



NEH Community Deep Mapping Institute

ArcGIS Enterprise Portal



What is ArcGIS Enterprise portal?

The Geospatial Research Facility at Michigan Tech hosts its own instance of ArcGIS Enterprise portal. ArcGIS Enterprise portal is a platform that allows users to develop and share geospatial data, as well as collaborate with other users in the organization. Within ArcGIS Enterprise portal users can upload their own data, create web maps and story maps, search the Geospatial Research Facilities collection of GIS content, create groups for sharing information with collaborators, and share links to GIS data and apps. ArcGIS Enterprise portal also has the capability to share GIS data to and from ArcGIS Pro desktop software.

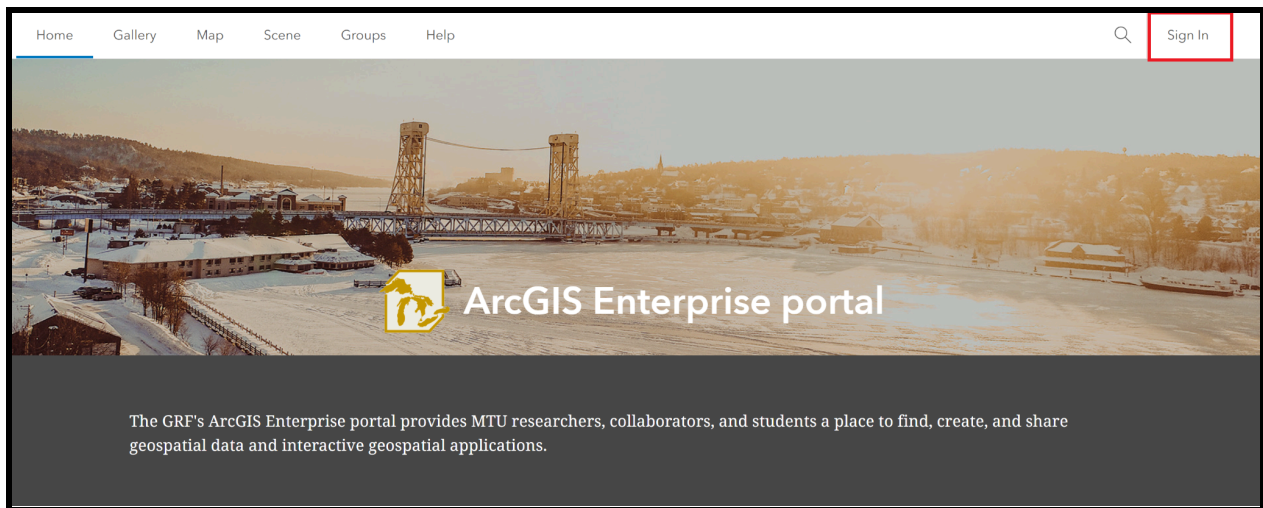
For the NEH Institute 2025 at Michigan Tech, Institute fellows will have access to individual groups for uploading and sharing data and easy collaboration with other team members. This guide will provide an overview of the Geospatial Research Facility's ArcGIS Enterprise portal including how to upload and manage your own content for your deep mapping project, access your group for the institute, and collaborate and share datasets.



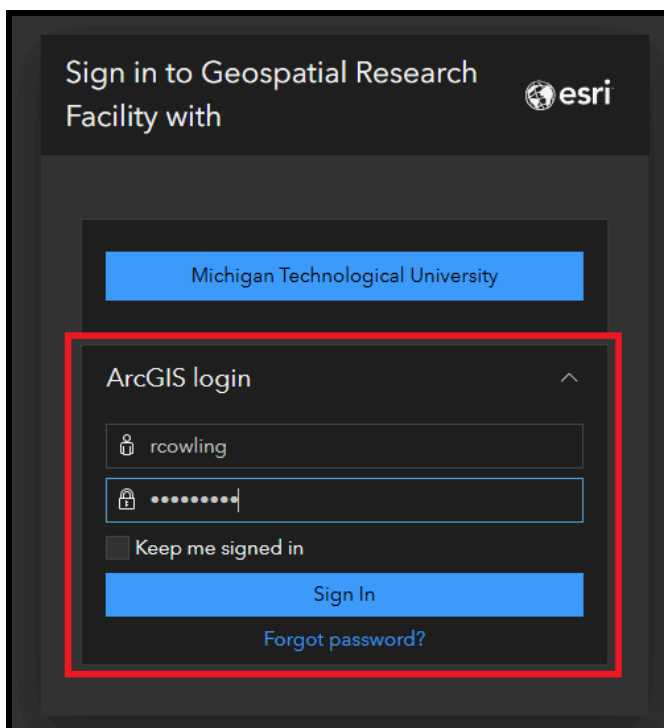
Accessing ArcGIS Enterprise portal

The easiest way to access the Geospatial Research Facility's ArcGIS Enterprise portal platform is to go directly to the URL at:

<https://portal1-geo.sabu.mtu.edu/mtuarcgis/home>. Then click on the **Sign in button** in the upper right hand corner of the screen and sign in using the credentials that were provided to you in your welcome email.

