# Prepare and Configure the Event GDB with ArcGIS Pro

This document will show the process for preparing to use ArcGIS Pro on an incident, utilizing the GeoOps Incident Folder Structure and Event Geodatabase.
The GeoOps File Namer spreadsheet should be used throughout this process and the entire incident for maximum efficiency and consistency in file naming.

1. Creating Incident File Structure
   a. Unzip the Current GeoOps Folder Structure as close to the root drive as possible.
   b. Rename the *2020_[template]* folder to the incident name.
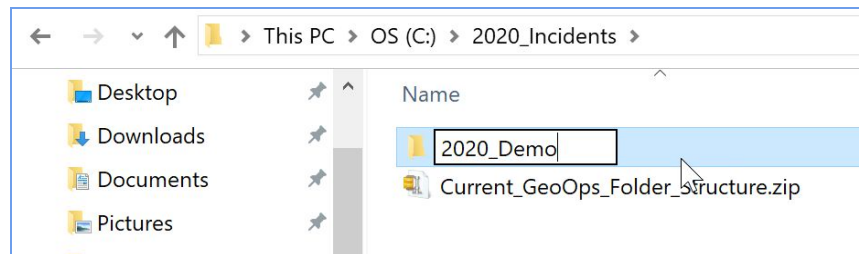
Note: It is very important that the most current *Current GeoOps Folder Structure* be used when setting up ArcGIS Pro. This will allow the Pro Project Template to establish the correct file pathways. The Pro Project Template can be added to an older Folder Structure, but the Default GDB will need to be reset to the correct *Other_Incident_Data.gdb* and the *DynamicTextUpdate* table will need to be imported there. Other issues may arise and it is not recommended.

2. Customize the Template to the Incident
   a. In the *projects* folder, open the 2020_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.
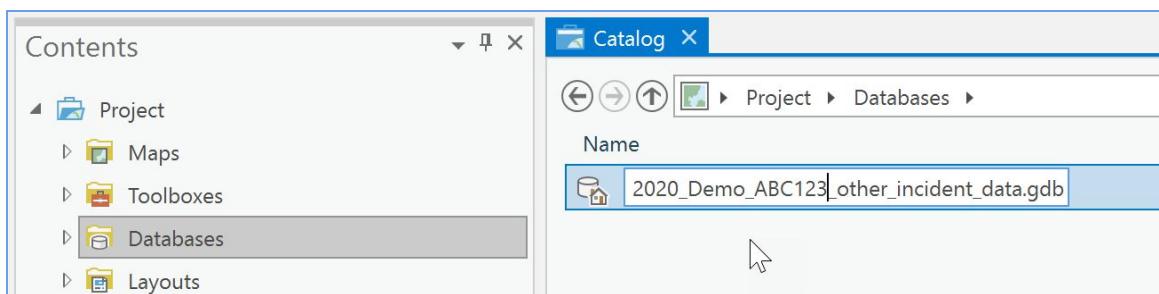

Note: Be sure to rename the Default GDB prior to opening the provided Map View or database lock will be created.

- Prior to 2.4, simply renaming the Default GDB will not actually update the Default GDB setting. **This issue has been corrected in 2.4.**
  - Open the Project Options and click the browse button next to the Default GDB path.
 - Navigate to and select the just renamed other_incident_data GDB in the Project Databases folder.

NOTE: A display issue also affects the Home Folder name. Even after renaming it to the incident name, it may still display as *2020_[template]* in the project folders. This can be left as is, as long as the underlying connection is correct. *This is fixed in 2.5*.
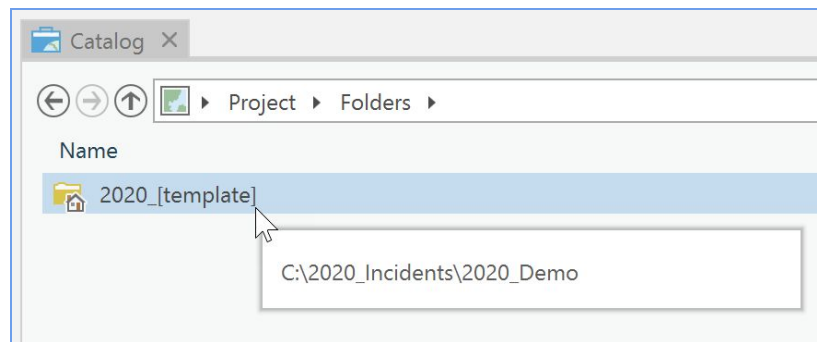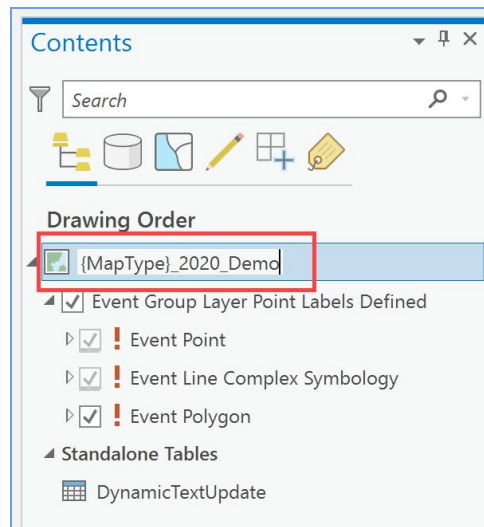

