# Prepare and Configure the Event GDB

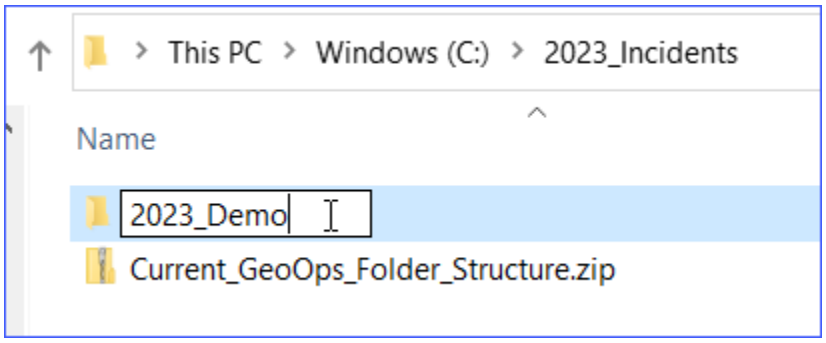
This document will show the process for utilizing the GeoOps Incident Folder Structure and Event Geodatabase on an incident.
See the GISS Workflow for more information and GeoOps for standards and definitions.

## Prepare the Event Geodatabase

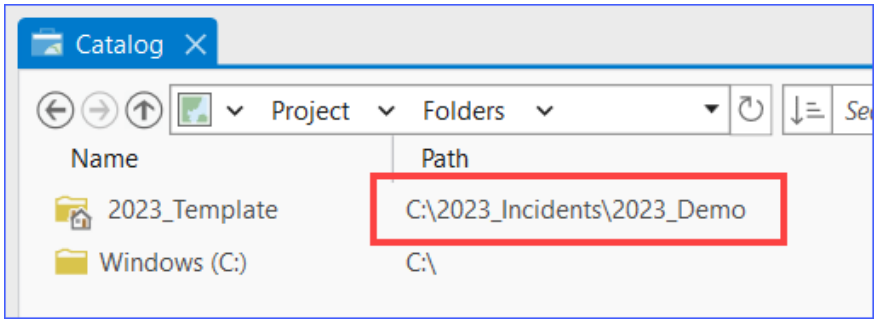
The GeoOps File Namer spreadsheet (found in the *tools* folder) should be used throughout this process and the entire incident for maximum efficiency and consistency in file naming.

*Note:* It is very important to begin with a new zip of the *Current_GeoOps_Folder_Structure* when setting up a project. This will allow the Pro Project Template to establish the correct file pathways. Reusing the folder structure or the Pro Project Template is not recommended.

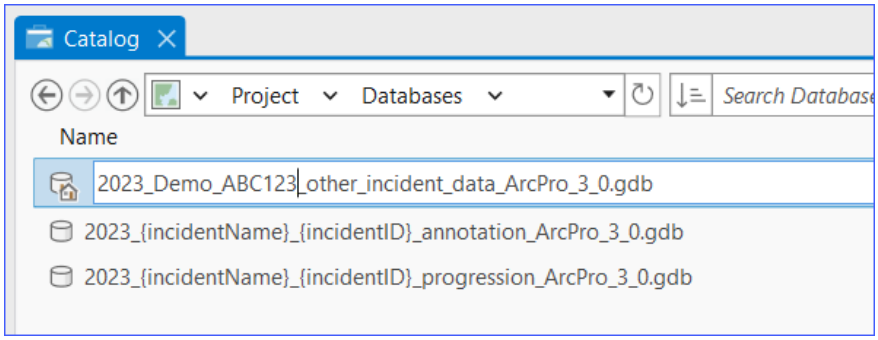
1. Creating Incident File Structure
    a. Unzip the Current GeoOps Folder Structure as close to the root drive as possible.
    b. Rename the *2023_Template* folder to the incident name.




*Note:* A display issue affects the Home Folder name in some versions of Pro. Even after renaming it to the incident name, it may still display as *2023_Template* in the project folders. This can be edited here or left as is, after confirming the underlying connection is correct.



