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# LWR Sites for Experience Cloud

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# CHAPTER 1 LWR Sites for Experience Cloud

## In this chapter ...

- [What Are LWR Sites for Experience Cloud?](#)
- [Before You Begin Building an LWR Site](#)
- [Key Resources for Developing LWR Sites](#)
- [Release Notes for LWR Sites](#)

Develop sites that load quickly and scale well using the *Build Your Own (LWR)* and *Microsite (LWR)* templates for Experience Cloud. Based on the Lightning Web Runtime (LWR) and the Lightning Web Components (LWC) programming model, these lightweight templates support fully custom solutions and deliver exceptional site performance.

This guide outlines the steps required to successfully develop and deploy LWR-based experiences, and explains how to create Lightning web components for the templates, build page and theme layouts, and enable various custom solutions.

## What Are LWR Sites for Experience Cloud?

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Powered by the Lightning Web Runtime (LWR), LWR sites deliver unparalleled site performance and improve developer productivity. The Build Your Own (LWR) and the Microsite (LWR) templates for Experience Cloud let you develop blazing fast digital experiences, such as websites, portals, and microsites, using the Lightning Web Components programming model.

Lightning Web Components uses core [Web Components](#) standards and provides only what's necessary to perform well in browsers supported by Salesforce. Because it's built on code that runs natively in browsers, Lightning Web Components is lightweight, efficient, and easy to learn.

Lightning Web Components also includes Apex and User Interface API support, so you can access Salesforce records, SOSL, and more to provide data-rich experiences for your customers. And performance features of LWR templates, such as publish-time freezing and HTTP caching, help you build richer experiences to target B2B and B2C markets.

At a high level, LWR templates:

- Provide custom URL paths, meaning no more /s cluttering up your site's URL—for example, `https://mycustomdomain.com/mypage`.
- Enhance developer productivity. Use Salesforce DX and your preferred editor or development tools to create custom components and themes. Build what you want, your way.
- Support the development of reusable Lightning web components and themes that follow modern web standards. Most of the code you write is standard JavaScript and HTML, making the model easy to learn.



**Example:** Let's say you specialize in building highly customized solutions with your own design system and component library. With the Build Your Own (LWR) template, you can now remove Salesforce Lightning Design System (SLDS) and include your own components and design system to achieve the pixel-perfect site you require.

Alternatively, let's say your company is hosting an event, and you need a place to keep all your event information that doesn't necessarily live with your other content. Enter microsites. Publish your page with all the event information, pull in logos and other content that you created in CMS, and archive the page when the event is over.

## Enhanced LWR Sites

The enhanced sites and content platform is a flexible new system that brings together Salesforce CMS and LWR sites. From Winter '23, this platform is automatically enabled, so all new LWR sites that you create are hosted on the platform. Similarly, any enhanced CMS workspaces that you create also run on the redesigned system.



**Tip:** To clarify which features apply where, we use the terms *enhanced LWR sites* and *enhanced CMS workspaces* to refer to LWR sites and CMS workspaces on the new platform.

The new platform offers a range of additional features that are available only to enhanced LWR sites and enhanced CMS workspaces. For example, enhanced LWR sites can employ partial deployment so you can choose which site elements are ready to go live. Expression-based visibility controls when and to whom components in your enhanced LWR sites appear. With site content search, your users can find content contained in Rich Content Editor and HTML Editor components. And because everything runs together on our consolidated platform, site search results can include content that you share from an enhanced CMS workspace.

See [What Is the Enhanced Sites and Content Platform](#) in Salesforce Help.

## Before You Begin Building an LWR Site


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Build Your Own (LWR) is a minimal template in Experience Cloud that provides only the most essential pages and components, so to build a functioning site, you need to add your own custom pages and components. Therefore, this template is best suited for developers who are comfortable developing Lightning web components and working with Salesforce DX, User Interface API, and Apex. The Microsite (LWR) template includes a responsive layout, preconfigured pages, and content components that you can use to quickly spin up a landing page, event site, or other web experience. Depending on your use case, the template doesn't necessarily require much additional customization.

You can create LWR sites for Experience Cloud in **Enterprise, Performance, Unlimited,** and **Developer** Editions.

To use this guide successfully, you need an org with Digital Experiences (formerly Communities) enabled. You also need experience:

- Using Experience Builder to build sites
- Developing Lightning web components
- Working with Salesforce DX, User Interface API, and ApexResources

 **Important:** Before you begin developing with an LWR template, we also recommend reviewing the [LWR Template Limitations](#) section to ensure that the template can support your needs.

## Key Resources for Developing LWR Sites

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Check out these resources to learn more about the main elements you use when developing an LWR site in Experience Cloud.

### Code Sample Files

To help you build your custom LWR site, we provide several code samples in a `.zip` file. Download the file and extract the samples. Then, in each section of this guide, we specify which examples to examine.

 [codeSamples.zip](#)

### LWR Sites

Check out these additional resources to help you get started with your LWR site.

 [How to Build LWR Sites with Experience Cloud \(Series\)](#)

 [Did You Know \(Series\)](#)


 [Experience Cloud LWR Apps](#)

 [AZ Insurance – Sample App](#)

 [Lightning Web Runtime](#)

### Lightning Web Components

Lightning Web Components is a programming model for building efficient Lightning web components and experiences. It uses modern ES6+ JavaScript and transpilation, which allows you to write modern JavaScript that works in any current browser.

 **Note:** You can build Lightning components using two programming models—Lightning Web Components and the original model, Aura Components.






When we refer to the programming models, we use Lightning Web Components or LWC, and Aura Components, capitalized.

When we refer to the components, we use lowercase—Lightning web components and Aura components.

-  [Lightning Web Components Developer Guide](#)
-  [Build Lightning Web Components](#)
-  [Lightning Web Components Reference](#)
-  [Introducing Lightning Web Components](#)
-  [Lightning Web Components in Lightning Communities](#)
-  [Ebikes - Communities LWC Demo](#)

## Salesforce DX

Salesforce Developer Experience (DX) provides a set of tools to manage and develop apps across their entire development lifecycle. It enables source-driven development and team collaboration, and it makes the release cycle more efficient and agile.

-  [Salesforce DX Setup Guide](#)
-  [Salesforce DX Developer Guide](#)
-  [Get Started with SFDX](#)
-  [Salesforce Extensions for Visual Studio Code](#)
-  [Build Apps Together with Package Development](#)

## User Interface API

The Salesforce User Interface API provides endpoints to build UI components with Salesforce record data. Use it to build UIs that let users work with records, list views, actions, favorites, and more.

-  [User Interface API Developer Guide](#)
-  [User Interface API](#)
-  [Introduction to the Salesforce UI API](#)

## Apex

Apex is a strongly typed, object-oriented programming language that enables you to execute business-logic transactions on Salesforce servers.

-  [Apex Developer Guide](#)



## Release Notes for LWR Sites

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Use the Salesforce Release Notes to learn about the most recent updates and changes to LWR sites for Experience Cloud.

For new and changed features, see [Developer Productivity](#) and [Aura and LWR Sites](#) in the Experience Cloud section of the Salesforce Release Notes. You can also look for Experience Cloud in [New and Changed Items for Developers](#) in the Salesforce Release Notes.

## CHAPTER 2 Get to Know the LWR Templates for Experience Cloud

### In this chapter ...

- [Pages and Components in LWR Templates](#)
- [Differences in Behavior in LWR Sites](#)
- [LWR Template Limitations](#)

Experience Cloud has an existing Aura-based Build Your Own template, which supports Aura components and Lightning web components. But the Build Your Own (LWR) and the Microsite (LWR) templates are based exclusively on the Lightning Web Components programming model and Lightning web components. Powered by the Lightning Web Runtime (LWR), these lightweight templates are designed to scale well and load quickly, and support fully customized solutions.

In addition to being based solely on Lightning web components, the Build Your Own (LWR) and Microsite (LWR) templates include several other features that make them distinct. Let's take a closer look.

## Pages and Components in LWR Templates

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The Build Your Own (LWR) and the Microsite (LWR) templates in Experience Cloud provide only the most essential out-of-the-box pages and components.

### Site Pages

LWR templates typically include the following template pages, so to create a working site, you often need to [create additional custom pages](#).


- Home
- Error
- Check Password
- Forgot Password
- Login
- Register
- News Detail (available in enhanced LWR sites)

### Page Components

We provide several components with LWR templates, but to accomplish your goals, you often must [create custom Lightning web components](#).

For more information on the components readily available in LWR templates, see [Standard Components for LWR Templates](#) in Salesforce Help.

 **Tip:** With LWR templates, the `startURL` query parameter is propagated for all login and page redirects. Also, autofill is enabled for login input fields and password manager.

 **Warning:** When you customize a login page or any page that includes fields with sensitive or confidential information with Experience Builder, we recommend that you use only standard components built by Salesforce or components that you built, customized, or vetted. Use of third-party components and code libraries on a page that includes fields with sensitive or confidential information can increase your risk for security vulnerabilities.

### Light DOM in LWR Templates and Standard Components

Before Spring '22, standard Lightning web components in the LWR templates rendered by default in shadow DOM (Document Object Model), making it difficult to integrate third-party analytics services. Now these templates and several of their components are enabled with light DOM. In Lightning web components enabled with light DOM, you can query DOM elements from the document root, which facilitates DOM traversal. You can listen for events within these components and send the events to multiple third-party analytics services, such as Google Analytics.

To take advantage of light DOM on an existing LWR site, republish the site.

SEE ALSO:

[Lightning Web Components Developer Guide: Light DOM](#)

[Salesforce Help: Standard Components for Use in the Build Your Own \(LWR\) Template](#)

## Differences in Behavior in LWR Sites

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With LWR templates in Experience Cloud, some things work a little differently than with our Aura templates.

### [New Publishing Model for LWR Sites](#)

LWR sites in Experience Cloud take advantage of a new publishing paradigm, where components are frozen when the site is published and served statically at runtime.

### [Custom URL Paths in LWR Sites](#)

Unlike Aura sites, LWR sites in Experience Cloud support custom URL paths, meaning no more `/s` cluttering up your site's URL—for example, `https://mycustomdomain.com/mypage`.

### [Lightning Web Security in LWR Sites](#)

Instead of Lightning Locker, LWR sites in Experience Cloud use Lightning Web Security (LWS), the new security architecture for Lightning web components. LWS supports cross-namespace communication for Lightning web components, in addition to the usual security features that Lightning Locker provides. Cross-namespace communication lets you import components from other namespaces and use them via composition or extension.

### [Caching Policy in LWR Sites](#)

LWR sites in Experience Cloud make heavy use of caching to improve performance and scalability on the live site. Except for the initial document request and data API calls, all requests required to load a page are HTTP cacheable.

### [Head Markup in LWR Sites](#)

With LWR sites in Experience Cloud, you have complete control over the head markup included on the page. Now, when you open the Head Markup window, you can access this default markup.

### [Accessibility in LWR Sites](#)


LWR sites in Experience Cloud include several important accessibility features and best practices, such as screen reader support and F6 navigation.

## New Publishing Model for LWR Sites

LWR sites in Experience Cloud take advantage of a new publishing paradigm, where components are frozen when the site is published and served statically at runtime.

This new paradigm allows LWR sites to deliver components and data as efficiently as possible, but it also introduces some caveats and limitations when managing your site and writing components.

In Aura sites, Lightning components (both Lightning web components and Aura components) are delivered dynamically. So when you update a custom component that's currently used in an Aura site, your component changes go live immediately without publishing the site. However, in LWR sites, you must publish your site before any changes, such as bug fixes or new features, can propagate to standard, custom, or managed components.

 **Note:** When you preview your site in Experience Builder, Lightning web components are served dynamically, which means the preview always shows the most up-to-date versions of your components and data.

## Which Features Are Affected?

This table explains which features are affected by the new publishing model.

Feature	You must republish your LWR site...
Lightning web components	<p>When:</p> <ul style="list-style-type: none"> <li>You update a Lightning web component that's being used in an LWR site.</li> <li>Salesforce updates out-of-the-box components.</li> </ul> <p>Until you republish the site, it uses the version of the previously published component's source code, which can cause issues at runtime.</p>
Managed package components	<p>When you upgrade components from a managed package that are already in your site.</p> <p>Until you republish the site, it uses the version of the previously published component's source code, which can cause issues at runtime.</p>
Labels	When you update a custom label or want updated labels from Salesforce.


## Custom URL Paths in LWR Sites

Unlike Aura sites, LWR sites in Experience Cloud support custom URL paths, meaning no more `/s` cluttering up your site's URL—for example, `https://mycustomdomain.com/mypage`.

Before Winter '23, you could create an authenticated or an unauthenticated LWR site. Unauthenticated sites supported custom URL paths, but authenticated sites included `/s` at the end of the base URL—for example, `https://mycustomdomain.com/s/mypage`.

LWR sites created in Winter '23 or later no longer include `/s` in their URLs and are authenticated sites by default. Authenticated sites allow users to log in and access user-specific data, but you can also include public pages or make the entire site publicly accessible.

Sites that don't use `/s` can still access Visualforce pages by instead appending `vforcesite` to the base URL—for example, `https://mycustomdomain.com/vforcesite/mypage`. You can also find the `vforcesite` URL in **Setup > Custom URLs**.

-  **Note:** Unauthenticated LWR sites created before Winter '23 are open to anyone on the web and don't support login or authentication. Therefore, the Members, Contributors, Login & Registration, and Emails areas in the Administration workspace are unavailable because their settings don't apply to unauthenticated sites.

SEE ALSO:

[Experience Cloud Developer Guide: Considerations for Deploying Authenticated LWR Sites](#)

[Salesforce Help: Control Public Access to Your Experience Builder Sites](#)


## Lightning Web Security in LWR Sites

Instead of Lightning Locker, LWR sites in Experience Cloud use Lightning Web Security (LWS), the new security architecture for Lightning web components. LWS supports cross-namespace communication for Lightning web components, in addition to the usual security features that Lightning Locker provides. Cross-namespace communication lets you import components from other namespaces and use them via composition or extension.

Lightning Web Security makes it easier to take advantage of third-party libraries, such as analytics and charting that work within your Lightning web components.

Also, interactions with global objects are no longer restricted. Because each namespace is given its own sandbox, we can expose document, window, and element globals directly without secure object wrappers. In turn, more standard DOM APIs can work successfully, and exposed APIs within your namespace behave the same as any web context without secure wrappers.

See [Lightning Web Security](#) in the Lightning Web Components Developer Guide.

 **Note:** LWR sites use their own instance of LWS. The **Use Lightning Web Security for Lightning web components (GA) and Aura components (Beta)** setting in Session Settings in Setup, described in [Enable Lightning Web Security in an Org](#), has no effect on LWR sites. Instead, the site-level setting in Experience Builder controls whether the site uses LWS, regardless of the org-level setting.

SEE ALSO:

[LWR Template Limitations](#)

## Caching Policy in LWR Sites

LWR sites in Experience Cloud make heavy use of caching to improve performance and scalability on the live site. Except for the initial document request and data API calls, all requests required to load a page are HTTP cacheable.

When the site is published, the JavaScript resources are generated and persisted, and then served at runtime as static, immutable, and cacheable resources.

Any resource is publicly cacheable, provided it's accessible through a public page in the site. If the Salesforce content delivery network (CDN) is enabled, publicly cacheable resources are cached in the CDN to further improve performance.

See [Serve Your Experience Cloud Site with the Salesforce Content Delivery Network \(CDN\)](#) in Salesforce Help.

This table provides more detailed information about caching time to live (TTL) values.

Resource	HTTP Caching Policy	Description
Generated framework scripts, views, and components	150 days	The site's framework scripts, views, and components are generated and persisted when the site is published. If its contents change, the resource URL changes, which wipes the cache when the site is republished.
HTML document	1 minute	HTML document caching is enabled only for orgs configured with Salesforce's first-party Akamai CDN. See <a href="#">Enable CDN to Load Applications Faster</a> .  Salesforce first-party CDNs cache HTML document responses for 60 seconds. To prevent downstream impact, the response from the CDN has the cache headers set to private, must-revalidate, and max-age of 0.  However, HTML document caching is disabled while a site is being published. We recommend publishing your site during off-peak hours to avoid serving a stale HTML document during the window of time after

Resource	HTTP Caching Policy	Description
		the site is published but before the max-age TTL expires.
Permissions	5 minutes	Permissions scoped modules (@salesforce/userPermission/ and @salesforce/customPermission/) aren't included in the HTML. Instead, they're fetched as separate resources. These resources are cacheable for 5 minutes on a per-user basis.
Org assets	1 day	Requests to Salesforce static resources (@salesforce/staticResource/) and content assets (@salesforce/contentAsset/) have max-age cache headers set to 1 day.

## Head Markup in LWR Sites

With LWR sites in Experience Cloud, you have complete control over the head markup included on the page. Now, when you open the Head Markup window, you can access this default markup.

```
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Welcome to LWC Communities!</title>

<link rel="stylesheet" href="{ basePath }/assets/styles/styles.css?{ versionKey }" />

<!-- webruntime-branding-shared stylesheets -->
<link rel="stylesheet" href="{ basePath
}/assets/styles/salesforce-lightning-design-system.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath
}/assets/styles/dxp-site-spacing-styling-hooks.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-styling-hooks.min.css?{
versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-slds-extensions.min.css?{
versionKey }" />
<!-- webruntime-branding-shared stylesheets -->
```

In Aura sites, this markup isn't exposed in the Head Markup window, but with LWR sites, you can edit:

- The meta charset tag, which specifies the character set to use. This specification is a best practice.
- The title tag, which controls the default title of your site that appears in the browser tab.
- Links to the default style sheets that control the site's appearance. One link is for Salesforce Lightning Design System (SLDS) and the others are internal style sheets used by the base template. Although you can't edit the style sheets directly, you can [remove them](#).



**Tip:** You can also use this section to include global JavaScript from third-party libraries using the `<x-oasis-script>` privileged script tag.

You can use the `{ basePath }` and `{ versionKey }` variable references in your head markup as you want. For example, if your site URL is `https://site.acme.com/service`, then `{ basePath }` returns `service`, which allows you to reference relative URLs.

`{ versionKey }` is a unique id that's used to refer to a current published state, which you can use for caching and performance purposes. Every time the site is republished, the `versionKey` changes.

SEE ALSO:

[Integrate Third-Party Libraries Using the Privileged Script Tag](#)

[Salesforce Help: Add Markup to the Page <head> to Customize Your Site](#)

## Accessibility in LWR Sites

LWR sites in Experience Cloud include several important accessibility features and best practices, such as screen reader support and F6 navigation.

### F6 Navigation

F6 navigation makes it easier to navigate a webpage with a keyboard or a screen reader. Unlike using the Tab key, which can take several keystrokes to reach a specific element, pressing F6 lets users first navigate between different regions. Then users can use the Tab key to home in on components within that region.

The major sections of the out-of-the-box Header and Footer theme layout component are enabled for F6 navigation. To enable F6 navigation for regions in your custom theme layouts, see [Create Custom Layout Components](#).

### Screen Reader Support

LWR sites run in a single page application (SPA), which is a web app that loads a single HTML page. Page updates are handled by JavaScript that modifies the Document Object Model (DOM) to simulate navigation, which can cause issues for screen readers.

So we provide screen readers with the information to properly recognize SPA navigation. Upon navigation, the title of the page is announced via an ARIA-Live region. If the theme layout stays the same, the user's focus is returned to the content area. If the theme layout changes, the user's focus is returned to the top of the page.

## LWR Template Limitations

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LWR templates in Experience Cloud don't include the same features as Aura templates. Check out the current differences and limitations before you begin creating your site.

## Unsupported Features and Settings

The following items are unavailable.

- Several of the [default components and pages](#) that you get with Aura templates, such as Chatter feeds
- Some preconfigured standard pages, such as Account Management, are used when [creating custom pages](#)
- Default themes and theme management
- Right-to-left languages in standard components
- Progressive rendering



- Changes to the favicon at the site's root domain
- Template, page, and theme export and Lightning Bolt Solutions
- Template-level accessibility features, such as a skip link
- App-level [events](#) that you get with Aura templates, although you can use [CustomEvent](#)
- [Some base components and features](#) from the Lightning Component Library
- Some properties in the [@salesforce/i18n module](#)
- Mobile and value providers such as [\\$Browser](#)
- The `pageAccess` property in the ExperienceBundle metadata type
- Session timeout alerts
- Salesforce Community Page Optimizer
- Surveys

## Experience Workspaces Limitations

Only the Administration, Builder, Dashboards, and Guided Setup workspaces are available.

## Experience Builder Limitations

- In the toolbar, the **Undo** and **Redo** buttons and some Help options are unavailable.
- In the Theme panel, branding sets, theme settings, and the CSS editor are unavailable. For alternative solutions, such as creating section palettes or adding style sheets to the head markup, see [Brand Your LWR Site](#).
- For enhanced LWR sites, to show all components in the Components palette, you must enable **Show all components** in the Advanced panel each time you open or reload Experience Builder.
- When working with components, some hover actions and some of the action menu options in the property editor are unavailable.
- When you modify records while previewing your site in Experience Builder, you sometimes see stale record data when you navigate to a previous page. To fix this issue, refresh your browser.
- Experience admins can't access record pages in Experience Builder for objects that they don't have access to.

## LWR Site Limitations

An LWR site supports up to 500 routes, or unique URLs. For best performance, keep the number of routes below 250. Dynamic content can help keep your number of routes lower. For example, don't create an individual page with a unique route for each content item. Instead, use record details to represent your content, and then create a single page that shows record details and requires only one route.

LWR sites don't use route-level record validations for record navigation. In most cases, the site checks only the `keyPrefix`. For example, the route `/account/001A00xxxxxxxxxxxx` doesn't use a valid record ID. But because it uses the correct `keyPrefix`, in this case 001, it sends the user to the Account detail page rather than presenting a 404 error.

## Enhanced LWR Site Limitations

For enhanced LWR sites, referential integrity for object API names in object routes is unsupported. If you rename an object that a page component references, the connection to the object breaks.

## Dynamic Component Import Limitations

You can import and instantiate a Lightning web component dynamically in LWR sites. However, LWR sites only support statically analyzable dynamic imports. For this use case, `import("c/analyzable")` works, but `import("c/" + "analyzable")` doesn't work because it isn't statically analyzable. Similarly, `import("c/" + componentName);` or `import("c/" + componentNameVariable)` also don't work.

## Lightning Web Security Limitations

Instead of Lightning Locker, LWR sites use Lightning Web Security (LWS), the new security architecture for Lightning web components. These properties are currently unsupported for LWS in LWR sites.

- `document.domain`
- `document.location`
- `window.location`
- `window.top`

## Asset Files in Sandbox Limitations

Full and Partial Copy sandboxes can support asset files along with other content entities. Asset files are unsupported in Developer and Developer Pro sandboxes. When defining the sandbox template for Full and Partial Copy sandboxes, make sure to select **Content Body** in the template also.