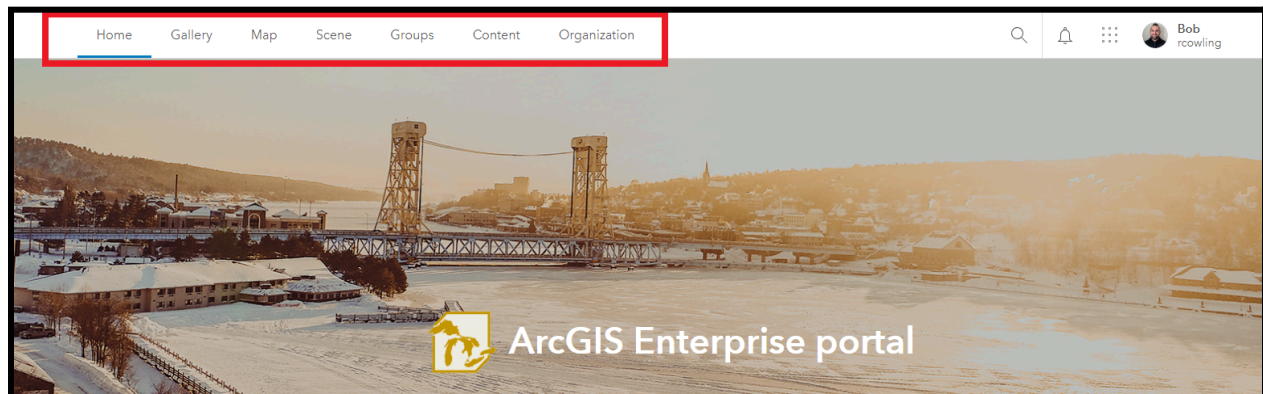


You will then be prompted with an ArcGIS Login Screen. You will sign into your account using the **ArcGIS login**. Enter your user name and password under the ArcGIS login and click the **Sign In** button. Do not sign in using the Michigan Technological University button, unless you are affiliated with Michigan Tech.



Once you are logged into ArcGIS Enterprise you will now be on the Home tab.

Navigating ArcGIS Enterprise portal



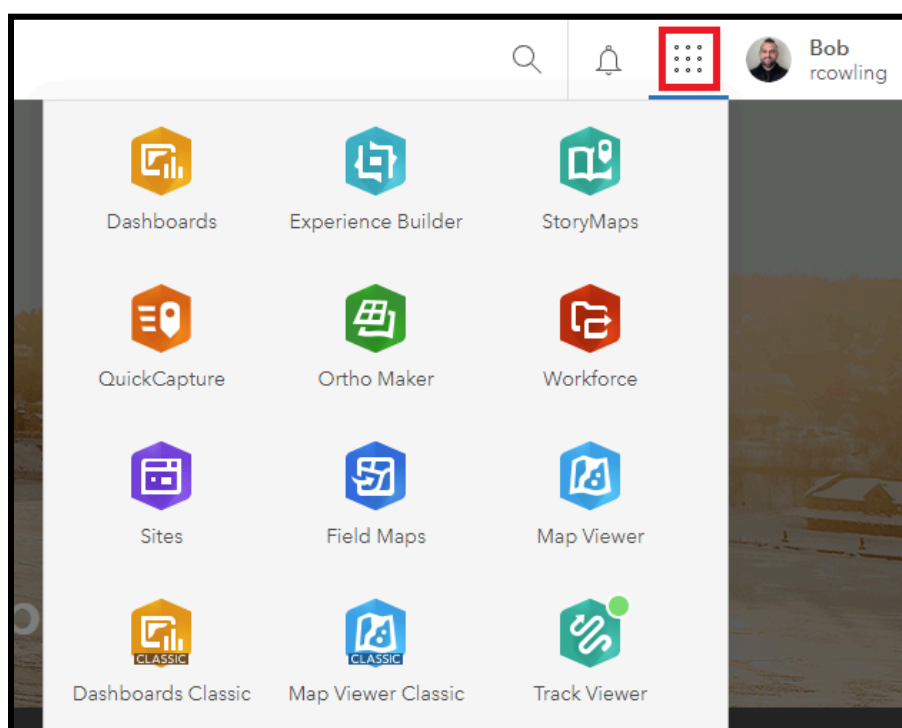
The ArcGIS Enterprise portal contains a main navigation menu with several tabs. The tabs consist of:

- Home
 - The main page of Enterprise. Used for navigation and exploring individual research project sites.
- Gallery
 - A gallery of featured datasets and applications.
- Map
 - A basic map viewer where you can add and view datasets and create a web map.
- Scene
 - A 3D Scene Viewer where you can create a new 3D Web Scene.
- Groups
 - A list of groups within the organization. Including groups you own or belong to.
- Content
 - A list of content you have uploaded. Here you can view existing content and upload and create new datasets.
- Organization

- Shows the organization's latest content, newest members, and administrative contacts.

