

Prepare and Configure the Event GDB

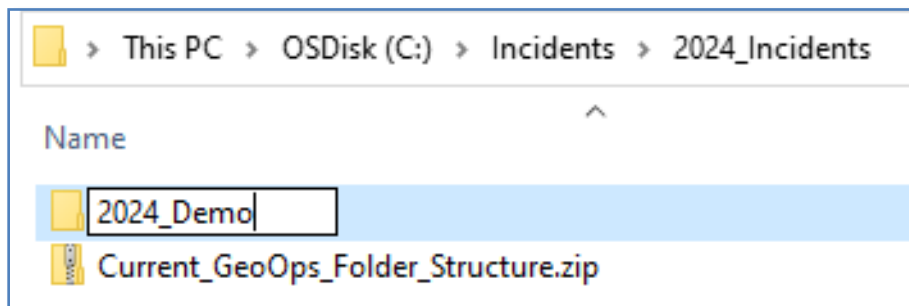
This document will show the process for utilizing the GeoOps Incident Directory Structure and Event Geodatabase on an incident.

See the [GISS Workflow](#) for more information and [GeoOps](#) for standards and definitions.

Implement the Incident Directory

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. Download the [Current GeoOps Folder Structure](#).
2. Extract the zipped folder as close to the root of your working drive as possible.
3. Rename the *2024_Template* folder to the incident name. If the incident name contains more than one word, use CamelCase (i.e., 2024_CedarCreek).

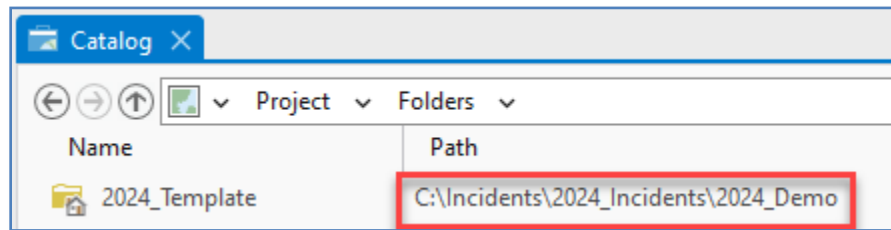


4. Enter Incident Information in the GeoOps File Namer spreadsheet in the \tools folder. The File Namer should be used throughout this process and the entire incident for maximum efficiency and consistency in file naming. Use the Zone field only if you are on a zoned incident.

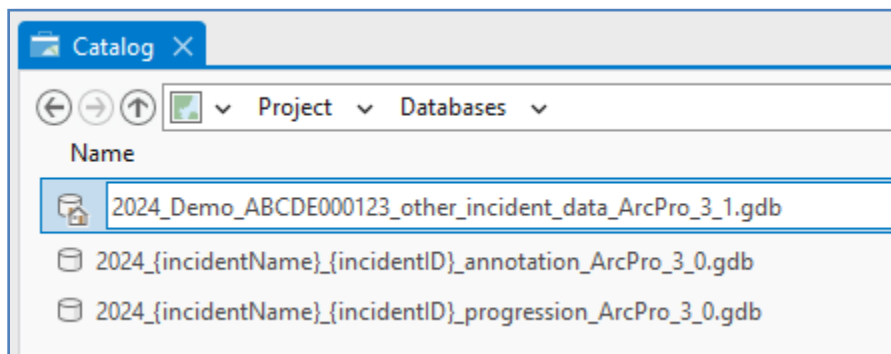
Data Preparation		
Year:	2024	Current Date & Time
Incident Name:	Demo	October 27, 2023 13:22
Zone:		
Unit ID:	ABCDE	
Local Incident Number:	000123	IRWIN ID
Software Version:	ArcPro_3_1	{AAAAAAAA-1111-2222-3333-ZZZZZZZZZZZZ}
First Initial, Last Name:	pparker	

Configure the Pro Project Template

1. In the `\projects` folder, open the `2024_ProProjectTemplate` APRX file.
2. 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 `2024_Template` in the project folders. Rename the Home Folder after confirming the underlying connection is correct.

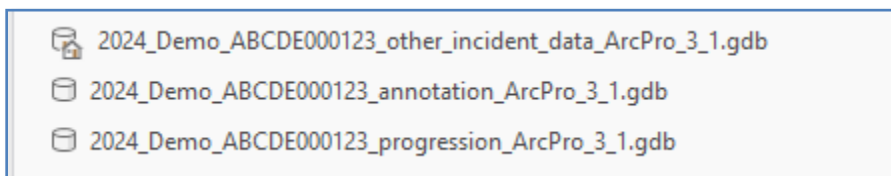


3. In the Project Databases folder under Contents, rename the Default GDB (other_incident_data GDB) with the incident name and Unique Fire ID.