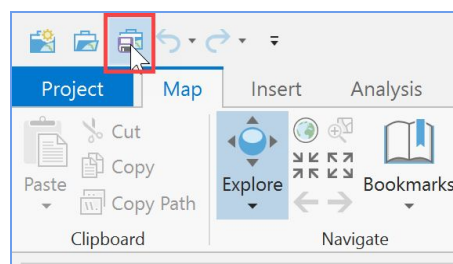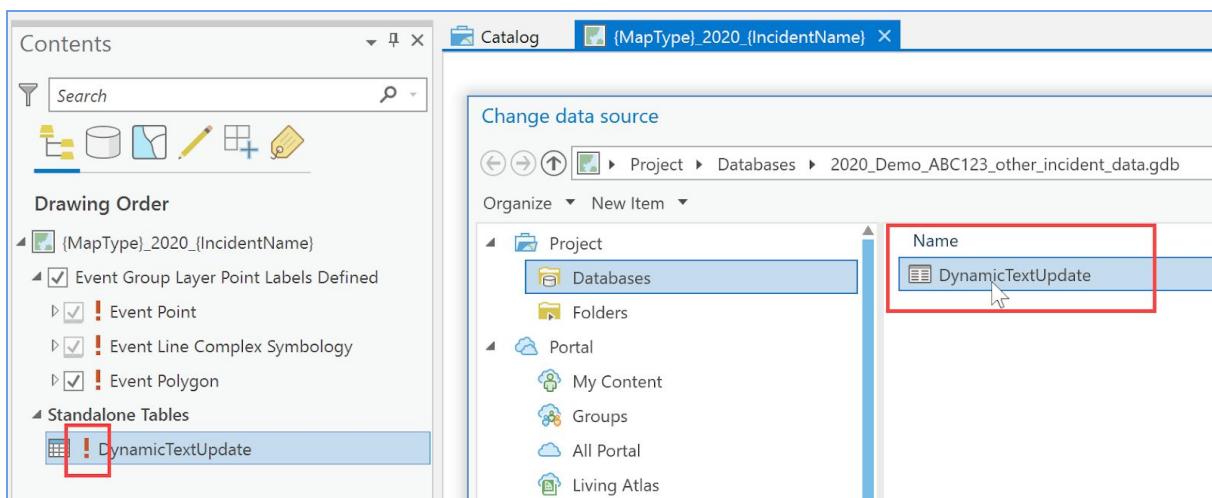c. Rename the Annotation and Progression GDBs found in the \incident_data folder.
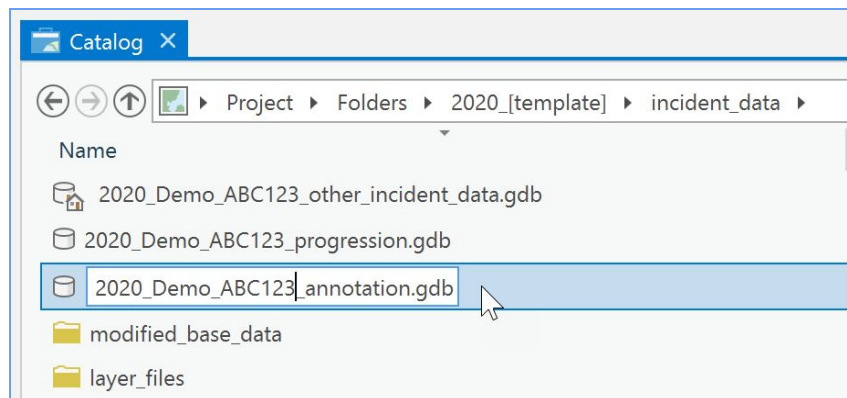
d. And the Edit GDB in the *incident_data\edit* folder
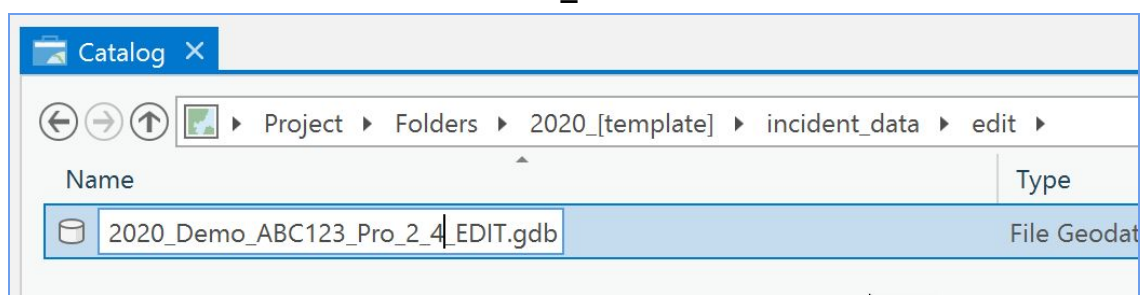
e. Navigate to the Maps folder and open the provided map view
   {MapType}_2020_{IncidentName}.

