

IMPLEMENT A MODERN INTEGRATED SPATIAL DATA INFRASTRUCTURE

(LEVEL:INTERMEDIATE)

Trainer 1: Louis Kruger

Trainer 2: Leigh Thomas

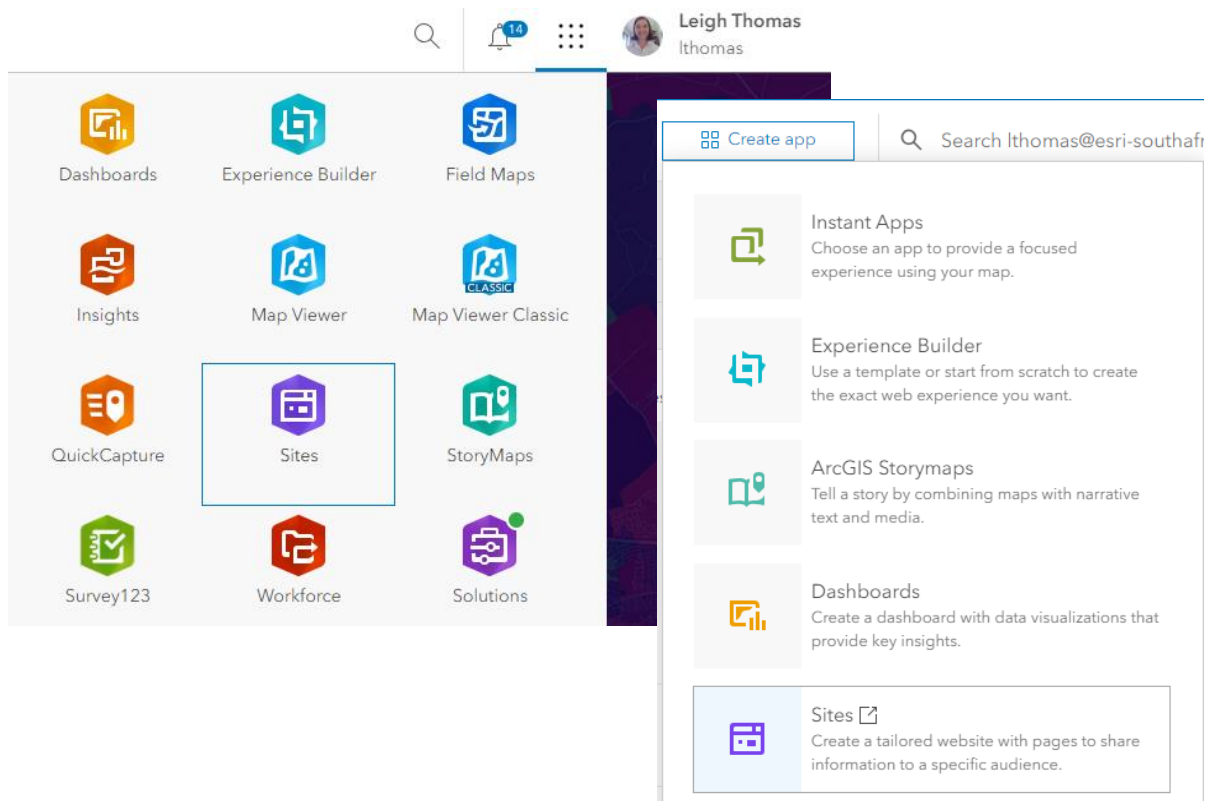
ArcGIS Online and ArcGIS Enterprise both provide an easy-to-configure web-based engagement platform that helps organisations work more effectively with their communities by sharing data and information, encouraging engagement, and providing overall transparency. Learn how to use ArcGIS capabilities to share authoritative spatial data, maps, and apps through the configurable website builder as well as the open data portal. Add collaboration tools to coordinate and engage with external agencies, community partners, volunteers, and citizens to tackle projects that matter most in your community.

Section 1

Build a basic external facing website with ArcGIS Sites.