For unsupported sandboxes, if your site contains a Lightning web component with a `@salesforce/contentAsset` reference, the reference breaks in the site on the sandbox org. In LWR sites, the component can't render, and you can't publish the site until you delete the component from the page or remove the asset reference from the component. In Aura sites, the imported reference resolves to an invalid URL.

## CHAPTER 3 Start Building Your LWR Site

### In this chapter ...

- [Create an LWR Site in Experience Cloud](#)
- [Create Custom Pages in an LWR Site](#)
- [Create Theme Layouts in an LWR Site](#)
- [Create Components for LWR Sites](#)
- [Create Custom Layout Components](#)
- [Create a Custom Navigation Menu Component](#)
- [Publish Your LWR Site](#)

Learn about the initial steps to get a basic LWR in Experience Cloud site up and running, such as creating custom Lightning web components.

For details on more advanced customization, such as custom record components, see [Add More Customizations](#).

## Create an LWR Site in Experience Cloud

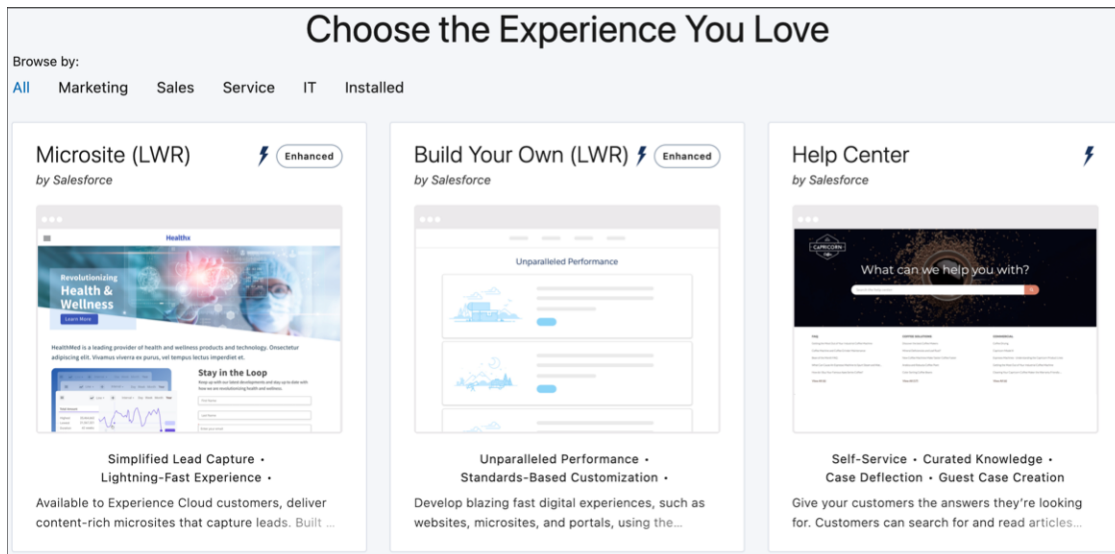
Select the Build Your Own (LWR) or the Microsite (LWR) template to create an LWR site in Experience Cloud.

From Winter '23, the way you create an LWR site has changed in two key ways.

- Before Winter '23, when you created an LWR site, you could create an authenticated or unauthenticated site, which affected the site's URL. LWR sites created in Winter '23 or later are authenticated sites by default and no longer include `/s` at the end of their URLs. See [Custom URL Paths in LWR Sites](#).
- From Winter '23, new LWR sites and CMS workspaces that you create are hosted together on the enhanced sites and content platform, which offers partial deployment, site content search, and easy content management. As a result, any new LWR sites that you create using the Microsite (LWR) or the Build Your Own (LWR) templates are now enhanced LWR sites. See [What Is the Enhanced Sites and Content Platform](#) in Salesforce Help.

To create an LWR site:

1. From Setup, in the Quick Find box, enter *Digital Experiences*, then select **All Sites**, and click **New**.
2. In the site creation wizard, select **Build Your Own (LWR)** or **Microsite (LWR)**, and click **Get Started**.



3. Enter a name and base URL value.

The base URL value is appended to the domain that you created when you enabled Digital Experiences. For example, if your domain name is `UniversalTelco.my.site.com` and you're creating a partner site, you can enter `partners` to create a unique URL `UniversalTelco.my.site.com/partners`.

4. Click **Create**.

After you create your site, the Experience Workspaces area appears.

You can also create the site programmatically [through Connect API](#) or [using Salesforce CLI commands](#).

SEE ALSO:

[Custom URL Paths in LWR Sites](#)


## Create Custom Pages in an LWR Site

LWR templates in Experience Cloud provide only a few key default pages, so you can create additional custom pages for your particular use case.

To create a custom page, open the Pages menu on the top toolbar in Experience Builder. Click **New Page** at the bottom of the Pages menu. See [Create Custom Pages with Experience Builder](#) in Salesforce Help.


## Standard Pages

When creating custom pages, the Search standard page is available for the template and supports certain routes and URL parameters.

 **Note:** Some preconfigured standard pages, such as Account Management, are unsupported.

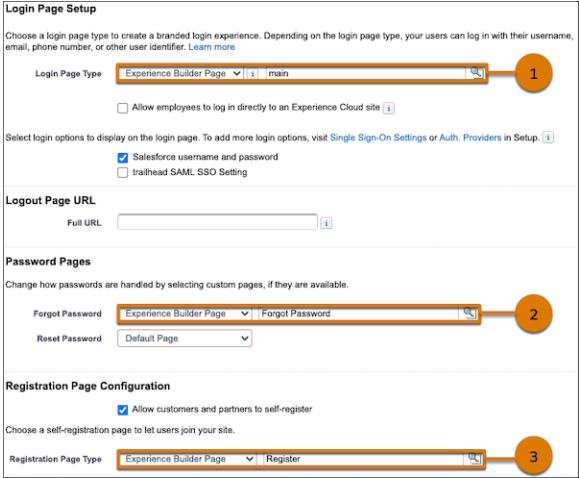
## Object Pages

Because the [recommended solutions for record page components](#) use the User Interface API to retrieve data, create object pages only for [Supported Objects](#) in the User Interface API Developer Guide.

 **Note:** Unlike in Aura templates, there are no generic record pages. If you need record pages, you must create them for a specific object.

## Login Pages

To use the Login, Forgot Password, and Registration pages that come with the LWR templates, ensure that your site is published. In the Login & Registration tab of the Administration workspace, select **Experience Builder Page** for each page. Enter *main* for the Login page (1), *Forgot Password* for the Forgot Password page (2), and *Register* for the Registration page (3).



**Login Page Setup**

Choose a login page type to create a branded login experience. Depending on the login page type, your users can log in with their username, email, phone number, or other user identifier. [Learn more](#)

Login Page Type: Experience Builder Page | main **1**

Allow employees to log in directly to an Experience Cloud site

Select login options to display on the login page. To add more login options, visit [Single Sign-On Settings](#) or [Auth. Providers in Setup](#).

Salesforce username and password

Trailhead SAML SSO Setting

**Logout Page URL**

Full URL:

**Password Pages**

Change how passwords are handled by selecting custom pages, if they are available.

Forgot Password: Experience Builder Page | Forgot Password **2**

Reset Password: Default Page

**Registration Page Configuration**

Allow customers and partners to self-register

Choose a self-registration page to let users join your site.

Registration Page Type: Experience Builder Page | Register **3**

## Page Access & Authentication

As is the case with Aura sites, we send page metadata to the client for all routes in the site, including for guest user sessions.

**Important:** For LWR sites, URL parameter validation during navigation differs from Aura sites. For example, we don't prevent a user from accessing a record route when they don't have permission to access that object or that particular record. We also don't validate that URL parameters correspond to valid existing data in the org.

It's the responsibility of the components on the page and the APIs used to enforce correct user sharing rules when retrieving data. Therefore, don't put sensitive information on a page unless the data comes from an API that implements user access rules.

SEE ALSO:

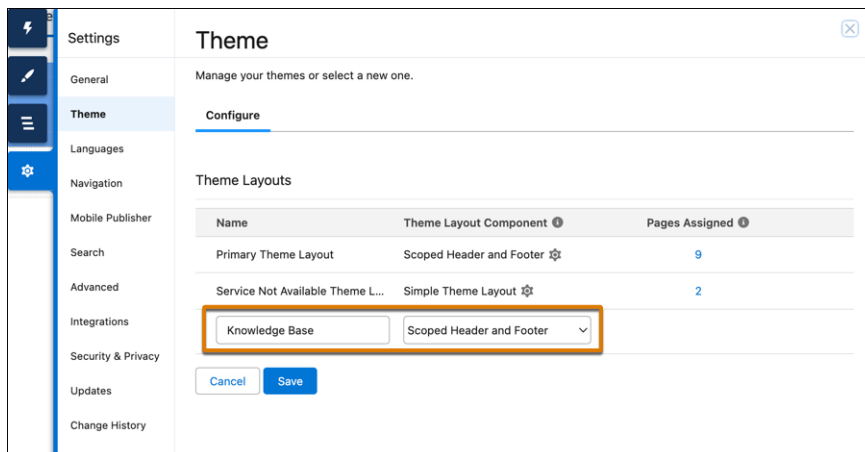
[Pages and Components in LWR Templates](#)

## Create Theme Layouts in an LWR Site

Theme layouts and theme layout components define the shared regions of LWR site pages. A theme layout component determines the header and footer for a site page and often includes navigation, search, and a user profile menu. You use the theme layout component in a theme layout and then assign the theme layout to a page. That way, every site page that you assign the theme layout to shows the same header and footer. LWR sites come with some theme layouts and theme layout components, and you can create your own.

Let's say that you have a primary theme layout for your site that uses the Scoped Header and Footer theme layout component. The Scoped Header and Footer component includes your logo, a navigation menu, and a user profile menu in the header, and contact links in the footer. Now you want to add a Create Case button to the header on your knowledge base page only. You can create a theme layout called Knowledge Base, apply it to the knowledge base page, and add the button to the header.

1. In **Settings > Theme**, click **New Theme Layout**.
2. Enter the name of the new theme layout, assign your chosen theme layout component to the new layout, and save the change. In this example, you add the Scoped Header and Footer theme layout component to your new Knowledge Base theme layout. Because Scoped Header and Footer includes your logo, the navigation menu, and the user profile menu in the page header, the new theme layout also includes those elements.



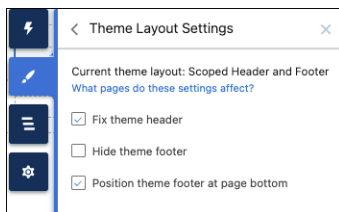
3. From the Pages menu in Experience Builder, select the page where you want to apply the new theme layout. In this example, you choose your site's knowledge base page.
4. In the page settings, select **Override the default theme layout for this page**, and then select your new theme layout.
5. On the page itself, add your desired component or components to the header or footer. In this example, you add a Button component to the header.

Now the header with the button appears on your knowledge base page, and the other pages on your site show the header without the button.


 **Tip:** To create your own theme layout component, see the Theme Layout section in [Create Custom Layout Components](#) on page 27.

On sites created with the Build Your Own (LWR) template, additional layout options are available on pages whose theme layout uses the Scoped Header and Footer theme layout component. In **Theme > Theme Layout Settings**, select

- **Fix theme header** when you want the entire header region to always remain visible at the top of the page.
- **Hide theme footer** when you want to hide the footer from view.
- **Position theme footer at page bottom** when you want the footer region to sit at the bottom of the page. Depending on the page length, site visitors could be required to scroll down to see the footer.



These choices are also available in **Settings > Theme** in the property settings for any theme layout component of the type Scoped Header and Footer.

 **Note:** When you change a theme layout, for example by fixing the theme header, that change appears on every page where this theme layout is assigned.

## Create Components for LWR Sites

Each Lightning web component folder must include a configuration file named `<component>.js-meta.xml`. The configuration file defines the metadata values for the component, including the design configuration values for Experience Builder.

If you previously created Lightning web components for Experience Builder sites, you're familiar with the `lightningCommunity__Page` and `lightningCommunity__Default` targets. For the LWR template, we added two new target types—`lightningCommunity__Page_Layout` and `lightningCommunity__Theme_Layout`.

Target Value	Description
<code>lightningCommunity__Page</code>	Enables a drag-and-drop component to be used on an LWR or Aura site page in Experience Builder. Components appear in the Components panel.
<code>lightningCommunity__Page_Layout</code>	Enables a component to be used as a page layout in an LWR site in Experience Builder. Components appear in the Page Layout window.
<code>lightningCommunity__Theme_Layout</code>	Enables a component to be used as a theme layout in an LWR site in Experience Builder. Components appear in Settings in the Theme area.
<code>lightningCommunity__Default</code>	Used together with <code>lightningCommunity__Page</code> or <code>lightningCommunity__Theme_Layout</code> . Enables a

Target Value	Description
	<p>component to expose properties that are editable when the component is selected in Experience Builder.</p> <p>For Experience Builder sites, only <code>lightningCommunity__Default</code> supports configurable component properties. We support these property attribute data types:</p> <ul style="list-style-type: none"> <li>• Integer</li> <li>• String</li> <li>• Boolean</li> <li>• Picklist</li> <li>• Color</li> </ul>

To use a component in Experience Builder, edit the `<component>.js-meta.xml` file to define the component's design configuration values as follows.

- To make your component usable in Experience Builder, set `isExposed` to `true`, and define `lightningCommunity__Page`, `lightningCommunity__Page_Layout`, or `lightningCommunity__Theme_Layout` in `targets`.
- To include properties that are editable when the component is selected in Experience Builder, define `lightningCommunity__Default` in `targets` and define the properties in `targetConfigs`.

See [Configure a Component for Experience Builder](#) in the Lightning Web Components Developer Guide.



**Note:** All configuration file tags listed in [Configuration File Tags](#) in the Lightning Web Components Developer Guide are supported.

### Component Properties

Let's look at some sample code for a Lightning web component that includes four editable properties.

`lightningCommunity__Page` tells Experience Builder that this component is a drag-and-drop component. And the `lightningCommunity__Default` target is used to configure any design-time component properties for Experience Builder in its `targetConfig`.

### Base Lightning Component Limitations in LWR Sites

In LWR sites for Experience Cloud, you can use most of the components in the Lightning Component Library, but there are some limitations.

### User Interface API

User Interface API allows you to get Salesforce record data into your Lightning web component. LWR sites don't require anything special when developing your Lightning web components with User Interface API.

### @salesforce Modules in LWR Sites

LWR sites in Experience Cloud support `@salesforce` modules, which add functionality to Lightning web components at runtime.

### Lightning Navigation

Use the `lightning/navigation` API to navigate to different pages within your site, generate URLs to different routes, and get the current `pageReference` object.




### [Make a Custom Lightning Web Component Screen-Size Responsive](#)

For enhanced LWR sites, you can assign separate values for the desktop, mobile, and tablet versions of certain properties in custom Lightning web components. With screen-responsive properties, the component uses the correct property value based on the end user's screen size.

## Component Properties


Let's look at some sample code for a Lightning web component that includes four editable properties.

`lightningCommunity__Page` tells Experience Builder that this component is a drag-and-drop component. And the `lightningCommunity__Default` target is used to configure any design-time component properties for Experience Builder in its `targetConfig`.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

```
<?xml version="1.0" encoding="UTF-8"?>
<LightningComponentBundle xmlns="http://soap.sforce.com/2006/04/metadata" fqn="myComponent">

  <apiVersion>51.0</apiVersion>
  <isExposed>true</isExposed>
  <masterLabel>Component Name</masterLabel>
  <description>Description of your component.</description>
  <targets>
    <target>lightningCommunity__Page</target>
    <target>lightningCommunity__Default</target>
  </targets>
  <targetConfigs>
    <targetConfig targets="lightningCommunity__Default">
      <property type="String" name="stringProp" default="hello world"/>
      <property type="Integer" name="integerProp" default="314"/>
      <property type="Boolean" name="booleanProp" default="true"/>
      <property type="Color" name="colorProp" default="#333333"/>
      <property type="Picklist" name="picklistProp" datasource="item1,item2"/>
    </targetConfig>
  </targetConfigs>
</LightningComponentBundle>
```

 **Note:** Always name your component properties using camel case, both in the `.js` file and the `js-meta.xml` file. Don't capitalize the first letter because it can cause the component to break.

The default value of the property in the `js-meta.xml` file determines the out-of-the-box value of a component property.

If no default is provided, then we use the value of the corresponding `@api` variable in the `.js` file. This value can then be further edited via the component's property panel in Experience Builder.

When the component is loaded, we attempt to coerce the current value of a component property to its specified JavaScript type in the `js-meta.xml` file. If there's no corresponding property at all in the `js-meta.xml` file and the attribute only exists in the `.js` file, then the value isn't coerced.

Component `@api` properties with values containing expression language syntax (for example, `{!Route.recordId}`) are only interpolated if there's a corresponding design property config in the `js-meta.xml` file. See [Make a Component Aware of Its Context](#) in the Lightning Web Components Developer Guide.

For multilingual sites, to make a String property translatable, define it as `translatable="true"` in the `js-meta.xml` file. If you add a `dataSource` attribute to the property—for example, to create a picklist—you can't define that property as `translatable="true"`.

## Base Lightning Component Limitations in LWR Sites

In LWR sites for Experience Cloud, you can use most of the components in the Lightning Component Library, but there are some limitations.

The lightning-input-field component (including when it's used within another component):

- Doesn't support lookup search in LWR sites viewed on desktop computer
- Is unsupported in LWR sites viewed on mobile devices

These components and events are unsupported:

- lightning-emp-api
- lightningsnapin components
- platform-show-toast-event, but you can use [toast-container](#)

These features are unsupported:

- Opening files, as described in [Open Files](#) in the Lightning Web Components Developer Guide
- Using panels or modals

 **Tip:** See an example of lightning-messageService in `codeSamples/messageService` in the [code sample files](#).

## User Interface API

User Interface API allows you to get Salesforce record data into your Lightning web component. LWR sites don't require anything special when developing your Lightning web components with User Interface API.

To learn more, check out the following topics in the Lightning Web Components Developer Guide.

- [Use the Wire Service to Get Data](#)
- [lightning/ui\\*Api Wire Adapters and Functions](#)

 **Tip:** If your site is public or includes public pages, make sure that you also enable the following settings in the Administration workspace under Preferences.

- **Allow guest users to access public APIs**

Lets guest users access any Lightning web components that use the User Interface API, in addition to the API access that it already provides. Enable this setting to give guest users access to Salesforce CMS and record detail pages, such as Knowledge detail pages.

- **Let guest users view asset files, library files, and CMS content available to the site**


Lets guest users access Lightning web components that use `@salesforce/contentAssetUrl`.

## @salesforce Modules in LWR Sites


LWR sites in Experience Cloud support `@salesforce` modules, which add functionality to Lightning web components at runtime.



Most of the supported modules also support referential integrity, meaning that when a Lightning web component includes a reference to an object or resource, that dependency is respected. For example:

- If a Lightning web component in your LWR site contains a reference to a supported module, you can't delete the referenced object without first removing the Lightning web component.
- If you modify the name of the referenced object or other relevant data in your org, the system automatically updates the reference in your Lightning web component.

 **Note:** For published LWR sites, the system immediately updates the references. However, unpublished sites rely on the source code of the custom component definition, which can take up to 2 hours to update. During this brief window, sometimes it's not possible to publish your LWR site because the component's references are temporarily invalid.

See [@salesforce Modules](#) in the Lightning Web Components Developer Guide.

Module	Description and Limitations
@salesforce/apex	Import Apex methods. Calls to Apex behave the same across LWR and Aura sites. If an Apex method signature changes, you must republish your site. Otherwise, the changes can break existing components.
@salesforce/apexContinuation	Import Apex methods that can make a long-running request to an external web service. Calls to Apex behave the same across LWR and Aura sites. If an Apex method signature changes, you must republish your site. Otherwise, the changes can break existing components.
@salesforce/client	Get the form factor of the hardware (desktop, tablet, or mobile) that the browser is running on.
@salesforce/community	Get information about the site, such as the network ID or the base path. If the base path changes, you're not required to republish the site.
@salesforce/contentAssetUrl	Import content asset files. Content assets behave the same across LWR and Aura sites. The live site always fetches the latest version of the content asset. And if the name of the content asset changes, the live site doesn't require you to republish the site.   <b>Note:</b> The URL for the content asset isn't exactly the same as in Aura sites or in Lightning Experience.
@salesforce/customPermission	Import a custom permission and check whether it's assigned to the current user. If the assignment of the referenced permission changes, you're not required to republish the site.
@salesforce/i18n	Import internationalization properties. For LWR sites, the language and locale are mapped to the language configured for the site, and the timezone is determined by the browser's timezone rather than the user's personal settings.  Additionally, <code>currency</code> , <code>number.currencySymbol</code> , and <code>number.currencyFormat</code> are unsupported.  If the site or org language configurations are updated, you must republish the site.

Module	Description and Limitations
@salesforce/label	Reference a label in the org. If the label is updated, you must republish the site.   <b>Note:</b> Referential integrity isn't enforced for labels in a published site, as they're frozen when the site is published. However, when you preview the LWR site in Experience Builder before publishing it, we always fetch the latest label.
@salesforce/messageChannel	Expose the Lightning Message Service API. The Lightning Message Service lets you publish and subscribe to messages across the DOM between different Lightning web components on a page. If updates are made, you must republish the site.
@salesforce/resourceUrl	Import static resources in your org. Resource URLs behave the same for LWR and Aura sites. The live site always fetches the latest version of the resource. And if you rename the resource, the live site doesn't require you to republish the site.   <b>Note:</b> The URL for the static resource isn't exactly the same as in Aura sites or in Lightning Experience.
@salesforce/schema	Reference the name of objects, fields, and relationships in your org. If any of these names change, you're not required to republish the site.
@salesforce/site	Get information about the site, such as the site ID or the active languages. If the site language configuration changes, you must republish the site.
@salesforce/user	Get the current user's ID using the user module's <code>id</code> property, or determine whether the current user is a guest using the user module's <code>isGuest</code> property. If the user is a guest user, the ID is a <code>null</code> value.
@salesforce/userPermission	Import a Salesforce permission and check whether it's assigned to the current user. If the assignment of the referenced permission changes, you're not required to republish the site.

## Lightning Navigation


Use the `lightning/navigation` API to navigate to different pages within your site, generate URLs to different routes, and get the current `pageReference` object.

See [PageReference Types](#) in the Lightning Web Components Developer Guide.

Aura templates support `comm__namedPage` schemas that use the `name` attribute (added in Spring '20) and the `pageName` attribute (deprecated in Spring '20). In LWR templates, only the `name` attribute is supported. The name of a page is its API name, which is configurable during page creation and visible on the page properties.

URLs for record detail pages behave a little differently in LWR sites than in Aura sites.