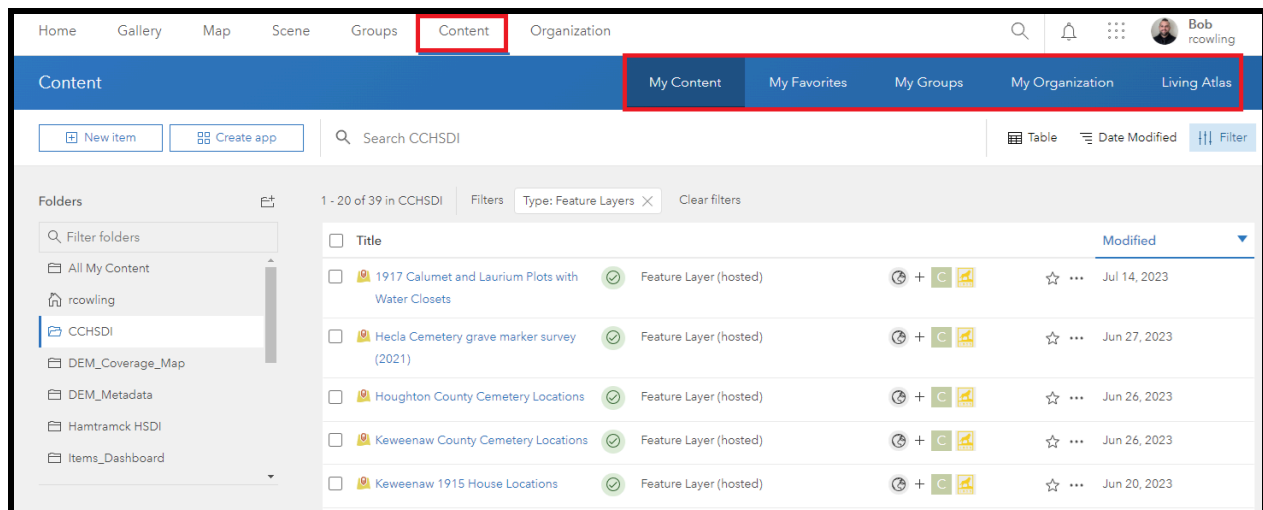
While all of the different sections of the Enterprise portal are useful in their own way, this guide will cover two of the more important tabs used in the deep mapping Institute: **Groups** and **Content**.

Accessing Applications



ArcGIS Enterprise portal provides access to a suite of additional applications including ArcGIS Experience Builder, StoryMaps, Dashboards, and Field Maps. These applications can be accessed through the **grid menu** next to your username in the top right of the main navigation bar. Simply click on the **grid icon** and choose the application of interest.

Managing and creating your own content



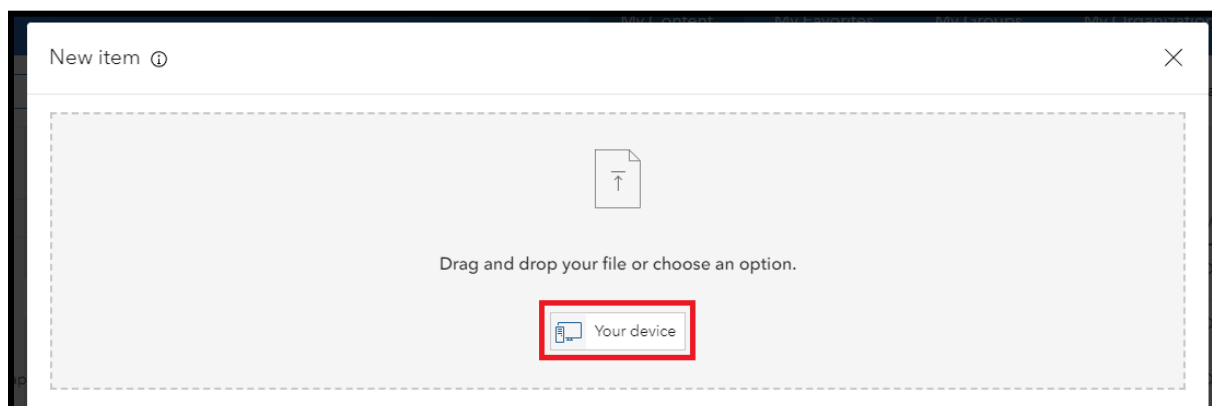
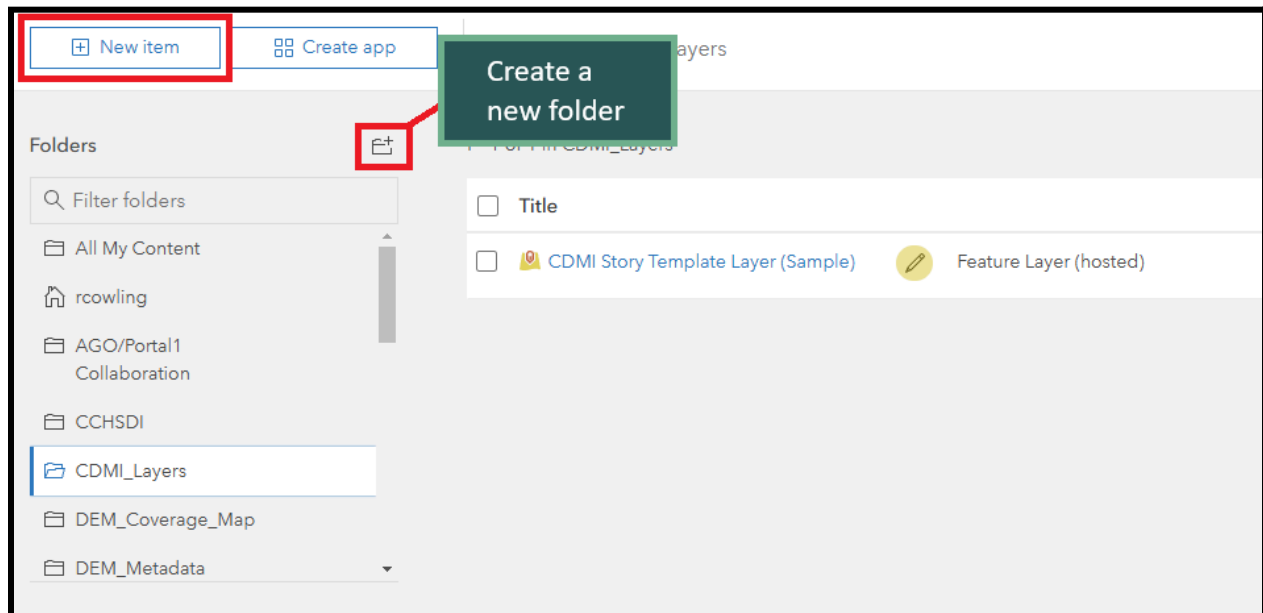
By clicking on the **Content** tab on the main Enterprise portal navigation menu, you will be able to view your existing content on the portal, as well as any Favorite items you have, groups you belong to, the organization's content, and the ArcGIS Living Atlas of the World layers.