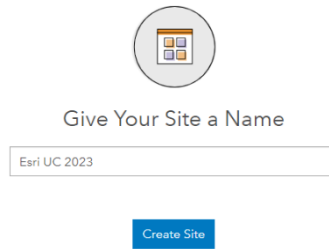
Section 1 Exercise

1. Finding the App – App Launcher; Create Menu.
 - a. Use the App launcher to launch the **Sites** app.

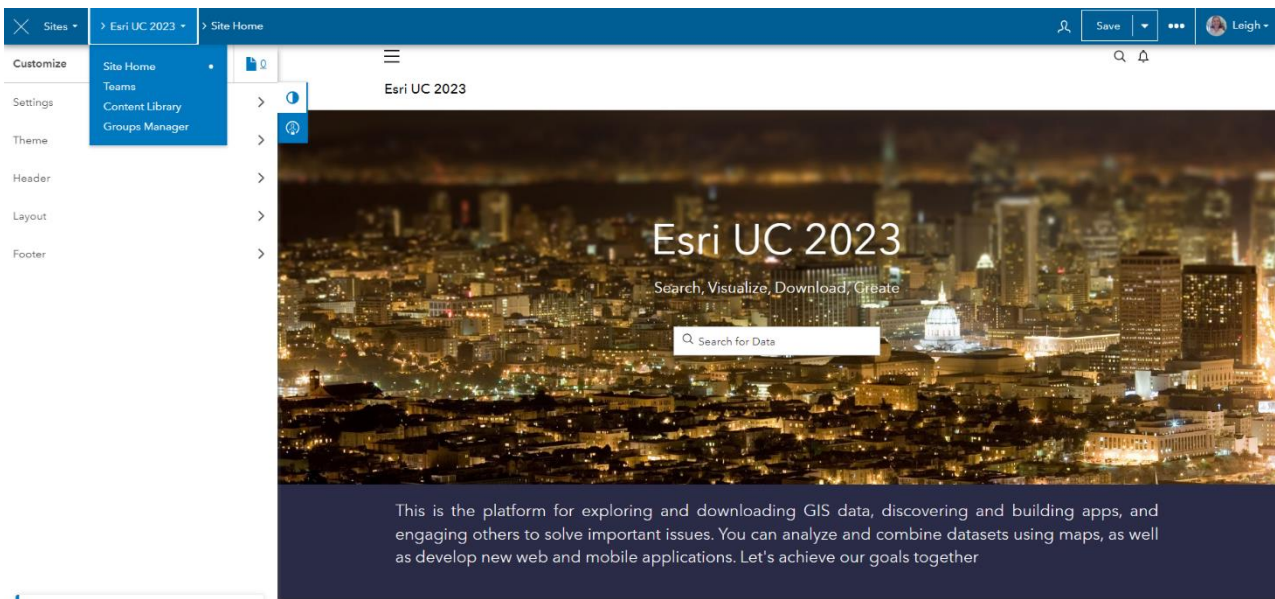


2. The Enterprise Sites overview page will open. This is where you can manage existing sites or create new ones. Today you will choose to create a new site.
 - a. Click on the **New** button to get started.

- b. Give your site the name “Esri UC 2023” and click the **Create Site** button to continue.



3. Once your new site has loaded, take a few minutes to explore the generic interface (Instructor guided).



- 4.
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|---|---|
| <ul style="list-style-type: none"> × Sites ▾ > Esri UC 2023 ▾ > Site Home Customize <ul style="list-style-type: none"> Site Home Teams Content Library > Groups Manager > Settings > Theme > | <ul style="list-style-type: none"> a. Teams b. Content Library c. Groups Manager |
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5. For most site editing workflows, you will use your site's side panel.

To open the side panel, click the side panel toggle button . Click the back button next to **Customize** at the top of the panel to return to the root menu.


a. Settings

Settings allow you to control certain elements, such as URL configuration and site name and summary, and interactions, such as private downloads and global navigation. A site's URL is the web address people use to access your site. When you create a new site, a default URL is generated for you based on the name you provided. You can, however, change your URL manually by following these steps.

