and Read
 Save as Draft
 Save As

Properties

Display title: Localizations
 Promotion

Description: Localizations

Presentation Template Options

Import Export Insert Tag Insert Element Tags Insert Link Insert Image

```
<h1>[Property context="current" type="content" field="title"]</h1>
```

```
<!-- Short Text -->
```

```
<p>[Element context="current" type="content" key="Product ID"]</p>
```

```
[EditableElement key="Product ID" format="div" mode="dialog"]
```

```
    [Element key="Product ID"]
```

```
[/EditableElement]
```

```
<!-- Link -->
```


22. In your new preview, you will see the Product ID twice in read mode. The edit mode only works inside DX pages.

DX Promotion

DX003

DX003

[HCL Digital Experience Home Page](#)

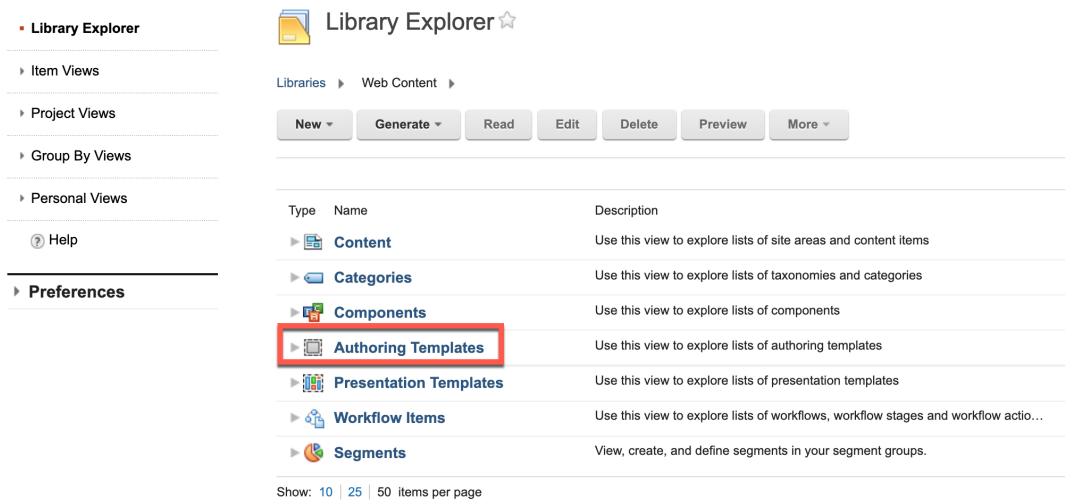


Congratulations! You have successfully created the new Promotion Presentation template using the elements from an existing Promotion Content Template and started preparing it to allow it to be edited directly in a page.

Part 3: Map Promotion Presentation Template with Content Template

You will now configure to map your new Promotion Presentation Template with your corresponding Promotion Content Template. This will help to set the default presentation for all content based on that Content Template. You will do this in the Content Template and then apply this update to your existing content. Optionally you map it in the Site Area as well. This may be handy in the case you wanted to use a different one for that Site Area only.

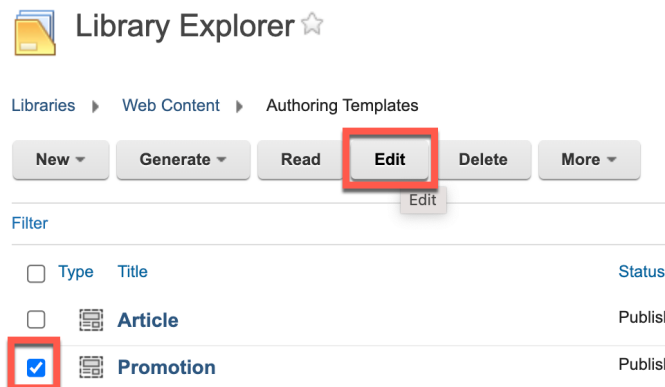
1. First open your Promotion Content Template to set this default mapping. It is under the Authoring Templates. Click **Authoring Templates**.



The screenshot shows the 'Library Explorer' interface. On the left, there is a sidebar with a 'Preferences' section. The main area displays a list of libraries under 'Web Content'. The 'Authoring Templates' library is highlighted with a red box. Below the list, there are buttons for 'New', 'Generate', 'Read', 'Edit', 'Delete', 'Preview', and 'More'. At the bottom, it shows 'Show: 10 | 25 | 50 items per page'.

Type	Name	Description
Content	Content	Use this view to explore lists of site areas and content items
Categories	Categories	Use this view to explore lists of taxonomies and categories
Components	Components	Use this view to explore lists of components
Authoring Templates	Authoring Templates	Use this view to explore lists of authoring templates
Presentation Templates	Presentation Templates	Use this view to explore lists of presentation templates
Workflow Items	Workflow Items	Use this view to explore lists of workflows, workflow stages and workflow actions
Segments	Segments	View, create, and define segments in your segment groups.

2. You see the Promotion Content Template. Edit it. Select **Promotion** and then click **Edit**.



The screenshot shows the 'Library Explorer' interface with the 'Authoring Templates' library selected. The 'Edit' button is highlighted with a red box. Below the buttons, there is a 'Filter' section with a table of templates. The 'Promotion' template is selected with a red box around its checkbox.

Type	Title	Status
<input type="checkbox"/>	Article	Publisi
<input checked="" type="checkbox"/>	Promotion	Publisi

- There are several presentation templates that may be associated, e.g. for summary, JSON, XML and HTML Document. For each you can set a different dedicated presentation template. Set the Default Presentation Template to your Promotion one. Click and then select **Web Content / Promotion**.

Libraries > Web Content > Authoring Templates > Promotion

Promotion ☆
 Status - Published | Last modified Yesterday 8:40:16 AM GMT by Sara Botello | Created by Sara Botello

Save and Close Read Preview Manage Elements Close

Content Template Properties Default Content Default Content Properties

***Name:** Promotion

Display title: Localizations Promotion

Description: Localizations Promote a product

Item Properties

Rendering type: Content

Default Presentation Template: Select Presentation Template
 None

Summary Presentation Template: Select Presentation Template
 None

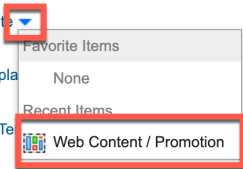
JSON Record Presentation Template: Select Presentation Template
 None

XML Document Presentation Template: Select Presentation Template
 None

HTML Document Presentation Template: Select Presentation Template
 None

Create content under a new site area

Location options:



- Notice the new mapping, the (?) gives you details on that topic and other options below. Keep them unchanged for now. Then click **Default Content**.

Libraries > Web Content > Authoring Templates > Promotion

Promotion ☆
 Status - Published | Last modified Yesterday 8:40:16 AM GMT by Sara Botello | Created by Sara Botello

Save and Close Read Preview Manage Elements Close

Content Template Properties **Default Content** Default Content Properties

*Name: ?
 Promotion

Display title: ? Localizations
 Promotion

Description: Localizations
 Promote a product

Item Properties

Rendering type:
 Content

Default Presentation Template: ?
 Web Content / Promotion

Summary Presentation Template:
 None

JSON Record Presentation Template: ? Select Presentation Template

If no valid template mapping exists for a content item, the default presentation template is used to render the content item. Typically this presentation template will render the content item as an HTML page fragment.

- Here you see all the elements you have configured. Now click **Save and Read** to save your changes.

Libraries > Web Content > Authoring Templates > Promotion

Promotion ☆
 Status - Published | Last modified 11/17/21, 12:48:45 PM GMT by Gene Hayes | Created by Gene Hayes

Save and Close Read Preview Manage Elements Close

Save Save and Read Save as Draft Save and Read Save As

Display title: [🔗](#)

Description: [🔗](#)

Product ID

Product ID [🔗](#)
 XX000

Promotion Link

Link: [🔗](#)
 External URL
 Web Content

Type a URL: ?