- **My Content**
 - Contains all items that you have published on the ArcGIS Enterprise portal. Here you can also add new items and organize existing ones.
- **My Favorites**
 - A favorites list of items you have added to your 'My Favorites' list within the organization.
- **My Groups**
 - A list of groups you own or belong to.
- **My Organization**
 - A list of all datasets in the ArcGIS Enterprise portal. These are datasets that belong to any member of the organization and should be checked for credibility.
- **Living Atlas**
 - Layers from ArcGIS Living Atlas of the World.

Viewing and creating your own content

In the deep mapping Institute each individual/team will have the option of creating and hosting their own datasets on ArcGIS Enterprise. You will be able to create

New items by uploading content from your computer or importing from a service URL by clicking the **New Item** button. The ArcGIS Enterprise portal supports uploading of both spatial and non-spatial data. The most common types of data you would upload to the portal are shapefiles, CSV files, or tables. You can also create **new folders** to help keep your items organized within your Content. The easiest way to add a dataset is from a file existing on your own computer. In the **New item popup** either drag and drop the dataset into the gray box or click the **Your device** button and select the file from a directory on your computer. Please be aware that if you are uploading a shapefile, it will have to be zipped in a .zip file format.



Once the item has uploaded you should be directed to the **Overview details page** for the item. Here you will find basic information about your item, item settings, sharing level, and the ability to view your item in a web map or open in ArcGIS Pro.

The screenshot displays the 'Example Item Details Page' for a 'CDMI Story Template Layer (Sample)'. The page is divided into several sections: a map thumbnail with an 'Add to Favorites' button, a description of the layer as a public data collection template for the CDMI at Michigan Tech in 2025, a list of layers including a 'Point layer', and a 'Terms of Use' section. The 'Overview' tab is selected, and the 'Public data collection' tag is visible. On the right side, there is a vertical menu with buttons for 'Open in Map Viewer', 'Open in Scene Viewer', 'Open in ArcGIS Desktop', 'Publish', 'Create View Layer', 'Export Data', 'Update Data', 'Share', and 'Metadata'. The 'Open in Map Viewer' button is highlighted. Below the menu, there is an 'Item Information' section with a progress bar and a 'Learn more' link.

Here you can write additional metadata about your item. Click the **edit** button next to the **Summary** or **Description** or **Terms of Use** to change it. To help others find your dataset and make it reusable you should provide an accurate description of your dataset and any steps that were taken to create it. You should also provide proper **Credits (Attribution)** to yourself (if you are the author of the dataset) and/or any sources used or (if you downloaded the dataset or created the dataset from a historical data source) where it came from.