   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
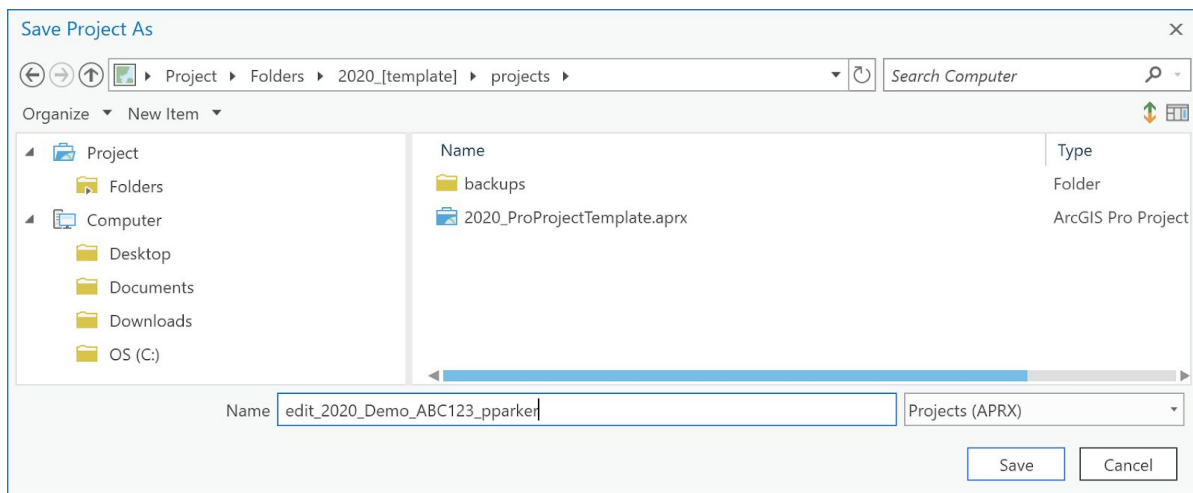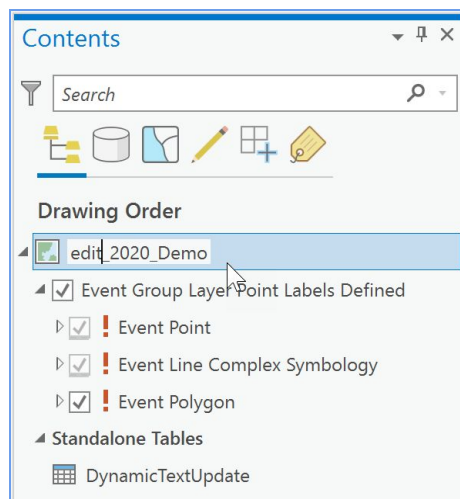   the Default GDB.

f. 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_2020_{incidentName}_{localIncidentID}_{yourName}*.
      This is the **Edit Project**, all data editing should be done here.

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

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

OBJECTID	IncidentName	UniqueFireID	SourceStatement	Acres	AcresEffectiveDate
1	Demo	ABC123	Acres from IR and GPS	99,999	Effective DateTime
Click to add new row.					

NOTE: Values in the *DynamicTextUpdate* table will populate dynamic text in every 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.
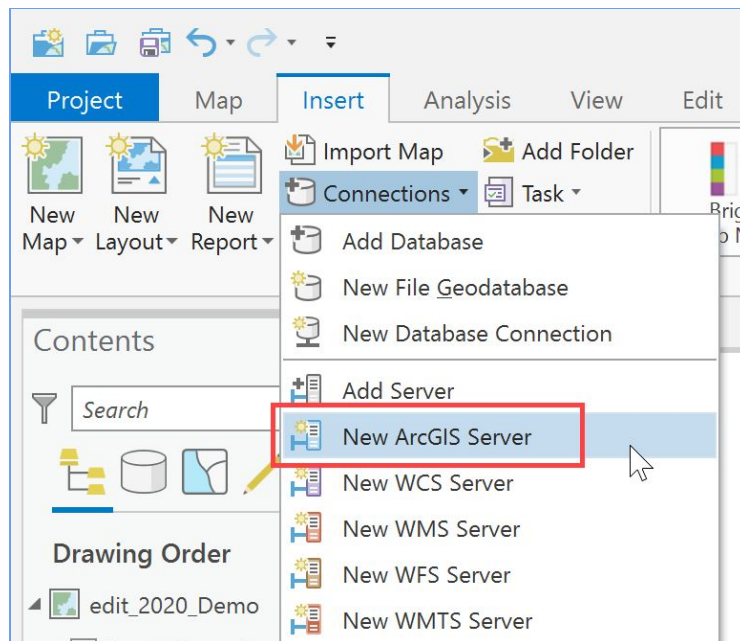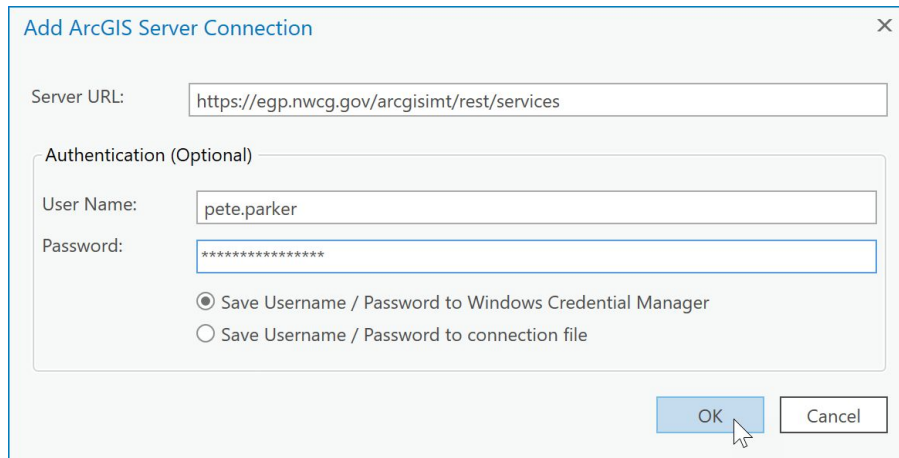Do not add additional rows to this table.