Display link as: [🔗](#)
 Text Image component

Link text: [🔗](#)

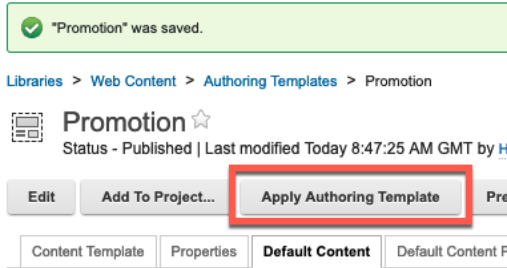
Use URL as link text

Link Attributes

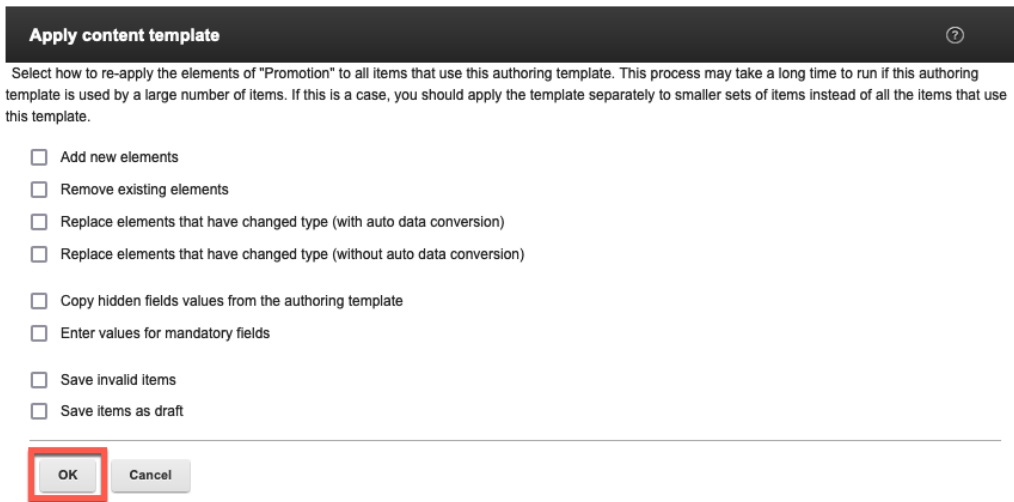
Promotion Banner

Digital asset source:

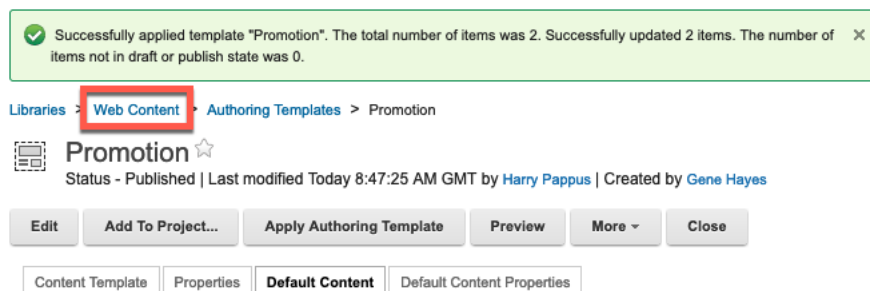
- Now you need to apply your Content Template change to the existing content. Click **Apply Authoring Template** (notice that this only appears if you are in read mode of the Content Template. You also need to have administrator rights to do this. Gene may not have this).



- If you had added, changed, or removed elements, you may indicate this. In this case, there is nothing to check. Click **OK** to apply.



- Optionally, you may set a different mapping for a specific site area. You can read through this or apply it on your instance. As you would use the same mapping, it would not give an effect. Go to the Articles site area in the Web Content library. Click **Web Content**.



9. Notice that you can easily re-edit the open items from the left. Then click **Content**.

The screenshot shows the 'Library Explorer' interface. On the left, there is a sidebar with categories like 'Item Views', 'Project Views', 'Group By Views', 'Personal Views', and 'Open Items'. The 'Open Items' section is highlighted with a red box and contains two 'Promotion' items, each with a close icon. Below this is a 'Close All' link. The main area shows a breadcrumb path: 'Libraries > Web Content >'. Below the path are buttons for 'New', 'Generate', 'Read', 'Edit', and 'Delete'. A table below lists various content types: 'Content', 'Categories', 'Components', 'Authoring Templates', and 'Presentation Templates'. The 'Content' item in the table is highlighted with a red box.

10. Then select the **Articles** site area and click **Edit**.

The screenshot shows the 'Library Explorer' interface with the breadcrumb path updated to 'Libraries > Web Content > Content'. The 'Edit' button in the top navigation bar is highlighted with a red box. Below the navigation bar is a 'Filter' section with a 'Type' dropdown and a 'Title' search field. A table below lists content items, with the 'Articles' item selected (checkbox checked) and highlighted with a red box. The 'Articles' item has a status of 'Published'. At the bottom, there is a 'Show: 10 | 25 | 50 items per page' option.

11. Here you see the details of the site area, including the existing child template mapping for the Article Authoring Template with its corresponding Article Presentation Template. You will add your Promotion to this. Click **Add**.

Libraries > Web Content > Content > Articles

Articles ☆
Status - Published | Created by wpsadmin

Save and Close Read Preview Apply Authoring Template More Close

Site Area Properties

*Name: Articles

Display title: Localizations (English: Articles)
Articles

Description: Localizations

Site Area Properties

Path: /Web Content/

Rendering Behavior: Redirect to default content

Default Content: Select Default Content
None

Site Area Template: Default Site Area Template

Child Template Mappings:

Add Edit Remove

Authoring Template Presentation Template

Web Content / Article Web Content / Article Presentation

Save and Close Read Preview Apply Authoring Template More Close

* Required Fields

12. Then select **Promotion** and click **Next**.

Define Template Mappings

To define a template mapping, first select an authoring template. Then, click **Next**.

Views: All Recent Items Favorites

Libraries > Web Content

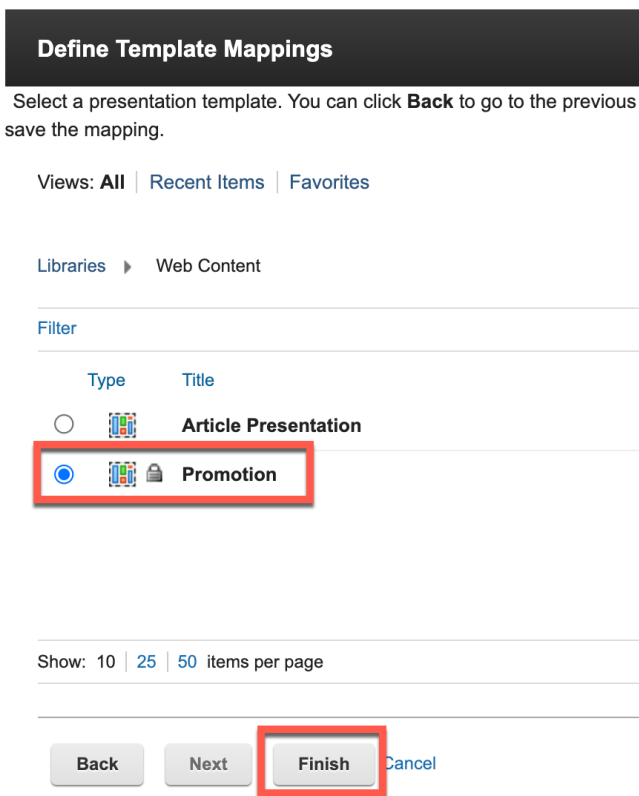
Filter

Type	Title	Status
<input type="radio"/>	Article	Published
<input checked="" type="radio"/>	Promotion	Published

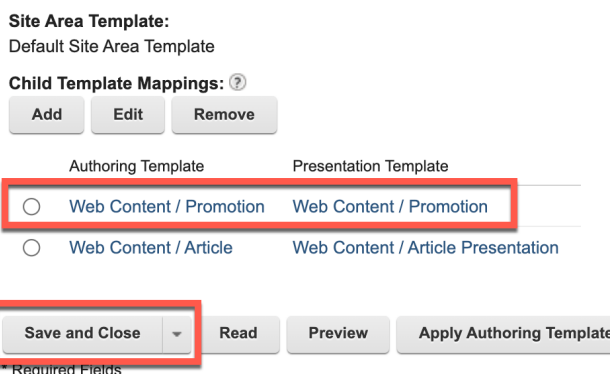
Show: 10 | 25 | 50 items per page

Back Next Finish Cancel

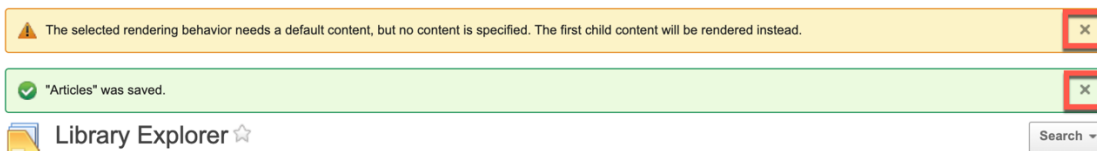
13. Notice that your Promotion template is locked, as you are editing it. Select **Promotion** and click **Finish**.



14. Check that the mapping is added and then click **Save and Close**. Each Promotion content, created with the Promotion Content Template, in this site area will now automatically be shown with the Promotion presentation template.



15. That is all. You may close the messages.

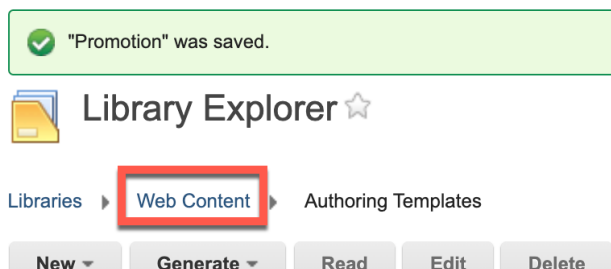


You have successfully mapped your Promotion Content Template with your Promotion Presentation Template specifically and learned how to apply it specifically for a Site Area as well.