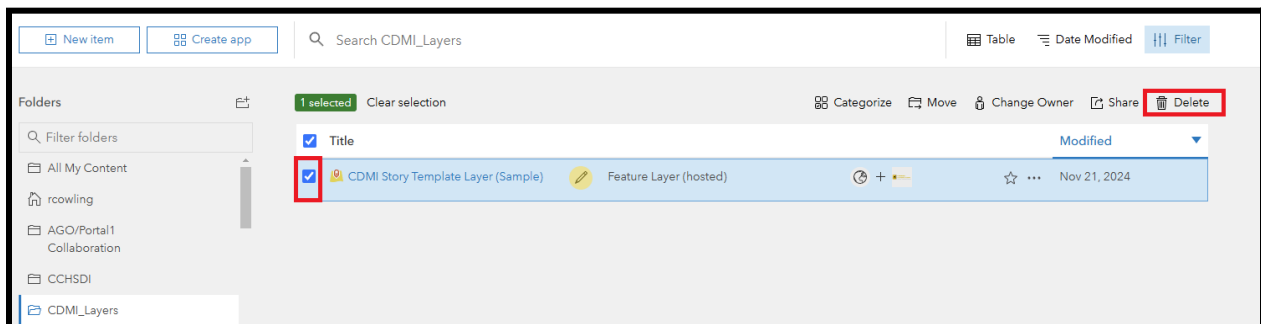
This screenshot shows the same 'Example Item Details Page' but with the 'Settings' tab selected. The 'Settings' tab is highlighted with a red box. The 'Open in Map Viewer' button is still highlighted. The 'Public data collection' tag is visible. The 'Item Information' section is also visible.

You also have several other tabs available in this section. If the dataset is a vector layer, the **Data tab** will display a table with data from all fields in the dataset, and the **Visualization tab** allows you to change the styling and appearance of the data using a web map editor. The **Settings tab** allows you to enable export, set a default geographic extent.

Your dataset can now be found under the **Content Tab**.

Deleting items

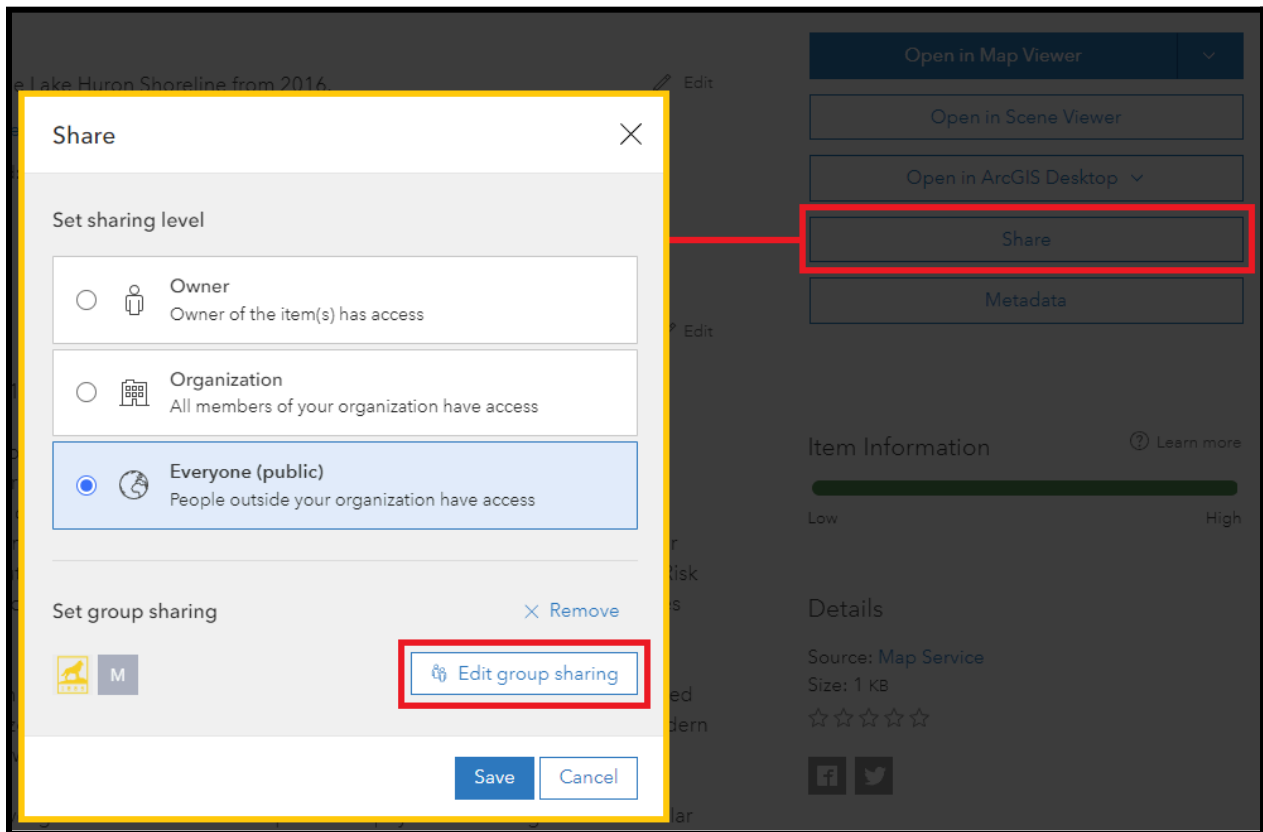
In the event you need to delete an item, simply click the checkbox next to any item in the content tab and press the **Delete** button. Please be aware that this is permanent and cannot be undone.