- For pages of type `standard__recordPage`, the URLs that are generated using the `lightning/navigation` API include `detail` as the recordName in the URL path. The proper record name is used when the user actually visits the page through a canonical URL redirect.
- If the current user visits a record detail page but doesn't have access to the current record, there's no canonical URL redirect and the record name can't be resolved.

- There's no support for `pageReference` type `standard__namedPage`. Use `comm__namedPage` instead.
  - When URL slugs are enabled for LWR Commerce stores, in pages of type `standard__recordPage`, `urlPath` is supported for Category object pages, and `urlName` is supported for Product object pages. Include the `urlName` attribute for Product and `urlPath` attribute for Category in the `standard__recordPage` `pageReference` attributes along with the `recordId`.
-  **Tip:** When you develop custom Lightning web components that contain links, use the `lightning/navigation` API to generate URLs for the href values as an SEO best practice. See [Basic Navigation](#) in the Lightning Web Components Developer Guide.

## Limitations

- The `comm__loginPage` `pageReference` type isn't supported. Instead, navigate to the login page as a regular `comm__namedPage`.
- The `objectApiName` attribute is required when navigating to pages of type `standard__recordPage` or `standard__recordRelationshipPage`.
- The `actionName` attribute isn't enforced as required when navigating to pages of type `standard__recordPage` or `standard__recordRelationshipPage`. However, including `actionName` remains a recommended best practice.

## Make a Custom Lightning Web Component Screen-Size Responsive

For enhanced LWR sites, you can assign separate values for the desktop, mobile, and tablet versions of certain properties in custom Lightning web components. With screen-responsive properties, the component uses the correct property value based on the end user's screen size.

To make your custom Lightning web component screen responsive, follow these general steps.

### 1. Declare a Property as Screen-Size Responsive

In the component's configuration file, `componentName.js-meta.xml`, declare an integer, string, or both properties as screen-size responsive by using the `screenResponsive` attribute with a value of `true`, and the `exposedTo` attribute with a value of `css`.

For example, here's the code for the maximum height of a custom button component.

```
<targetConfig targets="lightningCommunity_Default">
  <property name="test" type="String" default="Button"/>
  <property name="url" type="String"/>
  <property name="maxHeight" type="Integer" min="0" max="20" default="0"
screenResponsive="true" exposedTo="css"/></targetConfig>
```

Here's the code for the alignment of a child component of a custom banner component.

```
<targetConfig targets="lightningCommunity_Default">
  <property type="Color" name="borderColor" default="" />
  <property name="url" type="String"/>
  <property type="String" name="bannerAlignment" default="center" screenResponsive="true"
exposedTo="css"/>
</targetConfig>
```

### 2. Use CSS Variables to Define Media Queries

In the component's `.css` file, use the CSS variable `--dxp-c--screen-size-property` to define a media query, where

*screensize* can be *l* (for desktop), *m* (for tablet), or *s* (for mobile).

*property* is the property name in kebab case.

For example, here's the code for the maximum height (property `maxHeight`) of a custom button component.

```
/* Desktop */
div {
  max-height: calc(var(--dxc-c-l-max-height)*1px);
}

/* Tablet */
@media only screen and (max-width: 64em) {
  div {
    max-height: calc(var(--dxc-c-m-max-height)*1px);
  }
}

/* Mobile */
@media only screen and (max-width: 47.9375em) {
  div {
    max-height: calc(var(--dxc-c-s-max-height)*1px);
  }
}
```

**!** **Important:** The screen-responsive property applies only to style properties, not expressions. Expressions (such as JavaScript or data-binding expressions) set at CSS values aren't resolved at runtime.

Here's the code for the alignment (property `bannerAlignment`) of a custom banner component.

```
/* Desktop */
div {
  justify-content: var(--dxc-c-l-banner-alignment, center);
}

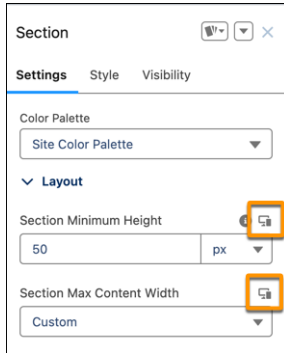
/* Tablet */
@media only screen and (max-width: 64em){
  div {
    justify-content: var(--dxc-c-m-banner-alignment);
  }
}

/* Mobile */
@media only screen and (max-width: 47.9375em) {
  div {
    justify-content: var(--dxc-c-s-banner-alignment);
  }
}
```

**📝** **Note:** Enhanced LWR sites use the same breakpoints as shown in this example to distinguish between each view mode. To give your users the best experience, use these breakpoints when you define media queries.

### 3. Specify the Property Values for Each Screen Size

After you declare a component property as screen responsive, specify the values for each screen size in Experience Builder. In the component's property panel, an icon indicates screen-responsive properties.



By default, smaller screen sizes inherit the property values that you specify for larger screen sizes. To set a property value for a particular screen size, use the dropdown menu in the navigation bar to switch between view modes.

## 4. Publish the Site

After you specify a property's values for different screen sizes, publish the site. When you publish, the CSS custom variables are added in the host class of the generated component.

For example, here's the code for the maximum height of a custom button component.

```
<dxp_base-button data-component-id="button-0b67" slot="column"
  style="--dxp-c-l-max-height:100; --dxp-c-m-max-height:80;
  --dxp-c-s-max-height:60;">
  ...
```

In this example, the component maximum height property is assigned a value of 100 pixels for desktop, 80 pixels for tablet, and 60 pixels for mobile.

SEE ALSO:

[Experience Cloud Help: Assign Different Values for Desktop, Tablet, and Mobile Properties in Custom LWR Components](#)

## Create Custom Layout Components

Layouts are supported in the Build Your Own (LWR) template using Lightning web components instead of Aura components. You can also create your own custom layouts in the same way as for Aura sites, but with some minor changes in syntax.

**Tip:** If your custom theme layout component exposes design properties for Experience Builder, remember to declare those properties in the `targetConfig` of the `lightningCommunity__Default` target in the `js-meta.xml` file.

## Regions

Slots are the new way to define parts of a web component's template that can be configured declaratively. The presence of slots on your component tells Experience Builder that it's a region.

Named slots (`<slot name="header">`) are analogous to component attributes in Aura layouts. If the slot doesn't have a name, it's considered to be the default slot, which is analogous to `{!v.body}` in Aura.

To learn more about how LWC uses slots, see [Pass Markup into Slots](#) in the Lightning Web Components Dev Guide.

## Page Layout

Page layout components use the `lightningCommunity__Page_Layout` target in `js-meta.xml`.



**Tip:** See an example of a two-row page layout with an exposed hero banner region in `customLayoutsAndBranding/force-app/main/default/lwc/customPageLayout` in the [code sample files](#).



**Important:** The JSDoc annotation containing `@slot` followed by the name of the region is required for the platform to know which slots (or regions in Experience Builder) are exposed for your page layout component. For example:

```
/**
 * @slot contentHeaderRegion
 * @slot contentRegion
 * @slot contentFooterRegion
 */
```

## Theme Layout

Theme layout components use the `lightningCommunity__Theme_Layout` target in `js-meta.xml`.

In Aura theme layout components, you include `{!v.body}` to denote where your content is rendered. Similarly, for an LWC theme layout component, you must include a default slot—essentially, a slot with no name: `<slot></slot>`—to indicate the region for your main content.



**Tip:** See an example of a three-column theme layout in `customLayoutsAndBranding/force-app/main/default/lwc/customThemeLayout` in the [code sample files](#). For a functional example of how to build a proper navigation component, see [Set Up a Navigation Menu Using Apex](#).



**Important:** The JSDoc annotation containing `@slot` followed by the name of the region is required for the platform to know which slots (or regions in Experience Builder) are exposed for your theme layout component. For example:

```
/**
 * @slot themeHeaderRegion
 * @slot themeFooterRegion
 */
```

## F6 Navigation

F6 navigation is available for theme layout components only. The framework treats any DOM elements with the `data-f6-region` attribute as an F6-navigable region.

To enable F6 navigation for regions in your theme layout, add the `data-f6-region` attribute to the major regions.

```
<template>
  <header data-f6-region style={headerStyle}>
    <slot name="header"></slot>
  </header>
  <section data-f6-region style={sectionStyle}>
    <slot></slot>
  </section>
  <footer data-f6-region style={footerStyle}>
    <slot name="footer"></slot>
  </footer>
</template>
```



```
</footer>
</template>
```

SEE ALSO:

[Video: How to Implement Custom Layouts for LWR Sites](#)

## Create a Custom Navigation Menu Component

The Build Your Own (LWR) template includes a Navigation Menu component that you can customize for the desktop and mobile versions of your site. If you prefer to create your own component, we recommend that you create a custom Lightning web component with an Apex controller to get the navigation items.

### Step 1: Configure a Navigation Menu

To create a custom navigation menu component in Experience Builder, go to **Settings > Navigation**, and click **Add Navigation Menu**. In the Menu Editor, you can add navigation items targeting specific sites pages.

Adding navigation items creates the [NavigationLinkSet](#) object and its corresponding [NavigationMenuItems](#).

**Note:** LWR templates (Build Your Own and Microsite) don't include generic record pages. So if you create an object or global action type menu item that links to a Salesforce object, make sure that you also create the corresponding object pages. If you don't create the associated object pages, end users don't see anything if they click the menu item.

### Step 2: Implement the Apex Controller

To fetch the navigation menu for your component, you can implement an Apex controller that uses the Connect API to get the [NavigationMenuItems](#) for the [NavigationLinkSet](#) you created in the Menu Editor.


**Tip:** See an example of this Apex controller in `lightningNavigation/force-app/main/default/classes` in the [code sample files](#).

In the example, we pass in:

- `navigationLinkSetMasterLabel`, or the menu name, to look up the `NavigationLinkSet.DeveloperName` for the nav menu of the current site
- `publishStatus` to get the correct `NavigationMenuItems` for a published site or for a site in draft mode
- `addHomeMenuItem` to determine whether the Home menu item must be included in the data
- `includeImageUrl` to determine whether the data must include image URLs

## Step 3: Implement the Navigation Menu Component

To implement your Navigation Menu component, use the code samples provided.

 **Tip:** See an example of a Navigation Menu component in `lightningNavigation/force-app/main/default/lwc/navigationMenu` in the [code sample files](#).

Here are some pointers on how the sample component is set up.

- JavaScript: To get data into the Lightning web component, we must [import the Apex controller using the wire annotation](#).
- JavaScript: To get the `publishedState` for the Apex controller, we can import the `CurrentPageReference` from [lightning/navigation](#) and check whether the menu is published.
- XML: We can expose the Navigation Menu Name through the property in the `targetConfig` of the `js-meta.xml` file.
- JavaScript: To navigate between pages, make sure to reference [lightning/navigation](#) and the [various page types that are supported](#).

SEE ALSO:

[Lightning Web Component Reference: Navigation](#)

[Video: Use lightning-navigation in LWR Sites](#)

[Video: Build Custom Navigation and Footers for LWR Sites](#)

## Publish Your LWR Site

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Unlike with Aura sites, you can publish your LWR site at any time, even when the site is unchanged. When changing your organization's schema or updating a component used in an LWR site, you must publish your site to make the changes live. Otherwise, your site can break at runtime.

For more details on what changes require you to publish an LWR site, see [New Publishing Model](#).

## CHAPTER 4 Brand Your LWR Site

### In this chapter ...

- [How Branding Works in LWR Sites](#)
- [Enable --dxp Styling Hooks](#)
- [--dxp Styling Hooks in LWR Sites](#)
- [How --dxp Styling Hooks Map to Theme Panel Properties](#)
- [Use --dxp Styling Hooks in Custom Components](#)
- [Override Component Branding in LWR Sites with Custom CSS](#)
- [Create a Color Palette for Page Sections and Columns](#)
- [Create a Configurable Site Logo Component](#)
- [Add Custom Fonts](#)
- [Remove SLDS](#)

Build LWR sites that consistently match your brand with the new Lightning Web Runtime (LWR) design system. The system includes base components that follow design best practices, and uses `--dxp` styling hooks to make it easier to get the look you want.

## How Branding Works in LWR Sites

With the Lightning Web Runtime (LWR) design system, you can modify base and custom Lightning web components to achieve a consistent look and feel across your LWR site. The system uses `--dxp` styling hooks, which map to properties in the Theme panel, to help you more easily apply branding to your entire site.

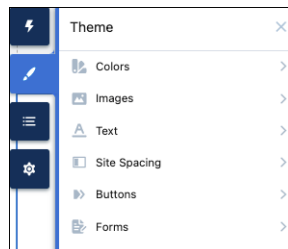
### What Are `--dxp` Styling Hooks?

Styling hooks use CSS custom properties, which are variables within your CSS that cascade to all descendants within the scope of a selector. `--dxp` styling hooks are a reduced set of custom properties that map to the lower-level component styling hooks, so you can set a single hook that affects many individual components at once.

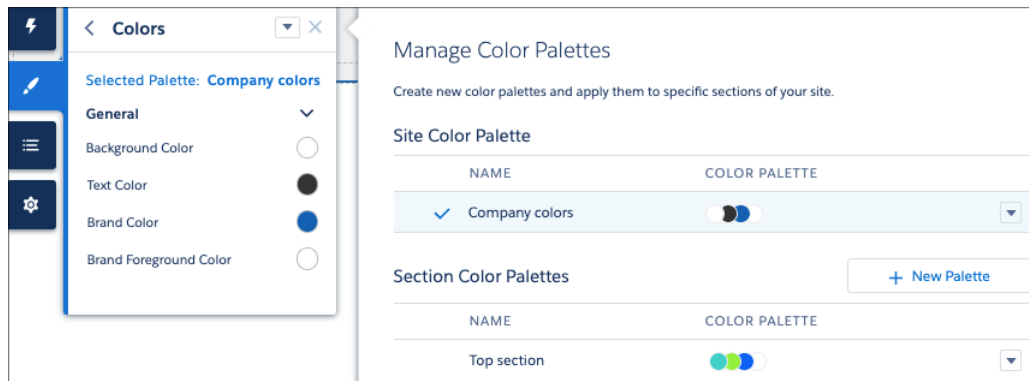
These hooks are used in the base components that come with LWR templates, and can also be used in your custom Lightning web components, which means that you can brand your entire site much more quickly.

### What Are the Theme Panel Properties?

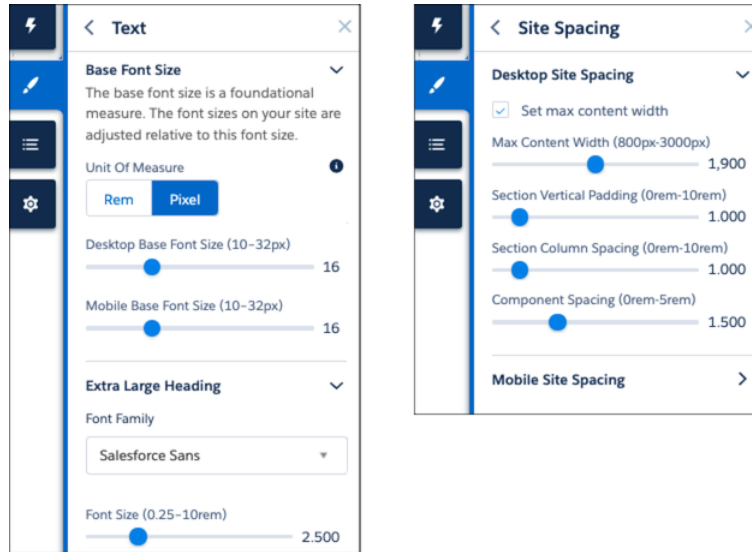
The Theme panel in Experience Builder provides several branding properties that let you declaratively control the color, image, text, and site spacing of your site.



In the Colors tab, you can create color palettes that differ from the main site colors, and apply them to specific sections of the page. And in the Images tab, you can select images from a Salesforce CMS workspace to create a logo or a browser icon (favicon).



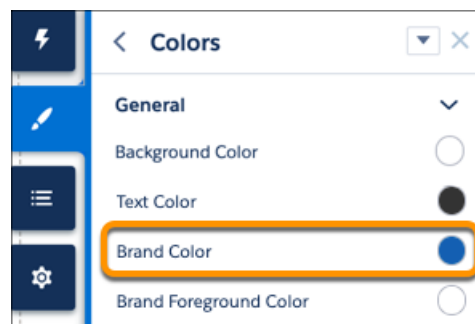
From the Text tab, you can set different base font size values for mobile and desktop sites. You can also select from dynamic font styles, headings, and decorations for all types of text, including links and buttons. And in the Site Spacing tab, you can adjust your site's maximum content width, section padding, and section column and component spacing for desktop and mobile views.



## How Do `--dxp` Styling Hooks and Theme Panel Properties Work Together?

Each property in the Theme panel in Experience Builder maps to one or more `--dxp` styling hooks. So if you update a property in the Theme panel, the system automatically updates any Lightning web components that use the hooks associated with that property.

For example, let's say you want to develop a custom button component that uses branding properties from the Theme panel. In this case, to use the site's Brand Color as the background color of the button, the component references the `--dxp-g-brand` global styling hook.



```
.my-custom-button-component {
  background-color: var(--dxp-g-brand);
  color: var(--dxp-g-brand-contrast);
}
```

Now, whenever a user updates the Brand Color property in the Theme panel, the system instantly updates the background color of the button component.

SEE ALSO:


[Video: Style LWR Sites with Custom Variables](#)

[--dxc Styling Hooks in LWR Sites](#)

[How --dxc Styling Hooks Map to Theme Panel Properties](#)


## Enable --dxc Styling Hooks

If you created your LWR site before Summer '21, enable --dxc styling hooks by adding the DXP branding style sheets to your site.

 **Tip:** New LWR sites created in Summer '21 and later automatically include these style sheets.

Click **Settings** > **Advanced** > **Edit Head Markup**, and include the following code in the Head Markup editor.

```
<link rel="stylesheet" href="{ basePath
}/assets/styles/salesforce-lightning-design-system.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath
}/assets/styles/dxc-site-spacing-styling-hooks.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxc-styling-hooks.min.css?{
versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxc-slds-extensions.min.css?{
versionKey }" />
```

 **Note:** Make sure that the `dxc-styling-hooks.min.css` and `dxc-slds-extension.min.css` files are loaded after `salesforce-lightning-design-system.min.css`.

## --dxc Styling Hooks in LWR Sites

With --dxc styling hooks, you can set a single hook that affects both base and custom Lightning web components throughout your LWR site in Experience Cloud.

The Salesforce Lightning Design System (SLDS) provides many [styling hooks](#) that give granular control over how each base component looks. Styling hooks use [CSS custom properties](#), which are variables within your CSS that cascade to all descendants within the scope of a selector. For example, the `lightning-button` component uses the styling hook `--slds-c-button-color-background` to change its background color. You can define the hook in any selector.

```
<style>
/**
 * Scoped to the root of the document and all its descendant elements.
 */
:root {
  --slds-c-button-color-background: peachpuff;
}

/**
 * Scoped to any element with the class applied and all its descendant elements
 */
.container {
```

```

    --slds-c-button-color-background: peachpuff;
  }
</style>

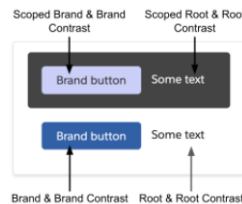
```

But with this system, accurately reflecting your brand across every component in your site, including associated variations and states, often requires updating hundreds of styling hook definitions.

In contrast, --dxp styling hooks are a reduced set of custom properties that map to the lower-level component styling hooks, so you can set a single hook that changes many individual components at once. For example, setting the --dxp-g-brand hook affects the background color of the button, the link color, and the input border color on focus.



Root is the background color of the container, with root-contrast as the foreground color. Each color pairing must maintain an acceptable contrast ratio for accessibility.



Any container can inherit styles (default) or define new styles. If a scoped container sets its own root (background color), remember to reevaluate all other --dxp hooks to make sure that they're accessible against the new root.



**Tip:** We recommend using --dxp styling hooks to make general changes across the components in your site. But if the --dxp branding defaults don't provide exactly what you need, you can use --slds-c and --slds-g-color styling hooks to fine-tune the appearance of individual components where necessary.

```

<link rel="stylesheet" href="{ basePath
}/assets/styles/salesforce-lightning-design-system.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath
}/assets/styles/dxp-site-spacing-styling-hooks.min.css?{ versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-styling-hooks.min.css?{
versionKey }" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-slds-extensions.min.css?{
versionKey }" />

<style>
  .mycontainer {
    /** Use --dxp-g to make broad changes **/
    --dxp-g-root: #1a1b1e;
    --dxp-g-root-contrast: #fff;
    --dxp-g-brand: #5eb4ff;
    --dxp-g-brand-contrast: #fff;
    --dxp-g-neutral: #76716b;
  }

```

```

--dvp-g-neutral-contrast: #fff;

/** Use --slds-c to fine-tune where necessary **/
--slds-c-button-color-background: peachpuff;
}
</style>

```

### Color --dvp Styling Hooks

In Experience Builder, the Colors tab is divided into families of colors that each have a specific use case along with a scale of possible values. With these properties, you can adjust the color values for the entire page or for any section within the page. When one of these color values is defined, other colors are subsequently derived and mapped to the individual base components.

### Text --dvp Styling Hooks

Extensive text branding properties make it easy to control the styling of the headings, body, button, link, and forms text used throughout your site.

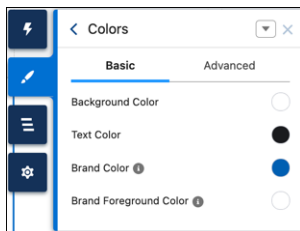
### Site Spacing --dvp Styling Hooks

Site spacing allows you to customize the global spacing settings for your site. These styling hooks combine to provide a consistent spacing experience across each page.

## Color --dvp Styling Hooks

In Experience Builder, the Colors tab is divided into families of colors that each have a specific use case along with a scale of possible values. With these properties, you can adjust the color values for the entire page or for any section within the page. When one of these color values is defined, other colors are subsequently derived and mapped to the individual base components.

For example, if you change the brand color from the default blue, the system updates the associated brand colors in all base components.



Experience Builder has a default derivation of these values that's increasingly contrasted against the root.

- If the root background color is dark, derivation becomes increasingly lighter to contrast against the background.
- If the root background color is light, derivation becomes increasingly darker to contrast against the background.

These derivation colors are often used for interaction states. For example, the color of a button can change from `--dvp-g-brand` to `--dvp-g-brand-1` on hover.

Additionally, many colors come in pairs, with a background color and an associated foreground color. Ensure that each color pairing maintains an acceptable contrast ratio for accessibility purposes.

## Usage Considerations

- Use the correct family of hooks for your use case. For example, if the main color of your brand is red, don't use `--dvp-g-destructive` because it also happens to be red. Use `--dvp-g-destructive` only for error and invalid states. Instead, to define your brand color, use `--dvp-g-brand`.