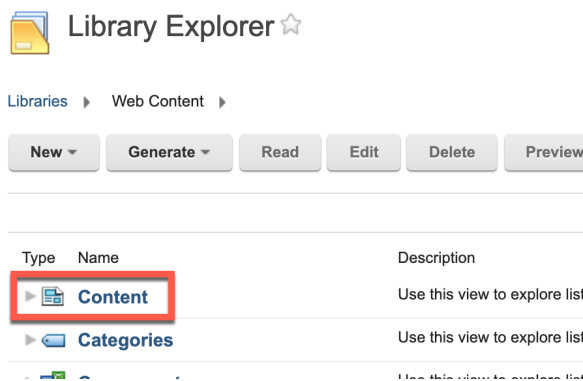
Part 4: Turn Content into a Site Manager Page Component and add to Page

To allow business user to add this new content to a page, you will turn it into a Site Manager Page Component with an easily identifiable image. For this you will add a special keyword and a nice preview image to the content. Then you will test it and add to a page.

1. To make this work, you need to edit your existing content in Web Content Authoring. Click **Web Content**.



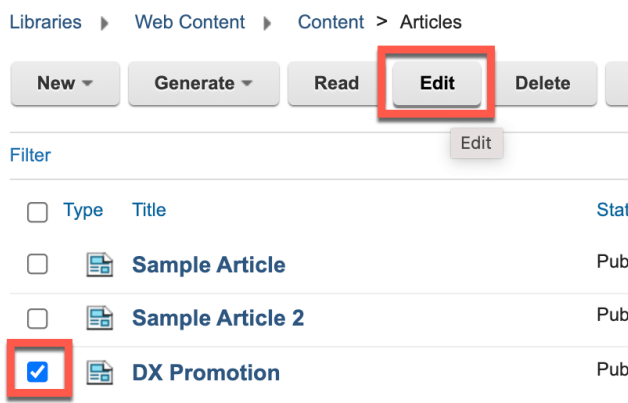
2. Then **Content**.



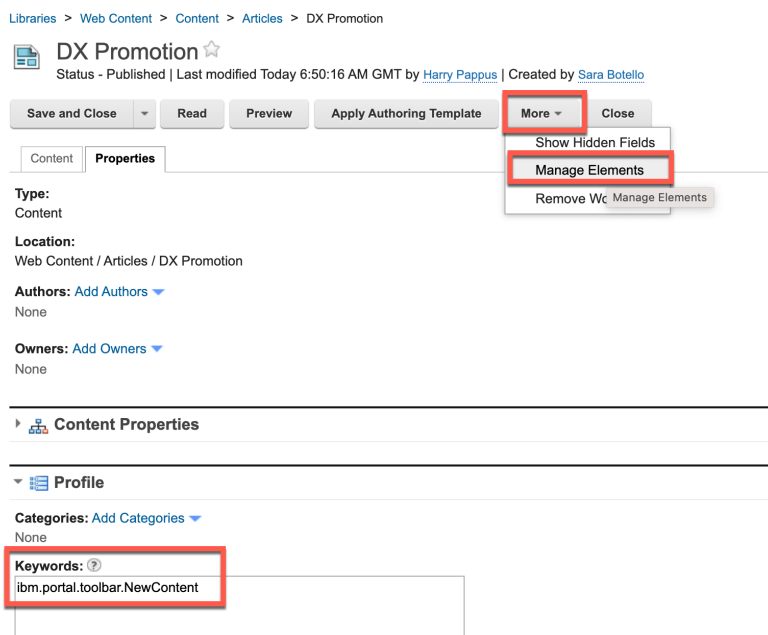
3. Then **Articles**.



4. Then select **DX Promotion** and click **Edit**.



5. To make this DX Promotion content appear in the toolbar, you need to add a special keyword and a 'preview' image that allows you to identify it easily. You do this with a special image element, named 'preview-image'. This element is not yet part of the Content Template. First add the keyword to this content. Under the **Profile** section, in the **Keywords** field, insert **ibm.portal.toolbar.NewContent**. Note that if you use this keyword in a site area, the site area will appear as a folder or category in your toolbar with all the content below it as page components. Then add the preview-image element. Click **More** and **Manage Elements**.



6. Select **Image** as the Element type, name it **preview-image** and then click **Add**.

Element Manager

To add a new element, select an element type and then enter a Name and a Display Title.
If a Display Title is not specified, then the Name field will be used instead.

Element type:
Image

***Name:**
preview-image

Display title:

Display Title Localization: ?
None

Add

Element type	Name	Display title

7. Your new element should show on the bottom. Click **OK** to close the Element Manager.

Element type	Name	Display title	
Short Text	Product ID	Product ID	
Link	Promotion Link	Promotion Link	
Image	Promotion Banner	Promotion Banner	
File	Brochure	Brochure	
Rich Text	Body	Body	
Image	preview-image	preview-image	

OK **Cancel**

8. Then go back to the Content tab to add an image. Click **Content**.

DX Promotion ☆
Status - Published | Last modified Tod

Save and Close **Read** **Preview**

Content **Properties** _____

9. Scroll down to find the new preview-image. Then click **Upload**.

▼ **preview-image**

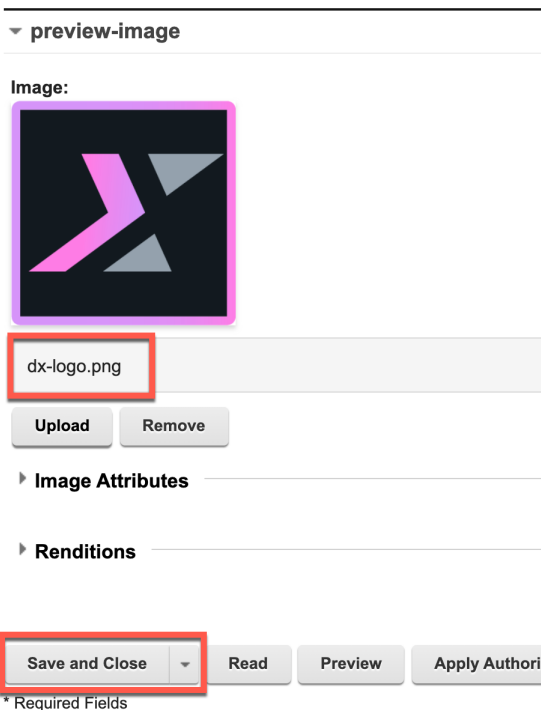
Image:

Upload

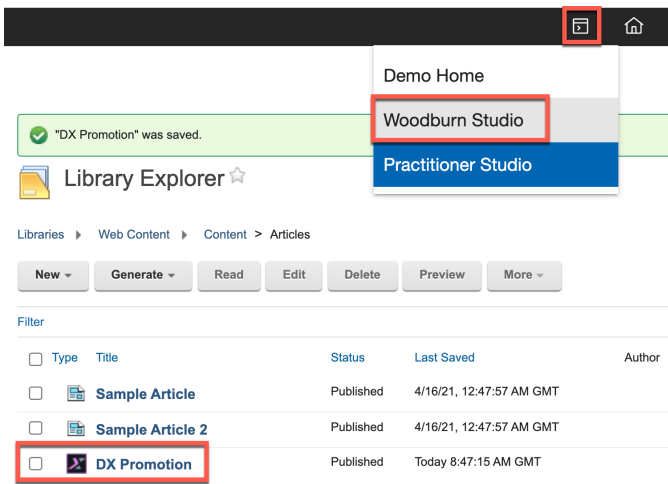
▸ **Image Attributes** _____

▸ **Renditions** _____

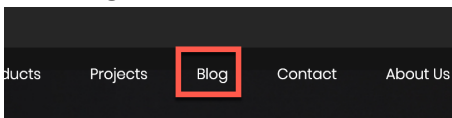
10. From your downloaded resources, select the HCL DX logo file: **dx-logo.png**. Then save it. Click **Save and Close**.



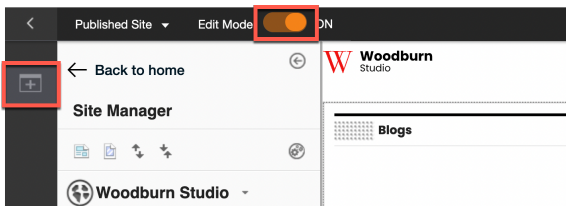
11. Notice that the preview image is applied to your content. Then go to the Woodburn Studio site and add it to the Blog page (or Promotions, if you have created this before). Open the site menu and click **Woodburn Studio**.