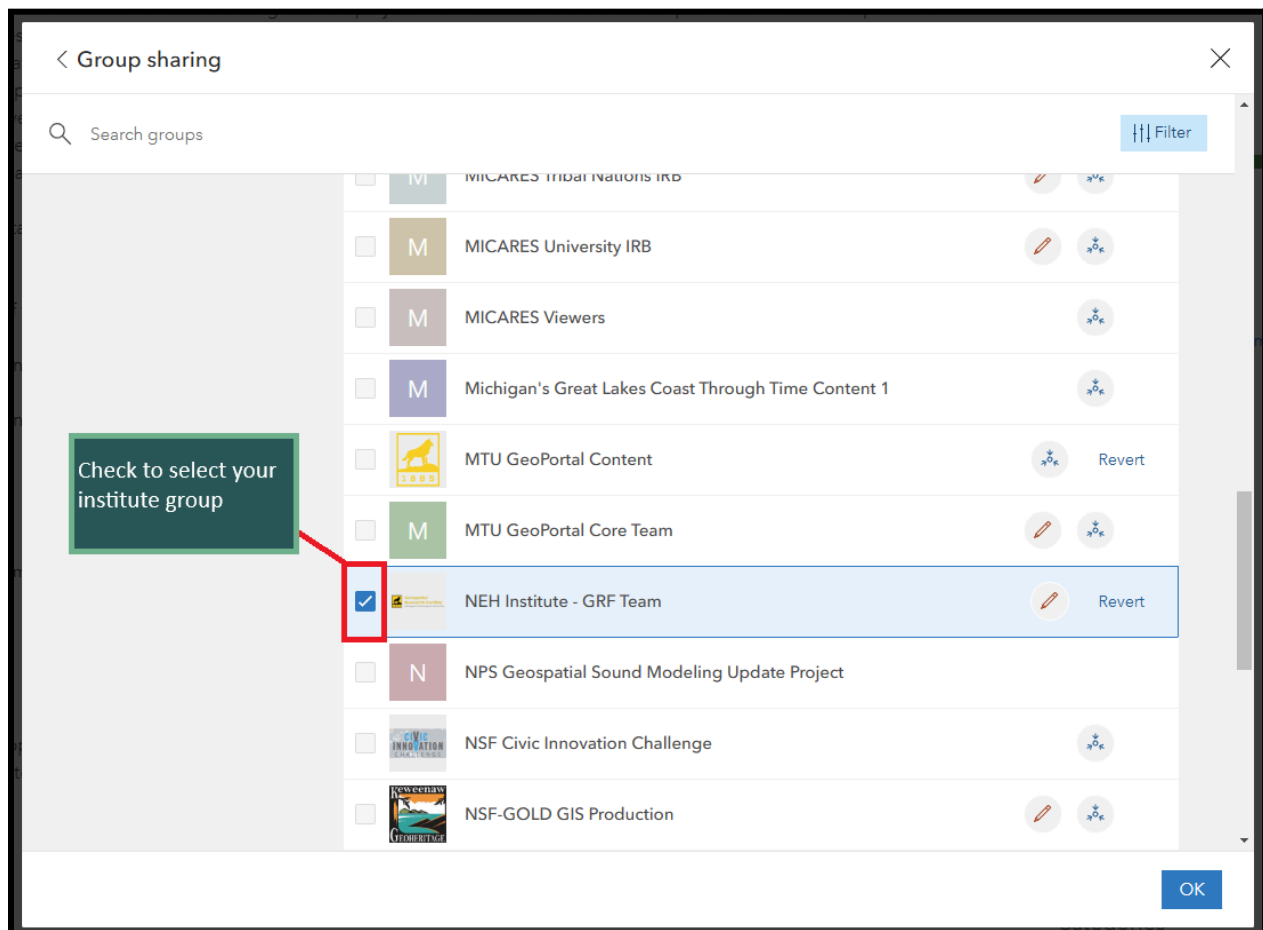
Sharing Datasets with your team

An advantage of using ArcGIS Enterprise portal is the ability to easily share datasets with collaborators and researchers through the use of Groups and Service URLs. Datasets can easily be **shared** or **downloaded** from the **Item Details** page of any item.

Sharing Datasets with your group



To share a dataset with your institute team group, click on the **Share button** on the **item's details page**. A window will pop up allowing you to set the **sharing level**. The options are: Owner, Organization, and Everyone (public). To share your item with your Institute team's Portal group, there is a button near the bottom of the popup that says **Edit Group sharing**. Click the **Edit group sharing button**. A window will open allowing you to select any groups in the organization in which you want to share this dataset with. Find your Institute team group and click the check box next to it and click **OK**.



You will now be returned to the Share window and you should see the groups are now listed under **Set group sharing**. Click **Save** to finish sharing with your group.

Now your item will be visible and accessible to all members of your team for use in the Deep Mapping Institute.

Share

Set sharing level

☐ Owner
Owner of the item(s) has access

☐ Organization
All members of your organization have access

☒ Everyone (public)
People outside your organization have access

Set group sharing [Revert](#)

 [Edit group sharing](#)

[Save](#) [Cancel](#)

Sharing from a Service URL

You also have the option to share the dataset from a **service URL**. The service URL can be useful if you are sharing the dataset with someone outside of the organization or if you are building a custom web app with JavaScript.