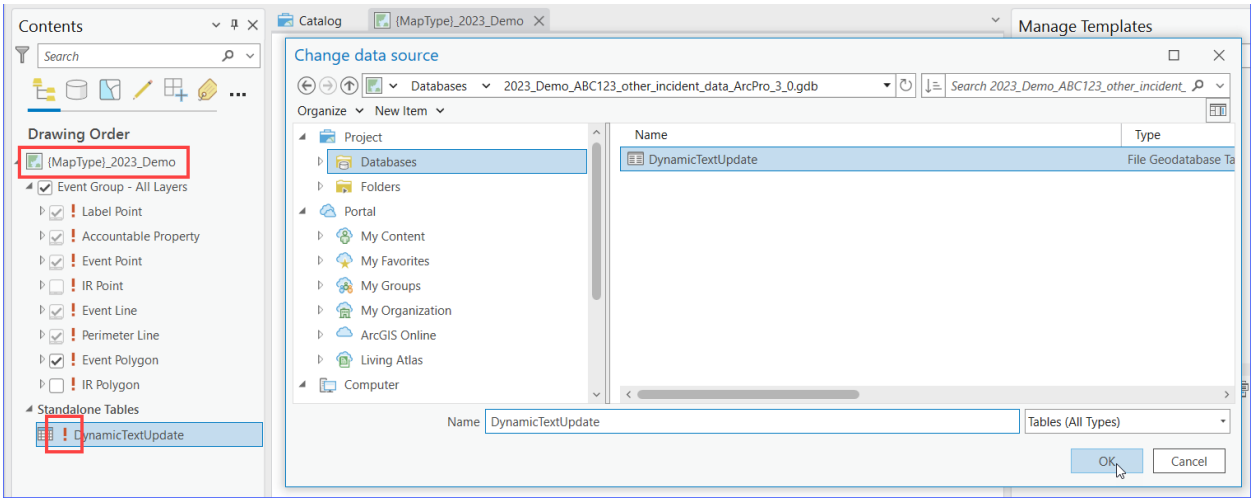
2. Customize the Template to the Incident
    a. In the *\projects* folder, open the 2023_ProProjectTemplate APRX file.
    b. In the Project Databases folder under Contents, rename the Default GDB (the other_incident_data GDB) with the incident name and local ID.



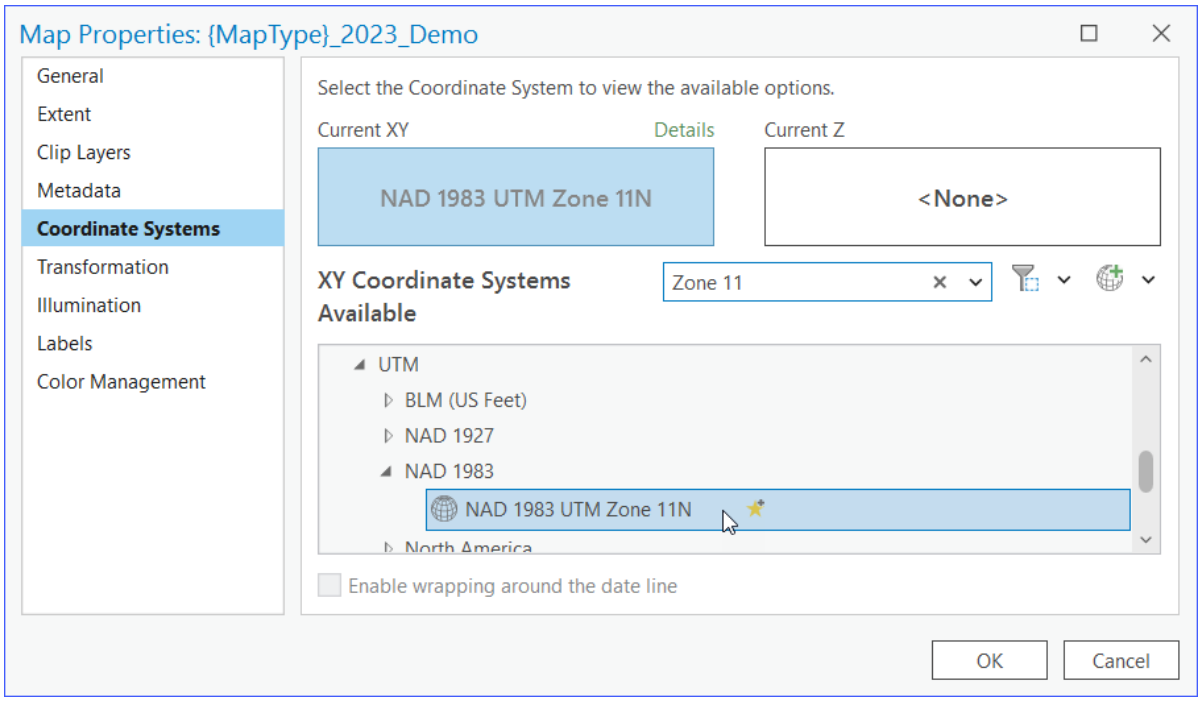

*Note:* A slow double-click on the database name in the Catalog View must be used to update the name. The Rename button will be grayed out.
Be sure to rename the Default GDB prior to opening the provided Map View or a database lock will be created, and you will be unable to rename the Default GDB.

    c. Rename the Annotation and Progression GDBs as well.

    d. Navigate to the Maps folder.
    Open the provided map view *{MapType}_2023_{IncidentName}.*
        i. Add the Incident Name to the map title, but leave *{MapType}.*
        ii. Repair the path of the *DynamicTextUpdate* table to the existing table in the Default GDB.