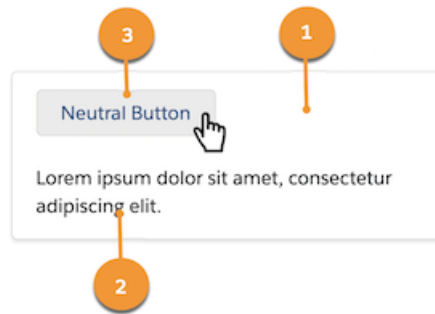


- You can't configure `--dvp-g-neutral`, `--dvp-g-warning`, `--dvp-g-info`, `--dvp-g-success`, or `--dvp-g-destructive` declaratively in the Theme panel. To modify these styling hooks, you must manually update them in the head markup.
- Because alpha values affect transparency, modifying the value can have an unintended impact on page elements. If you're overriding a color, we recommend keeping the alpha transparency at the same level as that color.
- Changes to ExperienceBundle or DigitalExperienceBundle don't trigger automatic color derivations.

## Root

The background color of the page or a section within the page. Root-1 is often used for components that retain the root background color, but have an interaction state—for example, the background hover state of neutral buttons.

- `--dvp-g-root` (1)
- `--dvp-g-root-contrast` (2)
- `--dvp-g-root-1` (3)
- `--dvp-g-root-contrast-1`

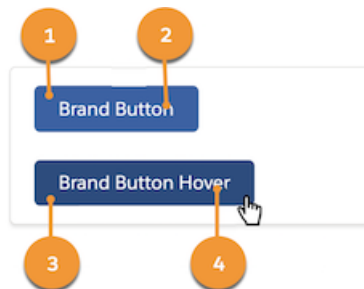


**Tip:** If you redefine `--dvp-g-root` on a section within a page, reevaluate all other `--dvp` styling hooks to make sure that they're accessible against the new root. If they're not, redefine the hooks.

## Brand

The primary brand color of your site. For Salesforce, the color is blue. Commonly used on buttons, links, focus states, and so on.

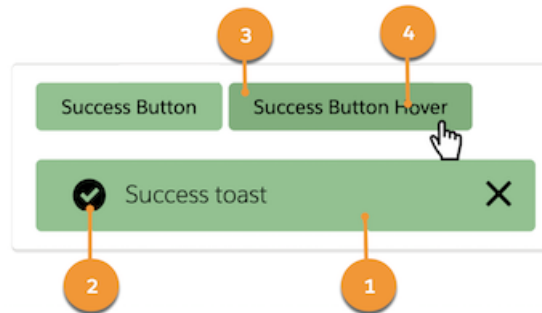
- `--dvp-g-brand` (1)
- `--dvp-g-brand-contrast` (2)
- `--dvp-g-brand-1` (3)
- `--dvp-g-brand-contrast-1` (4)



## Success

Communicates success. Commonly used on badges, alerts, toasts, and success variant buttons.

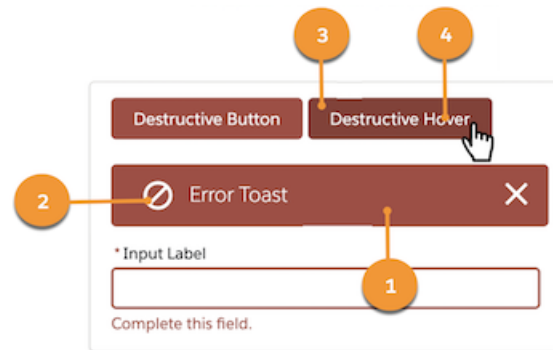
- --dvp-g-success (1)
- --dvp-g-success-contrast (2)
- --dvp-g-success-1 (3)
- --dvp-g-success-contrast-1 (4)



## Destructive

Communicates an error or an invalid state. Used on alerts, badges, toasts, form fields in an error state, and destructive variant buttons.

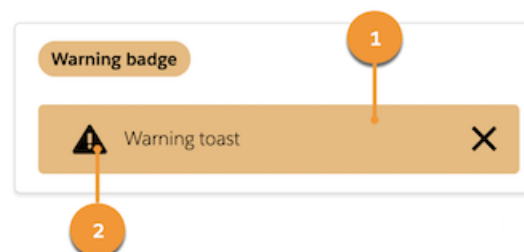
- --dvp-g-destructive (1)
- --dvp-g-destructive-contrast (2)
- --dvp-g-destructive-1 (3)
- --dvp-g-destructive-contrast-1 (4)



## Warning

Communicates a warning to the user. Used on badges, alerts, and toasts.

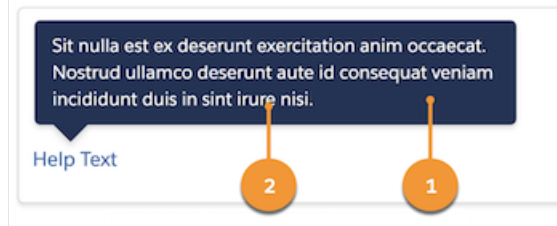
- --dvp-g-warning (1)
- --dvp-g-warning-contrast (2)



## Info

Communicates non-urgent information. Used on tooltips and popovers.

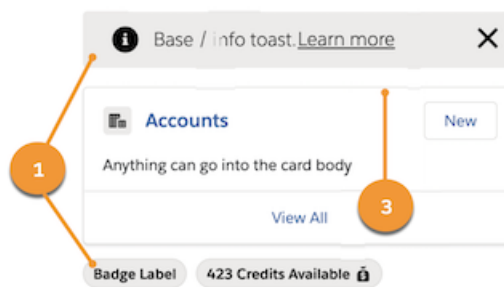
- --dwp-g-info (1)
- --dwp-g-info-contrast (2)
- --dwp-g-info-1
- --dwp-g-info-contrast-1



## Neutral

Used to break the flow between elements with borders and shadows. Neutral colors are also used for non-urgent informational elements, such as toasts and badges, and elements that don't have interaction, such as icons and disabled inputs.

- --dwp-g-neutral (1)
- --dwp-g-neutral-contrast
- --dwp-g-neutral-1 (3)
- --dwp-g-neutral-contrast-1
- --dwp-g-neutral-2
- --dwp-g-neutral-contrast-2
- --dwp-g-neutral-3
- --dwp-g-neutral-contrast-3



SEE ALSO:

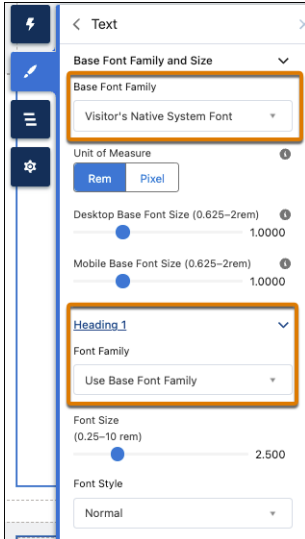
- [How --dwp Styling Hooks Map to Theme Panel Properties](#)
- [Create a Color Palette for Page Sections and Columns](#)

## Text --dwp Styling Hooks

Extensive text branding properties make it easy to control the styling of the headings, body, button, link, and forms text used throughout your site.

The Base Font Family and Base Font Size properties set the font family and font size on the `<html>` element of your site.

The Base Font Family property defaults to Visitor's Native System Font. In turn, the Font Family for each text element defaults to Use Base Font Family. (In LWR sites created before Spring '25, your existing font settings remain as is, but you can update them.) These settings give visitors better readability and site performance by using their operating system's native or default font as the site's font. The native system font varies for Windows, macOS, and mobile operating systems, but usually it's a sans serif font. You can customize the font setting for any text element, but for the best site performance, minimize the number of font families used in the site.



The Base Font Size properties determine the default desktop and mobile font sizes for your site. When you change the base font size, you proportionally adjust any site elements, such as font sizes or spacing values, whose size is specified with relative units (rem or em). In addition to text for buttons, links, and forms, you can modify the style for several levels of heading and body text, including:

- Heading 1
- Heading 2
- Heading 3
- Heading 4
- Heading 5
- Heading 6
- Paragraph 1
- Paragraph 2

You can configure each of these text styles declaratively in the Theme panel or programmatically via `--dxp` styling hooks. When you change the values for these properties, it also affects the SLDS and DXP CSS classes that consume them.

**Note:** Override heading tags associated with each style at the component level. For example, if your text component has a Heading 1 style (associated with an `h1` tag), change the tag to `h2` if needed.

To use these text properties in your components, use either SLDS or DXP CSS classes, or use the `--dxp` styling hook directly in the component's CSS.

For example, this code sample styles a component's `h1` using the DXP CSS class to use the branding property values defined in the Extra Large Heading.

```
<template>
  <h1 class="dxp-text-heading-xlarge">Heading 1</h1>
</template>
```

Alternatively, you can use the `--dxp` styling hooks directly in the component's CSS:

```
h1 {
  font-size: var(--dxp-s-text-heading-extra-large-font-size);
  font-family: var(--dxp-s-text-heading-extra-large-font-family);
}
```

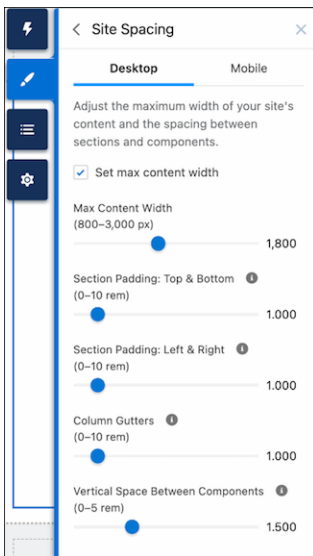
To alter the Base Font Size for small form factors, such as Tablet Portrait or Mobile, you can set the value of `--dxe-s-html-font-size-mobile` programmatically.

SEE ALSO:

[How --dxe Styling Hooks Map to Theme Panel Properties](#)

## Site Spacing --dxe Styling Hooks

Site spacing allows you to customize the global spacing settings for your site. These styling hooks combine to provide a consistent spacing experience across each page.



The Site Spacing tab of the Theme panel lets you set the following properties for desktop and mobile devices.

### Max Content Width

The maximum width of the inner content for theme regions and page regions.

### Section Padding: Top & Bottom

The space between the top and bottom of a section's inner content and the top and bottom of the section container, respectively.

### Section Padding: Left & Right

The space between the left and right edges of a section's inner content and the left and right edges of the section container, respectively.

### Column Gutters

The space between columns for section components with multiple columns. In mobile form factor, this setting controls the vertical space between stacked columns.

### Vertical Space Between Components

The amount of vertical spacing between components in the same region.

Site spacing properties aren't limited to what's exposed through the Theme panel. Along with the declarative properties displayed there, there are dozens of additional component-level site spacing hooks, which you can use to fine-tune spacing in different parts of your page.

For example, let's say you want your header region to span edge-to-edge instead of being confined to the max-content width set in the Theme panel. To achieve this outcome, you would override the max-width and padding directly for the section in question. Using the `--dxp` branding hooks enables you to edit the look and feel of any component without violating that component's style encapsulation.

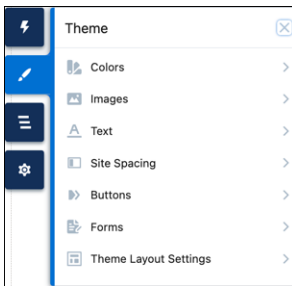
```
header {
  --dxp-c-section-content-spacing-block-start: 0;
  --dxp-c-section-content-spacing-inline-end: 0;
  --dxp-c-section-content-spacing-block-end: 0;
  --dxp-c-section-content-spacing-inline-start: 0;
  --dxp-c-section-columns-max-width: none;
}
```

SEE ALSO:

[How --dxp Styling Hooks Map to Theme Panel Properties](#)

## How --dxp Styling Hooks Map to Theme Panel Properties

Each declarative property in the Theme panel maps to one or more programmatic `--dxp` styling hooks. When a user updates a property in the Theme panel, the system automatically updates any Lightning web component that uses the hooks associated with that branding property.




### Colors

For button colors, see the [Button Color](#) section.

These Theme panel properties...	...map to these --dxp styling hooks
<b>Basic</b>	
Background Color	--dxp-g-root --dxp-g-root-1 --dxp-g-root-2 --dxp-g-root-3
Text Color	--dxp-g-root-contrast --dxp-g-root-contrast-1

These Theme panel properties...	...map to these --dxp styling hooks
	<pre>--dxp-g-root-contrast-2 --dxp-g-root-contrast-3</pre>
Brand Color	<pre>--dxp-g-brand --dxp-g-brand-1 --dxp-g-brand-2 --dxp-g-brand-3</pre>
Brand Foreground Color	<pre>--dxp-g-brand-contrast --dxp-g-brand-contrast-1 --dxp-g-brand-contrast-2 --dxp-g-brand-contrast-3</pre>
<b>Text</b>	
Heading 1	<pre>--dxp-s-text-heading-extra-large-color</pre>
Heading 2	<pre>--dxp-s-text-heading-large-color</pre>
Heading 3	<pre>--dxp-s-text-heading-medium-color</pre>
Heading 4	<pre>--dxp-s-text-heading-small-color</pre>
Heading 5	<pre>--dxp-s-text-heading-extra-small-color</pre>
Heading 6	<pre>--dxp-s-text-heading-extra-extra-small-color</pre>
Paragraph 1	<pre>--dxp-s-body-text-color</pre>
Paragraph 2	<pre>--dxp-s-body-small-text-color</pre>
<b>Links</b>	
Link Color	<pre>--dxp-s-link-text-color</pre>
Link Hover Color	<pre>--dxp-s-link-text-color-hover</pre>
<b>Forms</b>	
Field Label	<pre>--dxp-s-form-element-label-color</pre>
Placeholder Text	<pre>--dxp-s-form-element-placeholder-text-color</pre>
Input Text	<pre>--dxp-s-form-element-text-color</pre>
Input Text Focus	<pre>--dxp-s-form-element-text-color-focus</pre>
Field Background Fill	<pre>--dxp-s-form-element-color-background</pre>
Field Background Focus	<pre>--dxp-s-form-element-color-background-active</pre>
Field Border	<pre>--dxp-s-form-element-color-border</pre>

These Theme panel properties...	...map to these --dpx styling hooks
Field Border Focus	<code>--dpx-s-form-element-color-border-focus</code>
Checkbox Background	<code>--dpx-s-form-checkbox-color-background</code>
Selected Checkbox Background	<code>--dpx-s-form-checkbox-color-background-checked</code>
Checkbox Border	<code>--dpx-s-form-checkbox-color-border</code>
Selected Checkbox Border	<code>--dpx-s-form-checkbox-color-border-checked</code>
<b>Dropdowns</b>	
Dropdown Text Color	<code>--dpx-s-dropdown-text-color</code>
Dropdown Background Color	<code>--dpx-s-dropdown-color-background</code>
Dropdown Text Hover Color	<code>--dpx-s-dropdown-text-color-hover</code>
Dropdown Background Hover Color	<code>--dpx-s-dropdown-color-background-hover</code>
Dropdown Border Color	<code>--dpx-s-dropdown-color-border</code>

 **Tip:** See [Color --dpx Styling Hooks](#) for information about other available styling hooks that don't appear in the Theme panel.

## Images

These Theme panel properties...	...map to these --dpx styling hooks
Site Logo	<code>--dpx-s-site-logo-path</code> <code>--dpx-s-site-logo-url</code>
Browser Icon (Favicon)	No styling hook. To add a favicon in Experience Builder, click <b>Theme &gt; Images</b> and upload the file. After upload, the favicon is added automatically to your site's browser tab.

See [Create a Configurable Site Logo Component](#).

## Text

The Base Font Family and Base Font Size properties set the font family and font size on the `<html>` element of your site.

The Base Font Family defaults to Visitor's Native System Font, and the Font Family for each text element defaults to Use Base Font Family. You can change these settings for any text element, but for the best site performance, minimize the number of font families used in the site.

The Base Font Size properties determine the default desktop and mobile font sizes for your site. When you change the base font size, you proportionally adjust any site elements, such as font sizes or spacing values, whose size is specified with relative units (rem or em).



The design system also provides different levels of text styling for your site. Each level includes several style properties that map to --dXP styling hooks using this format.

```
--dXP-s-level-style
```

In the Headings and Body portion of this table, replace *level* with these values, as appropriate. For text in buttons, see the Buttons section. For text in forms, see the Forms section.

- text-heading-extra-large for Heading 1
- text-heading-large for Heading 2
- text-heading-medium for Heading 3
- text-heading-small for Heading 4
- text-heading-extra-small for Heading 5
- text-heading-extra-extra-small for Heading 6
- body for Paragraph 1
- body-small for Paragraph 2

For example, the --dXP styling hook for the Heading 1's font family is

```
--dXP-s-text-heading-extra-large-font-family
```

These Theme panel properties...	...map to these --dXP styling hooks
<b>Base Font Family and Size</b>	
Base Font Family	--dXP-s-html-font-family
Desktop Base Font Size	--dXP-s-html-font-size
Mobile Base Font Size	--dXP-s-html-font-size-mobile
<b>Headings and Body</b>	
Font Family	--dXP-s- <b>level</b> -font-family
Font Size	--dXP-s- <b>level</b> -font-size
Font Style	--dXP-s- <b>level</b> -font-style
Font Weight	--dXP-s- <b>level</b> -font-weight
Text Decoration	--dXP-s- <b>level</b> -text-decoration
Text Case	--dXP-s- <b>level</b> -text-transform
Line Height	--dXP-s- <b>level</b> -line-height
Character Spacing	--dXP-s- <b>level</b> -letter-spacing
<b>Link Text</b>	
Text Decoration	--dXP-s-link-text-decoration
Focus Text Decoration	--dXP-s-link-text-decoration-focus
Hover Text Decoration	--dXP-s-link-text-decoration-hover

## Site Spacing

These Theme panel properties...	...map to these --dpx styling hooks
<b>Desktop Site Spacing</b>	
Max Content Width	<code>--dpx-s-section-columns-max-width</code> <code>--dpx-s-header-content-max-width</code> <code>--dpx-s-footer-content-max-width</code>
Section Padding: Top & Bottom	<code>--dpx-s-section-content-spacing-block-start</code> <code>--dpx-s-section-content-spacing-block-end</code>
Section Padding: Left & Right	<code>--dpx-s-section-content-spacing-inline-start</code> <code>--dpx-s-section-content-spacing-inline-end</code>
Column Gutters	<code>--dpx-s-column-spacer-size</code>
Vertical Space Between Components	<code>--dpx-s-component-wrapper-spacer-size</code>
<b>Mobile Site Spacing</b>	
Max Content Width	<code>--dpx-s-section-columns-max-width-mobile</code> <code>--dpx-s-header-content-max-width-mobile</code> <code>--dpx-s-footer-content-max-width-mobile</code>
Section Padding: Top & Bottom	<code>--dpx-s-section-content-spacing-block-start-mobile</code> <code>--dpx-s-section-content-spacing-block-end-mobile</code>
Section Padding: Left & Right	<code>--dpx-s-section-content-spacing-inline-start-mobile</code> <code>--dpx-s-section-content-spacing-inline-end-mobile</code>
Column Gutters	<code>--dpx-s-column-spacer-size-mobile</code>
Vertical Space Between Components	<code>--dpx-s-component-wrapper-spacer-size-mobile</code>

## Buttons

When you set the base font size for the text on your site (see the [Text](#) section), that setting affects the default font size of the text in the buttons on your site. For button colors, see the [Button Colors](#) section.

These Theme panel properties...	...map to these --dpx styling hooks
<b>Text Values for All Buttons</b>	
Font Family	<code>--dpx-s-button-font-family</code>

These Theme panel properties...	...map to these --dpx styling hooks
Font Style	<code>--dpx-s-button-font-style</code>
Font Weight	<code>--dpx-s-button-font-weight</code>
Text Case	<code>--dpx-s-button-text-transform</code>
Text Decoration	<code>--dpx-s-button-text-decoration</code>
Line Height	<code>--dpx-s-button-line-height</code>
Character Spacing	<code>--dpx-s-button-letter-spacing</code>
<b>Standard Button Values</b>	
Vertical Padding	<code>--dpx-s-button-padding-block-start</code> <code>--dpx-s-button-padding-block-end</code>
Horizontal Padding	<code>--dpx-s-button-padding-inline-start</code> <code>--dpx-s-button-padding-inline-end</code>
Font Size	<code>--dpx-s-button-font-size</code>
Border Radius	<code>--dpx-s-button-radius-border</code>
<b>Small Button Values</b>	
Vertical Padding	<code>--dpx-s-button-small-padding-block-start</code> <code>--dpx-s-button-small-padding-block-end</code>
Horizontal Padding	<code>--dpx-s-button-small-padding-inline-start</code> <code>--dpx-s-button-small-padding-inline-end</code>
Font Size	<code>--dpx-s-button-small-font-size</code>
Border Radius	<code>--dpx-s-button-small-radius-border</code>
<b>Large Button Values</b>	
Vertical Padding	<code>--dpx-s-button-large-padding-block-start</code> <code>--dpx-s-button-large-padding-block-end</code>
Horizontal Padding	<code>--dpx-s-button-large-padding-inline-start</code> <code>--dpx-s-button-large-padding-inline-end</code>
Font Size	<code>--dpx-s-button-large-font-size</code>
Border Radius	<code>--dpx-s-button-large-radius-border</code>

## Button Colors

As of Winter '25, color properties for buttons are on the **Theme > Buttons** panel.

Button State	These Theme panel properties...	...map to these --dpx styling hooks
<b>Primary Buttons</b>		
Default State	Background	<code>--dpx-s-button-color</code>
	Border	<code>--dpx-s-button-border-color</code>
	Text	<code>--dpx-s-button-color-contrast</code>
Hover State	Hover Background	<code>--dpx-s-button-color-hover</code>
	Hover Border	<code>--dpx-s-button-border-color-hover</code>
	Hover Text	<code>--dpx-s-button-color-hover-contrast</code>
Focus State	Focus Background	<code>--dpx-s-button-color-focus</code>
	Focus Border	<code>--dpx-s-button-border-color-focus</code>
	Focus Text	<code>--dpx-s-button-color-focus-contrast</code>
<b>Secondary Buttons</b>		
Default State	Background	<code>--dpx-s-secondary-button-color</code>
	Border	<code>--dpx-s-secondary-button-border-color</code>
	Text	<code>--dpx-s-secondary-button-text-color</code>
Hover State	Hover Background	<code>--dpx-s-secondary-button-color-hover</code>
	Hover Border	<code>--dpx-s-secondary-button-border-color-hover</code>
	Hover Text	<code>--dpx-s-secondary-button-text-color-hover</code>
Focus State	Focus Background	<code>--dpx-s-secondary-button-color-focus</code>
	Focus Border	<code>--dpx-s-secondary-button-border-color-focus</code>
	Focus Text	<code>--dpx-s-secondary-button-text-color-focus</code>
<b>Tertiary Buttons</b>		
Default State	Background	<code>--dpx-s-tertiary-button-color</code>
	Border	<code>--dpx-s-tertiary-button-border-color</code>
	Text	<code>--dpx-s-tertiary-button-text-color</code>
Hover State	Hover Background	<code>--dpx-s-tertiary-button-color-hover</code>
	Hover Border	<code>--dpx-s-tertiary-button-border-color-hover</code>
	Hover Text	<code>--dpx-s-tertiary-button-text-color-hover</code>
Focus State	Focus Background	<code>--dpx-s-tertiary-button-color-focus</code>

Button State	These Theme panel properties...	...map to these --dpx styling hooks
	Focus Border	--dpx-s-tertiary-button-border-color-focus
	Focus Text	--dpx-s-tertiary-button-text-color-focus

## Forms

Similar to the different levels of text styling available for headings and body text on your site, the design system provides text styles for different parts of a form. In the Field Labels, Input Text, and Caption Text section of this table, replace *level* with these values, as appropriate.

