Creating a New Incident

The process for creating a new Incident Map using IGT4SAR requires the user to provide the targeted folder, the desired coordinate system and coordinate transformation (if applicable) and some basic information about the incident. The Incident Information is optional however it providing this information will expedite data the data entry process.

A new incident map can be created using either ArcMap or ArcCatalog, and uses the "Create New Incident" script within the SAR_Toolbox10b / Utilities (Figure 1).

Double clicking on the script in the SAR_Toolbox10b will initiate the tool and open the dialogue box shown in Figure 2. A description of the tool is provided in the panel to the right and as users step through the various parameters this panel will provided additional useful information.

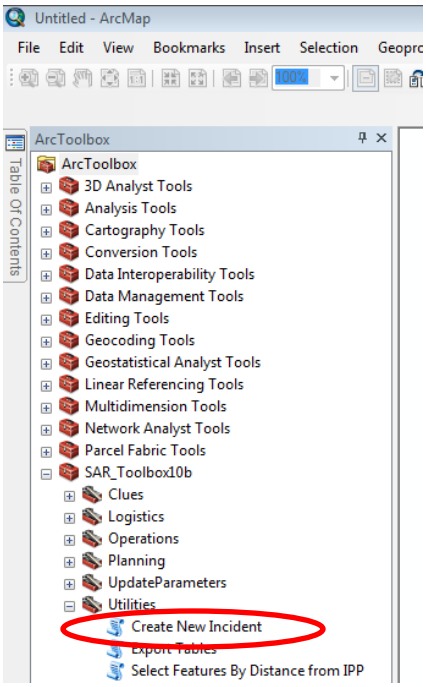


Figure 1: Create New Incident Tool in the SAR_Toolbox10b within ArcMap

Although these updates have been made, IGT4SAR continues to be compatible for ArcGIS versions 10.0, 10.1 and 10.2.

The user begins by selecting the target folder for the new incident map. This folder can be located anywhere the user has read/write access. The next step is to select the target coordinate system for the