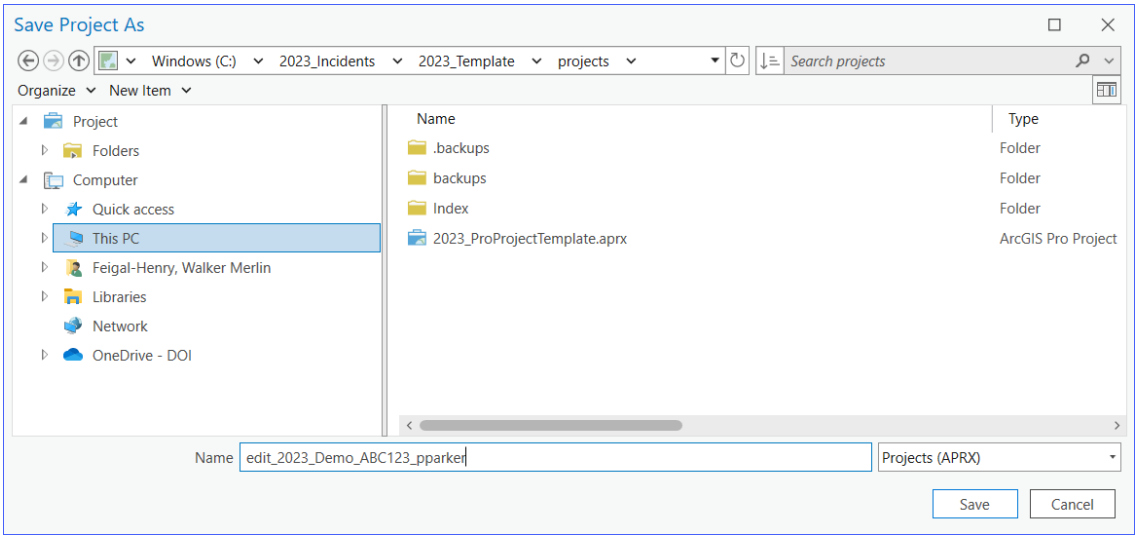
iii. Set the coordinate system of the map to a local projected coordinate system.




*Note:* By setting the coordinate system now, all incident projects will inherit this configuration. If you do not wish to use the same coordinate system for all incident projects, this can be set after each Save-As of the ProProjectTemplate APRX.

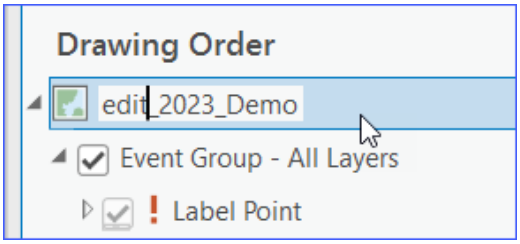
e. Save the Project.

3. Create the **Edit Project**
    a. Use Save As to save the template as a new project in the *projects* folder, naming it *edit_2023_{incidentName}_{localIncidentID}_{yourName}*.
    This is the **Edit Project**, all data editing should be done here.

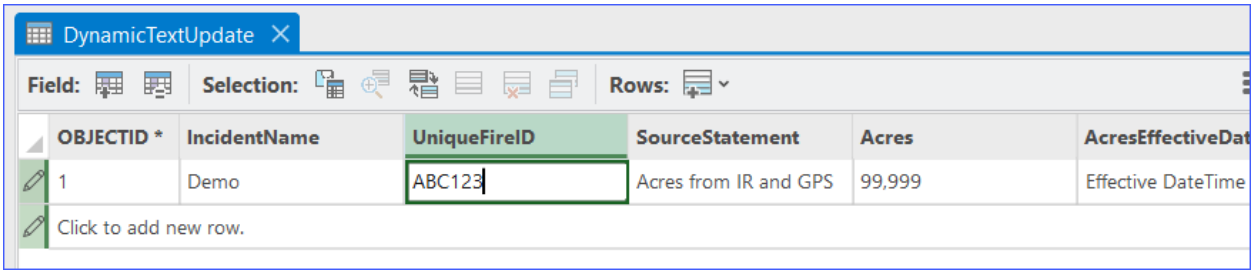



*Note:* ***Do not*** save the **Edit Project** in a OneDrive synced folder. If using OneDrive to store and sync the incident files, save the **Edit Project** to a logical place on your local C: drive such as *C:\2023_Incidents\Demo_2023*.

    b. Add "edit" as the *{MapType}* to the Map View title.