The service URL can be found near the bottom of the details page for any item. Click on the **clipboard button** to copy the service URL.

Credits (Attribution) [Edit](#)

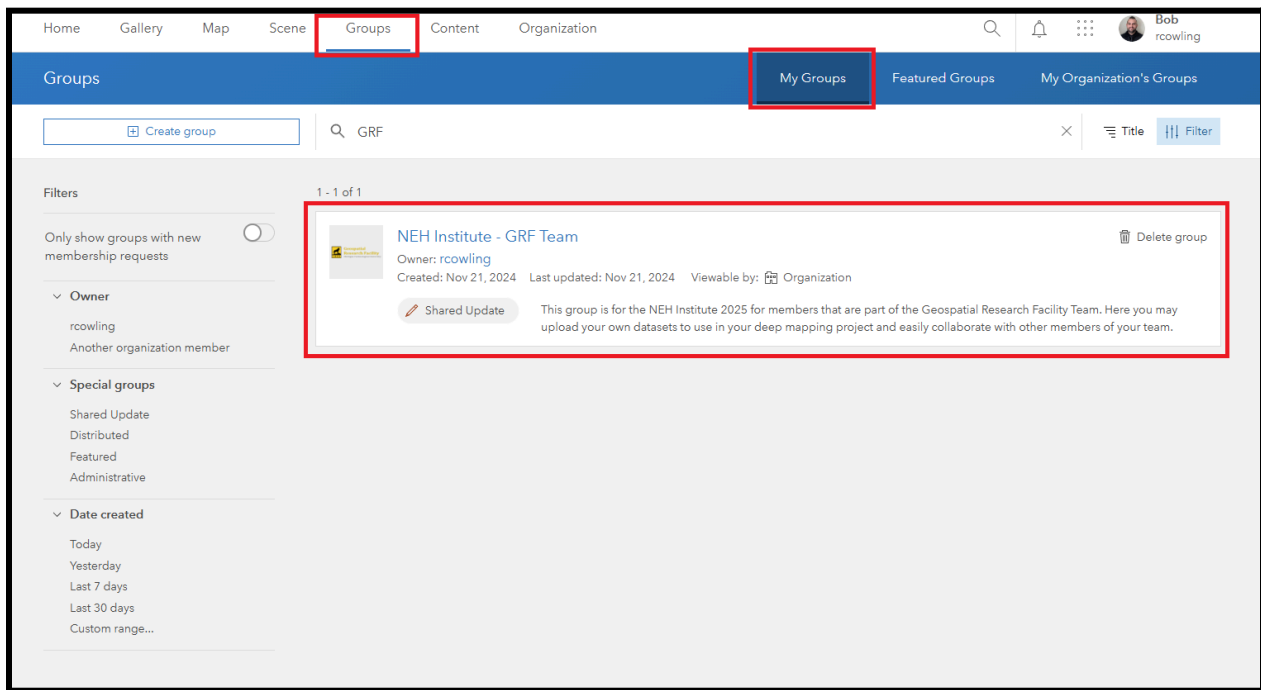
Geospatial Research Facility, Michigan Tech Univ.

URL [View](#)