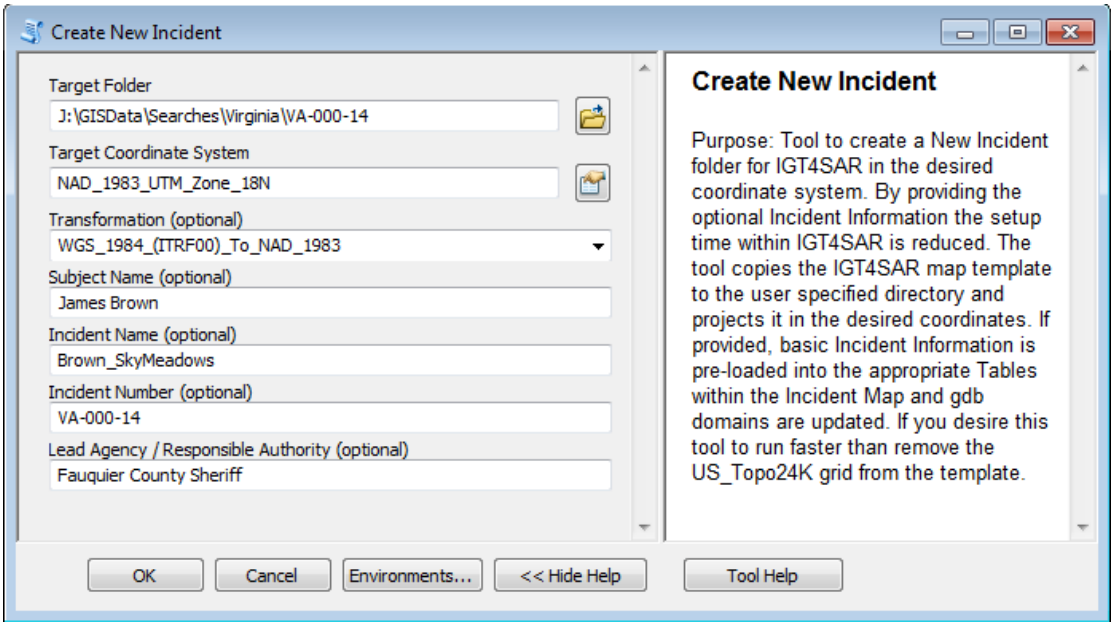


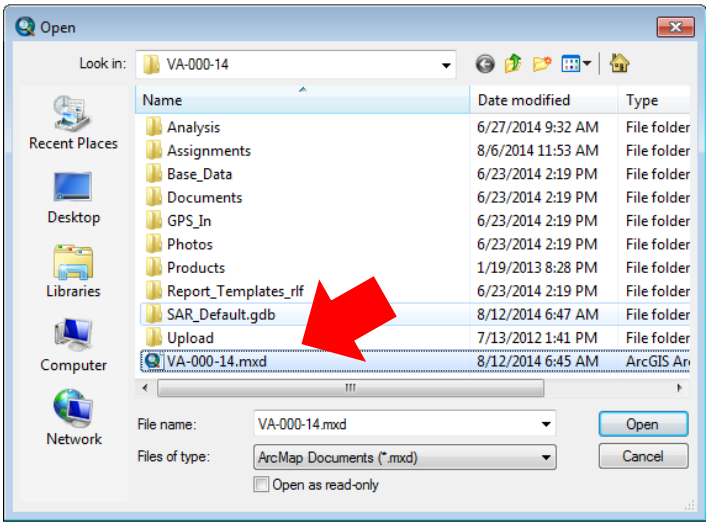
Figure 2: Create New Incident dialg box

new incident map. This can be either a Geographic (i.e. Lat/Long) or Projected (USNG, UTM) coordinate system however the user should note that not all of the tools will work with only a Geographic Coordinate System. For example, the automatically generated Air Search Pattern tool currently requires a Projected Coordinate System although a fix is underway.

In some cases a coordinate transformation is required in order to transition from the baseline template which is in WGS84 Geographic Coordinate System to the desired target coordinate system. This mathematical transformation ensures the accuracy of your data and does not rely on "on-the-fly" display transformation in ArcMap.

The remaining parameters are related to Incident Information and are optional. If used, these parameters fill critical fields in the Incident Information and Subject Information as well as updating the dynamic domains of the SAR_Default.gdb, the Map Name and the data frame.

Once all of the information has been provided the user selects the "OK" button and the new Incident is created in the desired target folder. Messages in the Tool dialog box provide updates to the progress of tool. When complete, the user can simply open the new incident map file in ArcMap.



Opening the new incident map file in ArcMap, the user will notice the map file has been set to the Incident Number provided previously. If the user did not provide the optional Incident Information then the map file would simply be named "IncidentNo.mxd".

Electing to provide the optional Incident Information when the "Create New Incident" was executed would result in the updating of Data Frame name as well as the Attribute Tables of several Features/Tables and to be updated as noted below. Additional information must be provided later if the user desires to execute other tools within IGT4SAR such as the Ring Model (SAR_Toolbox10b / Planning/A. Statistical Search Area – IPP) which relies on the "Subject Category" being accurately specified in the "Subject Information" Table.

Subject Information: A new Subject row has been added and the Subject "Name" field has been updated to reflect the information provided when the New Incident was created. This information was also updated in the "Subject_Number" dynamic domain of the SAR_Default.gdb so that it is now available for use with other features and tables.

Incident Information: A new Incident row has been added with updates to the "Incident_Name", "Incident Number", "Lead Agency" and "MapDatum" fields as shown in Figure 3. Updates have also

been made to the appropriate Domains within the SAR_Default.gbd so the information is available in other features and tables.