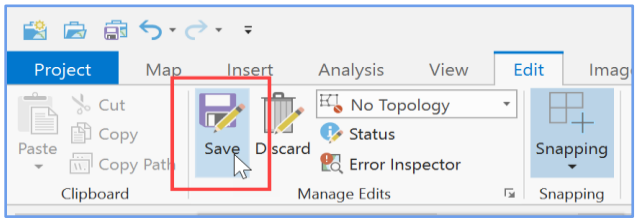

    c. Open the *DynamicTextUpdate* table and fill in all the attributes.




*Note:* Values in the *DynamicTextUpdate* table will populate dynamic text elements in every template layout in every ArcGIS Pro project for the incident. It should be edited from the **Edit Project** while all other projects are closed so the updated values will populate properly. This provides a single source to update the current acreage and other attributes *for all layouts at*

*once*. Additional attributes can be added and utilized with their own Dynamic Text tags. Multiple rows can now be utilized with the use of a custom query.

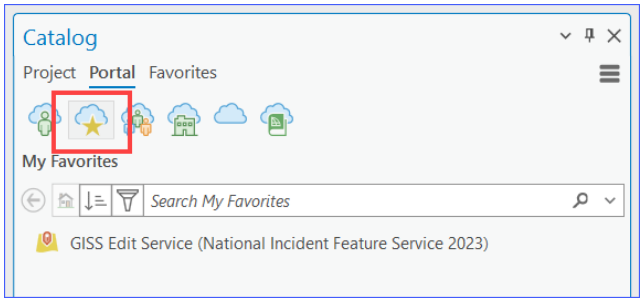
d. Save the edits to the table.



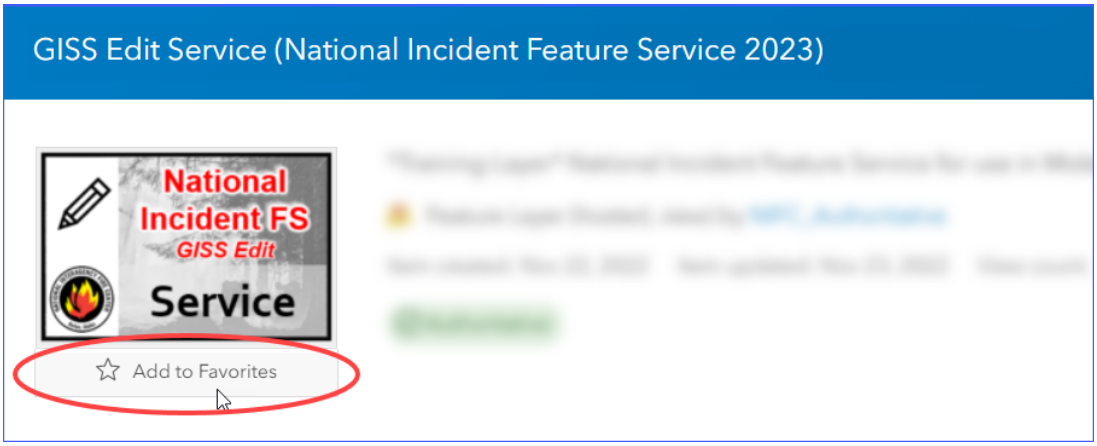

4. Create an **Offline Copy**

*Note:* The coordinate reference system of the **Offline Copy** will be automatically reprojected to the local projected coordinate system of the map frame upon creation.

a. Sign into your NIFC AGOL account in ArcGIS Pro
b. In the Catalog pane, click on Portal and then the cloud with a star for *My Favorites*. Right-click the GISS Edit service and select Add To Current Map.

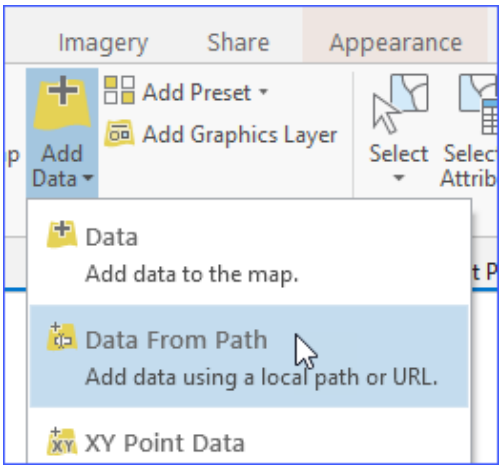



*Note:* To add the GISS Edit Service to the *My Favorites* menu, open the item page in AGOL and click Add to Favorites under the thumbnail.