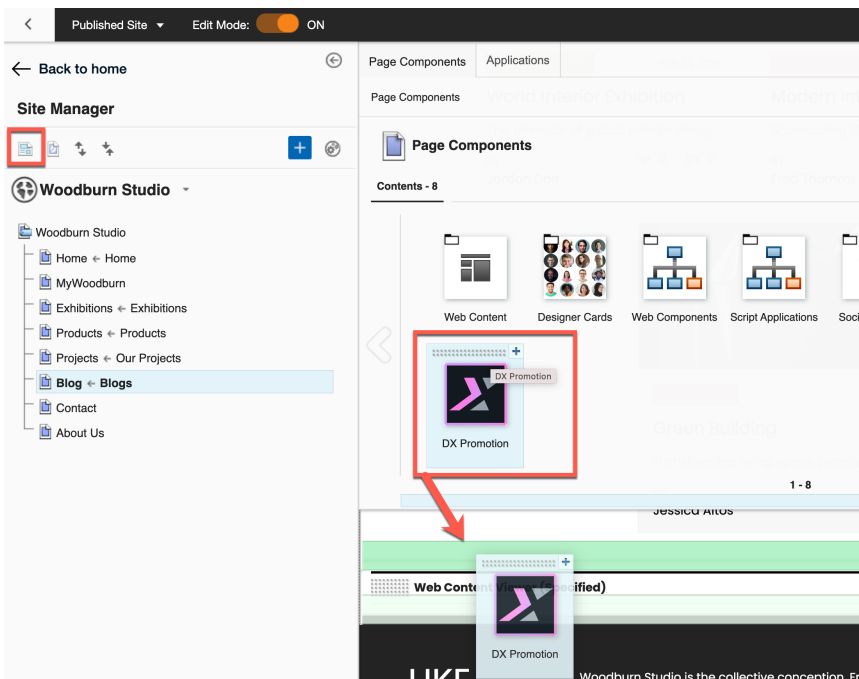
12. Click **Blog**.



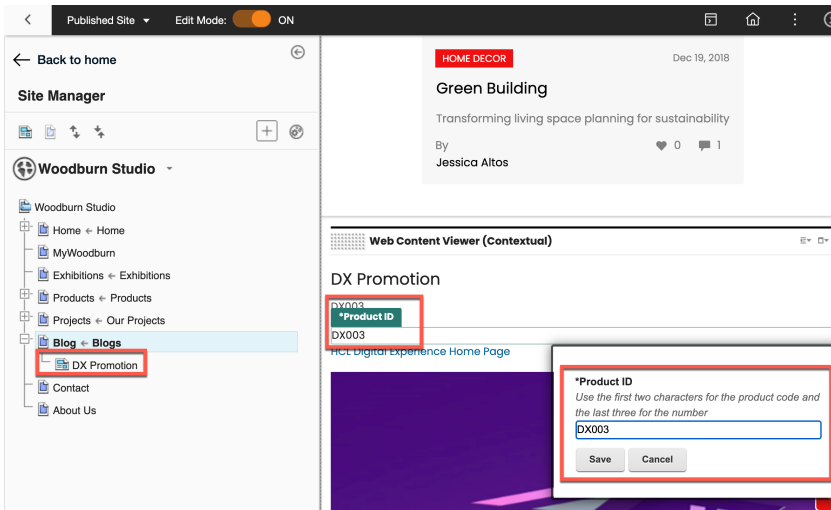
13. Turn the Edit Mode on and click **Add page components and applications**.



14. Your new DX Promotion shows under Page Components. Now drag & drop it just above the footer and then select Show content items in the tree view. Click .



15. You see your DX Promotion content under the Blog page in the tree view. In the page, you see the content with your presentation template. Notice you can edit the Product ID.



You have successfully turned your DX Promotion content to a new Page Component, managed to add this to your page and be able to update it using inplace editing.

Conclusion

Using this lab tutorial, you have learned how to use the Web Content Authoring interface to further develop your web content. You have first looked at how the Promotion Content, you created earlier, looks like in this different interface. Then you created new Promotion presentation template using tag helpers for this Promotion and learned how to preview it with a specific content.

Then you configured to associate your new DX Promotion Presentation Template with your corresponding Promotion Content Template. This will help to set the default presentation for all content based on the Content Template. You did in the Site Area using the Site Template Mappings and in the Promotion Content Template.

And finally, to allow business user to add this new content to a page, you have turned it into a Site Manager Page Component with an easily identifiable image and tested this on a page.

There are a few optional parts, with additional optional learning points you may want to consider doing now.

Optional Part 1: Create new DX Promotion Content Template and Content in WCM Authoring

In this optional part, you will learn that you can create the Content Template and Content in WCM Authoring as well.

Optional Part 2: Update locally and push changes to server

Use WebDav or Web Developer Toolkit to access the design of Web Content Manager locally and then push your changes back to the server.

Optional Part 3: Create more Page Component and Templates

Web Content comes with a few ready to use Page Components and Templates. In this optional part, you may create one of these easily. There is a Banner Page component that you may add to a page and then edit.

Optional Part 4: Create and display a content list

Use a Menu Component to build a list of content and then show it on the same page. Create a second promotion for Volt MX and then configure a Menu Component to show all content based on the Promotion Content Template in a specific way.

Resources

Refer to the following resources to learn more:

HCL Digital Experience Home - <https://hclsw.co/dx>

HCL Digital Experience on HCL Solutions Factory (SoFy) - <https://hclsofy.com/>

HCL Software - <https://hclsw.co/software>

HCL Product Support - <https://hclsw.co/product-support>

HCL DX Product Documentation - <https://hclsw.co/dx-product-documentation>

HCL DX Support Q&A Forum - <https://hclsw.co/dx-support-forum>

HCL DX Video Playlist on YouTube - <https://hclsw.co/dx-video-playlist>

HCL DX Product Ideas - <https://hclsw.co/dx-ideas>

HCL DX Product Demos - <https://hclsw.co/dx-product-demo>

HCL DX Did You Know? Videos - <https://hclsw.co/dx-dyk-videos>

HCL DX GitHub - <https://hclsw.co/dx-github>

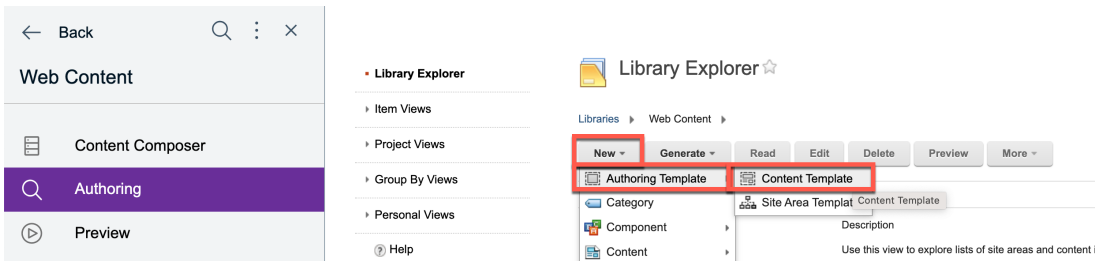
HCL DX Web Developer Toolkit - <https://github.com/HCL-TECH-SOFTWARE/WebDevToolkitForDx>

Optional Part 1: Create new DX Promotion Content Template and Content in WCM Authoring

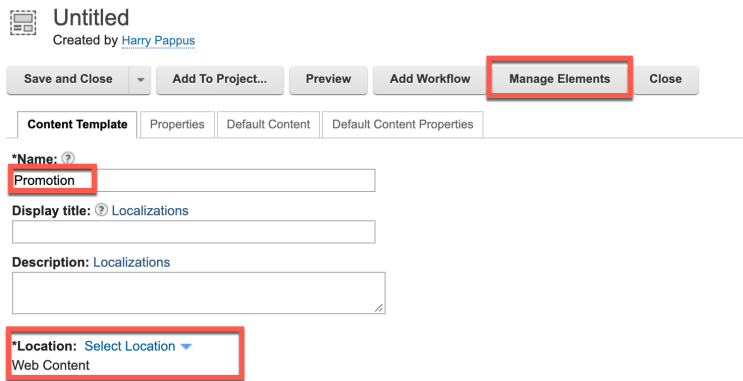
In this optional part, you will learn that you can create the Promotion Content Template and Content in WCM Authoring as well. If you have already created the Promotion Content Template with the Content Composer, you need to use a different template and content name here, e.g. Promotion1 and DX Promotion1.

To promote HCL Digital Experience, your Promotion Content Template will have this list of elements: Product ID (Short Text), Promotion Link (Link), Promotion Banner (Image), Brochure (File, in PDF format and limited to 10Mb) and Body (Rich Text).

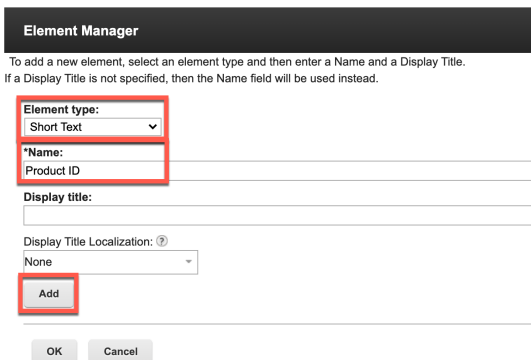
1. In the Web Content Authoring, select **New, Authoring Template -> Content Template**. Notice there are also Site Area Template to manage your sites.




























2. Name it **Promotion**, ensure it is located under **Web Content** and then add the elements. Click **Manage Elements**.



3. In the Element Manager, you can set the Element type and name for each element you want to add. Start with the **Short Text Product ID**. Then click **Add**.



- In the same way a **Link** (for Promotion Link), the **Image** (for Promotion Banner), **File** (for the Brochure) and **Rich Text** (Body description) elements. Check you can change the order using the icons to the right. Then click **OK**.