   d. Save the edits to the table.
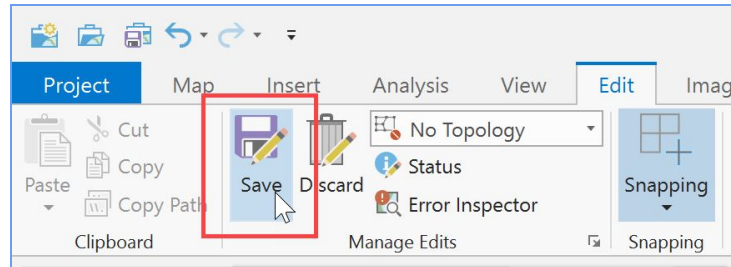
4. Create a **Local Copy**
    a. From the Insert ribbon tab, on the Connections dropdown, use New ArcGIS Server to add a connection to the EGP ArcGIS Server.


    b. Enter the URL https://egp.nwcg.gov/arcgisimt/rest/services and your EGP username and password.

Tip: Right-click the connection in the Catalog pane and select Add to Favorites to quickly add the connection to future projects.
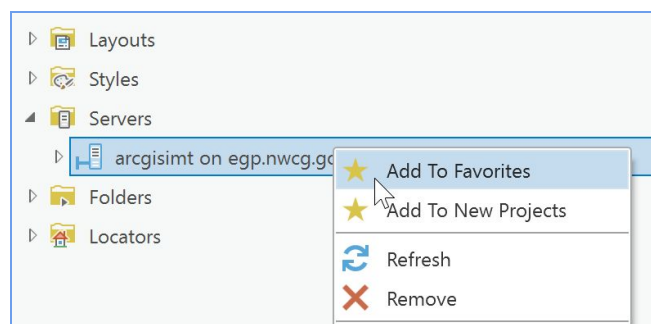

c. Open the server connection in the Catalog pane and add the *Event_GISSEdit* Feature Service in the *GISS* folder to the **Edit Map** by right-clicking and selecting Add to Current Map or simply dragging it into the map frame. (Make sure you are using the Feature Service which has the little box on the symbol, and not the Map Service. Hovering the mouse over each will also display the type.)
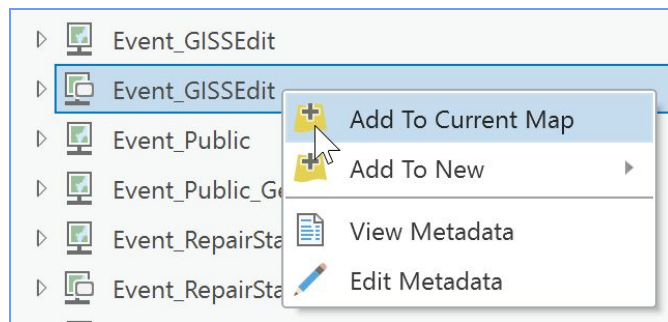