1. Click **Settings** on the side panel.
2. Click **Domain** settings.

3. Click **Modify Domain Settings** and follow the in-app instructions to modify the URL.

b. Theme

Define the colors for the header, global navigation bar, buttons, text, and background colors. The colors and fonts that you select are applied to the entire site layout and to any pages attached to the site. You can override theme colors for individual rows to get more granular control of the layout colors. Each row has its own settings that allow you to set text and background colors, as well as apply an image as a background. To get started, hover over the upper right corner of the row and click the settings button  to modify the following:

- Choose a wide or box layout—**Wide** expands the row across the entire layout. **Box** displays content at a fixed width in the row.
- Change text and background color using hex color codes or the color slider—Any text that appears in the row appears in the color you define in this setting. This includes text displayed in the row using any card. You can also apply color to the row's background.
- Set a background image—You can optionally set an image as the background for a row by uploading an image or pasting a link to a hosted image file.

c. Header & Footer

A header and footer are important for completing the layout of your site. In the header, you can introduce your site by adding branding and creating a menu that help visitors find content, pages, and external websites. The footer signals the end of your site and provides space for helpful information, such as your organization's copyright information, location, and contact information.

Additionally, all new sites are enabled with global navigation, a capability that places a thin, compact bar above the header. This bar allows visitors to search your site's content using keywords and phrases, access their user profile, and view notifications.

The header, footer, and global navigation bar remain consistent across the site and its pages to ensure that visitors can navigate back to the original page when following links to other pages. You can use custom code in headers and footers. You can also use the options in the **Header** menu on the side panel to configure the following (no coding required):



- A logo
- Header background and text color
- Social icons to connect visitors with your social media platforms
- Menu links to pages and additional resources to create site navigation

d. Layout

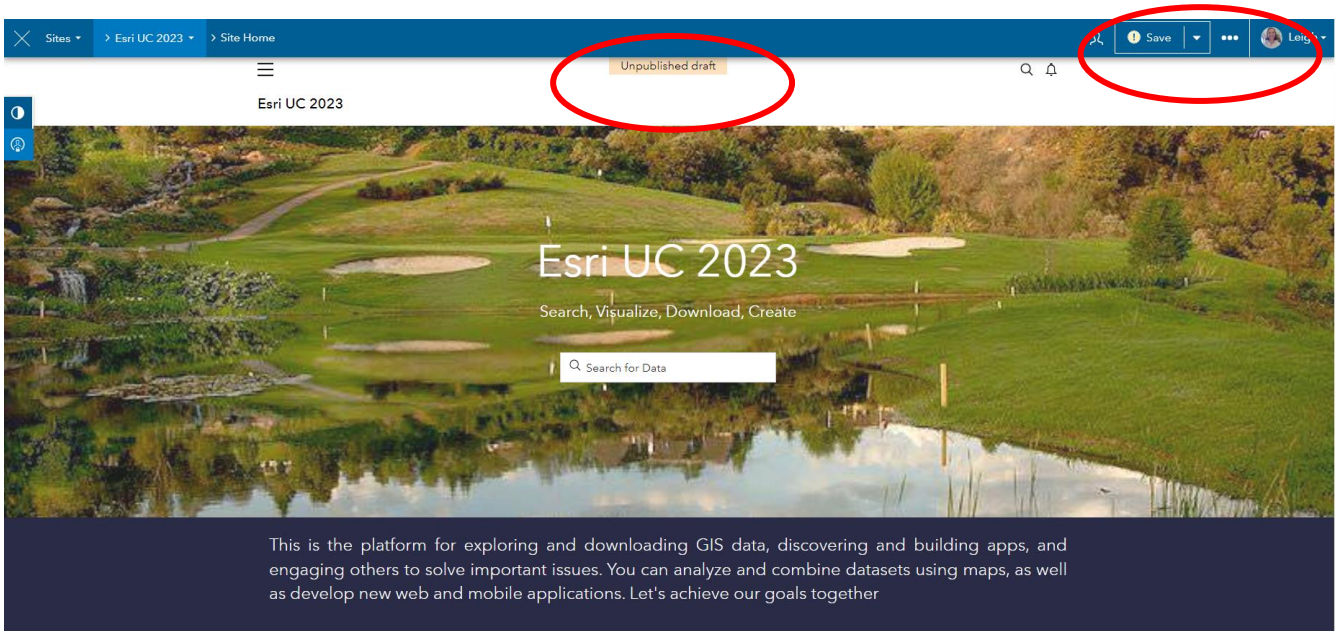
To start designing the layout of your site, open the **Layout** menu in the side panel to access a selection of cards that allow you to add images, text, apps, media, and other components to your site. Your site's default layout is designed to show you how you can combine cards to construct a cohesive narrative that focuses on providing context before introducing your content. You can adopt this format as is, update its colors and content, or remove all cards and start with a blank layout. To become familiar with editing your site's layout, follow these steps to add a new row card:

1. Click **Layout** in the side panel.
2. Drag the **Row** card from the side panel onto the layout and position the row where you want it.

Rows are the building blocks of the layout and are required anywhere you want to insert a card, such as a text, app, or image card.

3. Drag a card, such as the text card, from the side panel onto the new row and position the card where you want it.
4. Optionally, to reposition a row, hover over the upper right corner of the row and use the position button  to move the row. You can move the row, including every card it contains, to a new place on the layout.
5. Click **Save**.
6. To remove a card or row, click its delete button .

6. Use your newfound skills to change the background image to the **ChampagneSports** image saved on your Desktop.



** Take note at the top of the screen that your site is still an unpublished draft. Click the Save button on the top right of the screen to save your changes. We will publish the site at the end of the exercise. Until then, it remains in draft mode.*

Section 2

Apply best practices to design a site that supports data-driven initiatives.

Adding, managing, and showcasing content are core functions of sites. Only content items that are added to the content library will appear in search results. To add content to a site's content library, you must be an Enterprise administrator, the site's owner, or a member of the site's core team. You can add content by selecting from existing content, uploading files directly from your machine or by URL, or by creating new content.

Supported file types for upload

- Portable Document Format (.pdf)
- Comma-separated Values (.csv)
- Image files (.jpg., .jpeg, .png, .tif, .tiff)
- Microsoft Excel (.xls, .xlsx)
- Microsoft PowerPoint (.ppt, .pptx)
- Microsoft Word (.doc, .docx)
- ArcGIS Feature Service- By URL Only
- GeoJSON (.geojson)- By URL Only
- Shapefiles (.shp)- By URL Only
- Web Pages and Document link (URL to online document)- By URL Only



Section 2 Exercise

7. Upload Content as a file or using a URL

You can add Enterprise items that you or others have created, including members of your organizations and the public.

Consider checking with the item's owner before sharing it with a larger audience. You cannot change the sharing settings of an item unless you are the owner, it is shared with your core team, or you have administrative privileges. Thus, private items (shared only with you, the core team, or organization) that are shared to the content library, are not visible to people with whom the item is not shared.

1. Select the second drop-down menu on the edit navigation bar.
2. Select **Content Library**.
3. Select the **Add existing content** button.
4. Search and filter the list, select individual items, and click **Save**.

8. Add existing Content


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9. Update/Modify content metadata

You can modify basic metadata in ArcGIS Enterprise for items in certain families (Data and Documents). You must be an administrator, an item owner, or a member of the core team (and the item is owned by another core team member).

Improve the clarity and usefulness of your content by ensuring that it has complete metadata. Click the **Edit** button  on an item's full details page or explore page (content views), to edit basic details. Otherwise, edit the item in Enterprise (any non-item resource such as a layer or a published service that is not an item but part of an item).

- **Thumbnail** - The thumbnail image is displayed on layout cards and content views.
- **Title** - Use a title that is succinct and informative. Avoid underscores as they will be removed.
- **Summary** - Give an overview in several sentences that cover the key elements of the item.
- **Description** - Write a description that is clear and informative, as it is shown on content views and in search results.
- **License** - Add a license in Enterprise under **Terms of use** on the item details page.
- **Tags** - These help users discover your datasets through searches. For individual items, add tags in Enterprise. All layers in map and feature services will have the same tags as those set for the entire service in Enterprise.
- **Categories** - These help organize items and facilitate their discovery and use.