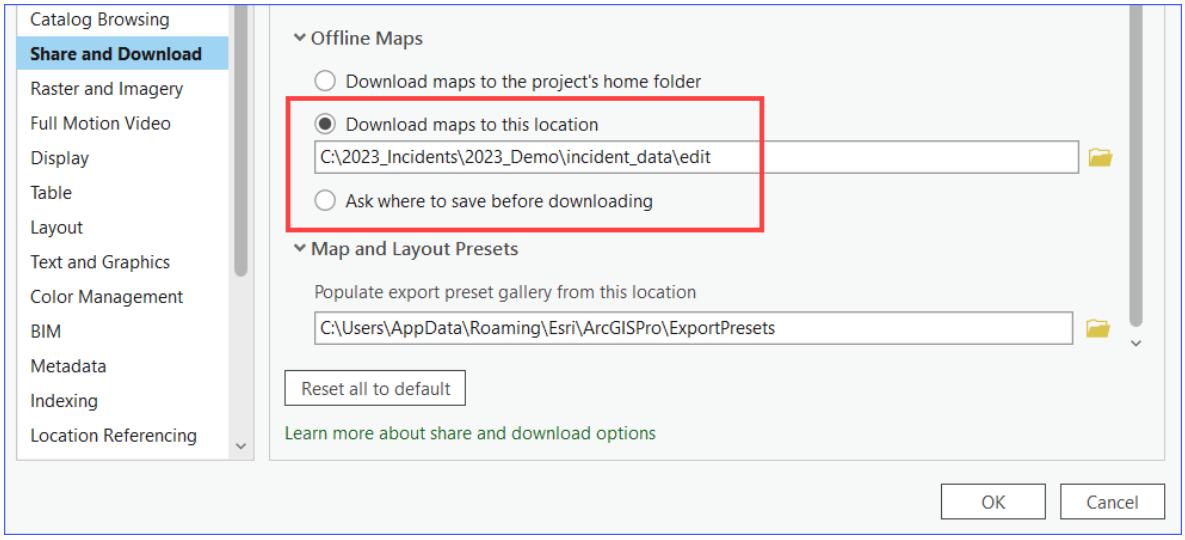
c. The service can also be added by URL with Add Data from Path

i. On the Map ribbon tab, open the Add Data dropdown and select "Add Data" from Path




ii. Copy and paste the URL path to the NIFC AGOL "GISS Edit Service (National Incident Feature Service" into the dialogue box. Both the NIFC Org URL and REST URL will work.

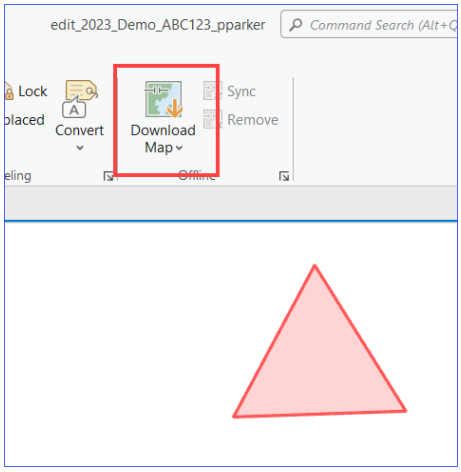
The **Offline Copy** will automatically be created in the Home folder (which is set to the main incident folder). *Do not move or rename it after download.*
If preferred, the download location can be set to prompt you each time or the default location updated to the *incident_data/edit* folder in the project settings under Share and Download. If setting the download location, *it must be updated for each incident*.



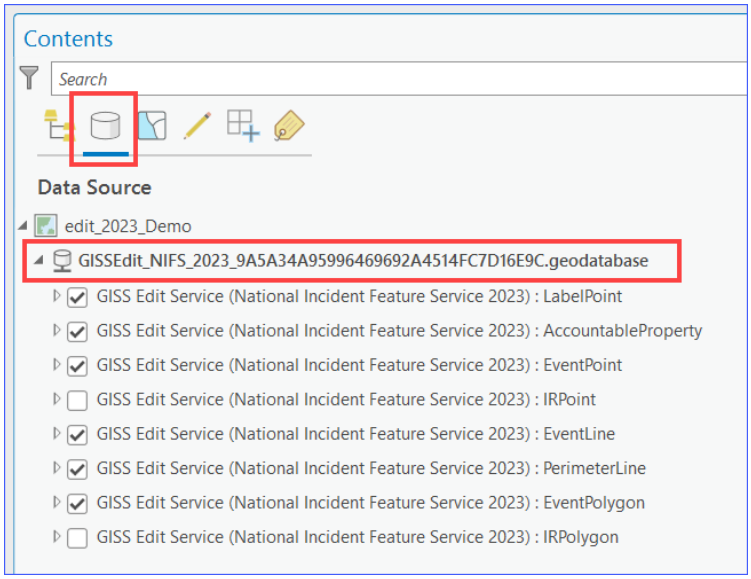
*Note:* ***Do not*** save the **Offline Copy** in a OneDrive synced folder. If using OneDrive to store and sync the incident files, save the **Offline Copy** to a logical place on your local C: drive such as *C:\2023_Incidents\Demo_2023*.