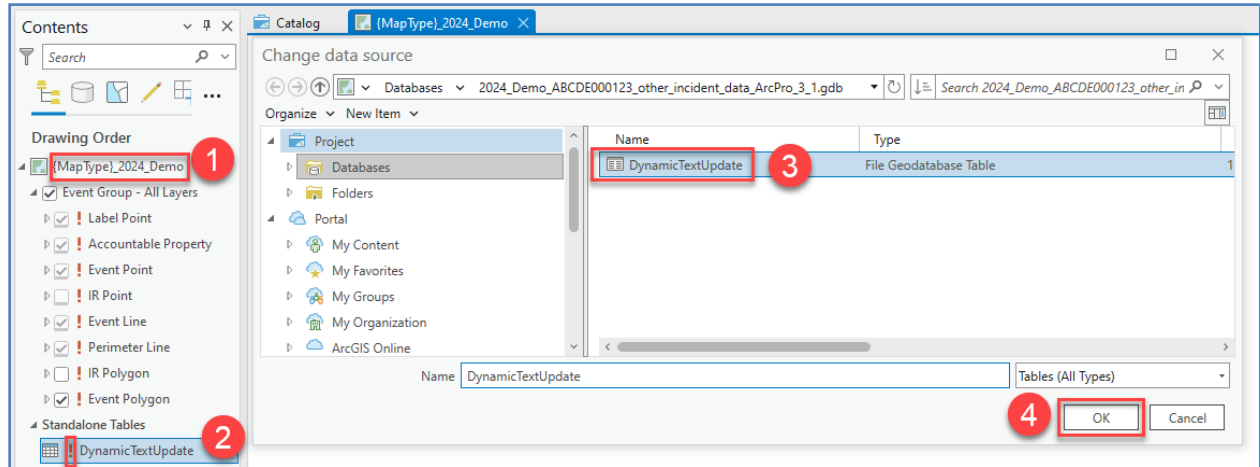
Note: A slow double-click on the database name in the Catalog View must be used to update the name. The Rename button will be grayed out. Be sure to rename the Default GDB prior to opening the provided Map View or a database lock will be created, and you will be unable to rename the Default GDB.

4. Rename the Annotation and Progression GDBs.

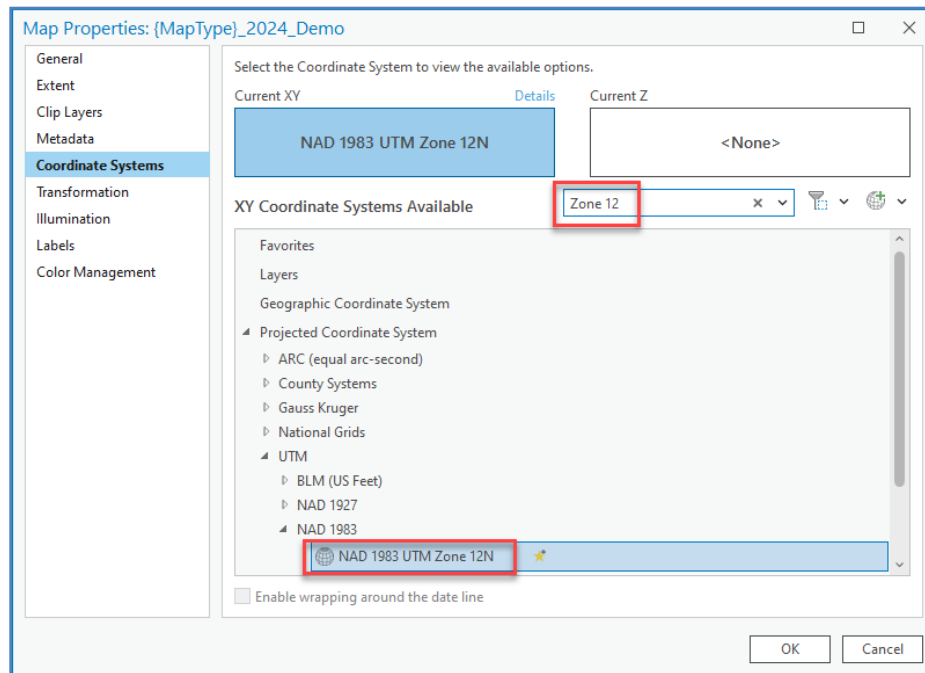


5. Navigate to the Project Maps folder. Open the provided map view `{MapType}_2024_{IncidentName}`.

- a. Add the Incident Name to the map title but leave *{MapType}*.
- b. Repair the path of the *DynamicTextUpdate* table to the existing table in the Default GDB.



- c. 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.