- `label` for Field Label
- `text` for Input Text
- `caption-text` for Caption

For example, the --dpx styling hook for the Field Label's font family is

```
--dpx-s-form-element-label-font-family
```

These Theme panel properties...	...map to these --dpx styling hooks
<b>Spacing</b>	
Field Padding: Top	--dpx-s-form-element-spacing-block-start
Field Padding: Right	--dpx-s-form-element-spacing-horizontal-end
Field Padding: Bottom	--dpx-s-form-element-spacing-block-end
Field Padding: Left	--dpx-s-form-element-spacing-horizontal-start
<b>Borders</b>	
Field Border Radius	--dpx-s-form-element-radius-border
Field Border Weight	--dpx-s-form-element-width-border
Checkbox Border Radius	--dpx-s-form-checkbox-radius-border
Checkbox Border Weight	--dpx-s-form-checkbox-width-border
<b>Field Labels, Input Text, and Caption Text</b>	
Font Family	--dpx-s-form-element- <b>level</b> -font-family
Font Size	--dpx-s-form-element- <b>level</b> -font-size
Font Style	--dpx-s-form-element- <b>level</b> -font-style
Font Weight	--dpx-s-form-element- <b>level</b> -font-weight
Text Case	--dpx-s-form-element- <b>level</b> -text-transform
Line Height	--dpx-s-form-element- <b>level</b> -line-height

These Theme panel properties...	...map to these --dxp styling hooks
Character Spacing	--dxp-s-form-element- <b>level</b> -letter-spacing

SEE ALSO:


[Text --dxp Styling Hooks](#)

[Color --dxp Styling Hooks](#)

[Site Spacing --dxp Styling Hooks](#)

## Use --dxp Styling Hooks in Custom Components

To build a custom Lightning web component for your site that uses the design system, use the appropriate --dxp styling hooks.

 **Tip:** We recommend using --dxp styling hooks to make general changes across the components in your site. But if the --dxp branding defaults don't provide exactly what you need, you can use --slds-c and --slds-g-color styling hooks to fine-tune the appearance of individual components where necessary.


This sample shows the code for a custom combobox component.

```
<template>
  <input type="text">
  <ul>
    <li>Option 1</li>
    <li>Option 2</li>
  </ul>
</template>
```

To ensure that the input looks similar to other base Lightning components that also respond to branding changes, the CSS must reference the --dxp styling hooks as follows.

```
input {
  border-color: var(--dxp-g-neutral);
}

input:focus {
  border-color: var(--dxp-g-brand);
}
```

 **Important:** Values of CSS custom properties are resolved at the time of evaluation. For example, let's say you have a CSS custom property that references another CSS custom property. If you update the value of the latter CSS custom property in a lower scope, the value of the former CSS custom property doesn't reflect the new value.

SEE ALSO:

[Text --dxp Styling Hooks](#)

[Color --dxp Styling Hooks](#)

[Site Spacing --dxp Styling Hooks](#)

[How --dxp Styling Hooks Map to Theme Panel Properties](#)

## Override Component Branding in LWR Sites with Custom CSS

Occasionally, styling hooks are insufficient to style a component exactly the way you want. In this situation, you can use CSS selectors to target and style preapproved “parts” within a component.



**Warning:** Use custom CSS sparingly and avoid targeting DOM elements without a part attribute. Doing so is brittle because changes to the component’s internal DOM structure is likely to break hard-coded CSS selectors. Additionally, Salesforce Customer Support can’t help resolve any issues with custom CSS.

### Target Component Instances

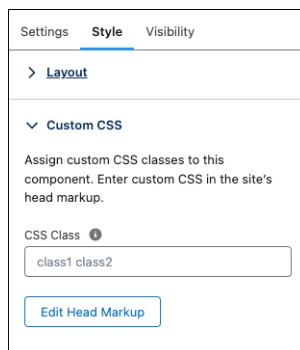
Every component has a `data-component-id` attribute with a unique value per component instance. Using this value, you can easily target the component instance and override styling hooks or add new CSS altogether.

To determine the exact attribute value of a component, inspect the DOM of your app—for example, with Chrome DevTools.

Let’s say a section on the page has the HTML markup `<community_layout-section data-component-id="section-adfb">`. This code sample uses the value to override the component’s default styling.

```
<style>
  [data-component-id="section-adfb"] {
    --dxp-g-warning: #ff9966;
    --dxp-g-warning-contrast: #fff;
    border: 2px dashed #000;
  }
</style>
```

You can also specify a custom CSS class on a component’s property panel to target that component.



### Target Parts Within a Component

Most components are made up of many DOM elements, which means that you can style a specific element or part within a component. Component parts are exposed by DXP with the following format:

```
<div part="dxp-[component]-[part]">Some element</div>
```

You can expose parts from your custom components using the same format. For example, a custom hero component could look like this:

```
<template>
  <div class="hero-background">
```

```

<h1>My hero text</h1>
<button part="some-partner-hero-primary-button">Main button</button>
<button part="some-partner-secondary-button">Secondary button</button>
</div>
</template>


```

And you can target either button with a CSS attribute selector, as follows:

```

<style>
  [part="some-partner-hero-primary-button"] {
    --dxp-g-brand: red;
    --dxp-g-brand-contrast: white;
    transition: background-color 2s ease-in;
  }
</style>

```

 **Note:** In the previous code sample, you would avoid targeting the `h1` or `hero-background` class because they don't have a defined part.

If you want to target a part within a specific component instance, you can combine the part selector with a `data-component-id` selector, as follows:


```

<style>
  [data-component-id="custom-hero-cd0b"] [part="some-partner-hero-primary-button"] {
    --dxp-g-brand: red;
    --dxp-g-brand-contrast: white;
    transition: background-color 2s ease-in;
  }
</style>

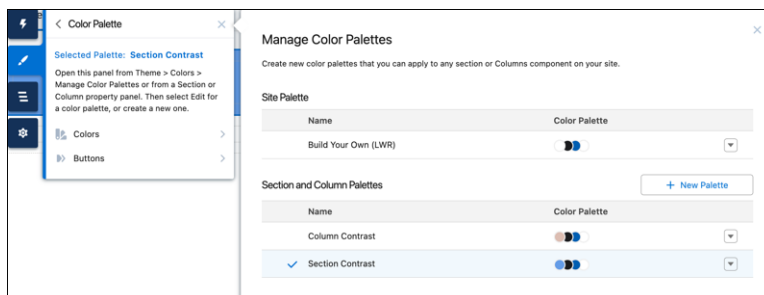
```

## Create a Color Palette for Page Sections and Columns

On many websites, it's common to have sections of a page, such as the header, footer, or columns and banners, that use different colors from the overall site. For example, perhaps you want to create a header with a dark background and a light foreground, whereas the rest of your site does the opposite. To achieve this, you can create separate color palettes and apply them to these page areas.

1. To create a color palette, in Experience Builder, open the Colors tab of the Theme panel and click  > **Manage Color Palettes**.
2. Click **New Palette** and give the palette a name.

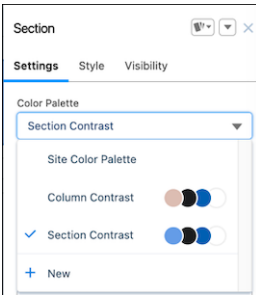
The new palette is created and selected in the Color Palette theme panel.



3. Update the palette's color properties as needed in the Colors section of the Color Palette theme panel.



- To use the palette, select a Section or Columns component on the page and then choose the palette from the Color Palette menu on the component property panel.



You can also create a color palette directly from a Section or Columns component. In the Color Palette menu in the component property panel, click **New**. After you name and save the palette, the palette is assigned to that component, and the Color Palette theme panel opens. Edit the palette's color properties in the theme panel as in step 3, and your changes are immediately applied to the component.

SEE ALSO:

[Color --dxp Styling Hooks](#)

## Create a Configurable Site Logo Component

Use the `--dpx-s-site-logo-path` and `--dpx-s-site-logo-url` global styling hooks to create an easily configurable site logo component that you can add to your site pages. When you update the Site Logo property in the Images tab of the Theme panel, the system automatically updates any component that references the hooks.

### Site Logo Styling Hooks

Let's take a closer look at the site logo `--dpx` styling hooks.

- `--dpx-s-site-logo-path` stores the path to the image, which can be consumed in JavaScript and HTML.
- `--dpx-s-site-logo-url` stores the site logo path surrounded by `url ( . )`, which can be consumed in CSS properties.

For example:

```
:root {
  --dpx-s-site-logo-path: "/cms/delivery/media/MCKW5KMZTF2BBFDLWWZG2MOVLLXA"
  --dpx-s-site-logo-url: url("/cms/delivery/media/MCKW5KMZTF2BBFDLWWZG2MOVLLXA")
}
```

This JavaScript code sample uses `--dpx-s-site-logo-path` to set the image `src`.

```
const root = document.querySelector('html');
const logoPath = getComputedStyle(root).getPropertyValue('--dpx-s-site-logo-path');
const imgEl = document.createElement('img');
imgEl.src = logoPath;
```

This CSS code sample uses `--dpx-s-site-logo-url` to set the site logo as a background image.

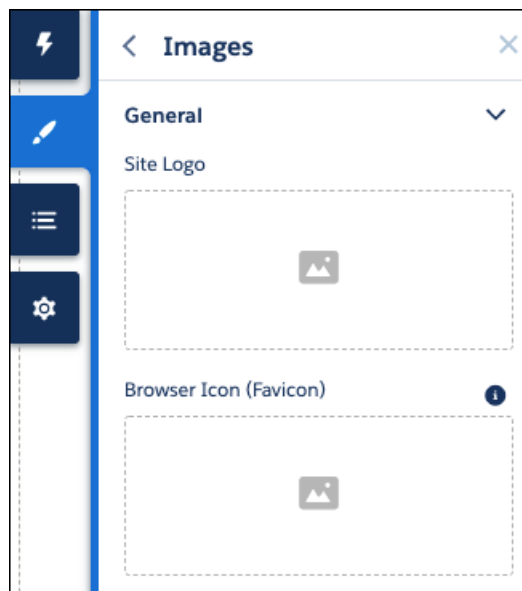
```
.logo-container {
  background-image: var(--dpx-s-site-logo-url);
}
```

```
background-position: center;
background-repeat: no-repeat;
background-size: contain;
max-width: 100%;
}
```

## The Site Logo Property in Experience Builder

The Site Logo property in Experience Builder uses Salesforce CMS images, so you must first add your LWR site as a channel in a CMS workspace in the Digital Experiences app.

Then to add an image in the Images tab of the Theme panel, you must also be a contributor in that CMS workspace. For more information, see [Salesforce CMS](#).



Finally, if the site logo is used on public pages, enable **Let guest users view asset files and CMS content available to the site** in the Administration workspace under Preferences.

## Add Custom Fonts

You can add custom fonts by uploading the font file as a static resource. Alternatively, you can reference a file that's hosted externally.

### Upload Fonts as a Static Resource

To upload your custom font as a static resource and reference it within the head markup:

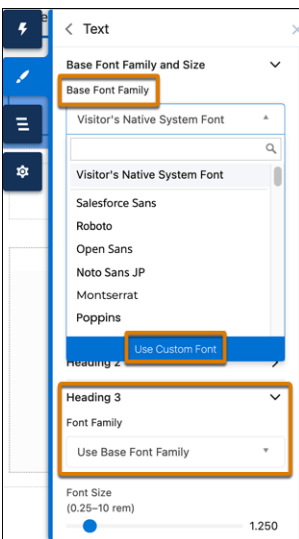
1. In Setup, in the Quick Find box, enter *Static Resources*, and then select **Static Resources**.
2. Click **New**, upload the file, and give the static resource a name. Keep a note of the resource name. If your site has public pages, select **Public** in the Cache Control setting. If you don't make the font resource publicly available, the page uses the browser's default font instead.

- To add a reference to the font in your site's head markup, return to Experience Builder, and click **Settings > Advanced > Edit Head Markup**.
- Insert the `@font-face` declaration. For example:

```
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-styling-hooks.min.css?{
versionKey}" />
<link rel="stylesheet" href="{ basePath }/assets/styles/dxp-slds-extensions.min.css?{
versionKey}" />

<style>
  @font-face {
    font-family: 'myFirstFont';
    /* Replace myFonts with your resource name */
    src: url('{ basePath }/sfsites/c/resource/myFonts') format('woff');
  }
</style>
```

- To reference a single font file, use the syntax `{ basePath }/sfsites/c/resource/static_resource_name`. For example, if you upload a font file called `myFirstFont.woff` and name the resource `MyFonts`, the URL is `{ basePath }/sfsites/c/resource/MyFonts`.
  - To reference a font file within a `.zip` file, include the folder structure, but omit the `.zip` file name. Use the syntax `{ basePath }/sfsites/c/resource/static_resource_name/font_folder/font_file`. For example, if you upload a file called `fonts.zip`, which contains `bold/myFirstFont.woff`, and you name the resource `MyFonts`, the URL is `{ basePath }/sfsites/c/resource/MyFonts/bold/myFirstFont.woff`.
- In the Text section of the Theme panel, click the Base Font Family dropdown list or the Font Family dropdown list for a specific text property, and select **Use Custom Font**.




- Add the font family name that you entered in the Head Markup editor—for example, `myFirstFont`—and save your changes.

**Add custom font to site**

To use a custom font throughout your site, upload the custom font and define it in the Head Markup. Then, add the font family name here. [Learn More](#)

myFirstFont

Cancel
Save

 **Tip:** Make sure that the font file format, for example, woff, matches your markup. Also make sure that your fallback values, such as Helvetica, sans-serif, and so on, are properly defined for your brand. To learn more, see [@font-face](#).

## Use Externally Hosted Fonts

You can use fonts that are hosted outside Salesforce, such as [Google Fonts](#). However, to access externally hosted files, you must also update the Content Security Policy (CSP) for your org by adding the hosts to your list of Trusted URLs. Otherwise, an error appears indicating that the resources can't be accessed.

For example, for Google Fonts, add:


- <https://fonts.googleapis.com> to access the Google Fonts style sheet
- <https://fonts.gstatic.com> to access fonts from Google Font

For details on how to add a Trusted URL with the required CSP directives, see [Manage Trusted URLs](#).

## Remove SLDS

---

If necessary, you can remove Salesforce Lightning Design System (SLDS) from your site.

 **Important:** Don't remove SLDS if you plan to use flexible layouts or any of the base Lightning components, as they rely heavily on the design system.

In Experience Builder, click **Settings > Advanced > Edit Head Markup**, and delete the following line.

```

<link
  rel="stylesheet"
  href="{ basePath }/assets/styles/salesforce-lightning-design-system.min.css?{ versionKey
}"
/>
```

To use SLDS again later, add the code back to your head markup.

## CHAPTER 5 Create a Multilingual LWR Site

### In this chapter ...

- Add a Language to Your LWR Site
- Delete a Language from Your LWR Site
- Set the Default Language on Your LWR Site
- Automatic Language Detection for Multilingual LWR Sites
- Export Content from Your LWR Site for Translation
- Import Translated Content to Your LWR Site

Deliver content to your site visitors in the languages that they prefer, and reach new audiences in new languages. You can translate your LWR site into languages that Salesforce supports and offer your site in up to 40 languages.

On standard components that come with an LWR template, you can translate text values in component properties such as text, URLs, and alt text fields. You can also translate text contained in components such as Rich Content Editor, HTML Editor, and Text Block. And you can translate SEO page properties, including title, description, and head tags.

For custom Lightning web components that you include in your site, you can make a String property translatable by defining it as `translatable="true"` in the component's `js-meta.xml` file. For example:

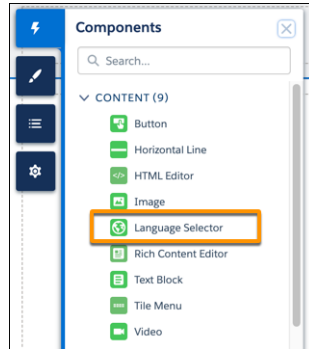
```
<?xml version="1.0" encoding="UTF-8" ?>
<LightningComponentBundle
xmlns="http://soap.sforce.com/2006/04/metadata">
  <isExposed>true</isExposed>
  <targets>
    <target>lightningCommunity__Page</target>
    <target>lightningCommunity__Default</target>
  </targets>
  <targetConfigs>
    <targetConfig targets="lightningCommunity__Default">
      <property type="String" name="recordId"
default="{!Route.recordId}"/>
      <property type="String" name="pageTitle"
translatable="true"/>
      <property type="String" name="description"
translatable="true"/>
      <property type="String" name="customHeadTags"
translatable="true"/>
    </targetConfig>
  </targetConfigs>
</LightningComponentBundle>
```

You can translate the content in these text fields directly in the component property editors in Experience Builder. Or, you can export your site content for translation, and the properties that you marked as translatable are included in the export file.




**Note:** If you add a `datasource` attribute to a property—for example, to create a picklist—you can't define that property as `translatable="true"`.

Add the standard Language Selector component to your site so your visitors can select which language to view on your site.



When your site visitors select a language, the URL for your site updates to indicate which language they're viewing. For example, if your site URL is `https://www.UniversalTelco.my.site.com` and you add a French translation to your site, the URL for the translated version is `https://www.UniversalTelco.my.site.com/fr`.

 **Note:** If you prefer to use different logic to identify languages in your site URL, or you want a different language-selector design, create your own Lightning web component.

## Limitations to Multilingual LWR Sites

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There are some limitations to keep in mind.

- Some base Lightning components don't support localization and aren't compatible with multilingual sites.
- You can't use the Google Cloud Translation API with LWR sites.
- LWR sites offer limited support for right-to-left languages in standard components. For the best customer experience in these languages, use custom Lightning web components.
- In enhanced LWR sites, the available languages are limited to the languages that are enabled in your Salesforce org. If a language that's on your Site Languages list is later disabled in Salesforce, the site translation in that language is still visible to your users. You can still update that site translation, but you can't select a disabled language as your default site language.
- In rare cases, the URL for a translation of your site inadvertently conflicts with other site URLs. For example, the URL for a translation can end up identical to the URL for a particular page on your original site. Or, it can end up identical to the URL for the home page on another one of your sites. In the first case, the URL that leads to the translated site takes precedence over the URL that leads to the page on your original site. In the second case, the URL that leads to your other site takes precedence over the URLs that lead to your translation or to a specific page.

To see how your site visitors can experience this URL conflict, let's look at some sample URLs.

Say you have a site at `https://UniversalTelco.my.site.com`, and you have a page on the site for your franchisees at `https://UniversalTelco.my.site.com/fr`. The main URL for your site ends with `.com`, and the URL that leads to the franchisees page ends with `/fr`.

Then you translate your site into French. When you publish the French translation, the main URL for your site is followed by the part of the URL that identifies the language, `/fr`. So the URL for the French translation of your site is also `https://www.UniversalTelco.my.site.com/fr`.

## Create a Multilingual LWR Site

When users enter this URL in a browser, they land on the home page of your French translation, not on the franchisees page.

Now let's say you set up a new site at `https://UniversalTelco.my.site.com/fr` for a sale that you're running in the city of Framingham. Again, the main URL for your site ends with `.com`, and the URL for your sale site ends with `/fr`. In this case, when users enter `https://UniversalTelco.my.site.com/fr` into a browser, they land on the page for your sale site, not on your French translation or the franchisees page.

To avoid these URL conflicts, change the URL for the franchisees page to end with something different, such as `/franchisees`. And change the URL for the sale page to end with something different, such as `/framingham`.

### SEE ALSO:

[Create Components for LWR Sites](#)

[Component Properties](#)

[Salesforce Help: Supported Languages](#)

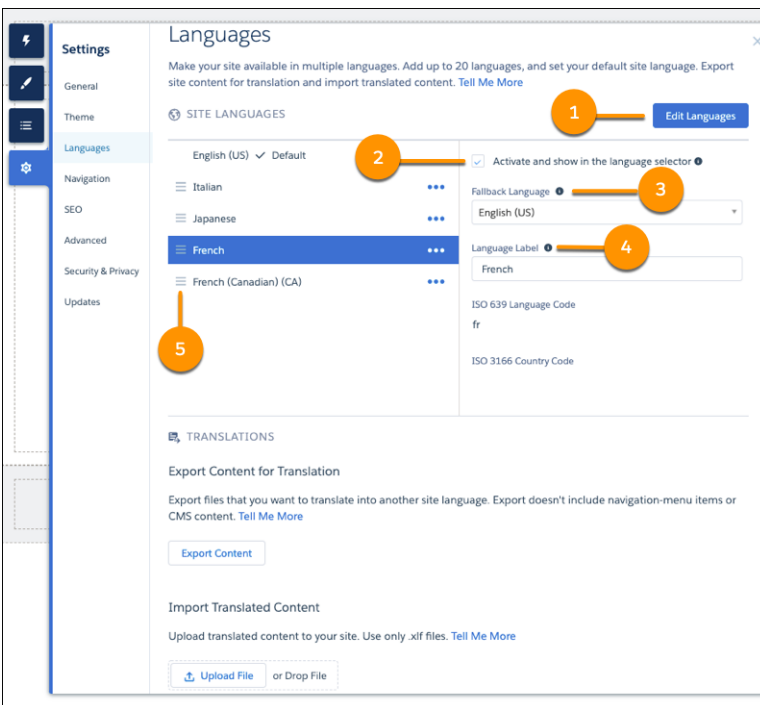
[Salesforce Help: Right-to-Left \(RTL\) Language Support](#)

[Salesforce Help: Considerations for Page Actions in Experience Builder](#)


## Add a Language to Your LWR Site

To offer your site in multiple languages, first add each language to the site from the Settings panel in Experience Builder. You can offer your site in up to 40 languages, including your default site language. Each language that you add appears in the language selector in Experience Builder for easy navigation between different translations of your site. To make the translations available to your site visitors, add the Language Selector component to your site.


1. In the Settings panel in Experience Builder, select **Languages**.



2. In the Languages panel, click **Edit Languages** (1).
3. In the Edit site languages window, select the language from the Available Languages list, move it to the Site Languages list, and save your changes. You can add more than one language at a time. On enhanced LWR sites, the available languages are limited to the languages that are enabled in your Salesforce org.

