

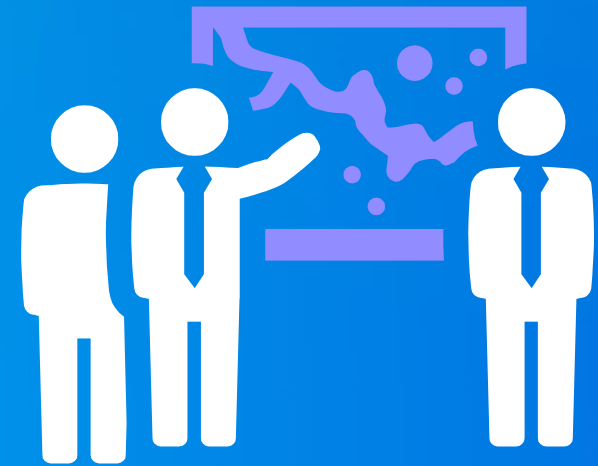


Automate Your Data Updates Using Geoprocessing and Python

Jill Penney

Assumptions

- **Geodatabase fundamentals**
 - **Experience with geoprocessing (gp)**
 - **Need to modify deployed data**
-
- **Please hold questions until the end of the session**
 - **Reminder to silence phones**
 - **There will be a link at the end to download code**



My shared map

The screenshot shows the CampusFS web application interface. The top navigation bar includes 'HOME', 'CampusFS', and links for 'New Map', 'Create Presentation', and a user profile 'Jill'. Below this is a toolbar with icons for 'Details', 'Add', 'Edit', 'Basemap', 'Save', 'Share', 'Print', 'Directions', 'Measure', and 'Bookmarks'. A search bar on the right prompts 'Find address or place'. On the left, a 'Contents' panel shows 'CampusFS - Buildings' (checked) and 'Topographic'. The main map area displays a campus layout with various buildings and green spaces. A pink building is highlighted, and a pop-up window titled 'Buildings: N' provides details:

Buildings: N	
Building Identifier	N
Facility Site Identifier	Esri Redlands
Full Name of Building	Building N
Number of Floors	3
Operational Hours	8:30am-5:00pm
Access Type	Employee
Condition	Excellent
Owned By	Our Agency
Managed By	Our Agency

At the bottom of the pop-up are links for 'Zoom to', 'Get Directions', and 'Edit'. The map includes a scale bar (0 to 100ft) and a north arrow. The footer contains links for 'Esri.com', 'ArcGIS Marketplace', 'Help', 'Terms of Use', 'Privacy', 'Contact Esri', 'Contact Us', and 'Report Abuse'. The map is powered by Esri, with data from the City of Redlands, City of Riverside, County of Riverside, Esri, HERE, and DeLorme.

Requirements have changed

- A new field is required
- Add a domain to an existing field
- Remove the domain from another field
- Enable attachments

Add New Domain

Remove Domain

New Field

The screenshot shows a web form titled 'Buildings: N'. It contains several fields with labels and values. Annotations with yellow arrows point to specific parts of the form: 'Add New Domain' points to the 'Access Type' field, 'Remove Domain' points to the 'Condition' field, 'New Field' points to the 'Building Type' field (which is highlighted in red), and 'Enable Attachments' points to the 'Edit' button at the bottom right. The 'Access Type' field has a red border around the value 'Employee'. The 'Condition' field has a red line through the value 'Excellent'.

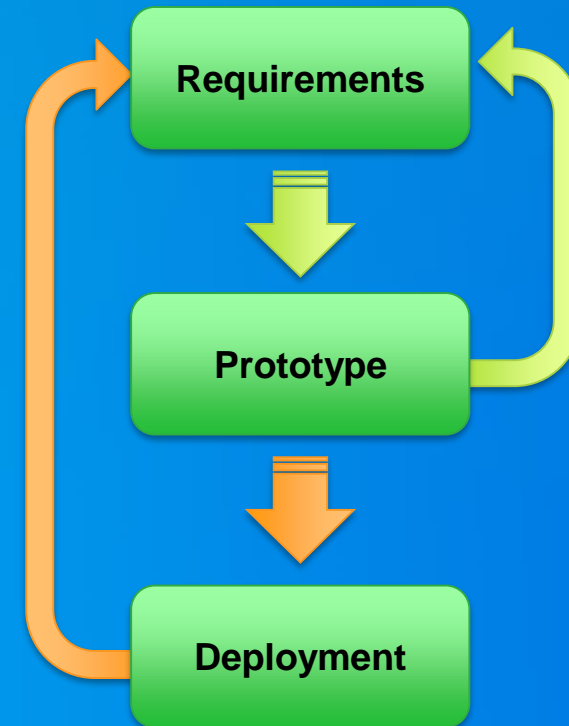
Building Identifier	N
Facility Site Identifier	Esri Redlands
Full Name of Building	Building N
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Condition	Excellent
Owned By	Our Agency
Managed By	Our Agency
Building Type	
Zoom to	Get Directions
Edit	