1. Select the second drop-down menu, then **Content Library**.
2. Select the title of an item to open its **Content details** page.
3. From this page (or from an Explore page), select the **Edit** button .
4. Add or edit details as needed.
5. Click **Save**.

To edit full metadata, select the **More actions** button **⋮**, and click **Edit in ArcGIS Enterprise**.

10. Remove Content

You can remove items shared to a site's content library.

Pages created for a site cannot be removed from the content library and are always available in a site's search results.

1. Select the second drop-down menu, then **Content Library**.
2. Select the checkbox next to an item.
3. Select **Remove**.

If the item was shared to the site's content group, it is unshared from the group in Enterprise. You can also remove groups of content using the **Groups manager**.

Section 3

Share your organization's authoritative data as maps, dashboards, and other information products to a site.

Using the following cards, core team members can display a variety of content on their sites and pages, including dashboards, story maps, documents, and even other sites and pages:

- **Search** card - Content added to the site's content library will show up in your site's search results.
- **Gallery** card - Useful for displaying a mix of different items, including other sites and pages. This card is also mobile responsive, meaning content will display correctly no matter the size of a device.
- **Category** card - Use this card to group datasets and other content types by category. Each category you create gets represented by an icon of your choosing.
- **Map** card - Display a web map or web scene on your site. Using row card settings, you can adjust its display to span the entirety of your site or choose to display it next to other content at a fixed width.
- **Application** card - Displays a supported ArcGIS application, such as web apps, dashboards, Insights pages, Experience Builder web apps, and storymaps.

*Displaying content on a site or page does not automatically add the item or items to the site's content library. When using the **Gallery**, **Map**, and **Application** card, you must also add the item to your site's content library if you want it to be discoverable in your site's search results. For more information, see [Add existing items](#).*

Popular items displayed on sites and pages include dashboards, story maps, and web maps. These items are created and managed in your Portal for ArcGIS. When populating a card with content, you can choose from your own content or content that's been shared with your team, your organization, or the public.

Section 3 Exercise

11. Add a map to your Site

To add a web map or 3D scene to your site, complete the following steps.

1. Drag a **Map** card onto an existing row.

2. Click **Find a web map**.
3. Find a web map by searching **My Maps, My Organization's Maps**, or **All Maps**.
4. To display a title for your map, click the toggle button for **Title**.
5. Set a **Height** value (in pixels) for your map.

12. Embed a single application

Use the **Application** card to display an item directly on the site or page. The following items are supported:

- Apps - applications and web mapping applications
- Documents - PDF, Microsoft Excel, Microsoft PowerPoint, iWork Keynote, iWork Pages, iWork documents, and Visio documents
- Datasets
- Dashboards
- Sites and pages

13. Create a gallery of Content

The gallery card displays up to 16 items using the item's thumbnail and summary. Visitors can open an item in a gallery by clicking on the item's card. You can use groups, your site's content library, or individual items to populate the gallery.

1. Drag a **Gallery** card onto an existing row

*By default, the gallery displays items shared to your site's content library. You can continue using it as a source of content for the gallery. You can also add groups using the **Dynamic** option, or if you'd rather choose individual items, you can choose the **Manual** option.*

2. Under the **Display** menu, choose one of the following options:
 - **Dynamic** - When this option is selected, items belonging to a selected group or groups will be displayed. You can choose which types of items from this group are shown using the **Content Type(s)** menu. You can also refine what items are displayed by using tags or categories. These categories are different from category cards.
 - **Manual** - This option enables you to select items for display, regardless of the group to which they belong. If you opted for manual display, you can reorder the way in which your cards are displayed.
3. Optionally sort which items are displayed based on whether they're shared and any tags or categories assigned to them.
4. From the **Style** drop-down menu, choose the look of your gallery cards with the following options:
 - **Image** - Choose either icons or thumbnails. For more information on editing thumbnails, see Item details.
 - **Corners** - Choose either square or rounded corners.
 - **Include buttons** - Optionally add a button for people to click on to open the card's item.