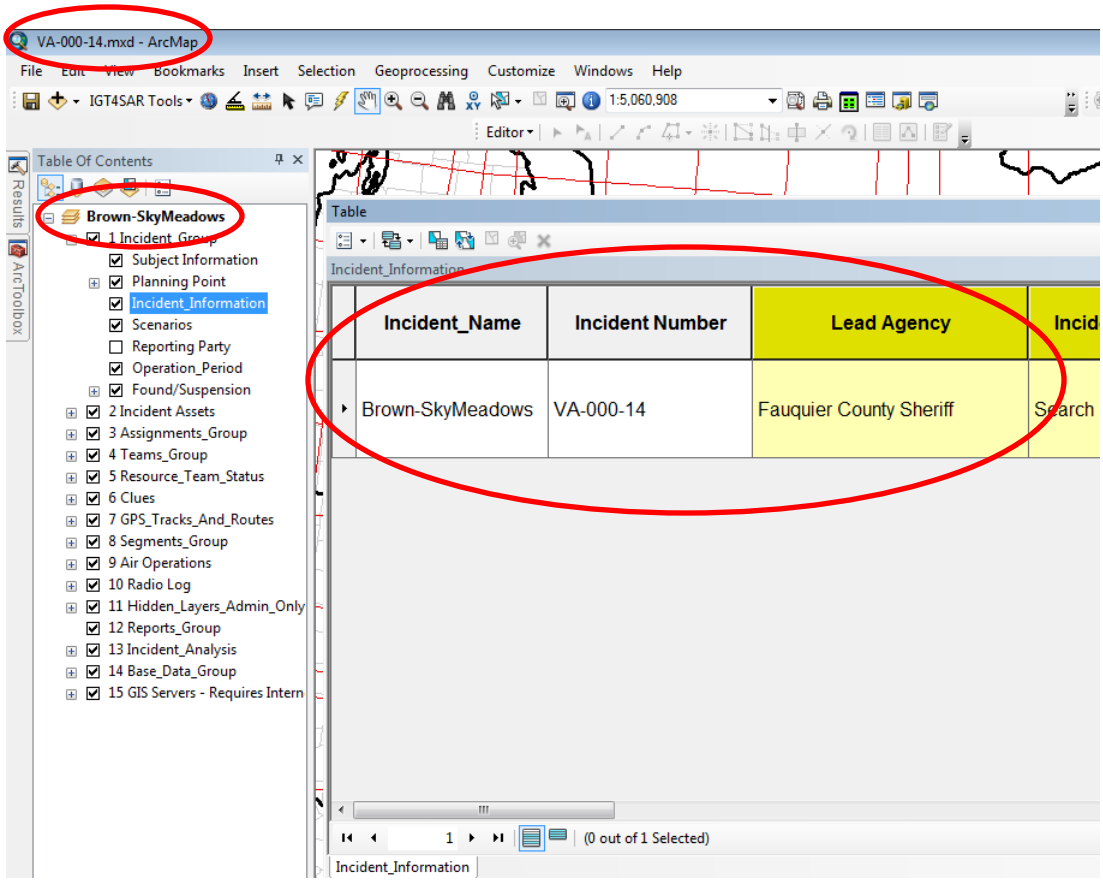


Figure 3: Updated Map File, Data Frame name and Incident Information.

Operation_Period: A new row was added to represent the start of a new Operational Period. The "Period" field was assigned a value of "1" and the respective "Period" domain was updated.

Lead_Agency: This table which resides in the "4 Team_Group" data layer group was updated with the information provided using the "Create New Incident" tool and the appropriate domain has been updated.

Without having to update any additional information the user is no free to define the Initial Planning Point (IPP) by editing the "Planning Point" feature and selecting one of the IPP types (PLS, LKP, etc). The user can choose to either simply click a location on the map to mark the IPP or can "Right Click" and select "Absolute XY". Once the IPP has been defined, the user should save edits –stop editing and perform the "Update Map Layout" tool on the IGT4SAR toolbar or in the SAR_Toolx10b – Update Parameters tools. Once the Map Layout has been updated along with various fields in the "Incident Information" the user can continue planning for the incident.