Enable Attachments

Data Modification

Schema Changes

- Over time your data model will change
- Use additional models or scripts to push out updates
- Deploy when appropriate

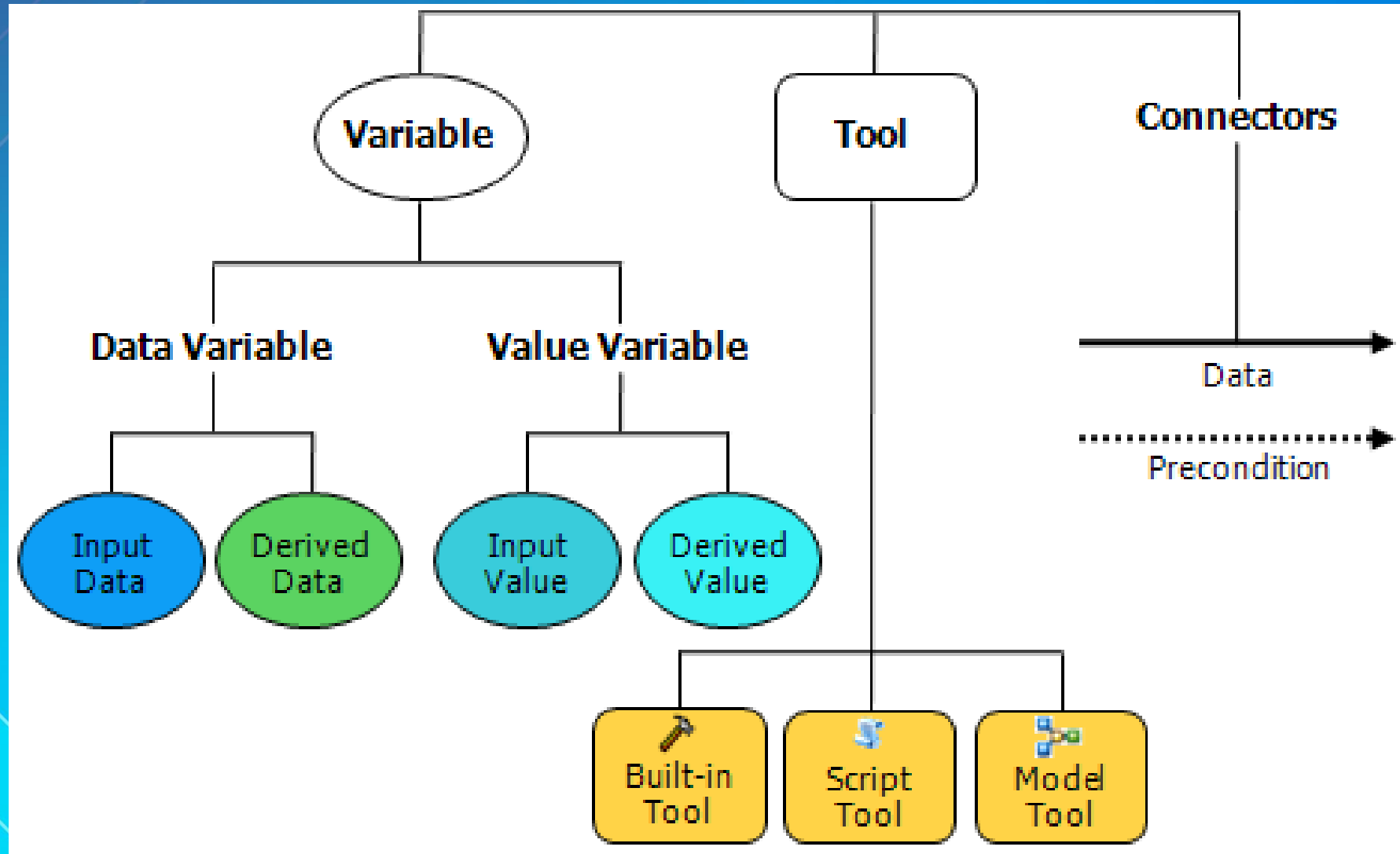


Benefits of Using Geoprocessing

- No recreating schema or reloading data
- Schedule changes to take place at appropriate time
- Change documentation