d. In Pro, feature services can be edited directly. This is a good option for minor edits, but a **Local Copy** will still be needed to create the **Master Incident GDB**. To create a **Local Copy**, zoom in to the incident and click Download Map on the Map tab of the ribbon. There should be a triangle in Event Polygon that was auto-generated from IRWIN when the incident was created that can be used as a starting point. It will already contain the correct IRWIN and Incident IDs.
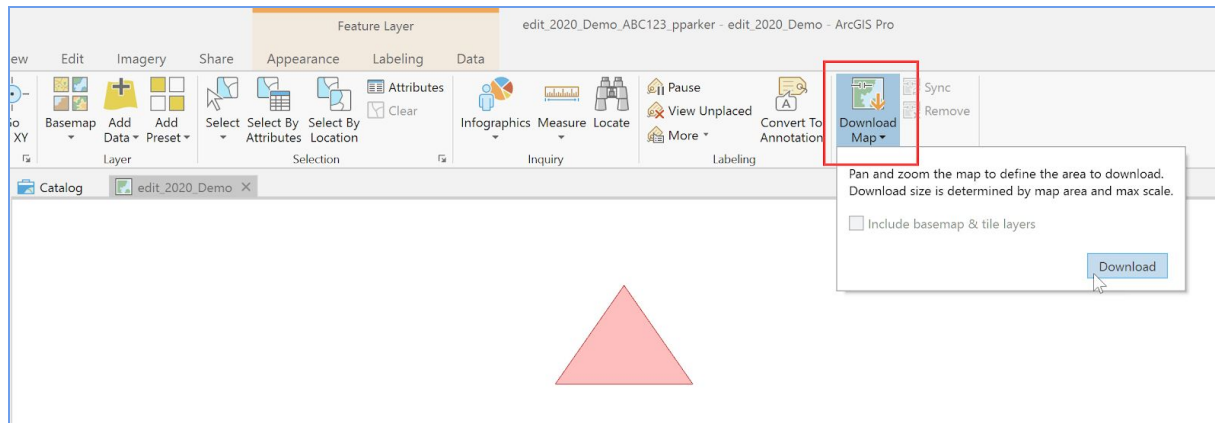
e. Once the download is complete, change the Contents pane to List by Data Source and confirm that the source for *Event_GISSEdit* is now a local GDB.
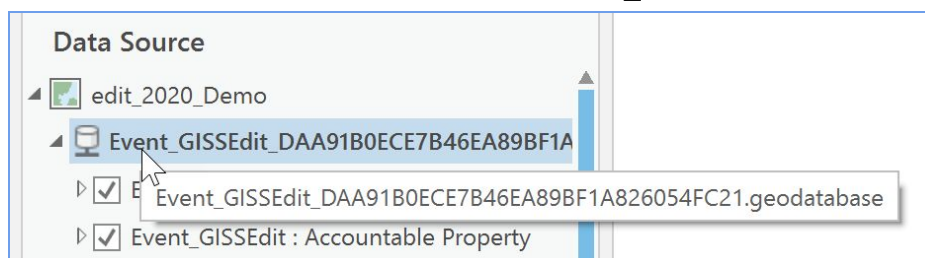
f. The **Local Copy** will automatically be created in the Home folder (which is set to the main incident folder). ***Do not move or rename it.***
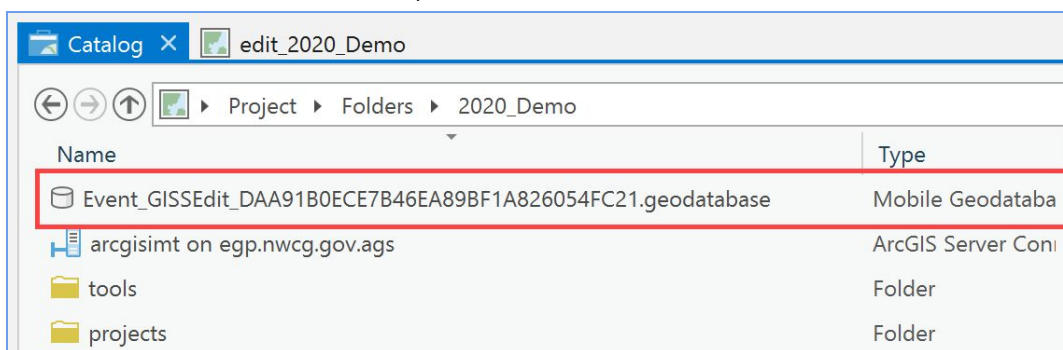
Note: The **Local Copy** is not a File GDB, it is a Mobile Geodatabase (aka Runtime GDB). ArcGIS Pro works natively with this format but its capabilities are limited and it will need to be converted to a File GDB for backups and use as the **Master Incident GDB**.
For more information on how to convert to a file GDB, see the document Converting Runtime GDBs to File GDBs.