Element type	Name	Display title	
Short Text	Product ID	Product ID	    
Link	Promotion Link	Promotion Link	    
Image	Promotion Banner	Promotion Banner	    
File	Brochure	Brochure	    
Rich Text	Body	Body	    

OK Cancel

- Now set the validation rules. Go the Default Content tab.

Untitled
Created by Harry Pappus

Save and Close Add To Project... Preview Add Workflow Manage Elements Close


Content Template Properties **Default Content** Default Content Properties

*Name: Promotion

Display title: Localizations

- Set a default value, XX000. Then open the field properties and make it required, by checking **Identify this as a required field**. Set the minimum and maximum characters to 5 and add help text to explain its format to the author. E.g. with ‘Use the first two characters for the product code and the last three for the number’.

Product ID

Product ID 

Short Text field properties

Identify this as a required field Hide field

Size (in characters) Field width: 100

Characters Minimum: 5 Maximum: 5

Words Minimum: Maximum:

Editors: Add Editors
None

Viewers: Add Viewers
None

Field help text: Use the first two characters for the product code and the last three for the number

Text Provider: None

Custom JSP:

Hide Refresh View Reset

XX000

- Then change the Digital asset source for the Promotion Banner to use the HCL DAM instead. Open the image properties and change the **Digital asset source** from Upload using file browser to **HCL DAM**.

▼ Promotion Banner

Image:

Image field properties

Identify this as a required field Hide field

Renditions: ON OFF

Desktop
 Tablet
 Smartphone

Renditions: Desktop

Preferred size
 Width: px Height: px

Recommended maximum file size
 KB

Maximum file size KB

Restrict MIME types:

Show digital asset source

Digital asset source: **HCL DAM**

Editors: Add Editors ▼
None

Viewers: Add Viewers ▼
None

- Then update the Brochure file. Open the field properties and select **Restrict MIME types** and select **PDF**. Then set the maximum size in bytes (here 10,000,000), change the **Digital asset source** from Upload using file browser to **HCL DAM** and optionally a Help text again.

▼ Brochure

File:

File field properties

Identify this as a required field Hide field

Minimum bytes: Maximum bytes:

Restrict MIME types:
 MP4 MOV OGG MP3 WEBM PDF Other:

Show digital asset source

Digital asset source: **HCL DAM**

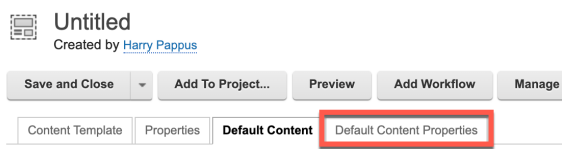
Editors: Add Editors ▼
None

Viewers: Add Viewers ▼
None

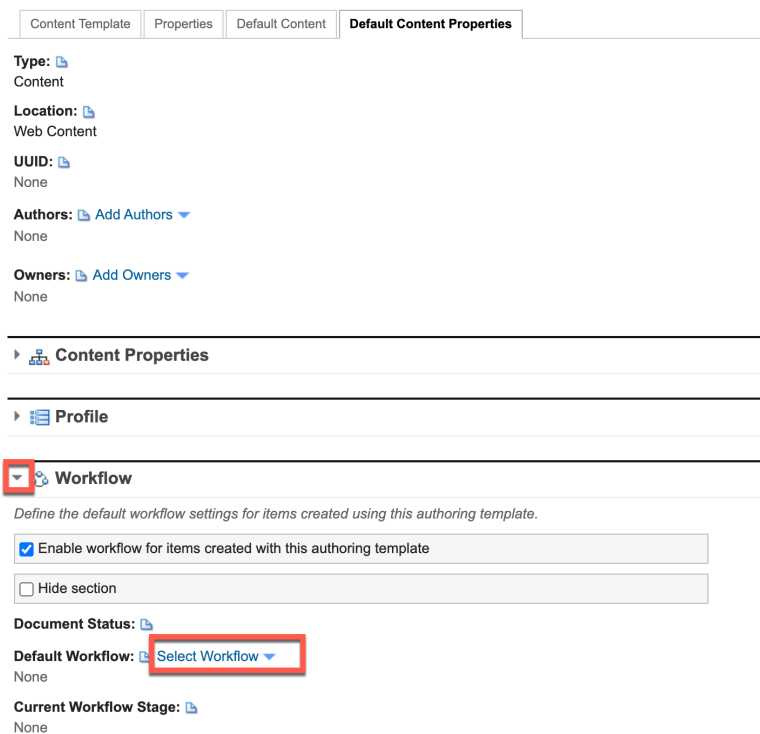
Field help text:

Text Provider:

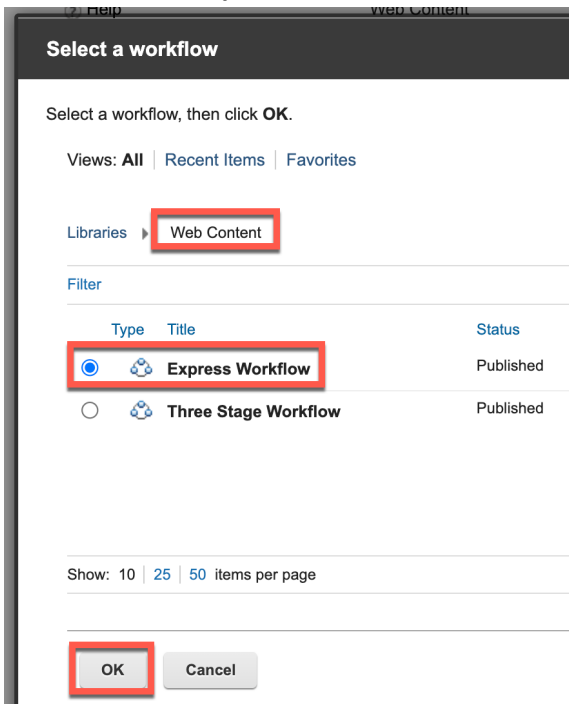
9. And finally, select the Web Content – Express Workflow. Open the **Default Content Properties** tab.



10. Then expand the Workflow section and then click **Select Workflow**.



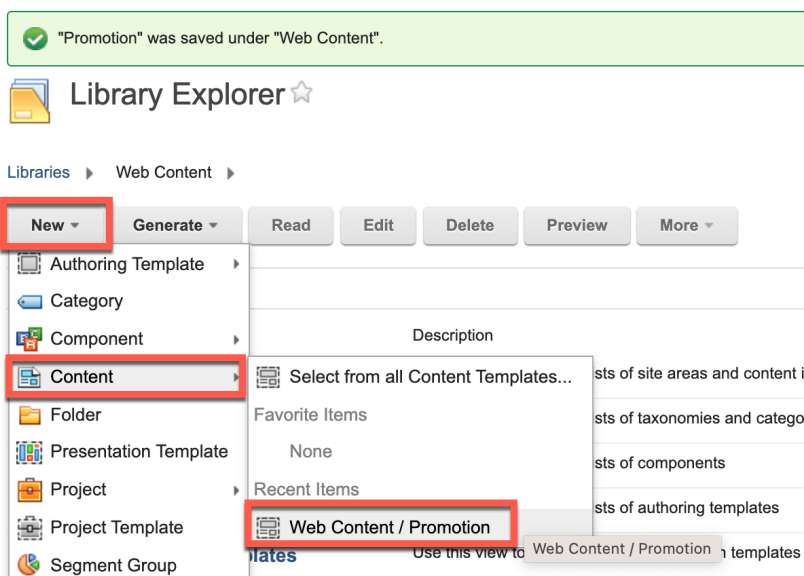
11. Then select the **Express Workflow** in the **Web Content** library and click **OK**.



12. Check the other sections and then click **Save & Close**.



13. Notice that your Promotion Content Template is saved un Web Content. Then create the DX Promotion content using this new template. Click **New – Content** and your recent item **Web Content / Promotion**.



14. Now enter the values. Name it **DX Promotion**, set the product ID to **DX003**, the Promotion link to the home page of HCL Digital Experience: <https://www.hcltechsw.com/dx> and keep the Display link as to Text (you can also select an image) and set the **Text to display** to **HCL Digital Experience Home Page** (you need to unselect the option Use URL as link text).

Untitled
Created by Harry Pappus

Save and Close Add To Project... Show Hidden Fields Manage Elements

Content Properties

***Name:** ?
DX Promotion

Display title: ? Localizations

Description: Localizations

*Location: Select Location
None

Product ID

***Product ID**
Use the first two characters for the product code and the last three for the number
DX003

Promotion Link

Link:
 External URL
 Web Content

Type a URL: ?
<https://www.hcltechsw.com/dx>

Display link as:
 Text
 Image component

Link text:
Digital Experience Home Page
 Use URL as link text

Link Attributes

15. Continue with the other elements and then click **Save and Close**.

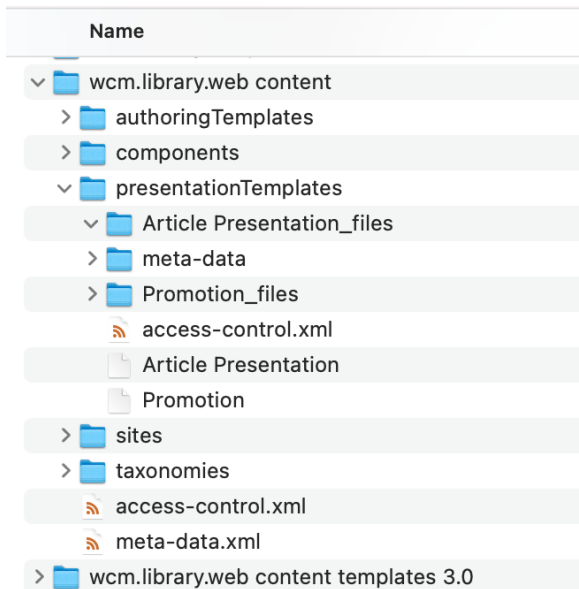
You have successfully created the Promotion Content Template and DX Promotion Content using the Web Content Authoring interface.