14. Display Categories of Data

Use icons to represent related content, such as Hydrology to represent datasets, web maps, and applications that have either been delineated with tags or organized into groups.

1. Drag a **Category** card onto an existing row.
2. Edit the link text for your category.
3. Select either **Use Tag Query, Use Category Query** or **Use Group**:
 - **Tag Query** - Enter a tag query. All datasets that have this matching tag on their respective enterprise portal item will be returned in the search results.

- **Group** - Select a group. All datasets in this group will be returned in the search results.
 - **Category Query** - Identify Categories that your organization has established. For more information on creating categories, see Categorize content.
4. You can choose an icon to represent your category by using the library or your own .svg file.
 - Click **Pick an Icon**.
 - Choose an icon and click **Select**.
 - Click the gray box to the right of the icon to choose the icon's color.
 5. Use your own icon:
 - Provide a URL for your icon.
 - Provide alt text for your icon to help non-sighted users and improve your site's accessibility.

Custom icons should be saved as an .svg or transparent .png file. Icons will be scaled to fit 120x120 pixels.


6. Click **Save**.

15. Add a Page to the Site

A page is an additional web page you can attach to your site that adopts the header, footer, and custom domain of your site. You can link to additional pages using menu links in the header. Every page added to your site includes a side panel with the same **Layout** menu included in the site editor. This means that you can design the layout of your page using cards in the same way that you design a site.

Add an existing page

You can add a page that you've created for another site or a page that has been shared with your core team or portal. You can also add publicly shared pages.

1. On the side panel, click the pages button .
2. Click **Link Page**, click the page's name, and choose **Select**.
3. Optionally, update the page's slug.
4. Click **Link Page**. To view the page, click its name in the side panel listed under **Home**.

Include a page summary

If a page is included in a site's content library, its name and summary are visible as a search result to those with whom the page is shared. Site owners and core team members can add or modify a summary once the page is created.

*Pages are discoverable in a site's search results in the **Documents** collection. This cannot be changed.*

Edit page URL

The text at the end of your page's URL is called a slug. You can modify the slug if you want it to be something other than the page name. The full page URL is in the following format: `https://webadaptorhost/webadaptorname/apps/sites/#/your-site-name/pages/page-name`.


When you change a page's slug, the previous URL will not automatically redirect to the URL with the updated slug. You must manually update the URL if it is used elsewhere, with the exception of pages that are included as menu links on a site's header.

1. Click the pages button .
2. In the list of pages, click the page you want to edit.
3. Click **Page Info**.
4. Type a slug in the **Page Slug** text box.
5. Click **Save**.

Add content to a page

To add content to a page, ensure that the item or items that you want to display on the page have been added to your site's content library. Once you've confirmed that your content has been added to the content library, you can use drag-and-drop cards to design the layout of a page in the same way that you can design the layout of a site.

You cannot edit the header or footer of the page because these are inherited from the page's site.

1. In the side panel, click the pages button  in the upper right corner.
2. In the list of pages, click the page you want to edit.
3. In the page editor, drag a row card onto the page's layout to start designing your page.

Certain cards, including the gallery card, automatically populate with applicable items shared to the site's content group or core team group (content library). If you want to add additional items to a page, use manual selection if the card supports it or add the item or group using the site's content library. Note, however, that only items shared in the site's content library are discoverable in a site's search results.

4. Ensure that the content displayed on the site is shared with the appropriate audience. For more information, see Adjust sharing controls.
5. Click **View** to preview the page.
6. Click **Save**.
7. **Publish** your changes to make them permanent.

Delete a page permanently

If you want to delete a page, click the delete button . The Site Page item will be permanently deleted from ArcGIS Enterprise and any groups to which it was shared.

16. Additional Functionality

- Share videos from Facebook, Vimeo, or YouTube social media (Media card) and embed iframes on your sites or pages.
- Create data visualizations using charts, tables, and summary statistics.

Section 4

Configure the open data portal to share authoritative data.

- Demonstration

Sources:

<https://enterprise.arcgis.com/en/sites/latest/sites/create-a-site.htm>

<https://enterprise.arcgis.com/en/sites/latest/content/content-basics.htm>