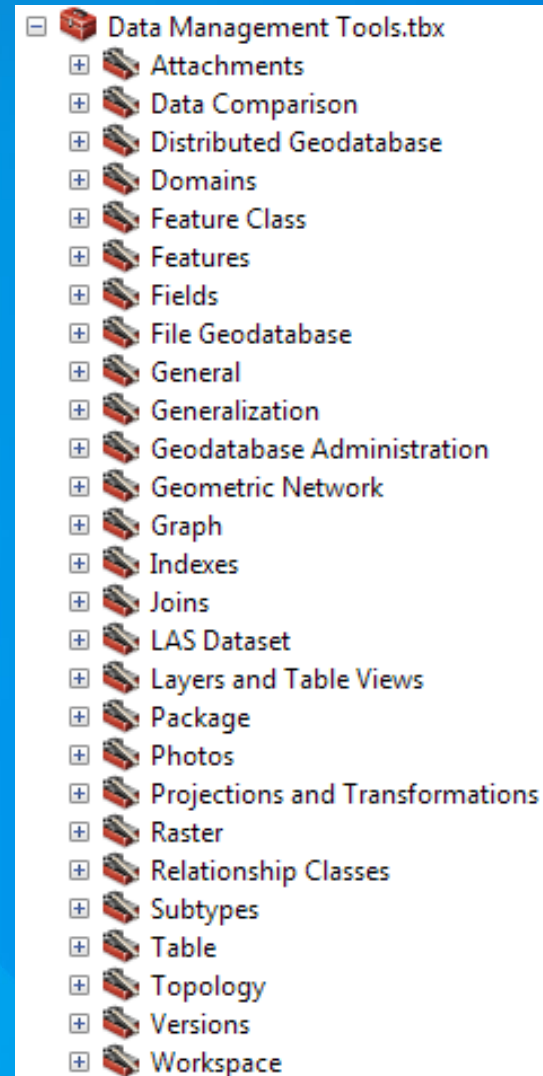


Model Elements



What tools should I use?

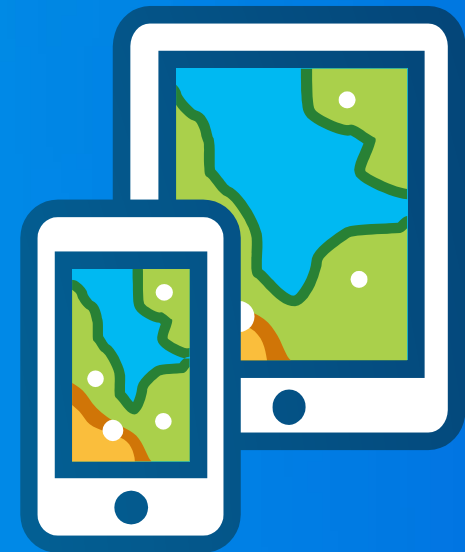
- Look in the Data Management toolbox
- Many tools to create geodatabase items



Street Inspection

Esri Campus, Redlands

- Survey Esri campus grounds during UC week
- GIS Analyst has deployed a Street Pavement feature class as an ArcGIS Server feature service
- Field workers updating data live