d. The **Offline Copy** will be needed to create the **Master Incident GDB** and should be used for all editing. While feature services can be edited directly in Pro, ***the NIFS should not be edited 'live' in Pro*.**

   i. Zoom to the incident and click Download Map on the Map ribbon. There should be a triangle in Event Polygon that was auto-generated from IRWIN when the incident was created, the triangle can be used as a starting point. It will already contain the correct IRWIN and Incident IDs.

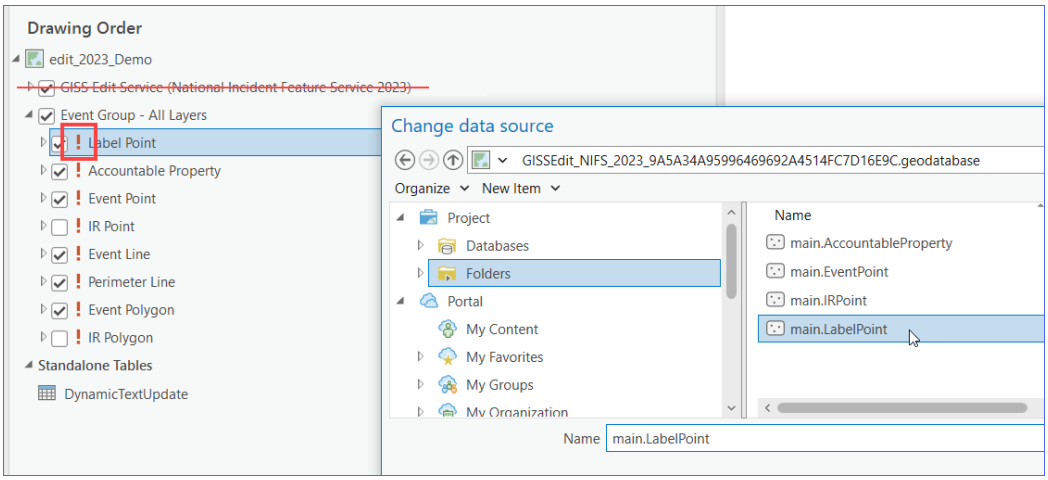



   ii. Once the download is complete, change the Contents pane to List by Data Source and confirm that the source for *GISS Edit Service (National Incident Feature Service 2023)* is now a local database.

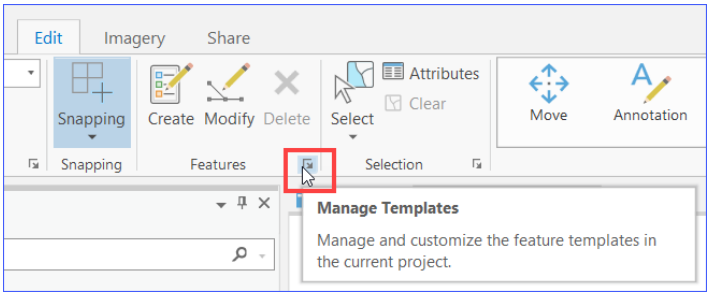


*Note:* The **Offline Copy** is not a File GDB, it is a Mobile Geodatabase (aka Runtime GDB). ArcGIS Pro works natively with this format, but its capabilities are limited and it will need to be converted to a File GDB for backups and use as the **Master Incident GDB**.
Use the Mobile Geodatabase To File Geodatabase (Conversion) geoprocessing tool.

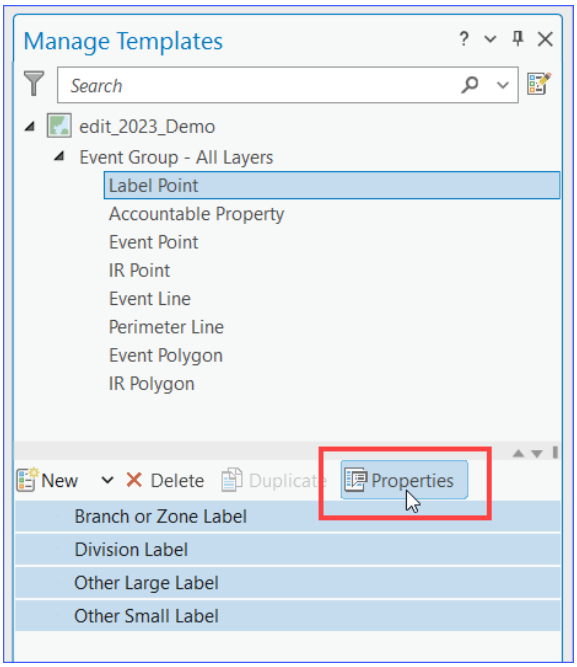
5. Use the Event layer files instead of the service directly. While the symbols are now the same, several other settings are saved in the layer files that are not available directly from the service.
    a. Repair the path of the *Event Group - All Layers* layers to point to the newly created **Offline Copy**.
    Remove the *GISS Edit Service (National Incident Feature Service 2023)* group to avoid confusion.