Optional Part 2: Update Locally and Push Changes to Server

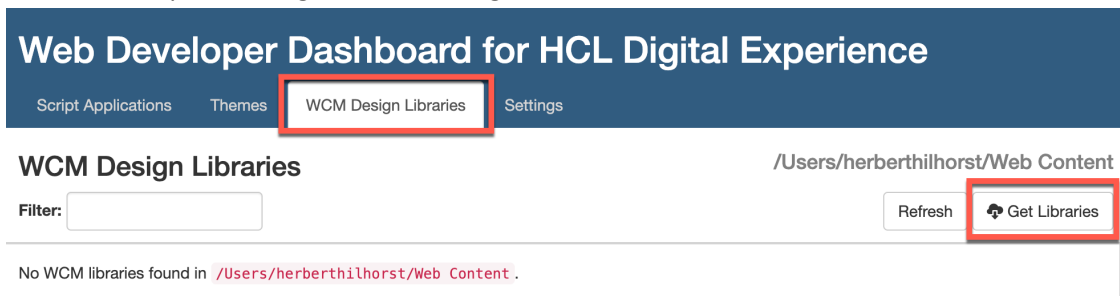
Use WebDav or Web Developer Toolkit to download/pull the design of Web Content Manager locally and then push your changes back to the server.

In the Theme Development for Beginners lab, you have learned to use WebDav and optionally configure the Web Developer Toolkit. Here you will learn the steps to work with your WCM design locally and synchronize with the server using WebDav and optionally the Web Developer Dashboard and the dxwcmdesigns command.

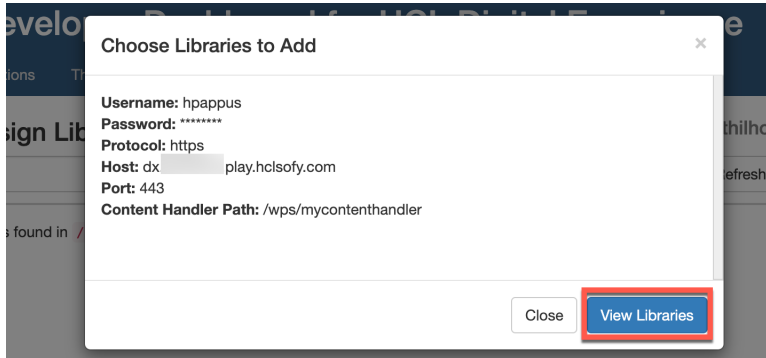
1. First use the WebDav option. Use your favorite WebDav client again and use <https://dx.XXXXXX.play.hclsofy.com/wps/mycontenthandler/dav/content/libraries/> (with your specific entry on SoFy). This gives you access to the structure of your design. You can directly work on the Presentation Template HTML files under presentationTemplates, for example Promotion or take a copy and work on the copy first. You may learn more on this structure in the Help Center: https://opensource.hcltechsw.com/digital-experience/latest/manage_content/wcm_delivery/webdav/wcm_webdav_pretemp/.



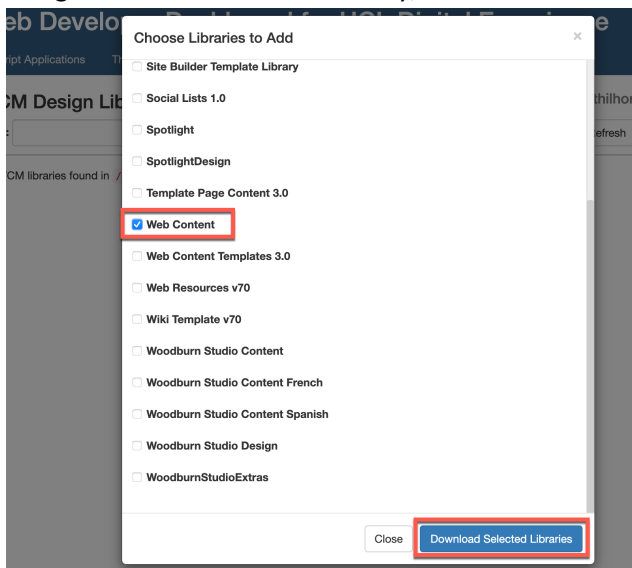
2. You may go directly to step 6 now or review another option using the Web Developer Dashboard. Open it and go to WCM Design Libraries. Click **Get Libraries**.



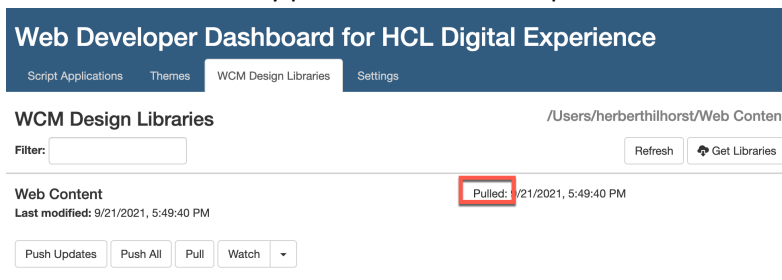
3. Then check your settings and click **View Libraries**.



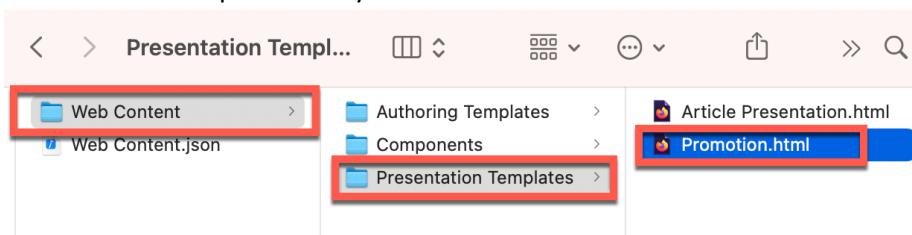
4. Then you see the Web Content libraries on your server. As you have put your Web Content design in the **Web Content** library, select that and click **Download Selected Libraries**.



5. Check it has it correctly pulled with the latest pull date. Notice the options to pull and push.



- Then check locally what was created. You see a JSON and folder for your library. Open the Web Content folder and you'll see the Authoring Templates, Components and Presentation Templates. Open Presentation Templates and you see the Promotion Presentation template as an HTML file. Open it with your favorite editor.



- Similar as with the Theme development, you may now make changes directly on the server when using WebDav (or copy the modified file back to the server one). Alternatively, you can use the Web Developer Dashboard or in a Terminal with the `dxwcmdesigns` command to push them to the server.

```

1 <h1>[Property context="current" type="content" field="title"]</h1>
2
3 <!-- Short Text -->
4 <p>[Element context="current" type="content" key="Product ID"]</p>
5 [EditableElement key="Product ID" format="div" mode="dialog"
6   [Element key="Product ID"]
7 [/EditableElement]
8
9 <!-- Link -->
10 <p>[Element context="current" type="content" key="Promotion Link"]</p>
11
12 <!-- Image -->
13 <p>[Element context="current" type="content" rendition="auto" key="Promot
14
15 <!-- File -->
16 <p>[Element context="current" type="content" key="Brochure"]</p>
17
18 <!-- Rich Text -->
19 <p>[Element context="current" type="content" key="Body"]</p>

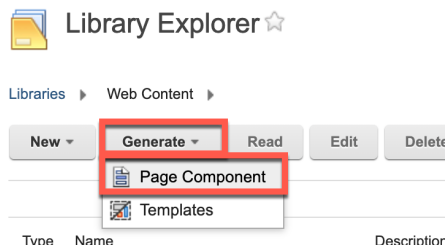
```

You have successfully discovered the option to develop the Web Content Design locally with your favorite code editor and learned how to work directly on the server files or use a copy and synchronize (copy and paste with WebDav or push/pull with Web Developer Toolkit) with the DX server.