 **Note:** Standard components in LWR sites offer limited support for right-to-left languages. For the best customer experience in these languages, use custom Lightning web components.

4. To make the language available to your site visitors, select **Activate and show in the language selector** (2) in the Languages panel.

 **Tip:** Deselect this option until you're ready to publish content in that language.

5. Optionally, set the fallback language for each language that you add (3).

On your published multilingual site, if any text isn't translated into a visitor's selected site language, the text appears in the fallback language. For example, if you add translations for French and French (Canadian) to your site, you can designate French as the fallback language for French (Canadian). If you don't designate a fallback language, the fallback is your default site language.



Multilingual sites support only one level of fallback language. For example, if French (Canadian) falls back to French, then your site's default language is the only fallback language allowed for French.

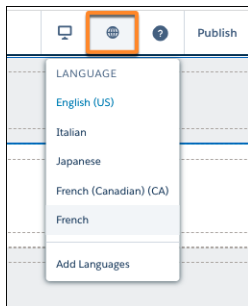
Experience Builder prevents you from creating fallback language loops. For example, if French is the fallback language for French (Canadian), then French (Canadian) isn't available to select as the fallback language for French. Similarly, if the fallback language for French (Morocco) is French (Canadian), then French (Morocco) also is unavailable to select as the fallback language for French.

On enhanced LWR sites, any language that has a designated fallback language can't itself be a fallback language. For example, if you designate French as the fallback language for French (Canadian), then French (Canadian) can't be the fallback for any other language.

6. Optionally, to determine how the language is listed in the language selector on your site, customize the label for the site language (4).

To rearrange the Site Languages list in the order that you want, use the grabber icon for a language (5). These changes also affect the order of languages in the language selectors in Experience Builder and on your site.

In Experience Builder, to view your site in another site language, use the language selector.



SEE ALSO:

- [Export Content from Your LWR Site for Translation](#)
- [Set the Default Language on Your LWR Site](#)

## Delete a Language from Your LWR Site

---

You can delete a language that you added to your LWR site.

1. In the Settings panel in Experience Builder, select **Languages**.
2. In the Site Languages list, select **Delete site language** from the actions menu for the language that you want to delete. You can also delete a site language in the Edit site languages window.
3. Move the language from the Site Languages list to the Available Languages list, and save your change.

When you delete a site language, you also delete its translated content and listing in the language selectors in Experience Builder and on your site. To preserve the translated content, export the content before you delete the language.

When you delete a site language that's designated as the fallback language for another translation on your site, the fallback for that translation switches to your default site language. You can change the fallback to a different site language.

SEE ALSO:


- [Add a Language to Your LWR Site](#)
- [Export Content from Your LWR Site for Translation](#)

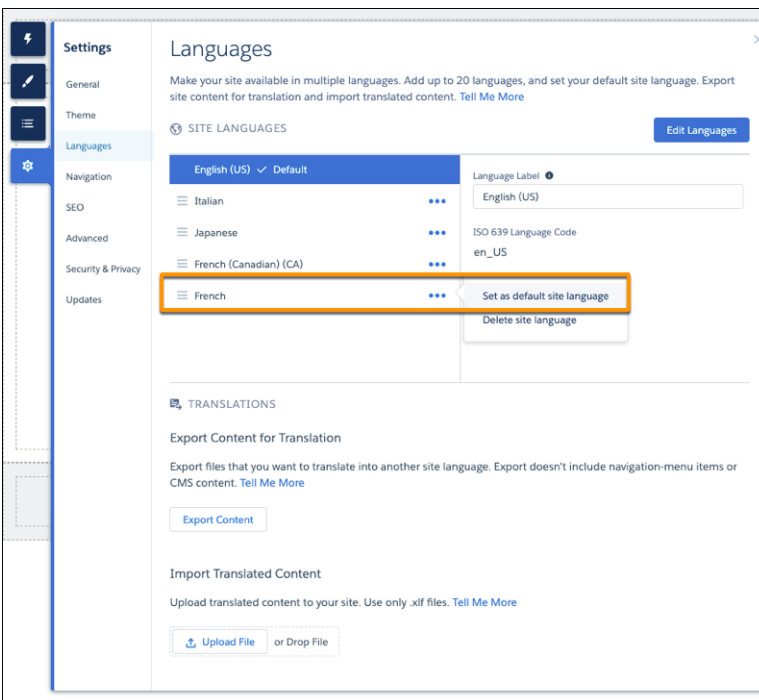
## Set the Default Language on Your LWR Site

When you create an LWR site, the default site language is English (US). If you want to change it to a different default language, update the default language as soon as possible after you create the site to avoid losing content.


When you change the default site language, you remove all content in your original default language. If there's translated content on your site in the new default language, you remove that, too. So it's best to minimize the amount of content that you add to your site in either language until after you update the default language.

1. In the Settings panel in Experience Builder, select **Languages**.
2. If you haven't added your intended new default language to the site, add it now.
3. From the actions menu for your intended new default site language, select **Set as default site language**. On enhanced LWR sites, if a site language is disabled in your Salesforce org, you can't select that language as your default site language.

 **Note:** If you plan to add Salesforce CMS content to your site, it's important that the site and the CMS workspace have the same default language so that the content appears properly. If the default languages are different, translate the content in your CMS workspace into your default site language, then add the translated content to your site.



4. In the confirmation window, click **Change**.

 **Note:** If you did add content to your site in either language, and you want to preserve that content, export the translation before you change the default site language. The resulting .xlf file contains the content in both languages. The text in your original default language appears within the <source> tags in the file. The text in your intended new default language appears within the <target> tags in the file.

```

</segment>
<segment id="buttonLabel">
  <source>Subscribe to our newsletter!</source>
  <target>Inscrivez-vous à notre newsletter!</target>
</segment>
<segment id="description">
  <source>We'll send you the latest news.</source>
  <target>On vous apporte les dernières nouvelles.</target>
</segment>
<segment id="description">
  <source>No need to search. Get all our news every week in your mailbox.</source>
  <target>Plus besoin de chercher. Recevez toute notre actu chaque semaine dans votre boîte mail.</target>
</segment>
<segment id="buttonLabel">

```

You can't import this file back to your site, but you can paste the text back into each relevant field in the component property editor panels in Experience Builder.

#### SEE ALSO:

[Add a Language to Your LWR Site](#)

[Export Content from Your LWR Site for Translation](#)

[Salesforce Help: Translating Salesforce CMS Content](#)

## Automatic Language Detection for Multilingual LWR Sites

When your customers access an LWR site, they see the site in the localized language that's set in their browser settings. Automatic language detection works when you republish your LWR site and the site has a localized version.


Let's say your LWR site has English as the default language, but it also has a French version. When guest users access the site, they see the site in their browser's default language. When authenticated users access the site, they see the language that's set in their user profile.

Keep these considerations in mind when using automatic language detection.

- Automatic language detection is on by default in your org. To disable it, contact Salesforce Customer Support.
- If the site doesn't support the user profile language or the browser's default language, users see the default site language instead.
- If guest or authenticated users change their language preference via the Language Selector component, the new preference is used the next time they access the site.
- Automatic language detection only happens when a user accesses the site without the locale path prefix. For example, a user accessing `www.salesforce.com/siteprefix/` is automatically redirected, but `www.salesforce.com/siteprefix/fr/` goes to the French language site.
- When a user logs in to the site, the cookie locale is set immediately. Changing the user locale doesn't change their language preference, even if the user never used the Language Selector to change the language.
- Automatic language detection relies on a functional cookie. If functional cookies are disabled, your site can't detect or save the language preference of your user.
- Language preferences are prioritized as follows:
  1. Locale path prefix
  2. Cookie locale
  3. User Profile's set locale
  4. Browser locale

## Export Content from Your LWR Site for Translation

After you add a language to your site, you can export the site content to send it to your localization team or vendor for translation.

 **Note:** If you exported your site content before Summer '22, export it again to ensure that you and your translator are working with the most recent version of the .xlf format. You can't upload older versions of the .xlf format to your site.

LWR site content exports in an .xlf file, the standard format that's compatible with third-party translation software. Content in your site's original default language is contained within the <source> tags. Translated content goes within the <target> tags. This excerpt from an .xlf file shows content in English (US), the default site language, along with its French translation.

```
<segment id="title">
  <source>Subscribe to our newsletter!</source>
  <target>Inscrivez-vous à notre newsletter!</target>
</segment>
<segment id="headline">
  <source>We'll send you our latest news.</source>
  <target>On vous apporte nos dernières nouvelles.</target>
</segment>
<segment id="description">
  <source>No need to search. Get all our news every week in your mailbox.</source>
  <target>Plus besoin de chercher. Recevez toute notre actu chaque semaine dans votre boîte mail.</target>
</segment>
```

1. In the Settings panel in Experience Builder, select **Languages**.


2. In the Languages panel, click **Export Content**.

The exported file doesn't include CMS content or the items in your site's navigation menu. Translate the CMS content in your CMS Workspace in the Digital Experiences app. Use Translation Workbench to translate the items in the site's navigation menu.

3. In the Export site content window, select the language that you want to export. Optionally, enter a name for the .zip file, such as the name of the language that you're exporting.

You can export more than one language at a time. All languages export in one .zip file, but within the .zip file each language is in its own .xlf file.

4. Click **Export**.

 **Note:** After you export your site content for translation, avoid updating the text in your default language because the translation is based on the earlier (pre-updated) version of the content.

The .xlf file includes the translatable component property values—the properties that are defined as `translatable="true"` in the component's `js-meta.xml` file. However, the file excludes empty String values, even if they're marked as translatable, because those properties contain no text to translate.

If you use the HTML Editor component or add SEO head tags to your site, the .xlf file also includes their text, which is in HTML. The exported file includes the HTML tags because these tags sometimes include attributes that need translation, such as placeholder text. For example, an email field where site visitors can enter their email address can look like this in the .xlf file:

```
&lt;input type="email" value="" placeholder="Enter your email address"
name="contact[email]" id="Email-footer" class="newsletter-form-group__input"&gt;
```

Translators must be familiar enough with HTML tags to know what to translate and what to leave alone. In this case, the only part to translate is `Enter your email address`.

SEE ALSO:

[Add a Language to Your LWR Site](#)

[Import Translated Content to Your LWR Site](#)


[Salesforce Help: Work with Translated Content in the Salesforce CMS](#)

[Salesforce Help: Translation Workbench](#)

## Import Translated Content to Your LWR Site

After you add a language to your site, you can enter translations for that language directly into the component property editor panels in Experience Builder. Alternatively, to upload an entire site translation at once, export the site content for translation, then import the translated content in an .xlf file.

In Experience Builder, you can import translated content to your LWR site only in an .xlf file. Each file can contain only one translation, and you can import only one .xlf file at a time. File uploads of greater than 1 MB can take a few minutes. In that case, we send you an email when the import is complete.

 **Note:** If you exported your site content before Summer '22, export it again to ensure that you and your translator are working with the most recent version of the .xlf format. You can't upload older versions of the .xlf format to your site.


Importing a site translation overwrites your existing content in that language, but it doesn't overwrite your default language content or content in other languages.

Avoid updating your site, including adding or removing components, while the site is being translated because the translation is based on the earlier (pre-updated) version of the site.

1. In the Settings panel in Experience Builder, select **Languages**.
2. In the Languages panel, click **Upload File** and navigate to the translation file, or drag the file to the **Drop File** field.
3. To view the translated content in Experience Builder, select that language from the language selector.



The file that you exported for translation didn't include any CMS content that's on your site or any items in your site's navigation menu. Translate the CMS content in your CMS Workspace in the Digital Experiences app. Use Translation Workbench to translate the items in the site's navigation menu.

 **Note:** You can also import a translation programmatically using ExperienceBundle. See [ExperienceBundle](#) in the Metadata API Developer Guide.

SEE ALSO:

[Add a Language to Your LWR Site](#)

[Export Content from Your LWR Site for Translation](#)

*[Salesforce Help: Work with Translated Content in the Salesforce CMS](#)*

*[Salesforce Help: Translation Workbench](#)*

## CHAPTER 6 Add More Customizations

### In this chapter ...


- Create Custom Record Components
- Use Apex and SOQL for Search
- Use Expressions to Add Dynamic Data to LWR Sites
- Create a Logout Link Component
- Integrate Third-Party Libraries Using the Privileged Script Tag

This section describes several advanced customizations, such as creating custom record components and using Apex and SOQL for search.

## Create Custom Record Components

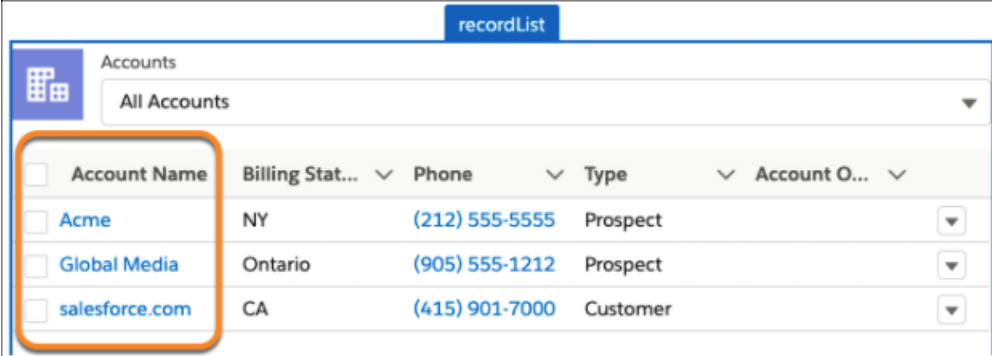
The Build Your Own (LWR) template doesn't include record components, but you can use the User Interface API to construct your own custom components.

Although many Aura template components aren't available as Lightning web components, you can extend existing Lightning web components, as detailed in the [Lightning Web Components Reference](#). However, User Interface APIs aren't yet available for related record lists, so you can't fully construct these types of components.

 **Tip:** See examples of custom record home and record detail components in `customRecord/force-app/main/default/lwc` in the [code samples files](#).

### Create a Custom Cell for Record Lists

Let's say you want to add a custom column to the data table in your record list component—in this case, the Account Name column.



<input type="checkbox"/>	Account Name	Billing Stat... ▾	Phone ▾	Type ▾	Account O... ▾
<input type="checkbox"/>	<a href="#">Acme</a>	NY	(212) 555-5555	Prospect	▾
<input type="checkbox"/>	<a href="#">Global Media</a>	Ontario	(905) 555-1212	Prospect	▾
<input type="checkbox"/>	<a href="#">salesforce.com</a>	CA	(415) 901-7000	Customer	▾

To add a custom cell to your record list, you can extend `LightningDatatable` to define a custom data type. In this example, the name of the record is displayed in the table with a hyperlink to its record page.

```
import { LightningDatatable } from 'lightning/datatable';

export default class RecordTable extends LightningDatatable {
  // define a new custom type... the custom cell will have a markup
  // represented by the template attribute
  static customTypes = {
    'name': {
      template: './name.html'
    }
  };
}
```


We then define the markup for the custom type inside our template. To display a hyperlink to a record page, we create a separate record link component and provide the values supplied by the record table component.

```
// inside name.html
<template>
  <c-record-link
    object-api-name={value.objectApiName}
    record-id={value.id}
    label={value.name}>
```



```
</c-record-link>
</template>
```

## Navigate to a Record Page or Custom Action

 **Note:** User Interface APIs aren't yet available for actions. For basic record creation and editing, consider using a separate page and a `lightning-record-form` or a custom Apex controller.

Record components can extend `NavigationMixin` from `lightning/navigation`, which allows your web component to generate a URL for navigating record and object pages.

```
import { LightningElement } from 'lwc';
import { NavigationMixin } from 'lightning/navigation';


export default class RecordList extends NavigationMixin(LightningElement) {
  ...
}
```

Using `NavigationMixin.Navigate`, you provide the desired page type and route parameters. This function generates a new URL and navigates to it, which is useful for performing actions on another page. Record `actionNames` other than `view` require a custom page.

Here's an example for navigating to a custom page to edit a record.


```
handleEdit() {
  // assumes you have created a custom page with API Name "record"
  this[NavigationMixin.Navigate]({
    type: 'comm__namedPage',
    attributes: {
      name: 'record__c'
    },
    state: {
      objectApiName: this.objectApiName,
      recordId,
      actionName: 'edit'
    }
  });
}
```

The result generates a URL that can be used for a new record page.

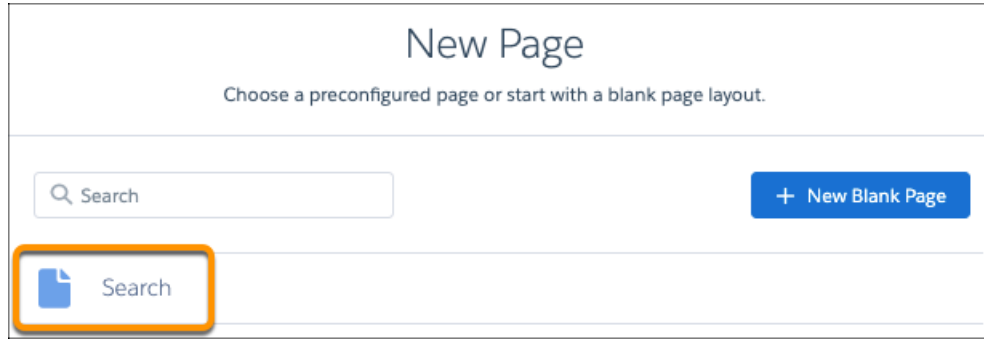
 **Important:** Custom solutions for object pages using preconfigured route parameters have only limited support. Use at your own risk. Use Salesforce-provided page templates when possible.

## Use Apex and SOQL for Search

Create a theme layout search component that sends the user to a search results page.

 **Tip:** See examples for custom search in `codeSamples/customSearch/force-app/main/default/` in the [code sample files](#).

1. Create a standard page for Search in the site, which functions as the search results landing page.




2. Drag the **Simple Theme Header** component onto the theme header region. The Simple Theme Header component serves as the header for the page and contains some utilities, such as the Search Bar component.

When a user types a term and clicks Enter, the Search Bar component uses the `lightning-navigation` API to navigate to the Search page in the site. See [lightning-navigation](#) in the Lightning Web Components Reference.

3. Drag the **Search Results** component into the content region of the Search page. The Search Results component grabs the search URL parameter by using the `{!Route.term}` expression language reference.

The Search Results component then sends the search term and object API name as parameters in an Apex method request for the search results data, which it uses to populate the UI.

4. The `GlobalSearchController.cls` is the Apex controller that takes the search term and performs a SOQL search for records with a Name containing the search string.

 **Tip:** Make sure that you configure the Apex class with permissions for any user you want to be able to use the search results. See [How Does Apex Class Security Work](#) in Salesforce Help.

## Use Expressions to Add Dynamic Data to LWR Sites

With expressions, you can make calculations and access property values and other data from Salesforce or content from Salesforce CMS to pass into a component's attributes. Use expressions for dynamic output or for passing values into components by assigning them to attributes.

An expression is any set of literal values, variables, subexpressions, or operators that can be resolved to a single value. Method calls aren't allowed in expressions.

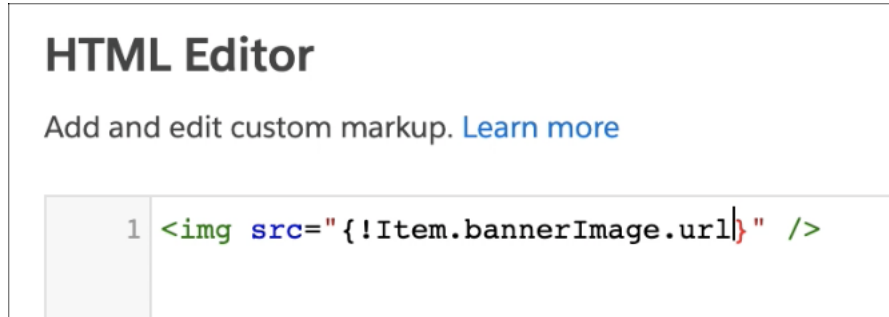
The expression syntax is: `{!expression}` where `expression` is a placeholder.

### Data Binding Expressions

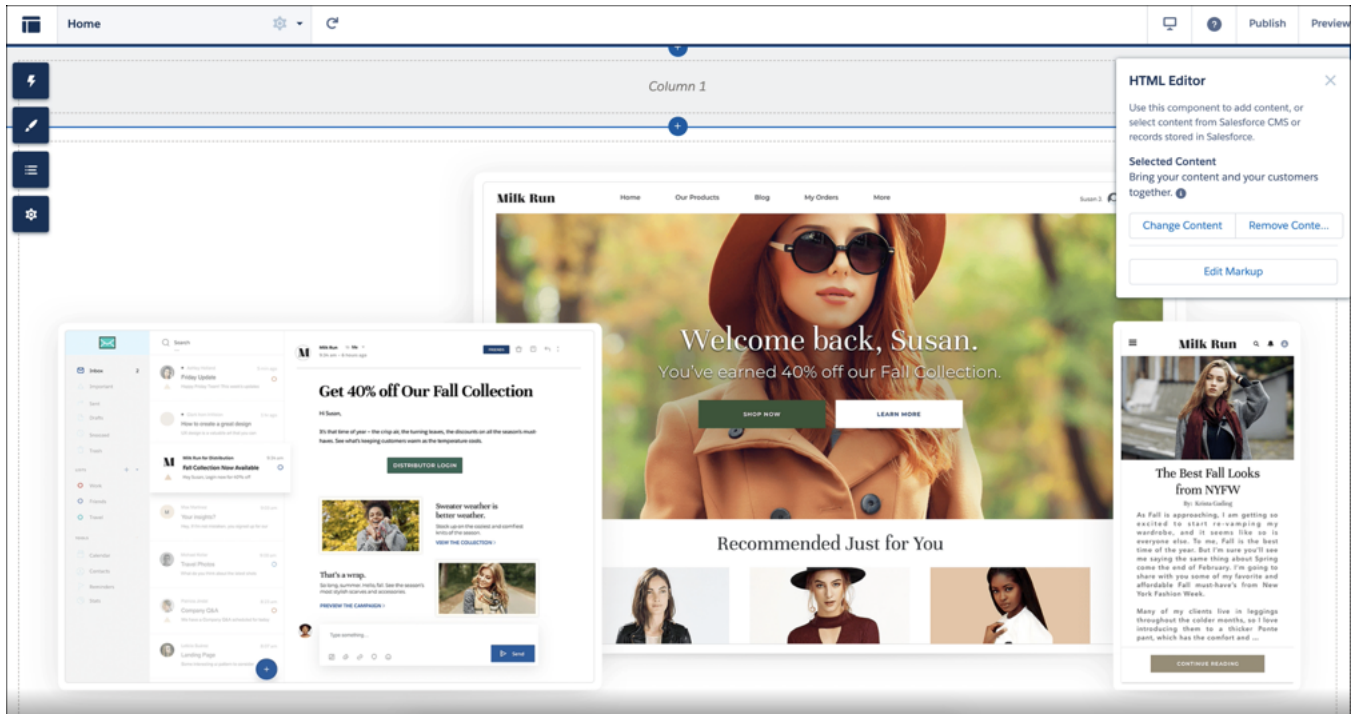
Use these expressions to bind data from Salesforce or content from Salesforce CMS to your LWR site and dynamically populate content. The expressions work in the following instances.