Prepare and Configure the E[...]
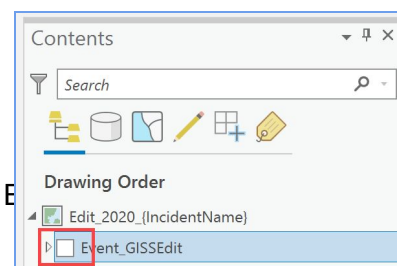
g. To use the standard Event symbology instead of the simplified symbols of the service for editing, repair the path of the *Event Group Layer Point Labels Defined* to point to the newly created **Local Copy**.
The Event_GISSEdit group layer can be turned off or removed.

h. Unlike in ArcMap, a **Local Copy** in Pro can sync with the service more than once. There is no need to create a new one each time.
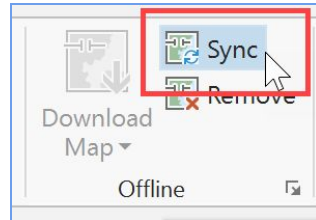For more information on working with a Local Copy in Arcgis Pro, see the document [How To Edit a Feature Service in ArcGIS Pro](#).

Offline Alternative to Local Copy

● If there is no internet available, use the **Edit GDB.**
Click the red exclamation mark and set the data source to the **Edit GDB** in the *incident_data\edit* folder.
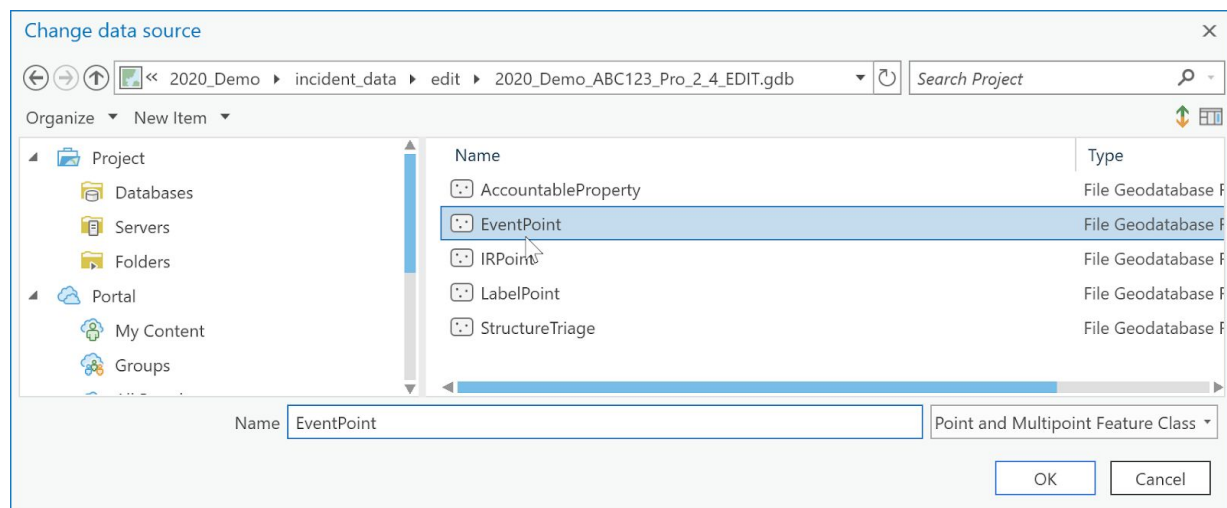
5. Set the coordinate system of the Edit Map to a local, projected coordinate system.
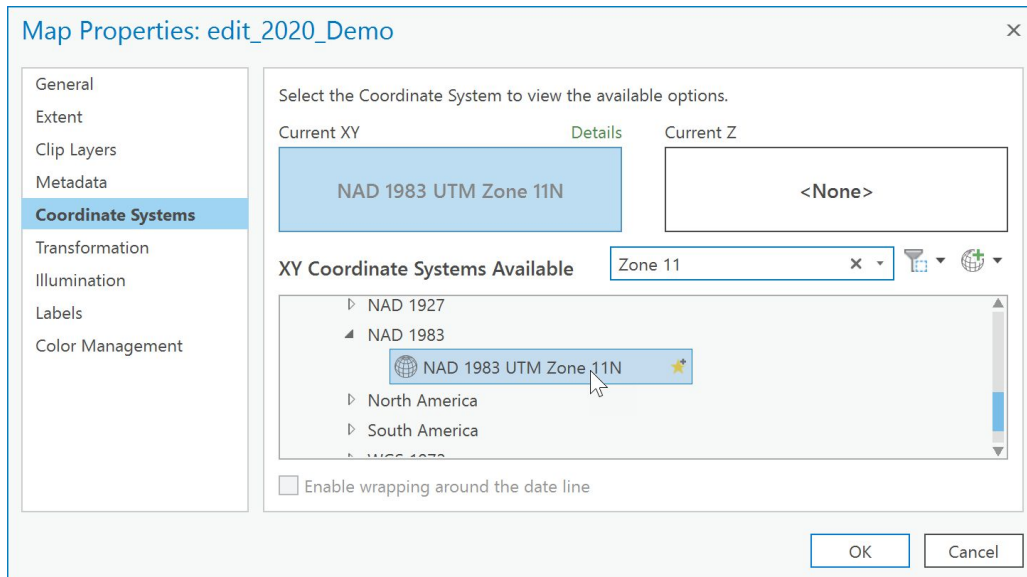
Note: It is very important to set the data frame to a local projected coordinate system after creating the Local Copy. In Pro, the coordinate reference system of the Local Copy is determined by the data frame, not by the service.

6. Configure Feature Templates
   a. Open the Manage Templates pane. This can be done from the Create Features pane (just like ArcMap) or by clicking the dialog box launcher (little arrow in the bottom right corner) under the Features group on the Edit tab.
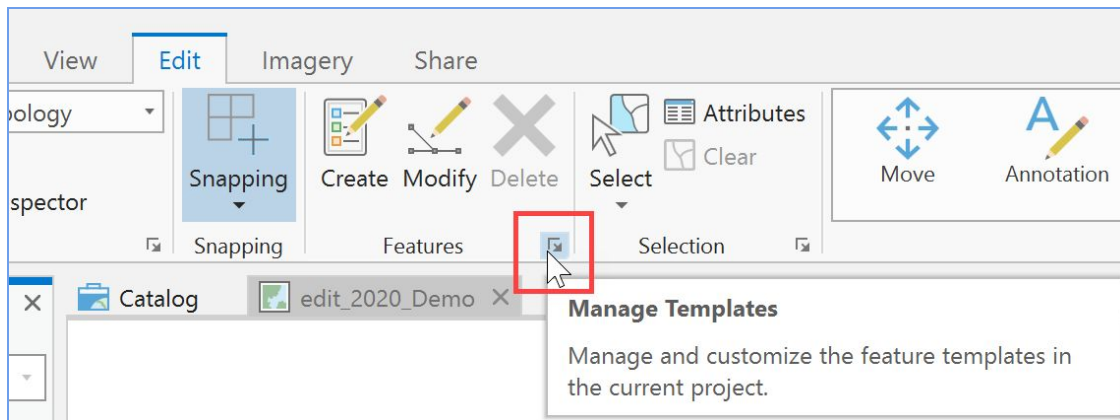
   b. Starting with Event Point, select all the features in the list and click Properties.