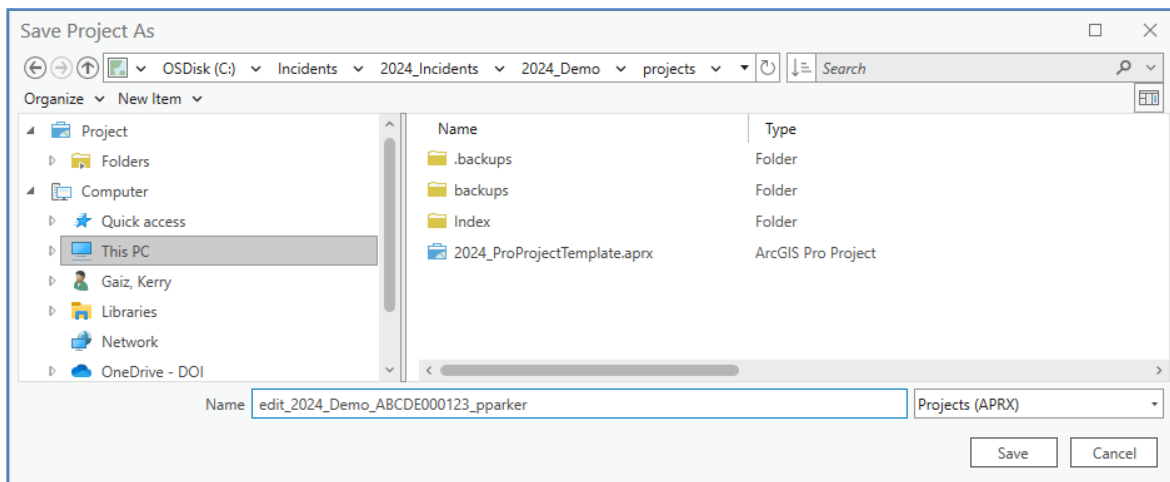
If you do not wish to use the same coordinate system for all incident projects, this can be set after each Save-As of the ProProjectTemplate APRX.

6. Save the Project.

Create the Edit Project

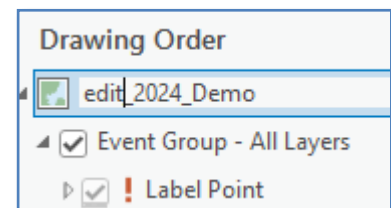
1. Save As on the Pro Project Template to create a new project at the root of the *projects* folder, naming it *edit_2024_{incidentName}_{localIncidentID}_{yourName}*.

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 sync the GeoOps directory from the incident's SharePoint, save the **Edit Project** to a logical place on your local C: drive such as *C:\2024_Incidents\Demo_2024*.

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



3. Open the *DynamicTextUpdate* table and fill in the Incident Name and Unique Fire ID attributes. If the incident name is more than one word, do *not* use CamelCase in attribute tables; use a space (e.g. "Cedar Creek").

DynamicTextUpdate						
Field:	OBJECTID *	Incident Name	Unique Fire ID	Source Statement	Acres	Acres Effective Date
Date and OP of Use	1	Demo	AB-CDE-000123	Acres from IR and GPS	99,999	Effective DateTime
Click to add new row.						