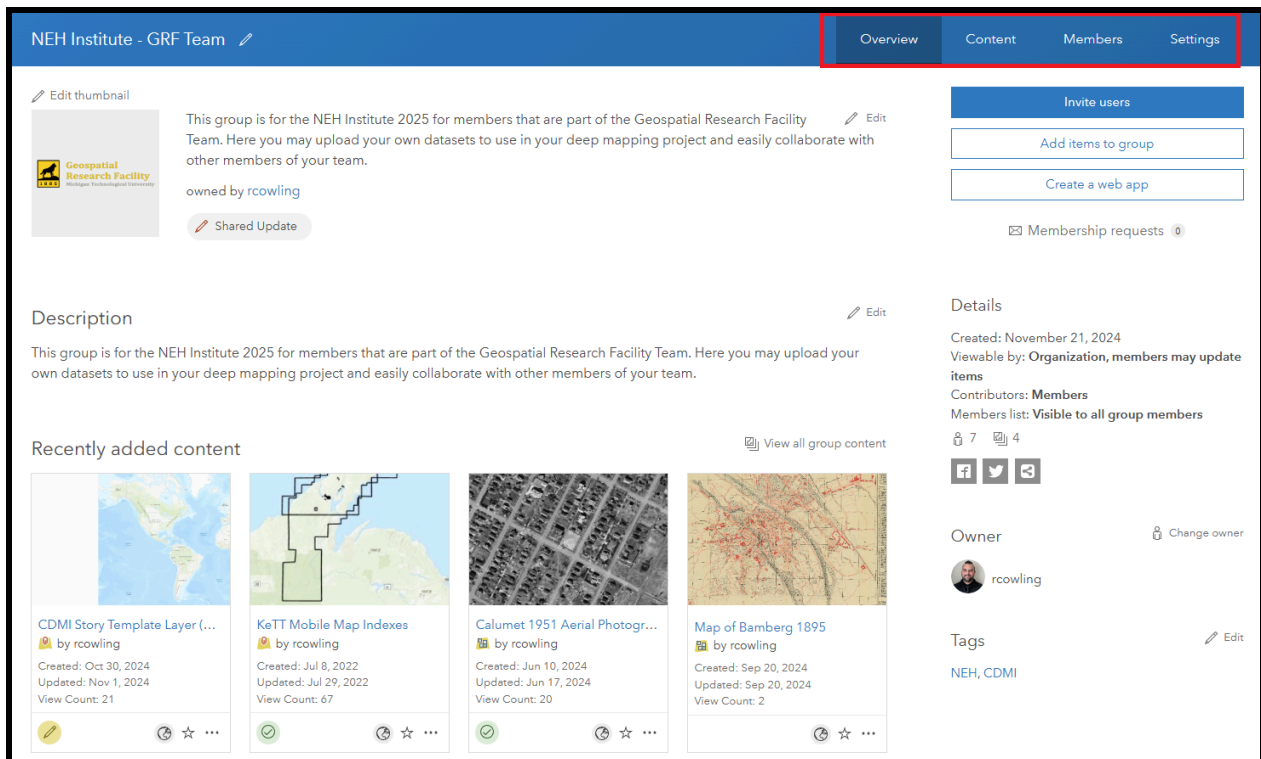
Accessing your Group



A group is where, during the Deep Mapping Institute you will be collaborating with your team and storing and sharing your datasets. Your group can easily be located in the ArcGIS Enterprise portal by simply clicking on the **Groups tab**. The Groups tab displays groups in the organization in which you own or belong to. Groups in ArcGIS Enterprise portal are a collection of items usually related to a specific project or topic of interest. Groups provide a way to organize items such as raster and vector GIS datasets and **control who has access to them**.

Working within your Group

When selecting your group from the **Groups tab**, you will be presented with the home page for your group.

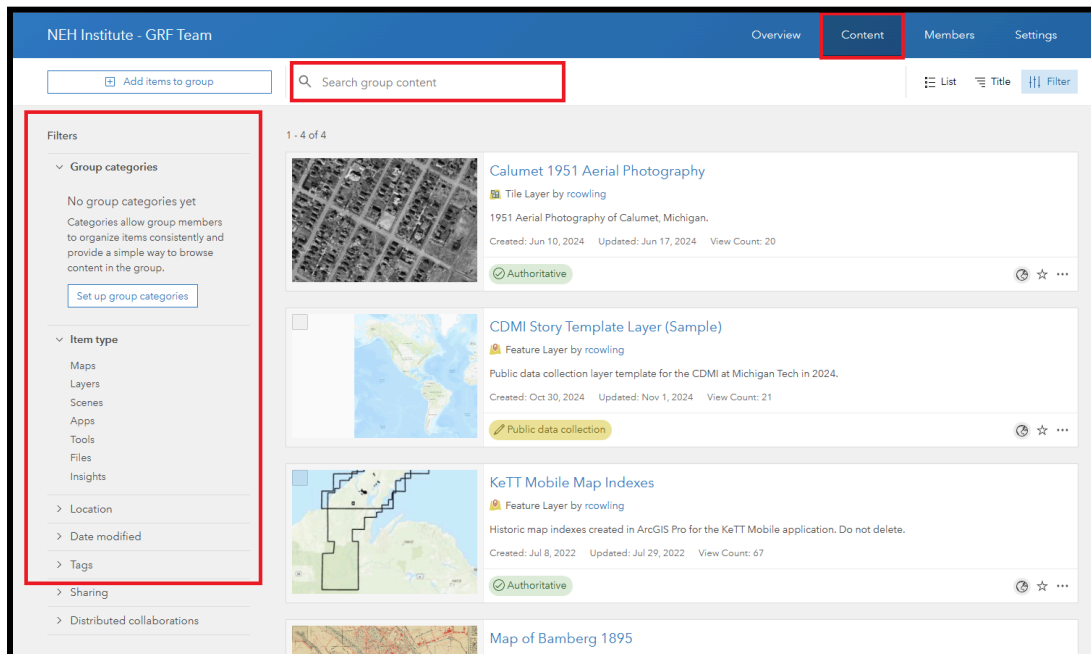


Your Group's homepage provides a summary and description of the group as well as recently added content and a navigation menu for the group. The Group's navigation menu contains the following tabs:

- Overview
 - Provides a summary and description of the group. You can view recently added content, invite users to the group, and manage membership requests.
- Content
 - A list of all of the content that has been added to the group. Here you can also add new content to the group.
- Members
 - A list of all of the members in the group. Here you can also invite people to **join** the group.
- Settings

- If you own or administer the group, you can change the settings here.

Viewing Group Content



You can view all of the content within the group by clicking on the group's **Content** tab. Here you can search the group's items and set up **Group categories** to help organize the items within the group or you can filter by item type, location, data modified, and tags.

If you need help putting a dataset onto the Enterprise portal, you can contact the GRF directly at grf@mtu.edu for assistance.