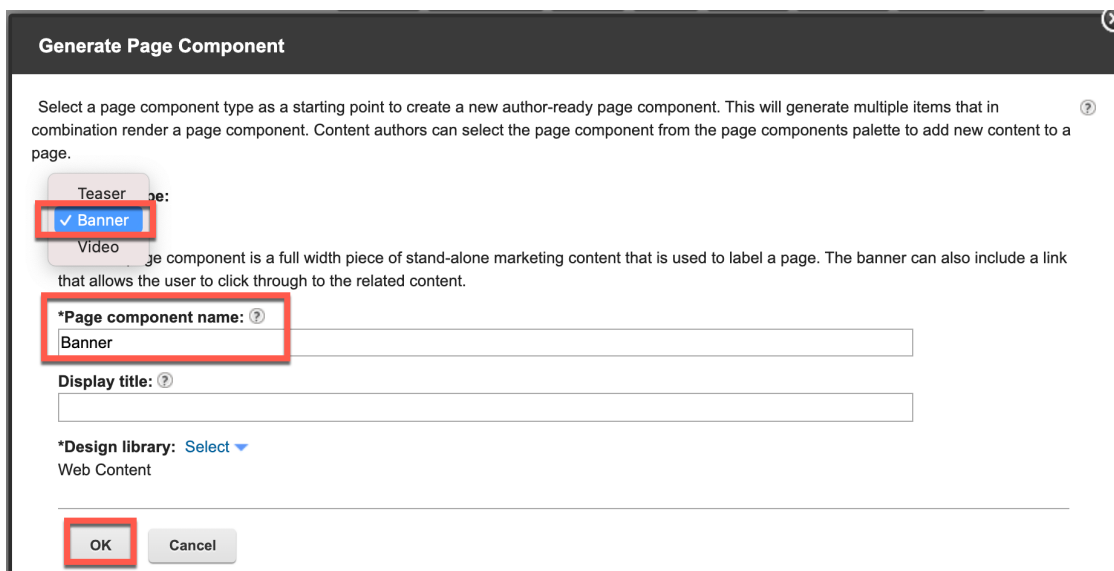
Optional Part 3: Generate more Page Component and Templates

Web Content comes with a few ready to use Page Components and Templates. In this optional part, you may generate one of these easily.

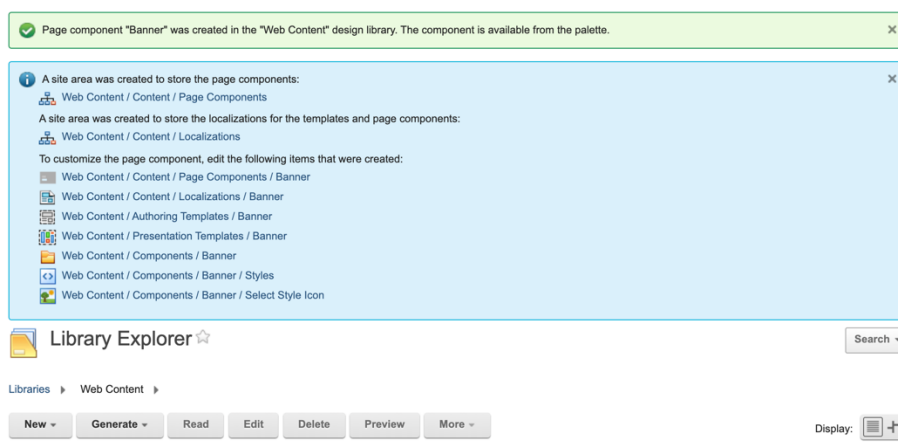
1. In Web Content Authoring, click **Generate**, notice the Page Component and Templates options and click **Page Components**.



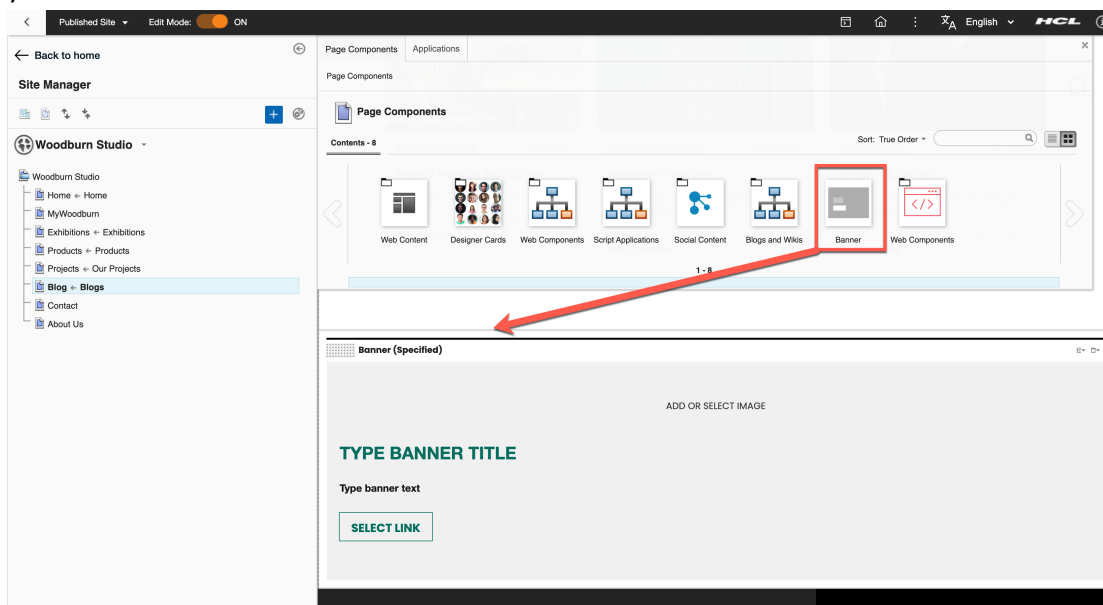
2. You have the options Teaser, Banner and Video. Choose Banner, check the name and click **OK**.



3. All the design items needed to manage the banner are created for you now. You may have a close look at each one. Then check how this works.



4. Go to your Woodburn Studio – Blog page and add the new Banner page component to it and you should see the editable banner.



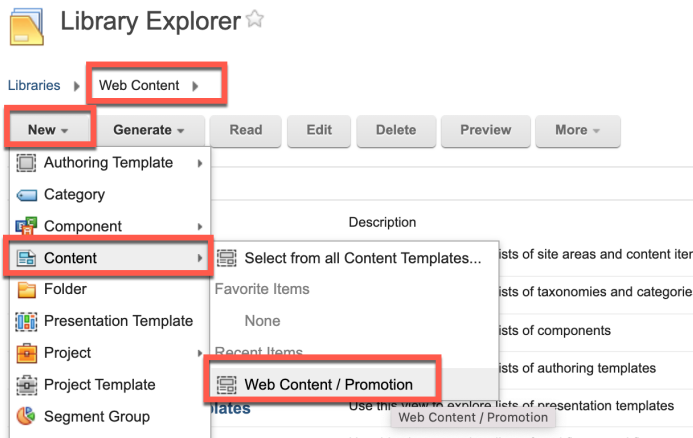
5. Feel free to edit all the banner element and check out the other WCM Page Components and Templates.

You have successfully used the out of the box WCM Page Components.

Optional Part 4: Create and Display a Content List

Use a Menu Component to build a list of content and then show it on the same page. For this you will first create a second promotion, e.g. for HCL Volt MX and create a list of Promotions.

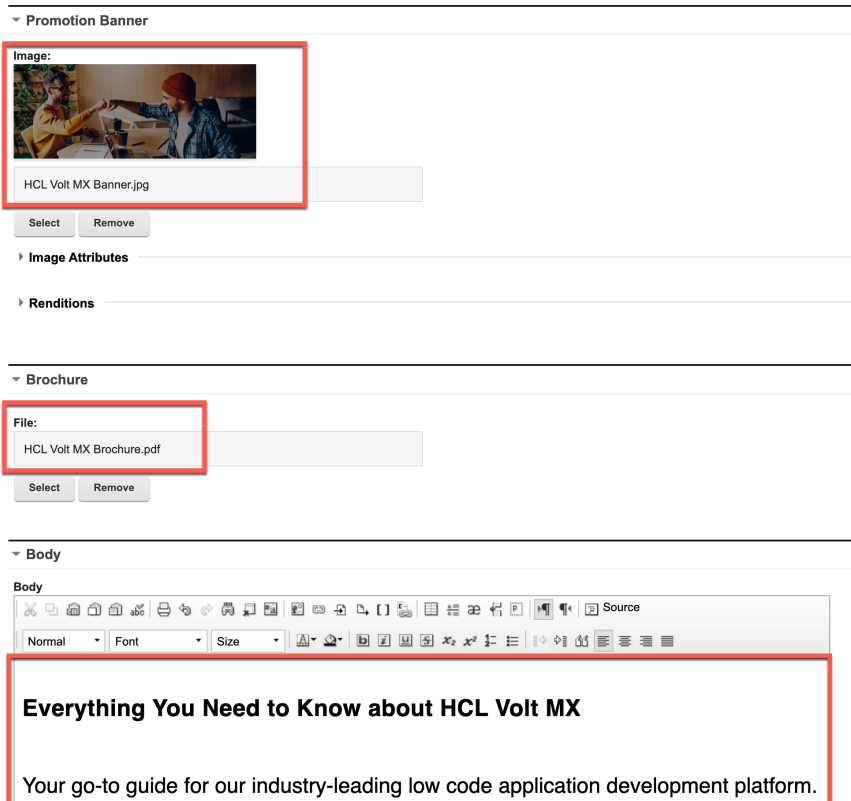
1. First create a second promotion. In Web Content Authoring, in the Library Explorer, click **New – Content – Web Content / Promotion**.