03/10/2020
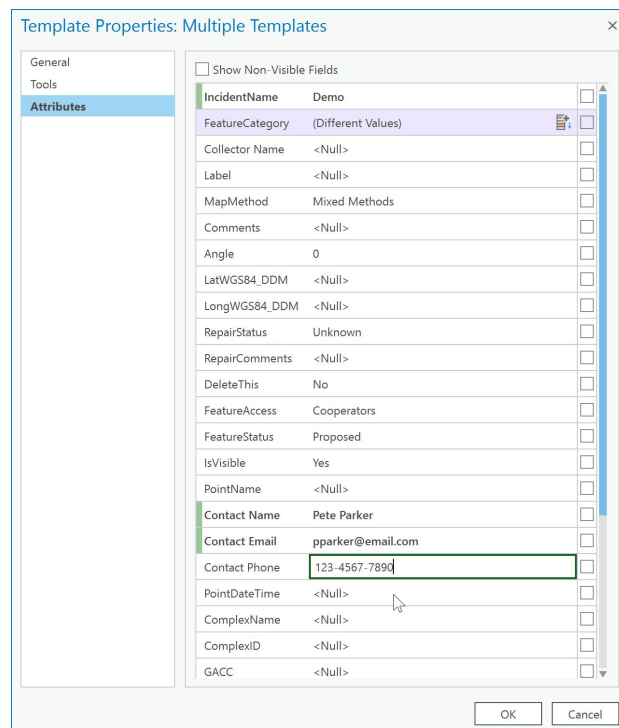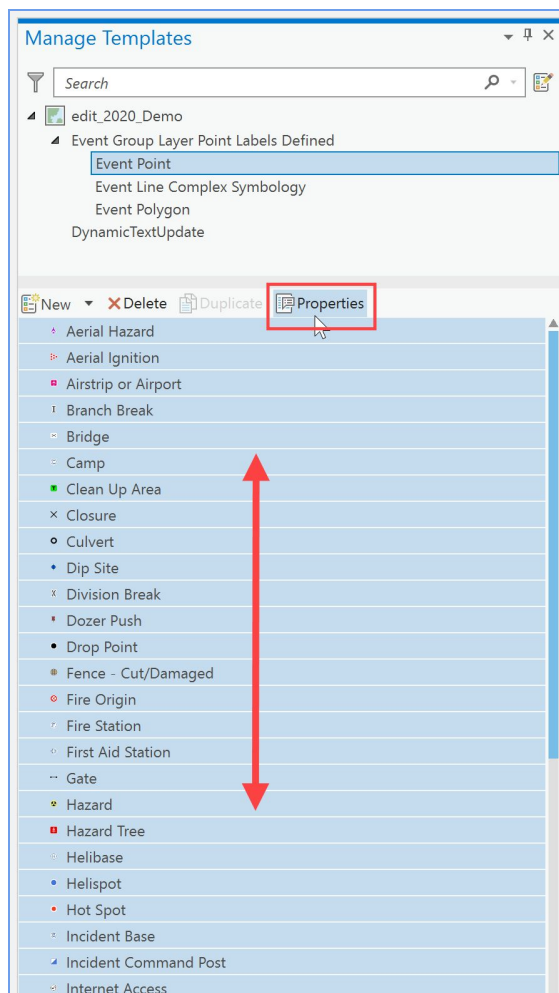
    c. Work through the attributes, filling in or adjusting the values using the *Configuring Feature Template Defaults* table below as a reference. This will set the default values for all Point features created in this map.
The checkbox to the right of each attribute is for prompting collection of that attribute upon feature creation. See the *Configuring Feature Template Attribute Prompts* table below.

Configuring Feature Template Defaults

| Field Alias	Default Value
Incident Name	Set default as the name of the fire incident (*e.g.* **Badger**)
Map Method	Leave as Mixed Methods or Set to **Phone/Tablet** if you expect most data to be submitted through Collector
Repair Status	Leave as is (**Unknown**) or set to **Repair Needed** if you expect most features to require repair
ContactName	Set default to your name (*e.g.* **Pete Parker**)
ContactEmail	Set default to your email (*e.g.* **Peter@dailybugel.com**)
ContactPhone	Set default to your phone (*e.g.* **303-555-9999**)
ComplexName	Leave as is (**<Null>**), unless the fire is part of a large complex in which case set default to the complex name.
ComplexID	Leave as is (**<Null>**), unless the fire is part of a large complex in which case set default to the IRWIN ID* (see below) of the complex.
GACC	Set default to the GACC in which the incident is occurring (*e.g.* **RMCC**)
IMTName	Set default the team managing the incident (e.g. **RM Blue**)
UnitID	Set default to unit ID of the local unit (e.g. **CO-HUX**)
LocalIncidentID	Set default to incident ID assigned by the local unit (e.g. **000444**)
IRWINID	Set default to the IRWIN ID* (see below) for the incident (e.g. **{1FB08B10-42C4-4FAB-86C4-CEF95CC3B15C}**)

*Obtaining IRWIN IDs for Incidents and Complexes:
For information on finding the IRWIN ID and other important incident attributes please see the documentation How To - Locating the IRWINID and other Important Attributes.