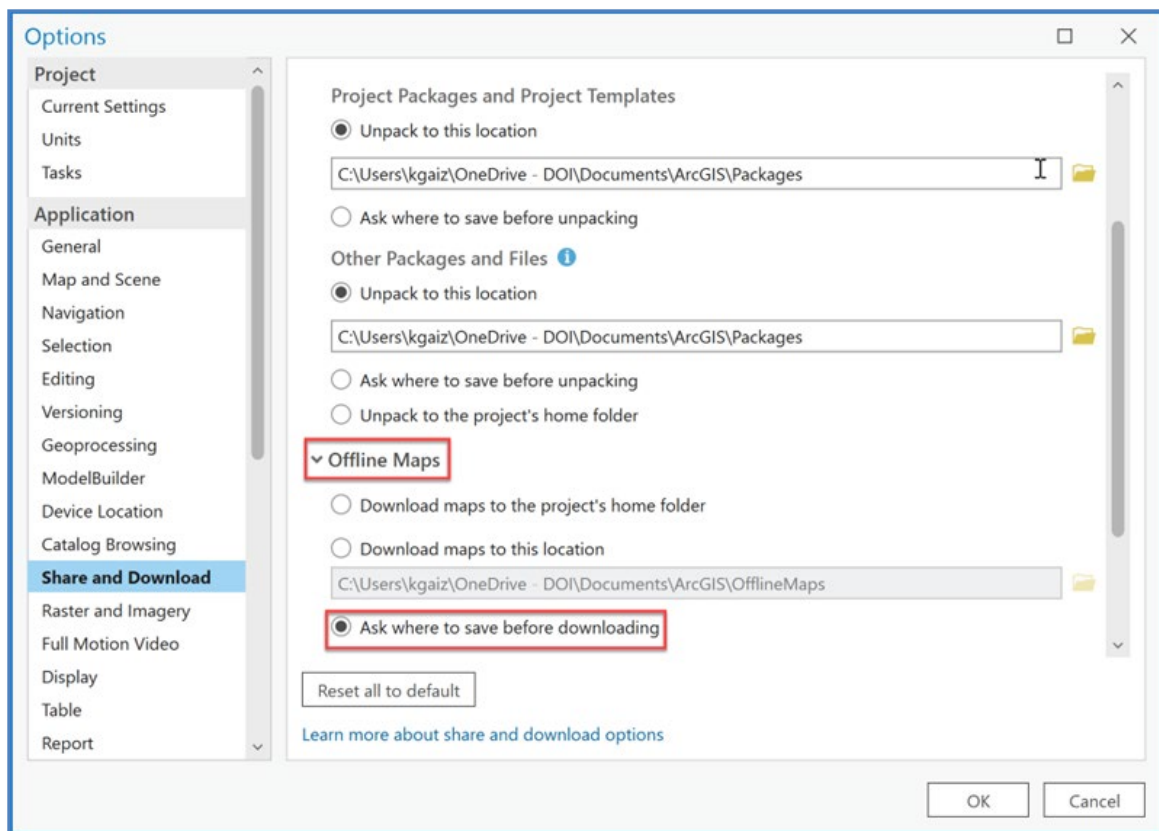
Note: Values in the *DynamicTextUpdate* table will populate dynamic text elements in every template layout in every ArcGIS Pro project for the incident. It should be edited from the **Edit Project** while all other projects are closed so the updated values will populate properly. This provides a single 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 be utilized with the use of a custom query.

4. Save the edits to the table.

Create an Offline Copy

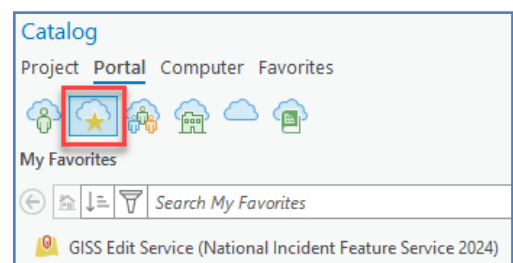
Configure ArcGIS Pro Portals and Options

1. Sign into NIFC AGOL as your active portal to access the GISS Edit Service.
 - a. If your ArcGIS Pro license comes from a different account, follow the instructions provided in [this article](#) to configure your Portals.
2. Set the download location. From the Project tab on the ribbon > Options > Share and Download > Offline Maps, select *Ask where to save before downloading* and click OK.