- In any field in a data-bound component, such as Banner, Card, Grid, or Tile
- In an HTML Editor component that's nested within a data-bound component or placed on a CMS content page or a record detail page
- In a Rich Content Editor component that's nested within a data-bound component or placed on a CMS content page or a record detail page (excludes the expression `{!cmsMedia.contentKey}`)

Here's an example of an HTML Editor component where we want to show an image in the banner.



When the page loads on the live site, the relevant value replaces the expression.



Expression	Description	Supported Pages and Components
<code>{!Item.field}</code>	Gets the data for the field on the current bound data.	Component properties that can be bound to data from Salesforce or to content from Salesforce CMS
<code>{!Item.field._rawValue}</code>	Gets the raw value for the data field.	Component properties that can be bound to data from Salesforce
<code>{!Item.field._displayValue}</code>	Gets the formatted and localized value for the data field.	Component properties that can be bound to data from Salesforce
<code>{!Item._detailURL}</code>	Gets the URL of a Salesforce CMS data item.	Component properties that can be bound to content from Salesforce CMS, including a CMS content page

Expression	Description	Supported Pages and Components
<code>{!Label.namespace.name}</code>	Defines the label's localized value when you specify labels in Experience Builder.	First, create a translated custom label in Salesforce Setup. For more information, see <a href="#">Translate Custom Labels</a> . Then, use the label expression in any Experience Builder component that has a text field to see the localized label.
<code>{!cmsMedia.contentKey}</code>	Gets the URL of a Salesforce CMS image.	The HTML Editor component on any page in an enhanced LWR site. Unsupported in non-enhanced LWR sites.

## Other Expressions

Use other expressions to query parameters, resolve the correct `basePath` for a site, or to leverage user fields in expressions.

Expression	Description	Supported Pages and Components
<code>{!Route.param}</code>	Gets a query parameter from the URL.	<ul style="list-style-type: none"> <li>All pages</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>
<code>{!param}</code>	Gets a parameter value from a URL where <code>:</code> precedes the parameter. For example, gets <code>{!term}</code> from the <code>/global-search/:term</code> URL.	<ul style="list-style-type: none"> <li>All pages with a dynamic parameter in their URL</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>
<code>{!Site.basePath}</code>	Resolves to the <code>basePath</code> of the LWR site.	<ul style="list-style-type: none"> <li>All pages</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>
<code>{!User.userId}</code>	Resolves to the Salesforce ID of the user.	<ul style="list-style-type: none"> <li>All pages</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>

Expression	Description	Supported Pages and Components
<code>{!User.isGuest}</code>	Returns TRUE or FALSE based on whether the user is a guest user.	<ul style="list-style-type: none"> <li>All pages</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>
<code>{!User.Record.&lt;User sObject Field&gt;}</code>	Resolves to the value of a Salesforce User Object's field.	<ul style="list-style-type: none"> <li>All pages</li> <li>Out-of-the-box and custom components with string properties</li> <li>HTML Editor</li> <li>Rich Content Editor</li> </ul>


- When you use the `{!param}` or `{!Route.param}` expression in the HTML Editor or Rich Content Editor components, some HTML special characters are escaped, or replaced with different values, for security purposes. These characters include `<`, `>`, and `&`.
- LWR sites don't support expressions that display authenticated user information and start with `{!CurrentUser}`.
- Expressions with user data are resolved for Rich Content Editor only on Preview and Published sites.
- When binding User data, you can access all the User sObject fields by using the `{!User.Record.<User sObject Field>}` expression. You can also use the `{!User.Commerce.<Commerce Field>}` expression to access user data related to Commerce in sites built using the Commerce templates. For more information, see [Expressions in Commerce Components](#).

## SEE ALSO:

[Experience Cloud Developer Guide: Use Expressions in Aura Sites](#)

## Create a Logout Link Component

To log out your users, you can create a custom logout link component.

 **Tip:** See examples for a logout link and profile menu in `codeSamples/salesforceScopedModules/force-app/main/default/` in the [code sample files](#).

To log out your users, redirect them to the `[/sitePrefix]vforcesite/secur/logout.jsp` path where `[/sitePrefix]` is your site's base path (without the `/s`). If your site doesn't use a prefix, use an empty string.

Here's an example of a component that only displays the logout link when a user is authenticated.

```
<template>
  <template if:false={isGuest}>
    <a href={logoutLink}>Logout</a>
  </template>
</template>
```

```
import { LightningElement, api } from "lwc";
import isGuest from "@salesforce/user/isGuest";
import basePath from "@salesforce/community/basePath";
```

```
export default class Logout extends LightningElement {

  get isGuest() {
    return isGuest;
  }

  get logoutLink() {
    const sitePrefix = basePath.replace("/", "");
    return `${sitePrefix}vforcesite/secur/logout.jsp`;
  }
}
```

Alternatively, you can make calls to the provided system Apex classes to get the login and logout links.

```
import getLogoutUrl from
 '@salesforce/apex/applauncher.IdentityHeaderController.getLogoutUrl';
import getLoginUrl from '@salesforce/apex/system.Network.getLoginUrl';
```

By default, users are redirected to the login page after logging out. You can configure the logout page URL in Experience Workspaces under **Administration > Login & Registration > Logout Page URL**.

## Integrate Third-Party Libraries Using the Privileged Script Tag

Some components within an LWR site encapsulate their elements in shadow DOM, which prevents global interaction with those components. As a result, third-party JavaScript libraries such as Google Analytics and Google Tag Manager can have trouble querying the DOM globally on an LWR site. When programmatic access to an element within the DOM is needed, you can write scripts within an `<x-oasis-script>` privileged script tag. Loading third-party libraries using this privileged script tag lets those libraries bypass any shadow DOM boundaries.

Use the custom `<x-oasis-script>` tag in place of the standard `<script>` in the head markup or inline. Scripts loaded within this custom tag run inside a special iframe that's exempt from shadow DOM and are always executed asynchronously.

`<x-oasis-script>` uses the same syntax as the `<script>` tag.

```
<x-oasis-script src="third_party_library.js"></x-oasis-script>
```

You can also use the tag to add event listeners and to import and export global variables with the `imported-global-names` and `exported-global-names` attributes. If you have custom code within the `<x-oasis-script>` tag, add the attribute `hidden="true"` to the tag. This attribute ensures that the custom code within the tag remains hidden from site visitors while the page is loading.

For example, this code sample defines a global variable—`testVar`—on the outer window, which is then imported for use in the `x-oasis-script` window. The global variable must be imported to define it in the privileged scope.

```
<script>
  window.testVar = "myTestVar";
</script>

<x-oasis-script hidden="true" imported-global-names="testVar">
  // Custom code to access testVar
  console.log(window.testVar)
</x-oasis-script>
```

In turn, this example exports the `testVar` global variable from `x-oasis-script`.

```
<x-oasis-script hidden="true" exported-global-names="testVar">
  window.testVar = "myTestVar";
</x-oasis-script>

<script>
  // setTimeout is needed in case this script tag is run before oasis script
  setTimeout(function() {
    // Custom code to access testVar
    console.log(window.testVar)
  }, 5000);
</script>
```



**Tip:** If you include a third-party library inline or in the head markup, remember to switch to Relaxed CSP and to allowlist the remote host.

#### [Examples: Use Google Analytics in LWR Sites](#)

Discover how visitors engage with your LWR site by using Google Analytics to track their interactions. These real-world examples use the `<x-oasis-script>` privileged script tag. This tag allows Google Analytics to interact with elements within the shadow DOM and attach event handlers such as click events or form submissions.

#### [Examples: Use Google Tag Manager in LWR Sites](#)

Use Google Tag Manager to track customer interactions with your LWR site, which is a single-page application. In these examples, the `<x-oasis-script>` privileged script tag lets Google Tag Manager interact with elements within the shadow DOM.

#### SEE ALSO:

[Video: Use Privileged Scripts for Third-Party Libraries in LWR Sites](#)

[Salesforce Help: Add Markup to the Page <head> to Customize Your Site](#)

[Salesforce Help: Select a Security Level in Experience Builder Sites](#)

[Salesforce Help: Where to Allowlist Third-Party Hosts](#)

## Examples: Use Google Analytics in LWR Sites

Discover how visitors engage with your LWR site by using Google Analytics to track their interactions. These real-world examples use the `<x-oasis-script>` privileged script tag. This tag allows Google Analytics to interact with elements within the shadow DOM and attach event handlers such as click events or form submissions.

In each example, you add the provided code sample to the head markup. To access the head markup in your LWR site, in Experience Builder click **Settings > Advanced > Edit Head Markup**.

**Head Markup**

For security purposes, we allow only specific tags, attributes, and values in the <head> section. [Learn More](#)

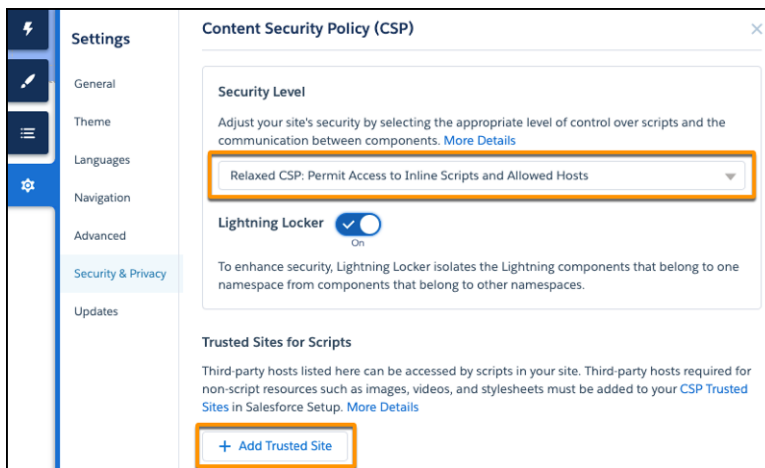
```

1 <script>
2 // The function overriding used for tracking of Page changes in Single Page Application (SPA).
3 // do not edit this code
4 window.history.pushState = ( f => function pushState(){
5   var ret = f.apply(this, arguments);
6   window.dispatchEvent(new Event('pushstate'));
7   return ret;
8 })(history.pushState);
9 </script>
10
11
12 // This snippet loads the gtag.js library, establishes GA_MEASUREMENT_ID as the default Google
13 <x-oasis-script async src="https://www.googletagmanager.com/gtag/js?id"></x-oasis-script>
14
15 <x-oasis-script>

```

Cancel Save

Because you're adding Google Analytics as a third-party library, switch to Relaxed CSP in Experience Builder in **Settings > Security & Privacy**. Also add the URL for your Google Analytics script to the Trusted Sites for Scripts list on this page.



**Note:** Each sample includes the same `<script>` tag that adds an entry to the browser stack to facilitate event tracking on pages in an LWR site, which is a single-page application.

Each sample also loads the Google Analytics JavaScript library using this code, where `{id}` represents the Google Analytics ID:

```

<x-oasis-script async
src="https://www.googletagmanager.com/gtag/js?id"></x-oasis-script>

```

## Example 1: Track Page Views

This example tracks when a user views a page in an LWR site. In the sample code, the `pushstate` event is fired when a visitor lands on a site page. The event listener on the window passes the event to Google Analytics along with the page URL.

[View the Sample Code](#)

## Example 2: Track Click Events

In this scenario, a page in the LWR site contains a button called Submit and a link called Download. Google Analytics can track when a customer clicks the button or the link.



In the sample code, the `buttonAndLinkClick` function uses the `.button_class` class to listen for a click event on the Submit button. The function also uses `.download_link` to listen for a click event on the Download link. When either event is fired, the event listeners on the button and link pass the event details to Google Analytics under the `link_button_click` event category.

[View the Sample Code](#)

### Example 3: Track Form Input and Submissions

In this scenario, a page in the LWR site contains a form called Subscribe, and within the form, a button called Submit. Google Analytics can track when a user enters information in the form or clicks Submit.

In the sample code, the `formClick` function uses the `.subscription_form_class` class to listen for a change event on the form input fields and a click event on the Submit button. When either event is fired, the event listener on the form passes the event details to Google Analytics under the `input_change` event category or the `form_submit_success` event category.

[View the Sample Code](#)

### Example 4: Track Outbound Link Clicks

In this scenario, a page in the LWR site contains links that redirect users to external websites. Google Analytics can track when a user clicks any of these outbound links.

In the sample code, the `trackOutboundLinks` function uses the `.outbound` class to listen for a click event on an external link. When a click event is fired, the event listener on the link passes the event details—including the external redirect link—to Google Analytics under the `outbound` event category.

[View the Sample Code](#)

### Example 5: Track Visit Duration

In this scenario, Google Analytics tracks how long a user stays on a page on the LWR site.

In the sample code, the `beforeunload` event listens for a page refresh or page unload. The `window.performance` attribute from the global window object measures the time since the user landed on the page. When the `beforeunload` event is fired, the event listener on the window passes the event details to Google Analytics, including the duration of the user's stay on the page.

[View the Sample Code](#)

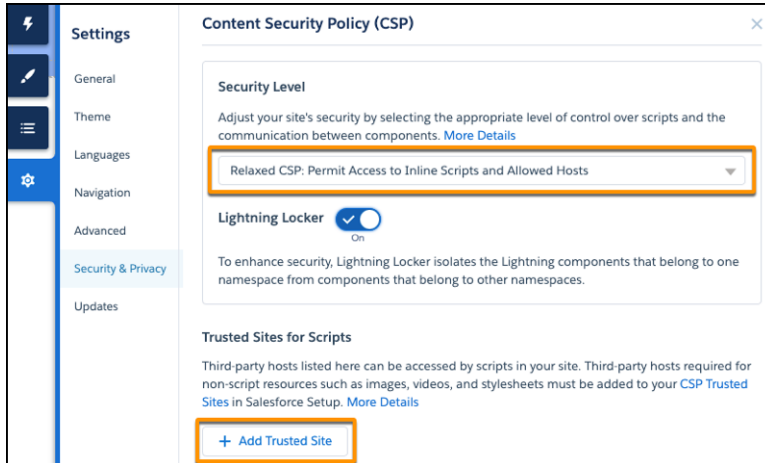
SEE ALSO:

[Google Help: Analytics Help](#)

## Examples: Use Google Tag Manager in LWR Sites

Use Google Tag Manager to track customer interactions with your LWR site, which is a single-page application. In these examples, the `<x-oasis-script>` privileged script tag lets Google Tag Manager interact with elements within the shadow DOM.

First, because you're adding Google Tag Manager as a third-party library, switch to Relaxed CSP in Experience Builder in **Settings > Security & Privacy**. Also add the URL for your Google Tag Manager script to the Trusted Sites for Scripts list on this page.



In these examples, the code listens for events and sends the captured details to the data layer. The data layer is an object that contains all the information that you want to pass to Google Tag Manager, such as events or variables. You can set up triggers in Google Tag Manager based on the variables in the data layer. Keep in mind that triggers and events loaded into Google Tag Manager using the `<x-oasis-script>` aren't visible in Google Tag Manager Preview mode. To view your expected changes, switch to live mode.

## Example 1: Track Form Inputs and Submissions

In this example, a page in the LWR site contains a form called `Subscribe`. Google Tag Manager tracks when the form is submitted and what a customer entered in the form.

1. In Experience Builder, click **Settings > Advanced > Edit Head Markup**, and embed this Google Tag Manager script in an oasis script tag. Replace `XXXX` with your Google Tag Manager ID.

```
<x-oasis-script hidden="true">(function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':
new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
j=d.createElement(s),dl=l!='dataLayer'?'+l+':':j.async=true;j.src=
'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
})(window,document,'script','dataLayer','GTM-XXXX');
```

2. In Google Tag Manager, create a custom HTML tag, and add this script to the tag.

This code uses the `.subscribe` class to listen for the forms present on the page and calls the `lwr_form_function` to send the captured inputs to the data layer.

```
<script>
var lwr_forms = window.frames[0].window.document.querySelectorAll('.subscribe');
lwr_forms.forEach(lwr_form_function);
function lwr_form_function(item) {
  item.addEventListener('submit', function (event) {
    window.dataLayer.push({
      'event': 'formSubmit',
      'FormTarget': event.target["target"],
      'FormId': event.target.id,
      'FormClass': event.target.className,
      'FormUrl': event.target.src,
      'FormElement': event.target,
      'FormText': event.target.innerText
    });
  });
};
```

```
});
}
</script>
```

3. Create a Window Loaded page view trigger in Google Tag Manager, and set it on all pages by omitting any filters that enable the trigger on specific pages.
4. On the configuration page for the custom HTML tag that you created in step 2, assign the Window Loaded page view trigger to the tag.
5. Publish the trigger.

## Example 2: Track Button and Link Clicks

In this scenario, Google Tag Manager tracks each click of a link or button on a page.

1. In Experience Builder, click **Settings > Advanced > Edit Head Markup**, and embed this Google Tag Manager script in an oasis script tag. Replace `XXXX` with your Google Tag Manager ID.

```
<x-oasis-script hidden="true">(function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':
new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
j=d.createElement(s),dl=l!='dataLayer'?'&l='+l:'';j.async=true;j.src=
'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
})(window,document,'script','dataLayer','GTM-XXXX');
```

2. In Google Tag Manager, create a custom HTML tag, and add this script to the tag.

This code listens for events on the `click` class and sends the captured details from the event to the data layer.

```
<script>
window.frames[0].window.document.addEventListener('click',function(e){
var targetElement=e.target;
window.dataLayer.push({
event:'custom_click_Text_Trigger',
custom_event:{
element:targetElement,
elementId:targetElement.id||'',
elementClasses:targetElement.className||'',
elementUrl:targetElement.href||targetElement.action||'',
elementTarget:targetElement.target||'',
elementText:targetElement.innerText
}
});
});
</script>
```

3. Create a trigger for Window Loaded in Google Tag Manager, and set it on all pages by omitting any filters that enable the trigger on specific pages.
4. On the configuration page for the custom HTML tag that you created in step 2, assign the Window Loaded page view trigger to the tag.
5. Publish the trigger.

SEE ALSO:

[Google Help: Tag Manager Help](#)

## CHAPTER 7 Manage Data in LWR Sites

In this chapter ...

- [Capture and Integrate Engagement Data](#)
- [Set Up Data Cloud](#)
- [Tag Manager Event Reference](#)

Use this guide to understand how visitor engagement from your LWR sites can be sent to Data Cloud and how you can best tailor our tools to your specific needs. Data is a powerful tool in the world of site management and analytics. Understanding how your users interact with your sites helps you build detailed user profiles, create enhanced analytics, and personalize your site for the best user experience.

### Familiarize Yourself with Data Cloud

---

If you're unfamiliar with Data Cloud, take some time to explore [Data Cloud Help](#).

### Turn On Data Cloud for Your Site

---

The Experience Cloud integration with Data Cloud automatically performs most of the setup needed for you to get started. Before you get started, perform the tasks described in [Connect Data Cloud to Your LWR Sites](#) in Salesforce Help.

### Learn About the Experience Data Layer

---

A data layer contains all the information captured when a user interacts with your website. The data layer is embedded as JSON in the HTML of your website. It provides a central location for user data so it can be sent to other applications and processed. The Experience Data Layer contains information about the page, the user, and behavioral data from your Experience Cloud sites. All of that data provides valuable information about how your customers interact with your site and can be sent along to other apps like Data Cloud and Google Analytics, or power products like Marketing Cloud.



**Note:** Use the Experience Data Layer Object Lightning web component to populate the data layer.



**Example: Experience Data Layer Code with Embedded JSON**

```
<html>
  <head>
  </head>
  <body>
    <web-runtime-app>
      <experience-data-layer-object>
        <script type="application/json"
data-provider-type="site">
          {
```

```

        "siteId": "site-12345"
    }
</script>
</experience-data-layer-object>
<experience-data-layer-object>
  <script type="application/json"
data-provider-type="page">
    {
      "url":
"https://www.datacloud.salesforce.com",
      "urlReferrer":
"https://www.root.salesforce.com"
    }
  </script>
</experience-data-layer-object>
<experience-data-layer-object>
  <script type="application/json"
data-provider-type="user">
    {
      "guestUuid": "guest-uuid-12345",
      "crmId": "user-id-12345"
    }
  </script>
</experience-data-layer-object>
<commerce-product-list-component>
  <commerce-product-list-data-provider>
    <experience-data-layer-object>
      <script type="application/json"
data-provider-type="catalog">
        [
          {
            "id": "product-id-12345",
            "type": "Product",
            "attributes": {
              "color": "blue"
            }
          },
          {
            "id": "product-id-54321",
            "type": "Product",
            "attributes": {
              "color": "orange"
            }
          }
        ]
      </script>
    </experience-data-layer-object>
  </commerce-product-list-data-provider>
  <div>
    <p>Product-1</p>
  </div>
</commerce-individual-product-component>
</commerce-individual-product-component>
<div>

```


```
        <p>Product-2</p>
      </div>
    <commerce-individual-product-component>
  </commerce-individual-product-component>
</commerce-product-list-component>
</web-runtime-app>
</body>
</html>
```

## Capture and Integrate Engagement Data

---

Experience Tag Manager is a JavaScript library that captures user-interaction events from the Experience Cloud data layer and combines them with site data to generate web events. These events are sent to other applications, such as Data Cloud or Google Analytics. Tag Manager is installed automatically when you connect your enhanced LWR sites to Data Cloud with the built-in Data Cloud integration. You can then use information you gather with Tag Manager to build behavior profiles for web visitors, audience segmentation, site personalization, or Salesforce integrations.

Experience interaction events are triggered when a user performs an action on a site page. Examples include scrolling, clicking, and viewing. Events can take place on Lightning web components or the page itself. When they occur, they're sent to the event queue, which notifies the Experience Tag Manager to process the events.

 **Important:** In the Summer '24 release, when Data Cloud and Google Analytics integrations are enabled in an LWR site, the transfer of site metadata to a different org via the DigitalExperienceBundle Metadata API encounters component failures. For more information, see [DigitalExperienceBundle has component failures with Data Cloud and Google Analytics integrations](#).

### [Configure the Consent Opt-In Default](#)

To start capturing events to send to Data Cloud, configure your user consent options. By default, Tag Manager doesn't send data to its destination until the user explicitly opts in. Choose how to present consent options to the site visitor and whether to update the default behavior.