Configuring Feature Template Attribute Prompts

Event Feature	Recommended Attribute Prompts
Event Point	Collector Name, Label, Map Method, Comments, Angle, Repair Status, Repair Comments, Point Name, Point DateTime
Event Line	Collector Name, Map Method, Comments, Repair Status, Repair Comments, Line DateTime, Line Width Feet
Event Polygon	Collector Name, Map Method, Comments, Polygon DateTime

Attribute Prompts are a great way to capture important data while editing without having to switch between panes or go back after creating features.
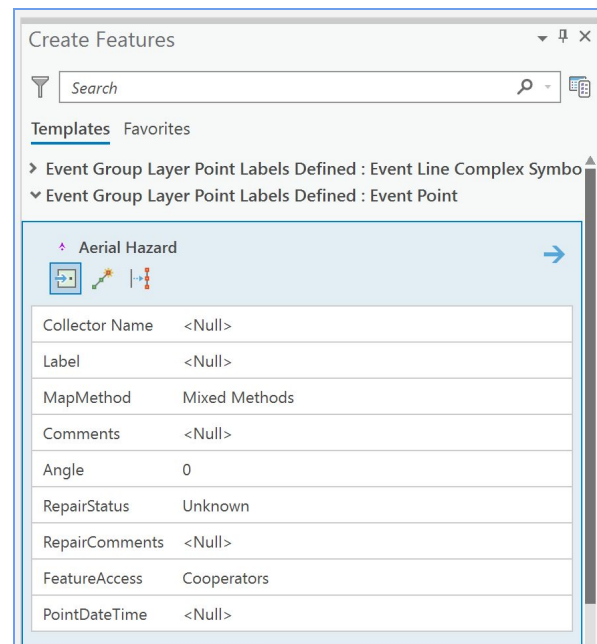
d. Repeat the previous step for Event Line and Event Polygon
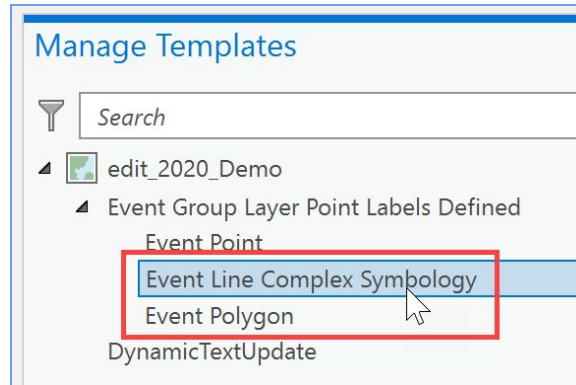
7. Once you have configured the Feature Templates for each of the Event feature classes, save a layer file as a backup. A layer file will store both the symbology, and more importantly, all the incident specific template settings just configured.
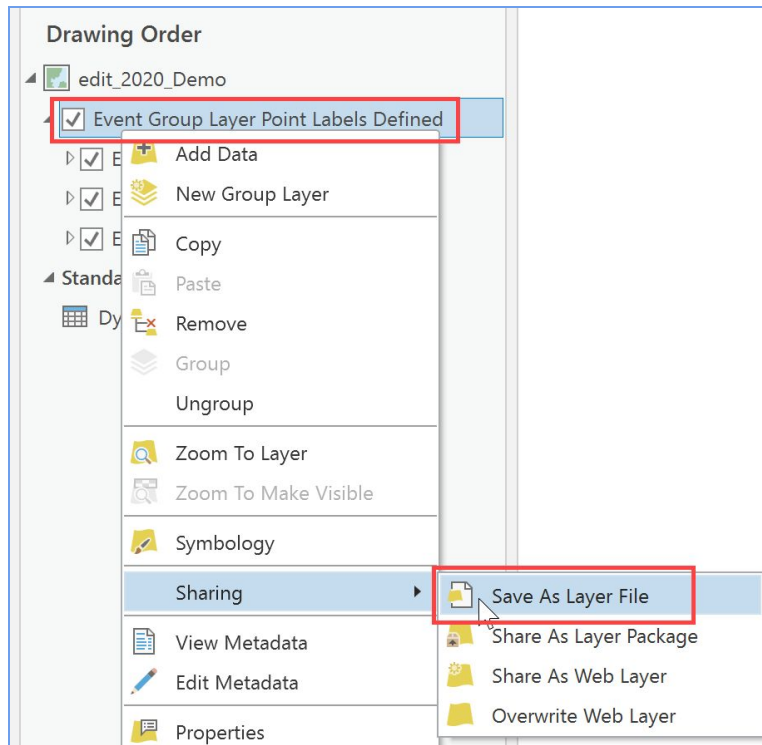
    a. Right-click the Event Group Layer in the Contents pane and select Save as a Layer File under Sharing.
Save the file to the *incident_data\edit* folder following the GeoOps naming convention *eventFeat_{year}_{incident name}_{unit ID+local incident ID}_{your name}.lyrx*

    b. Use these layer files to build a new Edit Project should you need to for any reason.

Note: Feature Templates and Label Classes are saved in the layer files but will not be transferred to a new map if the Import Symbology function in the Symbology properties is used. When adding layer files to a new map, add the layer file as you would a feature class through the Add Data window or Catalog tab. If the data has moved or you wish to apply it to a different feature class, simply repair/change the data source.

8. Add basemap(s) and any ancillary data necessary to perform accurate edits of the incident data.

Create the Master Incident GDB

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

1. If using an **Edit GDB**, simply copy it to the *incident_data* and *incident_data\backups* folders and rename per GeoOps standards after completing edits.
   {year}_{incidentName}_{localIncidentID}.gdb
2. If using a **Local Copy**, it will need to be converted to a File GDB before being copied to the *incident_data* and *incident_data\backups* folders and renamed.
   See the document [Converting Runtime GDBs to File GDBs](#).

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 2020_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}_2020_{IncidentName}* and rename it with the map type and the incident name. Unlike with ArcMap, 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 lyr 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](#).