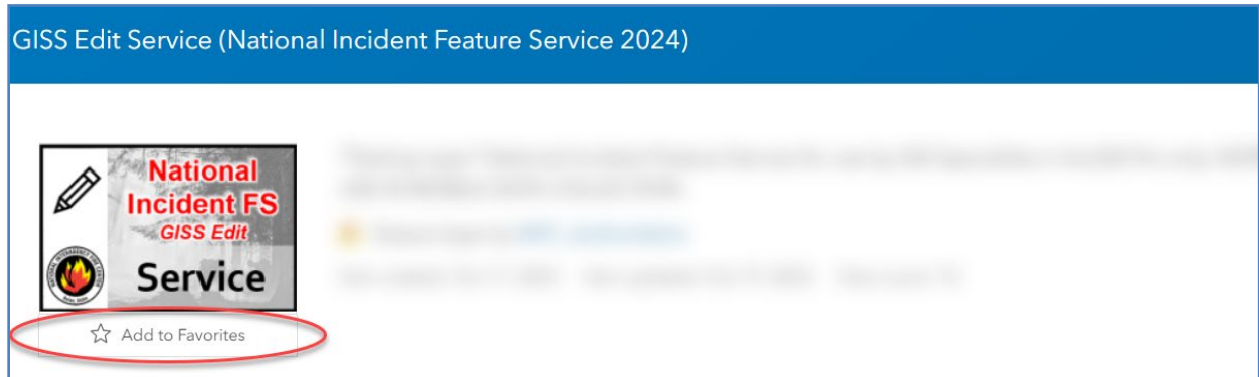


Add GISS Edit Service

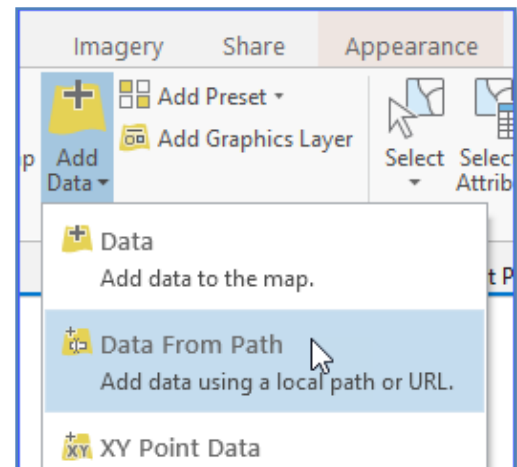
1. In the Catalog pane, click on Portal and then the cloud with a star for *My Favorites*. Right-click the GISS Edit service and select Add To Current Map.



Note: To add the GISS Edit Service to the *My Favorites* menu, open the item page in AGOL from the bottom of the [home page](#) and click Add to Favorites under the thumbnail.



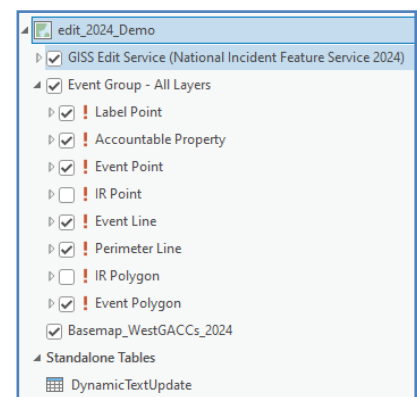
2. The service can also be added by URL with Add Data from Path
 - a. On the Map ribbon tab, open the Add Data dropdown and select “Add Data” from Path
 - b. Copy and paste the URL path to the NIFC AGOL “GISS Edit Service (National Incident Feature Service)” into the dialogue box. Both the [NIFC Org URL](#) and [REST URL](#) will work.



Add a Vector Tile Layer base map

1. *Optionally*, add a vector tile layer to your edit map as a basemap from the [Data Layers – National Incident Base Data group](#) in NIFC ArcGIS Online. An Esri basemap can be used as an alternative if a vector tile layer does not exist for your Geographic Area. Like the GISS Edit service, if you add the vector tile layer (**not** the vtpk) for your Geographic Area to your Favorites in NIFC ArcGIS Online, you can add the vector tile layer to your map in Pro from the Contents Pane > Portal > My Favorites.

Prior to downloading the Offline Copy, your edit map contents should resemble the following:

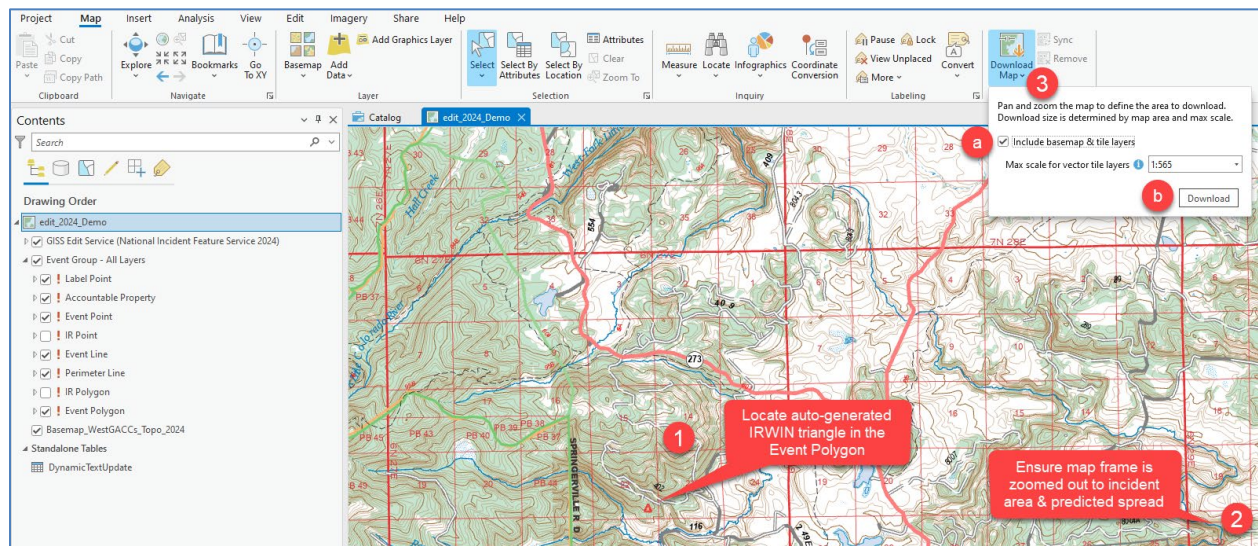


Create an Offline Copy

The **Offline Copy** is a mobile geodatabase (.geodatabase file extension) **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*.