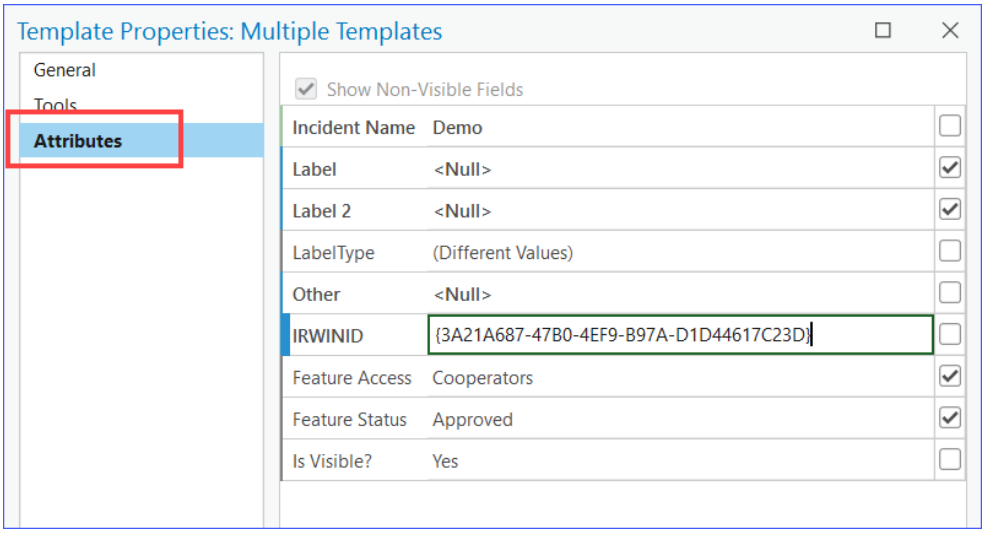

6. Configure Feature Templates
    a. Open the Manage Templates pane. This can be done from the Create Features pane or by clicking the dialog box launcher under the Features group on the Edit tab.



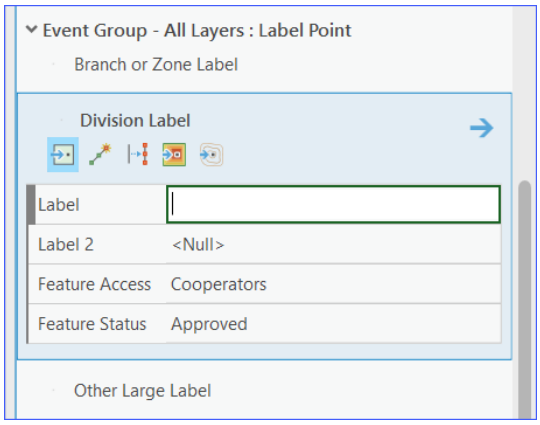
b. Starting with Label Point, select all the features in the list and click **Properties**.




c. Set the values for *IncidentName* and *IRWINID* and any other defaults you wish to apply to your edits.

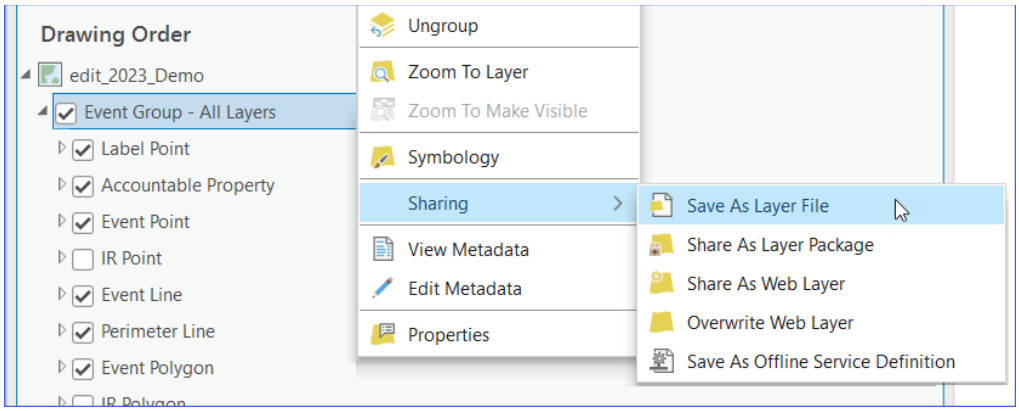


d. Repeat the previous step for all the other layers, setting the defaults and any additional attribute prompts you find useful (checking the box to the right of each value will add the field to the Create Features window for easy attribution of crucial fields.