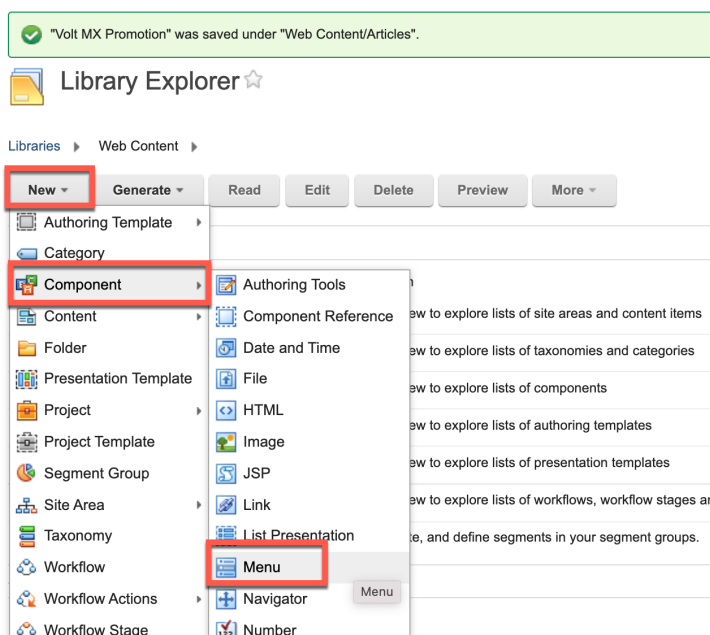
2. Name it **Volt MX Promotion** with Product ID **MX002** and Promotion Link <https://www.hcltechsw.com/volt-mx> and link text **HCL Volt MX Home Page**.

The screenshot shows the 'Untitled' content creation form. The 'Content' tab is active. The 'Name' field is filled with 'Volt MX Promotion'. The 'Product ID' field is filled with 'MX002'. The 'Promotion Link' section has 'External URL' selected, and the 'Type a URL' field is filled with 'https://www.hcltechsw.com/volt-mx'. The 'Display link as' section has 'Text' selected, and the 'Link text' field is filled with 'HCL Volt MX Home Page'. The 'Link Attributes' section is collapsed.

- Then add the Volt MX Promotions assets to a new Volt MX Promotions collection and select the Promotion Banner and Brochure from the DAM. Use the Volt MX Promotions document to copy and paste the Body content.



- Click **Save and Close** to save it in the same place as your other DX Promotion under Web Content - Articles. Now you have two promotions, create a Promotion list. This is managed with a Menu Component. Create **New – Component – Menu Component**.



- Name it, e.g. **Promotions**. Then set the Menu Criteria. You want it to select all content that is created on your Promotions Content Template. Select **Authoring Templates** and then click **Add Authoring Templates** to select your **Web Content / Promotion** Content Template.

Untitled
Created by [Harry Pappus](#)

Save and Close Add To Project... Add Workflow Close

Menu Properties

***Name:** Promotions

Display title: Localizations

Description: Localizations

*Location: Select Location
Web Content

Menu Criteria

Exclude current content from results

Select the criteria to use when searching for content:

Authoring Templates Categories
 Location Keywords

Authoring Templates

Search for content items that use these authoring templates: Add Authoring Templates

Web Content / Promotion

Further options

Include authoring templates from the following sources:

Specify in the Web Content Viewer portlet configuration
 Current template
 Query string

Parameter name:

Merge selected authoring templates with included authoring templates
 Replace selected authoring templates with included authoring templates

6. Then you have some menu design and list paging properties. Keep then.

▼ Menu design properties

Display order:
 Ascending
 Descending

Sort results first by: Then by: Then by:

Formatting:
 Use default design fields
 Use a list presentation

▼ List Paging Options

Define the paging options for page navigation components used as part of this list presentation

Results per page:

Start page:

Maximum number of result pages:

Pages to read ahead:

7. Then you need to configure the options to manage the design for your list. You can set the header, result design for each content, footer, separator, and a design if no contents are found. Enter the Result Design and use the Insert Tag to enter the following

*Promotion: [Property field="title"]
*
*Product ID: [Element key="Product ID"]
*
*Link: [Element key="Promotion Link"]
*

▼ List Presentation Markup

Use HTML to define how list results are presented to your site visitors, including a header, fi

Header:

Result design:

```
Promotion: [Property field="title"]<br>
Product ID: [Element key="Product ID"]<br>
Link: [Element key="Promotion Link"]<br>
```


- Add a separator to easily distinguish the different promotions. E.g. in **Separator** enter `

`. And enter **No promotions found** in the **No result design**.

Separator:

Import Export Insert Tag Insert Link Insert Image

`

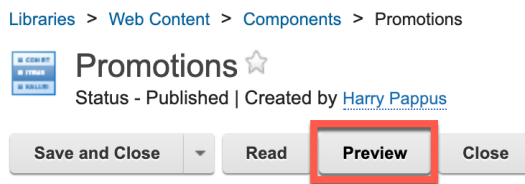
`

No result design:

Import Export Insert Tag Insert Link Insert Image

No promotions found

- Then save it so you can preview it.



- Select the **Web Content - Articles** site area and click **OK**.

Preview.

Select the site area to use as a rendering context when previewing:

Views: All | Recent Items | Favorites

Libraries ▶ Web Content

Filter

Type	Title
<input checked="" type="radio"/>	Articles
<input type="radio"/>	Localizations
<input type="radio"/>	Page Components

Show: 10 | 25 | 50 items per page

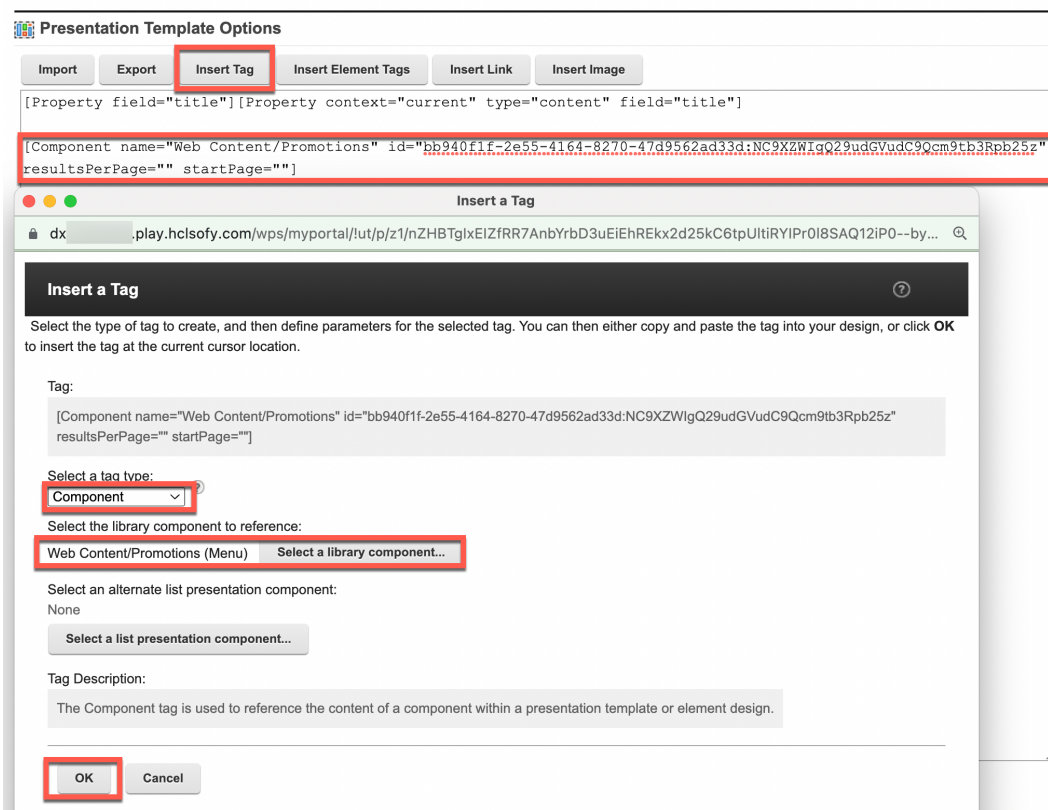
OK Cancel

- Ensure you authorize pop-up windows and then you should your list. Feel free to review your design and add more tags.

Promotion: DX Promotion
 Product ID: DX003
 Link: [HCL Digital Experience Home Page](#)

 Promotion: Volt MX Promotion
 Product ID: MX002
 Link: [HCL Volt MX Home Page](#)

- To integrate this new menu component into your design, you may add it using a component tag. This may be, for example, in your presentation template. For this menu component, the tag would be [Component name="Web Content/Promotions"], it may also add if id (or UUID) to it. You may use **Insert Tag** to easily create this tag where you select **Component** as tag type, then **Web Content/Promotions** as library component and **OK** to insert.



You have successfully created your list of promotions using a WCM Menu Component.

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