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.

1. Locate your incident using approximate coordinates from your Resource Order or search the Event Polygon feature layer for your incident name. 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 and contains the correct IRWIN ID.
2. After locating the triangle in the Event Polygon for the incident, **zoom out** to a geographic extent that captures the incident area and projected spread. Consider major transportation routes to and from the fire. If there are other fires in the area, attempt to exclude data from other incidents in your Map Frame. Data appearing within your Map Frame when you Download Map will be downloaded to your **Offline Copy**.



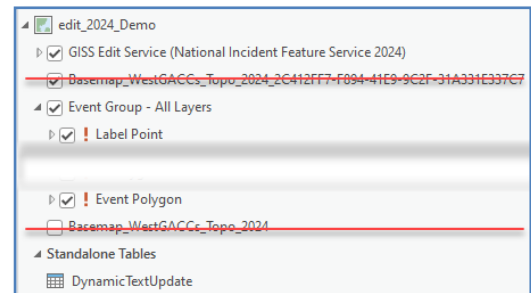
3. From the Map tab on the ribbon > Offline section > click Download Map.
 - a. If you added a vector tile layer as a basemap, check the box to Include basemap & tile layers and keep the max scale at the default value.
 - b. Click Download and set the download location to the \incident_data\edit* folder and click OK. Do not move or rename the **Offline Copy**.

***Do not** save the **Offline Copy** in a OneDrive synced folder. If using the incident's SharePoint to store incident files, save the Offline Copy to a logical place on your local drive such as C:\2024_Incidents\2024_Demo.

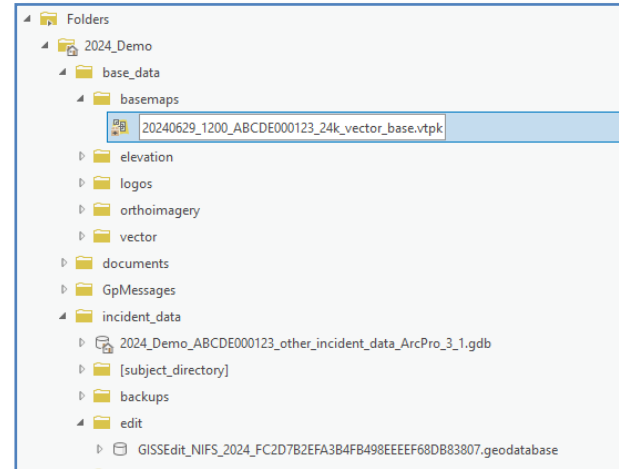
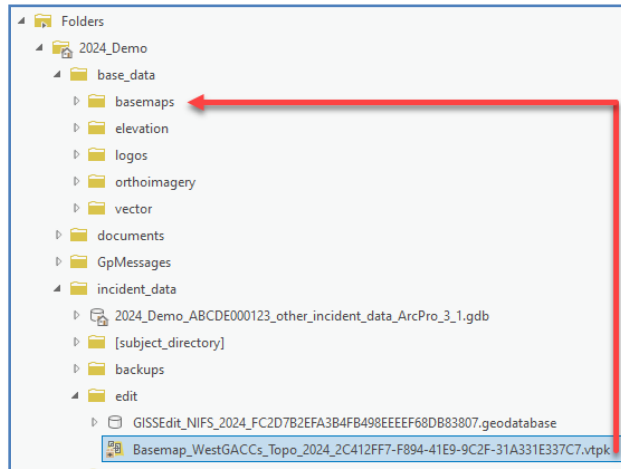
4. Once the download is complete, change the Contents pane to List by Data Source and confirm that the source for GISS Edit Service (National Incident Feature Service 2024) is now a mobile geodatabase (.geodatabase).

▲ C:\Incidents\2024_Incidents\2024_Demo\incident_data\edit\GISSEdit_NIFS_2024_FC2D7B2EFA3B4FB498EEEE68DB83807.geodatabase

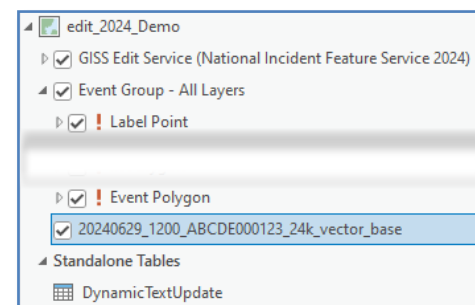
5. If you downloaded a vector tile layer with the GISS Edit service, remove both the vector tile layer and vector tile package from the Contents pane:



- a. Locate the downloaded vector tile package (e.g. Basemap_WestGACCs...) in the \incident_data\edit folder in the Catalog pane, move it to the \base_data\basemaps folder and rename it {current date}_{time}_{incident name}_{Unit ID+ Local Incident ID}_24k_vector_base.vtpk



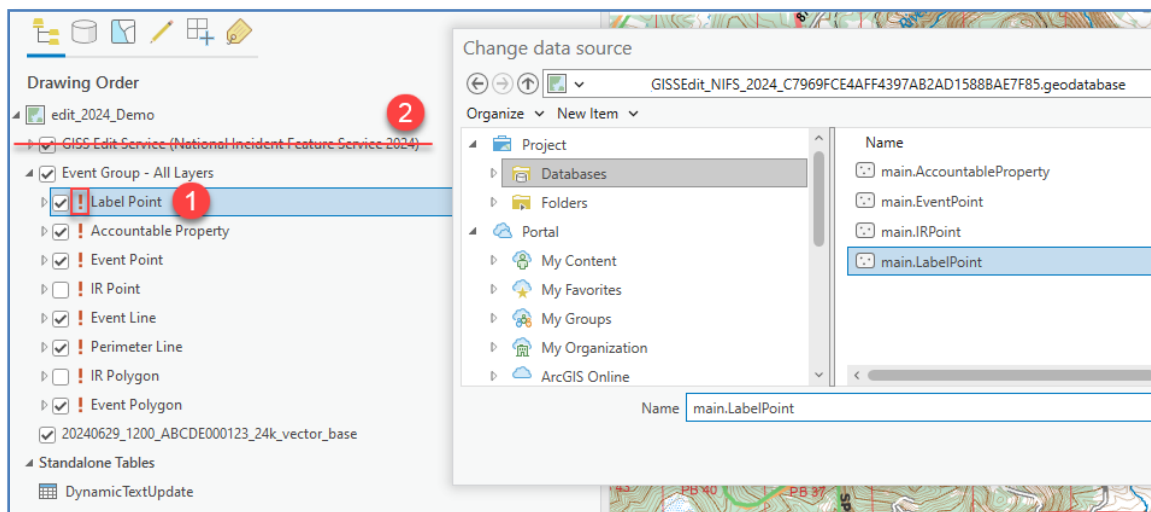
- b. Re-add the vector tile package from \base_data\basemaps to the map below but separate from the Event Group – All Layers in the Contents pane.



Repair Event Layer Files

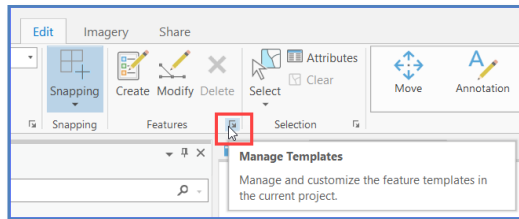
Use the Event layers in the edit map instead of the GISS Edit service directly. While the symbols are now the same, several other settings are saved in the layer files that are not available directly from the service, including caching, advanced labelling, and symbol display order. Critically, each layer is set to *not* cache any data locally in ArcGIS Pro to ensure the data displayed is always up to date.

1. Repair the path of the *Event Group - All Layers* in the Contents pane of the edit map to the newly created **Offline Copy** in the `\incident_data\edit` folder (e.g. GISSEdit_NIFS_2024_9A5A34...).
2. Remove the *GISS Edit Service (National Incident Feature Service 2024)* group to avoid confusion. Save the Edit Project.

