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and ONLY FOUR GIS Specialists
Our Daily Mission

- Collect data
- Process data
- Share data with decision makers
- Share data with the public
The Problem

Collecting Data

- Location needs to be accurate
- Information needs to be accurate, complete, and standardized
- Data needs to be gathered sooner rather than later

?!?

With only 4 people
The Solution

- Data layers are created and managed in GIS as GDB files
- Will work off-line when there is no cell service
- A web-based option is available for those without smart phones or tablets
- Easy to train the end users
- You can standardize much of the data entry using domains
The Process

- Add a GDB point file to ArcGIS – set up attribute fields and domains
- Sign into ArcGIS Online
- Choose “Share As” and “Service…”
The Process

- Choose “Publish a service”
- You can also overwrite an existing service – this is useful for making updates to existing data services
The Process

- Give your service a meaningful name, adding a date is helpful.
The Process

- Leave “Parameters” set to defaults
- Set “Capabilities” to “Feature Access”
- Check all boxes for “Operations Allowed”
• In “Item Description” fill in the summary, tags, description, access and use constraints and give credit (assign blame) to the person who created the service
• In “Sharing” fill check the boxes for the organizations and groups that can have access to the data.
The Process

- Always click “Analyze” before you “Publish” to check for errors
- Medium and Low priority errors can be ignored
- Click “Publish” and wait for it to upload
The Process

- Go to www.arcgis.com
- Log in to your organization
- Choose “MyContent” from the menu bar
The Process

• Select “Layers” in the Show list
The Process

- Clicking the drop down arrow gives you several options
- Choose “View Details” to see settings, usage, the data as a table...
- In “Settings” you can see several editing options including who can edit what, tracking the edits, and what edits can be made
The Process

- Clicking the drop down arrow gives you options
- Choose “Add layer to new map”
The Process

• Change symbology, scale dependency, basemap, view extent
• “Save As” a new map
• The map is now available to be used in Collector
The Process

- A list of maps available to the organization, group, or individual account
- The download arrow indicates a map that can be loaded onto the device so it can be used without cell service. Any edits made would be done off-line and would be uploaded in a sync operation once the device was reconnected to a service
- The identify or info button provides information about the creator of the map and its latest modification or creation date
- The upload button gives you the option to sign-out
The Process

• Touching on a map in the list opens the map with the symbology, extent, and basemap options that were set when you loaded the data into the map and saved it.
• Touching the word “Maps” takes you back to the map list
• Touching on the compass will toggle between showing your location on the map (and zooming and centering on it) and not showing it
The Process

- Touching on a point on your map puts a cyan highlight around it and pops up a window at the bottom (side on iPad) of the screen.
- Touching the white bar displays the attributes of the point.
- Touching the upload button provides a context menu with options to copy, edit, delete, zoom to, show details (what the white bar does), or get directions.
- Touching the small “x” above the white bar clears the selection.
The Process
The Process

- Touching on the magnifying glass brings up a search box
- Examples of recent searches are shown
- The third one in the list is a coordinate pair with the latitude given first *** DO NOT *** do this – the result will put you in Antarctica – the programming expects an x,y pair which we all know is long, lat
The Process

- Touch and hold at a point of interest on the map and a blue flag is placed on the map.
- Touching the upload button gives an options menu.
- Choosing “Add to my places” creates a user defined bookmark.
- Choosing “Collect here” will add a new point in your data – more on that later.
The Process

- Touching on more brings up another set of options
- Touching the measure tool brings up options for measuring lines or areas
- Touching the area option then the screen draws the shape you want to measure
The Process

- At the bottom of the map screen the measurement is shown in sq. miles
- If you need a conversion to another format touch the sq. mile measurement and a screen pops up with several standard conversions
- Line measurements are done in much the same way
The Process

- Touching on the layers button gives a list of layers in the map and allows for toggling them off and on.
The Process

- Touching on the bookmarks button brings up a list of bookmarks (defined in ArcGIS Online during the map creation process) or a list of "My Places" – defined in the app by the user
- Touching on one goes back to the map and zooms to that defined extent or location
The Process

- Collecting a new feature can be done in two ways
- The most direct approach and the most common is to be standing at the spot to mark and touch the plus sign at the top of the screen
- The other is by touching and holding on a point of interest on the map and choosing “Collect here” from the pop-up menu
- A list of editable layers will be displayed – choose the layer to which the point should be added
The Process

• The attribute table for that point is then displayed
• Click on the gray arrows next to each attribute to edit that attribute
• If domains have been set a list of choices will be displayed
• If a field is a date field a date selector will display
• When all of the data has been filled in touch “Submit” and the point will be added to the layer
The Process

- An example of a field with no domain is shown on the left.
- An example of a field with domains is shown on the right.
The Applications

TWRA is just beginning to scratch the surface of data collection with this tool

- Boating access
- Bank fishing sites
- WMA entrances
- Check stations
- Fish attractors
- Bear surveys
- Birding trail markers
- Hunters for the Hungry processors
- Fish sampling
- Trout stocking
- Dove Fields

There are plans to do even more data collection as the non-GIS staff learns more about this tool and its many uses and benefits
I WANT IT ALL!!!