Street Inspection Demo

ModelBuilder

Python

Scheduling

Final Thoughts

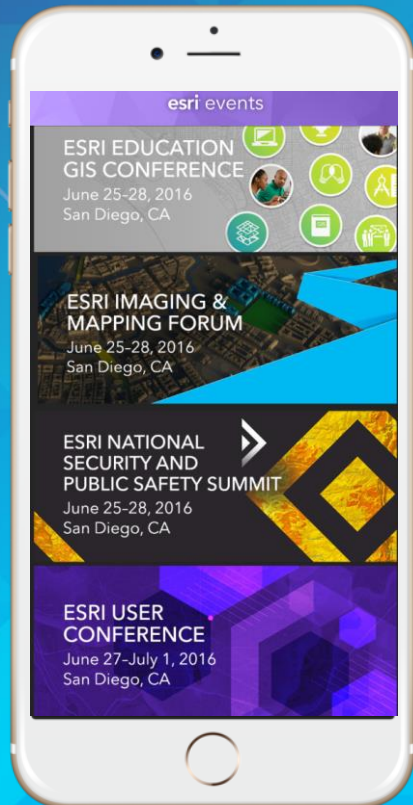
- Model tools
- Python script tools
- Use Python to automate
- Easy way to document modifications



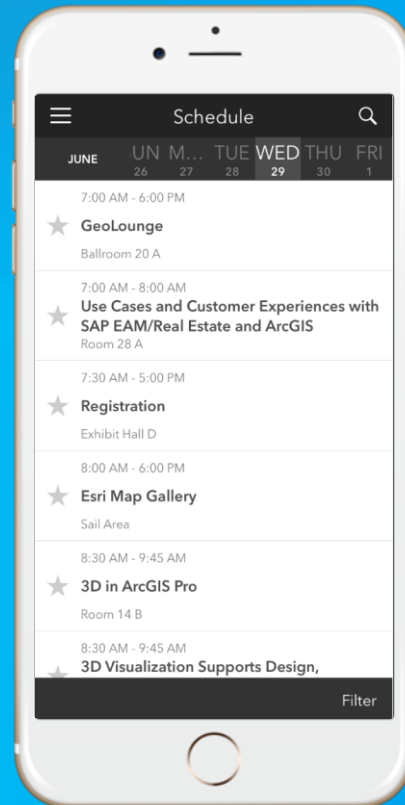
Please take our Survey

Your feedback allows us to help maintain high standards and to help presenters

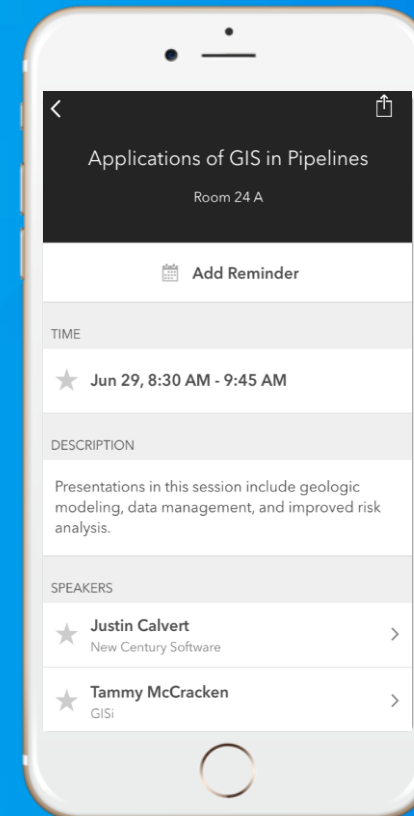
Find your event in the
Esri Events App



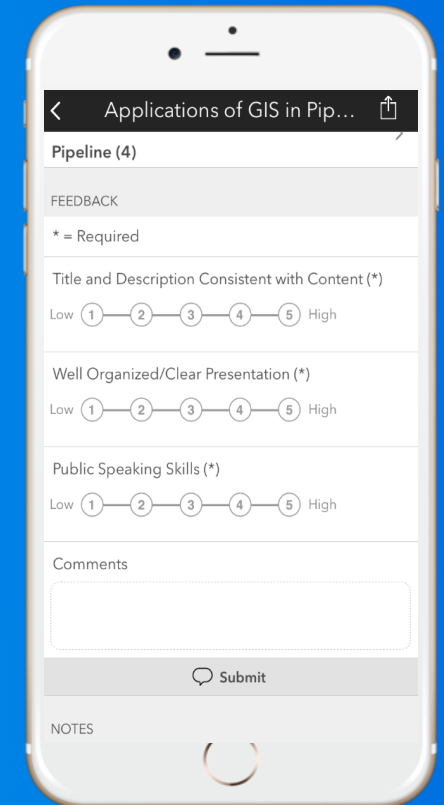
Find the session
you want to review



Scroll down to the
bottom of the session



Answer survey
questions and submit





Understanding our world.