*Note:* See the GISS Workflow for more information on Obtaining IRWIN IDs for Incidents and Complexes.

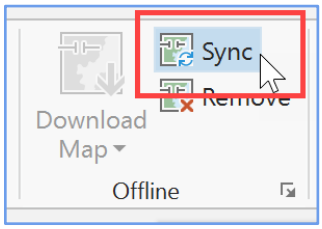
7. Once the Feature Templates for each of the Event feature classes are configured, save a layer file as a backup. A layer file will store both the symbology and more importantly, all the incident specific template settings just configured.
   a. Right-click the *Event Group - All Layers* in the Contents pane and select Save as a Layer File under Sharing.
   Save the file to the *incident_data\edit* folder following the GeoOps naming convention *{year}_{incident name}_{unit ID+local incident ID}_{your name}_EDIT.lyrx*




   Use this layer file to build a new Edit Project should you need to for any reason.

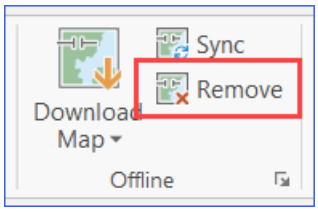
*Note:* In order to utilize all the settings saved in the layer file, add it to the map through the Add Data button. If the data has moved or you wish to apply it to a different feature class, you can repair/change the data source.

8. Edit the data.
    a. Add basemap(s) and any ancillary data necessary to perform accurate edits of the incident data.
    b. Edit the data as you would any local dataset.
    c. An **Offline Copy** in Pro can sync with the service more than once. There is no need to remove and re-download for each edit session.




*Note*: **SYNC-EDIT-SYNC:** It is critical to Sync ***before*** each editing session as well as after. Syncing before will pull down any edits that have been made since the last sync. Not doing so will greatly increase the chances of a conflict and data being overwritten.

9. Recreate the **Offline Copy** to account for an expanded area of interest.
   As a fire grows, it will likely be necessary to recreate the Offline Copy for a larger or different area.
    a. Remove the existing Offline Copy.




*Note:* As of Pro 2.8, clicking Remove no longer automatically deletes the **Offline Copy**. Managing the older mobile geodatabases is required, similar to as it was with ArcMap, to avoid confusion. They can be renamed and archived or simply deleted.
*This is a bug and will be fixed in a future version.*

    b. Zoom to the new area of interest and use the Download Map function to create a new Offline Copy.

# Create the Master Incident GDB

The **Master Incident GDB** is the database with which all incident maps should be created. The Master Incident GDB is located in the *incident_data* folder. **No editing should be done in this geodatabase**.

The **Offline Copy** will need to be converted to a File GDB before being copied to the *incident_data* and *incident_data\backups* folders and renamed.
Use the Mobile Geodatabase To File Geodatabase (Conversion) geoprocessing tool.

*Note:* Some versions of Pro display a bug that prevents a File GDB from being copied or renamed if the name begins with a number. If encountered, use File Explorer to copy GDBs or rename to begin with "*i_*" as done for feature classes.

Be sure your Master Incident GDB and all backups comply with GeoOps naming standards.

# Create Incident Maps in Pro

The same Pro Project Template APRX will be the starting point to create project files for incident maps as well.

Layouts are included for the most common page sizes and all the text is tied dynamically to the provided map view and the *DynamicTextUpdate* table in the *_other_incident_data.gdb*. Instructions for updating the dynamic text are found in each layout.

1. Open the 2023_ProProjectTemplate APRX file.
2. Use **Save As** to save the template as a new project in the *projects* folder, naming it *{mapType}_{year}_{incidentName}_{localIncidentID}.aprx*.
3. Open the existing map view *{MapType}_2023_{IncidentName}* and rename it with the map type and the incident name. This one project and Map View can be used to create all the map products for this type, regardless of printed size or multiple areas.
4. Repair the data source for the existing layers (or add a new lyrx file and repair) to the **Master Incident GDB**.
5. Open or create a Layout in the appropriate size and customize it to the product type.

For more information on creating incident maps with ArcGIS Pro, see the document Page Layouts in ArcGIS Pro.