### [Track User Interactions to Send to Data Cloud](#)

Your Data Cloud integration comes with a set of interaction events that are turned on and mapped to the Website Engagement DMO by default. Interactions are either all mapped, or not mapped at all, but you can update event names to customize your integration. An interaction event has a named identifier, required values, and tracked values that you define.

## Configure the Consent Opt-In Default

To start capturing events to send to Data Cloud, configure your user consent options. By default, Tag Manager doesn't send data to its destination until the user explicitly opts in. Choose how to present consent options to the site visitor and whether to update the default behavior.

Not all website visitors and customers consent to cookie tracking. With Experience Tag Manager, you can configure whether customers opt in or opt out of tracking. After a user provides consent, and the consent info is passed to your site, Experience Cloud respects the consent preference by sending or not sending data. Any engagement event triggered before a user provides consent is ignored. We recommend using a consent management provider (CMP) application to help manage your consent options.

Tag Manager listens for a specific interaction event called `set-consent` to capture user consent. Consent is stored as long as the session is active and the page isn't reloaded. Every time the page is refreshed the consent value must be sent through the `set-consent` event.

1. From Setup, in the Quick Find box, enter *Digital Experiences*, click **Digital Experiences**, and then click **Settings**.
2. Select **Security & Privacy**.
3. Under Security Level, select **Relaxed CSP: Permit Access to Inline Scripts and Allowed Hosts**.
4. When you're prompted, allow the change.
5. Navigate back to **Settings** and select **Advanced**.
6. Click **Edit Head Markup** and add this script to the existing code.

```
<script>
  document.dispatchEvent(
    new CustomEvent('experience_interaction', {
      bubbles: true,
      composed: true,
      detail: {
        name: 'set-consent',
        value: true,
      },
    })
  );
</script>
```

7. Save your changes and publish your site.

### USER PERMISSIONS

To create an Experience Cloud site:

- Create and Set Up Experiences AND View Setup and Configuration

To customize an Experience Cloud site:

- Be a member of the site AND Create and Set Up Experiences

OR

- Be a member of the site AND View Setup and Configuration AND an experience admin, publisher, or builder in that site

To publish an Experience Cloud site:

- Be a member of the site AND Create and Set Up Experiences

OR

- Be a member of the site AND an experience admin or publisher in that site



If you're using a CMP, follow the steps above with the following script and include your CMP's API as the value attribute.

```
<script>
  document.dispatchEvent (
    new CustomEvent('experience_interaction', {
      bubbles: true,
      composed: true,
      detail: {
        name: 'set-consent'
        value: CMP.getConsent ()
      },
    })
  );
</script>
```

You can remove user consent by triggering an interaction event with no value specified.

```
<script>
  document.dispatchEvent (
    new CustomEvent('experience_interaction', {
      bubbles: true,
      composed: true,
      detail: {
        name: 'set-consent'
      },
    })
  );
</script>
```

SEE ALSO:

[Consent Interactions](#)


## Track User Interactions to Send to Data Cloud

Your Data Cloud integration comes with a set of interaction events that are turned on and mapped to the Website Engagement DMO by default. Interactions are either all mapped, or not mapped at all, but you can update event names to customize your integration. An interaction event has a named identifier, required values, and tracked values that you define.

The events that you capture can't be changed, but you can update the named identifier to personalize your integration. For example, if you want to capture when your user clicks on a menu, you can change the interaction name to `menu-click`, instead of the more general `button-click` event.

If you want to change an existing name, create an event based on our [Tag Manager Event Reference](#).

1. From Setup, in the Quick Find box, enter *Digital Experiences*, click **Digital Experiences**, and then click **Settings**.
2. Select **Advanced**.
3. Click **Edit Head Markup** and add the script for the event you want to edit.
4. Save your changes and publish your site.

 **Note:** All anchor and button element clicks are captured as events, unless they're located inside a Shadow DOM element. For example, if an element is on certain custom lightning components, clicks aren't tracked. Events within Shadow DOM elements require custom tracking by the custom element. Anchor and button element clicks aren't supported in . For more information, see [Activity Tracking for Marketing Cloud Growth Landing Pages](#).

SEE ALSO:

[Tag Manager Event Reference](#)

### USER PERMISSIONS

To create an Experience Cloud site:

- Create and Set Up Experiences AND View Setup and Configuration

To customize an Experience Cloud site:

- Be a member of the site AND Create and Set Up Experiences
- OR
- Be a member of the site AND View Setup and Configuration AND an experience admin, publisher, or builder in that site

To publish an Experience Cloud site:

- Be a member of the site AND Create and Set Up Experiences
- OR
- Be a member of the site AND an experience admin or publisher in that site

## Set Up Data Cloud

After you finish setting up your site, head over to Data Cloud to make sure that your data streams are flowing. Confirm that streams from your Experience Cloud data kit connector are active. If you want to use a data space other than the default, deploy the data kit manually.

### Confirm Data Kit Connection

Your Data Cloud instance includes a default data space where captured data is collected. When you connect your Experience Cloud site to Data Cloud, the Experience\_Cloud\_Event\_DataKit is automatically installed in the default data space.

1. From Data Cloud Setup, under Configuration, select **Websites and Mobile Apps**.
2. Confirm that **Experience\_Cloud\_Event\_DataKit** is listed.
3. Navigate to the Data Streams tab and verify that your streams from the Experience\_Cloud\_Event\_DataKit are active.

If you planned to use the default data space, you're done! If you want to create a data space to map your Experience Cloud integration, refer to the next task.

### Deploy the Experience Cloud Engagement Data Kit to a Data Space

If you want to deploy your data kit to a data space other than the default, you must do so manually.

1. In Data Cloud, click **Data Streams**.
2. Click **New**.
3. Select **Installed Data Kits and Packages** and then click **Next**.
4. Add a data space name and select **Experience\_Cloud\_Event\_DataKit**.
5. Select all the available bundle items and then click **Next**.
6. For Connector Type, select **Website**.
7. For Connector Name, select **Experience\_Cloud\_Event\_Connector** and then click **Next**.
8. Review and optionally edit your data fields, and then click **Next**.

By default, when you deploy a data kit, all fields are deployed. However, to prevent deployment errors, you can deselect fields that aren't in the org or instance using the data kit. A data kit requires the deployment of fields with mappings, formula fields, and their source fields.

9. Click **Deploy**.

### Tag Manager Event Reference

This guide includes the event specifications for Experience Tag Manager. Use the examples and reference to understand the structure of Experience Cloud interaction events that are mapped to the Website Engagement DMO in Data Cloud.

#### EDITIONS

Available in: Salesforce Classic ([not available in all orgs](#)) and Lightning Experience

Available in: **Enterprise, Performance, Unlimited,** and **Developer** Editions

Applies to: [LWR sites](#)

#### USER PERMISSIONS

To create or edit a data stream:

- Customer Data Cloud Admin OR Customer Data Cloud for Marketing Data Aware Specialist

[Cart Interactions](#)

A cart interaction occurs when a customer interacts with their cart or checkout.

[Catalog Interactions](#)

A catalog interaction occurs when a customer interacts with various tracking items. For example, catalog items could include a product or a blog post.

[Consent Interactions](#)

Consent interactions capture whether a user opts into or out of tracking cookies.

[Email Interactions](#)

An email interaction occurs when a user updates or adds an email in your site.

[Engagement Interactions](#)

An engagement interaction occurs when a customer engages with your site through buttons, links, or other page elements.

[Error Report Interactions](#)

Error interactions capture when an error occurs on your site.

[Line Item Data](#)

Line items are intended to describe purchasable items. They're used in cart, catalog, and wish-list interactions.

[Search Interactions](#)

A search interaction occurs when a user performs a search on your site.

[Wish-List Interactions](#)

A wish-list interaction occurs when a customer adds or removes items from their wish list.

## Cart Interactions

A cart interaction occurs when a customer interacts with their cart or checkout.

Interaction Name	Description
cart-add	Captures an event for the addition of an item to a cart.
cart-remove	Captures an event for the removal of an item from a cart.
cart-replace	Captures an event for the replacement of all items in a cart at the same time.
cart-update	Captures events for updates to a cart.
cart-view	Captures an event for when a user views their cart. Available in package version 1.3 and later
checkout-apply-coupon	Captures an event that occurs when a user applies a coupon during checkout. Available in package version 1.3 and later.
checkout-begin	Captures an event for when a checkout begins. Available in package version 1.3 and later.
checkout-billing-address	Captures an event that occurs when a user enters their billing address during checkout. Available in package version 1.3 and later.
checkout-contact-info	Captures an event that occurs when a user enters their contact info during checkout. Available in package version 1.3 and later.

Interaction Name	Description
checkout-payment	Captures an event that occurs when a user makes a payment during checkout. Available in package version 1.3 and later.
checkout-review	Captures an event that occurs when a user selects review checkout before submitting their order. Available in package version 1.3 and later.
checkout-shipping-address	Captures an event that occurs when a user enters their shipping address during checkout. Available in package version 1.3 and later.
checkout-shipping-options	Captures an event that occurs when a user chooses a shipping option during checkout. Available in package version 1.3 and later.
checkout-submit	Captures an event that occurs when a user submits their order at the end of the checkout process. Available in package version 1.3 and later.
checkout-user-register	Captures an event that occurs when a user registers during checkout. Available in package version 1.3 and later.
order-accepted	Captures an event that occurs when an order is accepted and ready for fulfillment. Available in package version 1.3 and later.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
id	<p><b>Type</b> string</p> <p><b>Description</b> Required. A unique ID representing the Cart object.</p>
lineItems	<p><b>Type</b> <a href="#">Line Item Data</a> on page 98</p> <p><b>Description</b> Required. A single Line Item Data value.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>

### Example: Add to Cart Interaction Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'cart-add',
      cart: {
        id: 'cart-12345',
        lineItems: {
          id: 'line-item-12345',
          catalogObject: {
            id: 'catalog-id-12345678',
            type: 'Product'
          },
          attributes: {
            quantity: 12,
            price: 2.5,
            imageUrl: 'https://commerce.salesforce.com/blueshirt.jpg',
            name: 'blue-shirt'
          },
        },
        attributes: {
          currency: '$',
          name: 'my-personal-cart',
        },
      },
    },
  })
);

```

### Example: Remove from Cart Interaction Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'cart-remove',
      cart: {
        id: 'cart-12345',
        lineItems: {
          id: 'line-item-23112',
        },
        attributes: {
          name: 'my-personal-cart'
        },
      },
    },
  })
);

```

### Example: Update Cart Interaction Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'cart-update',
      cart: {
        id: 'cart-61221',
        lineItems: {
          id: 'line-item-11111',
          attributes: {
            quantity: 2,
          },
        },
        attributes: {
          name: 'my-updated-cart'
        },
      },
    },
  })
);

```

## Catalog Interactions

A catalog interaction occurs when a customer interacts with various tracking items. For example, catalog items could include a product or a blog post.

Interaction Name	Description
catalog-object-click	Captures the event of a user clicking a catalog object.
catalog-object-impression	Captures the event of a user viewing search results or category products. Available in package version 1.3 and later.
catalog-object-view-start	Captures the start point of a user viewing a catalog object.
catalog-object-view-stop	Captures the stop point of a user viewing a catalog object.
form-submit	Captures the event of a user submitting a form.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>

Field	Details
id	<p><b>Type</b> string</p> <p><b>Description</b> Required. A unique ID representing the Catalog object.</p>
lineItems	<p><b>Type</b> <a href="#">Line Item Data</a> on page 98</p> <p><b>Description</b> Required. A single-Line Item Data value.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>
type	<p><b>Type</b> string</p> <p><b>Description</b> Required. A type name representing the catalog object. If <code>type</code> is set to <code>product</code>, the interaction is sent to the <a href="#">Product Browse Engagement DMO</a>. If <code>type</code> is set to anything else, the interaction is sent to the <a href="#">Website Engagement DMO</a>.</p>



### Example: View Catalog Object Start Interaction Event

```
event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'catalog-object-view-start',
      catalogObject: {
        id: 'product-12345678',
        lineItems: {
          id: 'line-item-12345',
          catalogObject: {
            id: 'catalog-id-12345678',
            type: 'Product'
          },
          attributes: {
            quantity: 12,
            price: 2.5,
            name: 'blue-shirt'
          }
        }
      }
    }
  })
),
```



```

    },
  })
);

```

### Example: View Catalog Object Stop Interaction Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'catalog-object-view-stop',
      catalogObject: {
        id: 'product-12345678',
        lineItems: {
          id: 'line-item-12345',
          catalogObject: {
            id: 'catalog-id-12345678',
            type: 'Product'
          },
          attributes: {
            quantity: 12,
            price: 2.5,
            name: 'blue-shirt'
          }
        }
      }
    }
  })
);

```

### Example: Click Catalog Interaction Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'catalog-object-click',
      catalogObject: {
        id: 'product-12345678',
        lineItems: {
          id: 'line-item-12345',
          catalogObject: {
            id: 'catalog-id-12345678',
            type: 'Product'
          },
          attributes: {
            quantity: 12,
            price: 2.5,
            name: 'blue-shirt'
          }
        }
      }
    }
  })
);

```

```

    },
  },
})
);

```

## Consent Interactions

Consent interactions capture whether a user opts into or out of tracking cookies.

Interaction Name	Description
set-consent	Captures the user-consent value.

## Fields

Field	Details
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>
value	<p><b>Type</b> string</p> <p><b>Description</b> Indicates whether the user opts in to cookie tracking (<code>true</code>) or opts out (<code>false</code>).</p>

### Example: Opt-in Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'set-consent',
      value: true,
    },
  })
);

```

### Example: Opt-out Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {

```

```

    bubbles: true,
    composed: true,
    detail: {
      name: 'set-consent',
      value: false,
    },
  })
);

```

## Email Interactions

An email interaction occurs when a user updates or adds an email in your site.

Interaction Name	Description
email-update	Captures the email of the site visitor.

## Fields

Field	Details
email	<p><b>Type</b> string</p> <p><b>Description</b> The email of the site visitor.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>

### Example: Email Event

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'email-update',
      email: 'genie@example.com'
    },
  })
);

```

## Engagement Interactions

An engagement interaction occurs when a customer engages with your site through buttons, links, or other page elements.

Interaction Name	Description
anchor-click	Captures any anchor click.
button-click	Captures any button click.
page-scroll-to-bottom	Captures when a user scrolls to the bottom of the page.
page-view	Captures the event when a user views a page.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
linkhref	<p><b>Type</b> string</p> <p><b>Description</b> The web address of the link to capture.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>

### Example: Anchor Click Interaction Event

```
event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'anchor-click',
      linkHref: 'https://expectedUrl'
      attributes: {
        buttonLabel: 'Click here'
      },
    },
  },
),
```

```
    })
  );
```

### Example: Button Click Interaction Event

```
event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'button-click',
      attributes: {
        buttonLabel: 'Click here'
      }
    },
  })
);
```

## Error Report Interactions

Error interactions capture when an error occurs on your site.

Interaction Name	Description
error	Captures errors that occur on your site.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
id	<p><b>Type</b> string</p> <p><b>Description</b> Required. A unique ID representing the error type.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>

 **Example: Error Report Event**

```

event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'error',
      id: 'error-id-1',
      attributes: {
        type: "api-error",
        message: "503: service not available"
      },
    },
  }),
);

```

## Line Item Data

Line items are intended to describe purchasable items. They're used in cart, catalog, and wish-list interactions.

### Fields

Field Name	Description
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
catalogObjectId	<p><b>Type</b> string</p> <p><b>Description</b> Required. A unique identifier representing the catalog object referenced in the line item.</p>
catalogObjectType	<p><b>Type</b> string</p> <p><b>Description</b> Required. A name representing the catalog object referenced in the line item.</p>
currency	<p><b>Type</b> string</p>

Field Name	Description
	<p><b>Description</b></p> <p>The currency of the price field.</p>
price	<p><b>Type</b></p> <p>number</p> <p><b>Description</b></p> <p>The price of the catalog object referenced in the line item.</p>
quantity	<p><b>Type</b></p> <p>number</p> <p><b>Description</b></p> <p>Required. The number of catalog objects in this line item.</p>

 **Example:** Here's a basic structure of a line item used within an interaction.

```
{
  lineItems: {
    id: 'line-item-12345',
    catalogObject: {
      id: 'catalog-id-12345678',
      type: 'Product'
    },
    attributes: {
      quantity: 12,
      price: 2.5,
      imageUrl: 'https://commerce.salesforce.com/blueshirt.jpg',
      name: 'blue-shirt'
    }
  },
}
```

## Search Interactions

A search interaction occurs when a user performs a search on your site.

Interaction Name	Description
category-search	Captures an event that occurs when a user selects a category during a search. Available in package version 1.3 and later.
search	Captures a search event on your site.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
categoryId	<p><b>Type</b> string</p> <p><b>Description</b> The ID of a category from a commerce site that the site visitor selects. Must be classified as a category-based search.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>
searchQuery	<p><b>Type</b> string</p> <p><b>Description</b> A value that the site visitor supplies representing a search query.</p>



### Example: Search Event

```
event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
      name: 'search',
      searchQuery: input7.value,
      attributes: {
        searchFacetList: ['color', 'size'],
        searchType: ['product'],
        numberOfResultsRequested: 12,
        resultPageOffset: 10,
        sortType: 'asc',
        correlationId: 'X-239-22-0',
      },
    },
  }),
);
```



## Wish-List Interactions

A wish-list interaction occurs when a customer adds or removes items from their wish list.

Interaction Name	Description
wish-list-add	Captures an event for the addition of an item to a wish list.
wish-list-remove	Captures an event for the removal of an item from a wish list.
wish-list-replace	Captures an event for the replacement of all items in a wish list at the same time.
wish-list-update	Captures events for updates to a wish list.

## Fields

Field	Details
attributes	<p><b>Type</b> object</p> <p><b>Description</b> A dictionary of values that you supply.</p>
id	<p><b>Type</b> string</p> <p><b>Description</b> Required. A unique ID representing the Wishlist object.</p>
lineItems	<p><b>Type</b> <a href="#">Line Item Data</a> on page 98</p> <p><b>Description</b> Required. A single Line Item Data value.</p>
name	<p><b>Type</b> string</p> <p><b>Description</b> Required. The event name.</p>




### Example: Add to Wish List Interaction Event

```
event.target.dispatchEvent(
  new CustomEvent('experience_interaction', {
    bubbles: true,
    composed: true,
    detail: {
```

```
name: 'wish-list-add',
wishList: {
  id: 'wish-list-12345',
  lineItems: {
    catalogObject: {
      id: 'catalog-id-12345678',
      type: 'Product'
    },
    attributes: {
      quantity: 12,
      price: 2.5,
      name: 'gray-jeans'
    },
  },
  attributes: {
    currency: '$',
    name: 'my-personal-wish-list',
  },
},
},
})
);
```

## CHAPTER 8 Improve LWR Site Performance with Experience Delivery (Beta)

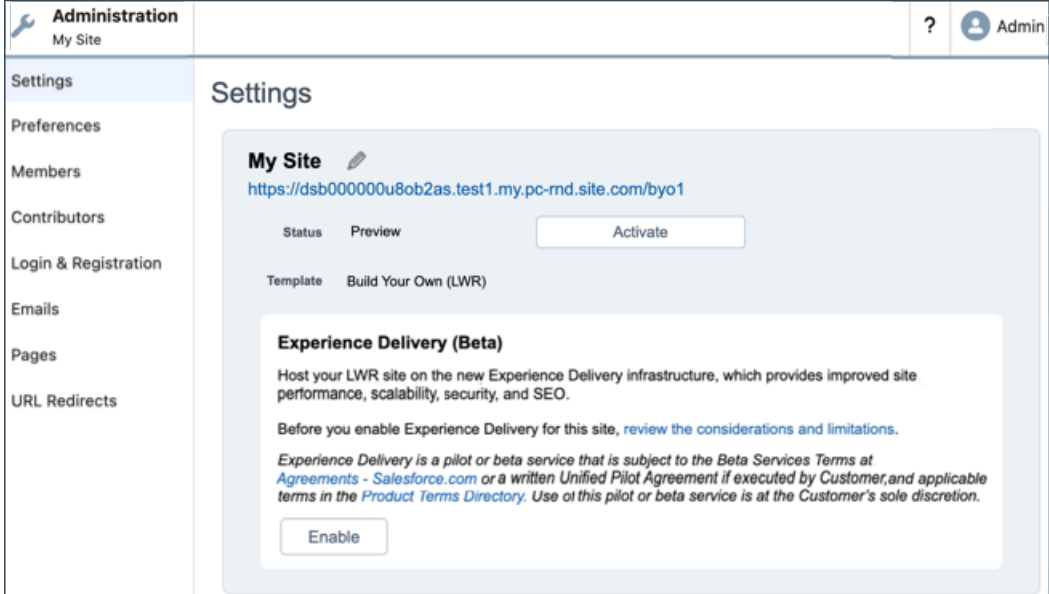
Use Experience Delivery, a powerful new infrastructure for hosting LWR sites, to boost the scalability and performance of sites created with the Build Your Own (LWR) template. Along with subsecond page load times, this new infrastructure provides improved security and search engine optimization.

 **Note:** For sites created with the Build Your Own (LWR) template, Experience Delivery is a pilot or beta service that is subject to the Beta Services Terms at [Agreements - Salesforce.com](#) or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the [Product Terms Directory](#). Use of this pilot or beta service is at the Customer's sole discretion.

Existing LWR sites use client-side rendering (CSR), meaning that all the HTML, JavaScript, CSS, and assets that make up the page are downloaded to the client before being rendered in the browser.

By contrast, Experience Delivery uses server-side rendering (SSR) and a dedicated content delivery network (CDN) to render the page on the server and then cache it in the CDN. This approach provides optimal site performance with page load times up to 60% faster, which leads to increased conversions and lower bounce rates.

Experience Delivery is supported in new and existing LWR and enhanced LWR sites that use the Build Your Own (LWR) template. You can enable Experience Delivery at the site level in the Settings tab of the site's Administration workspace.



The screenshot shows the Salesforce Administration workspace for a site. The left sidebar contains navigation options: Administration (My Site), Settings, Preferences, Members, Contributors, Login & Registration, Emails, Pages, and URL Redirects. The main content area is titled 'Settings' and shows the configuration for 'My Site' at the URL <https://dsb000000u8ob2as.test1.my.pc-rnd.site.com/byo1>. The site status is 'Preview' and the template is 'Build Your Own (LWR)'. The 'Experience Delivery (Beta)' section is highlighted, with the following text: 'Host your LWR site on the new Experience Delivery infrastructure, which provides improved site performance, scalability, security, and SEO. Before you enable Experience Delivery for this site, [review the considerations and limitations](#). Experience Delivery is a pilot or beta service that is subject to the Beta Services Terms at [Agreements - Salesforce.com](#) or a written Unified Pilot Agreement if executed by Customer, and applicable terms in the [Product Terms Directory](#). Use of this pilot or beta service is at the Customer's sole discretion.' An 'Enable' button is visible at the bottom of this section.

To learn more, see the [Experience Delivery \(Beta\) guide](#).