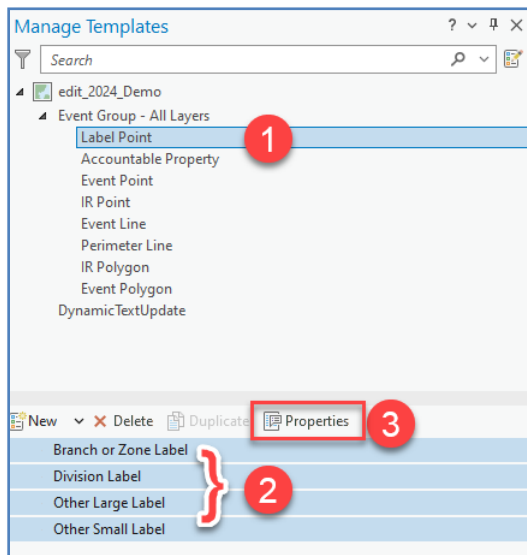


Configure Feature Templates

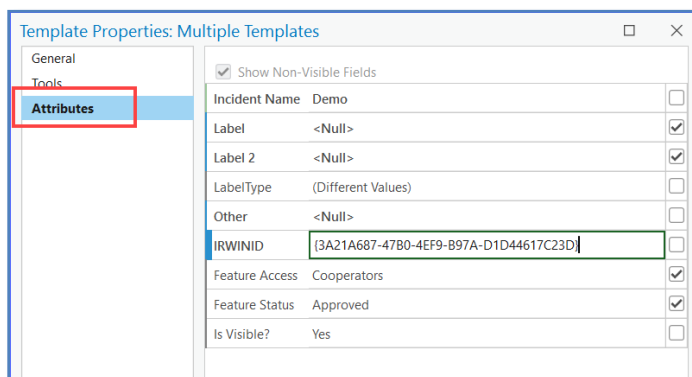
1. Open the Manage Templates pane. This can be done from the Create Features pane or the dialog box launcher under the Features group on the Edit tab.



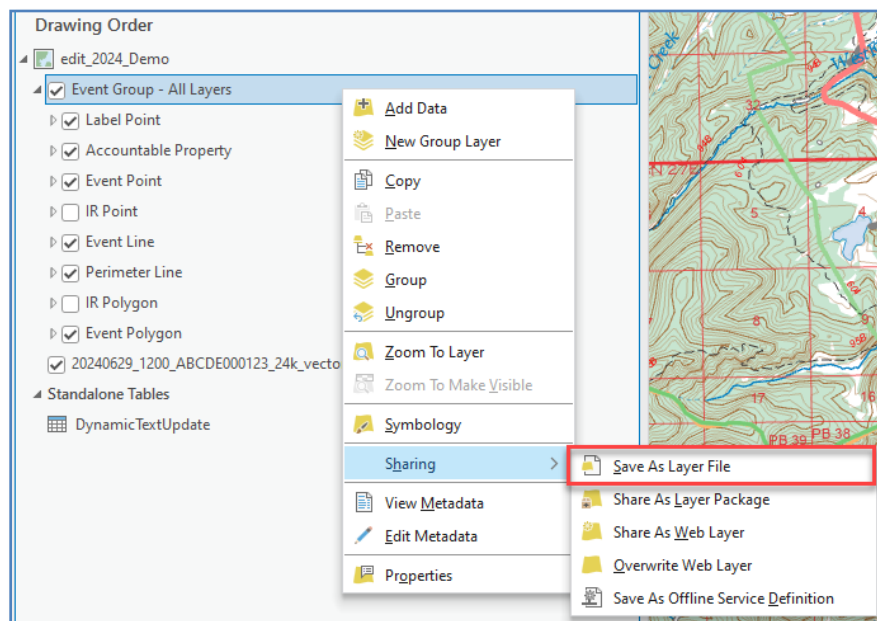
2. Starting with Label Point, select all the features in the list and click **Properties**.



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



4. Repeat the previous step for all the other layers, setting the defaults for any attributes you find useful. **Note:** See the [GISS Workflow](#) for more information on Obtaining IRWIN IDs for Incidents and Complexes.
5. 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 feature 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}.lyrx*

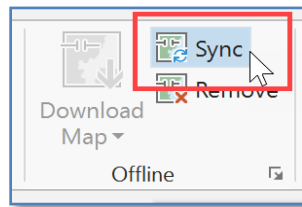


Use this layer file to build a new Edit Project should you need to for any reason.

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.

Edit Incident Data

1. Add any ancillary data needed to perform accurate edits of incident data to the edit map.
2. Secure incident information from the Situation Unit Leader.
3. Process or convert any incident data external to the NIFS.
4. Sync the **Offline Copy**. The 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.

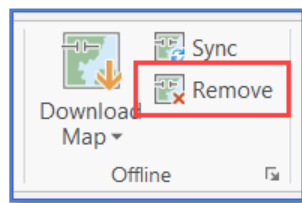


Note: SYNC-EDIT-SYNC: It is critical to Sync **before** each editing session as well as after. Syncing before will pull down any edits that have been made since the last sync. Not doing so will greatly increase the chances of a conflict and data being overwritten.

5. Review new data in the NIFS.
6. Edit data as you would any local dataset.
7. Run Analysis.
8. Update Metadata in the DynamicTextUpdate table.
9. Export the Fire Perimeter to the Progression Geodatabase.
10. Sync the **Offline Copy**.

If needed, recreate the **Offline Copy** to account for an expanded area of interest. As a fire grows, it may be necessary to recreate the Offline Copy for a larger area.

1. 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.**

2. 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 stored in the *incident_data* folder and contains “Event” in the standard file name as it is the implementation of the Event Schema. **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

The Pro Project Template APRX is the starting point to create master map projects.

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 2024_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}_2024_{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 and repair) to the **Master Incident GDB**.
5. Open or create a Layout in the appropriate size and customize it to the product type.
6. Export and review your maps.