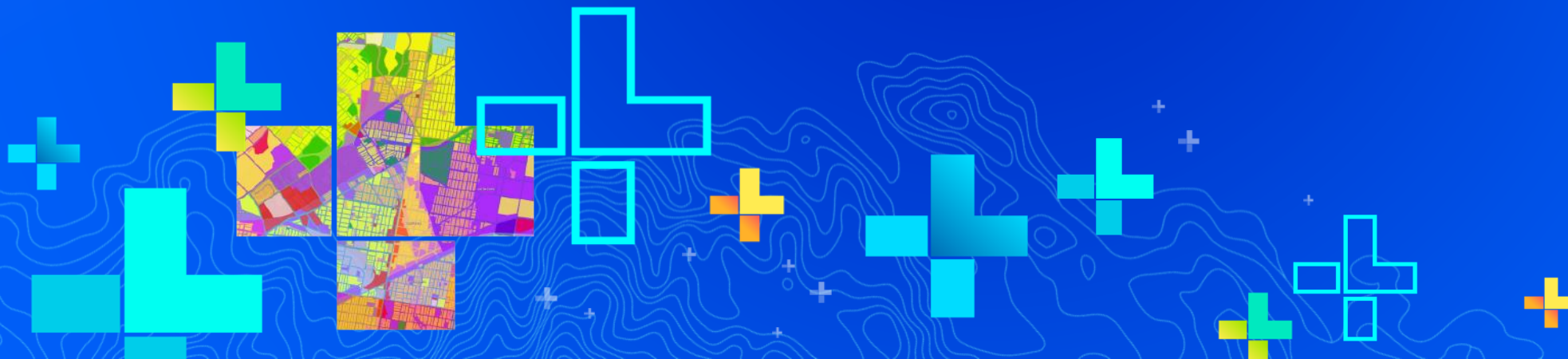




ArcGIS Pro Tasks: Tips and Tricks

Jason Camerano

SEE
WHAT
OTHERS
CAN'T



Who has used Tasks in ArcGIS Pro?

Show of hands



What You Will Learn From This Session

Spoiler: A Lot!

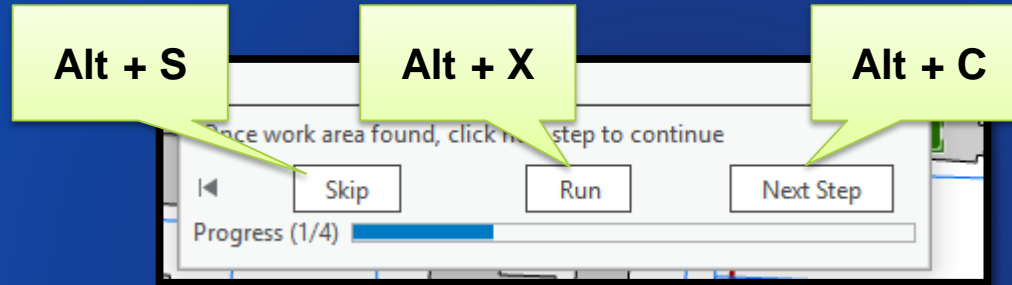
- As a User:
 - Helpful tricks to run Tasks efficiently
 - Maximize as much screen real estate as possible
- As an Author
 - Create Steps that utilize the correct Step Behavior
 - Fully understand the power of Step Actions
 - Embed Commands and preset parameters
 - Know when and how to use Step Palettes
 - How to share your work with your organization
 - And much more!

Let's Use A Task

Tips and Tricks for the user



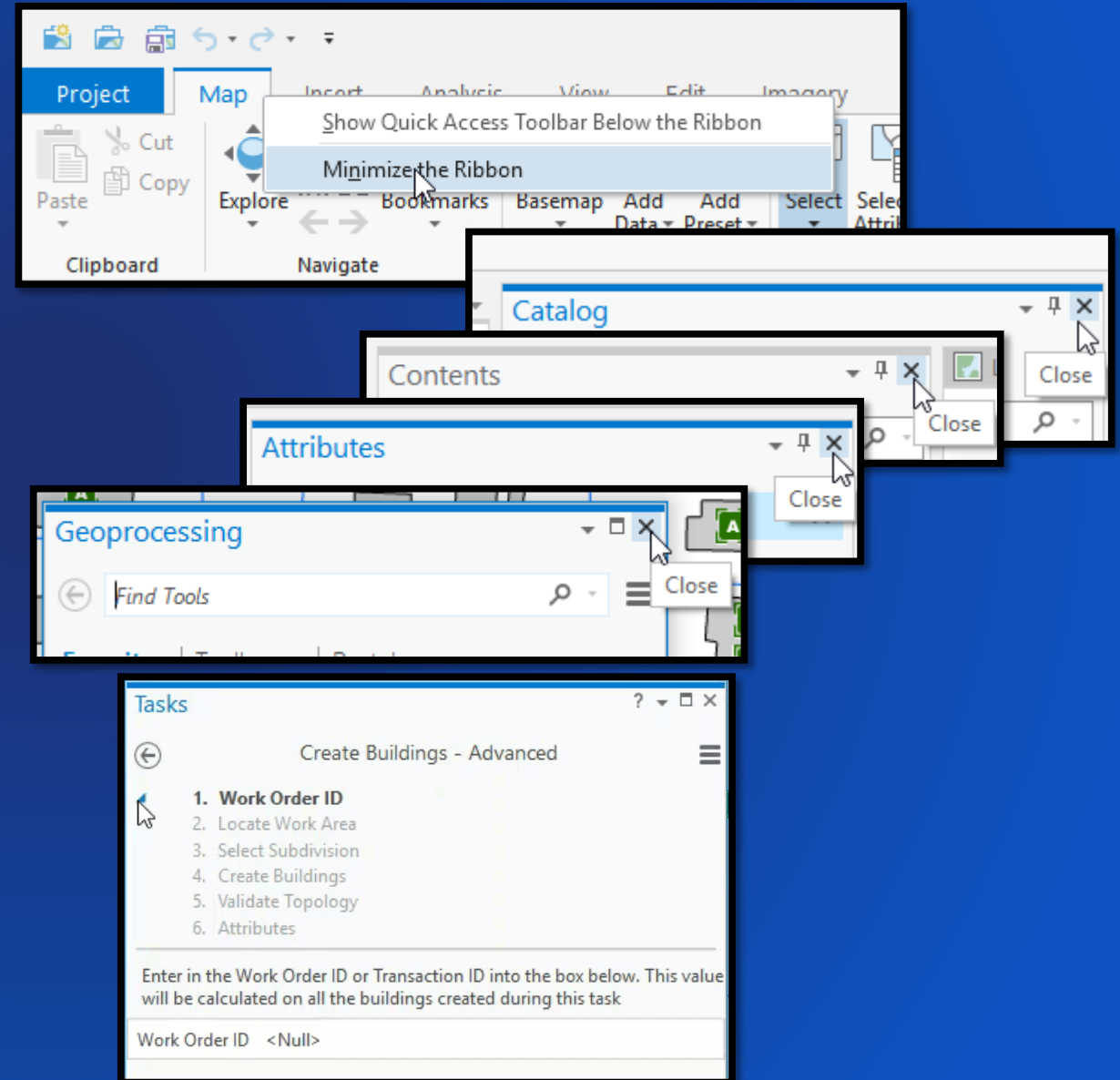
Everyone Likes Shortcuts!



CTRL + Z will undo changes and will also go back to previous steps

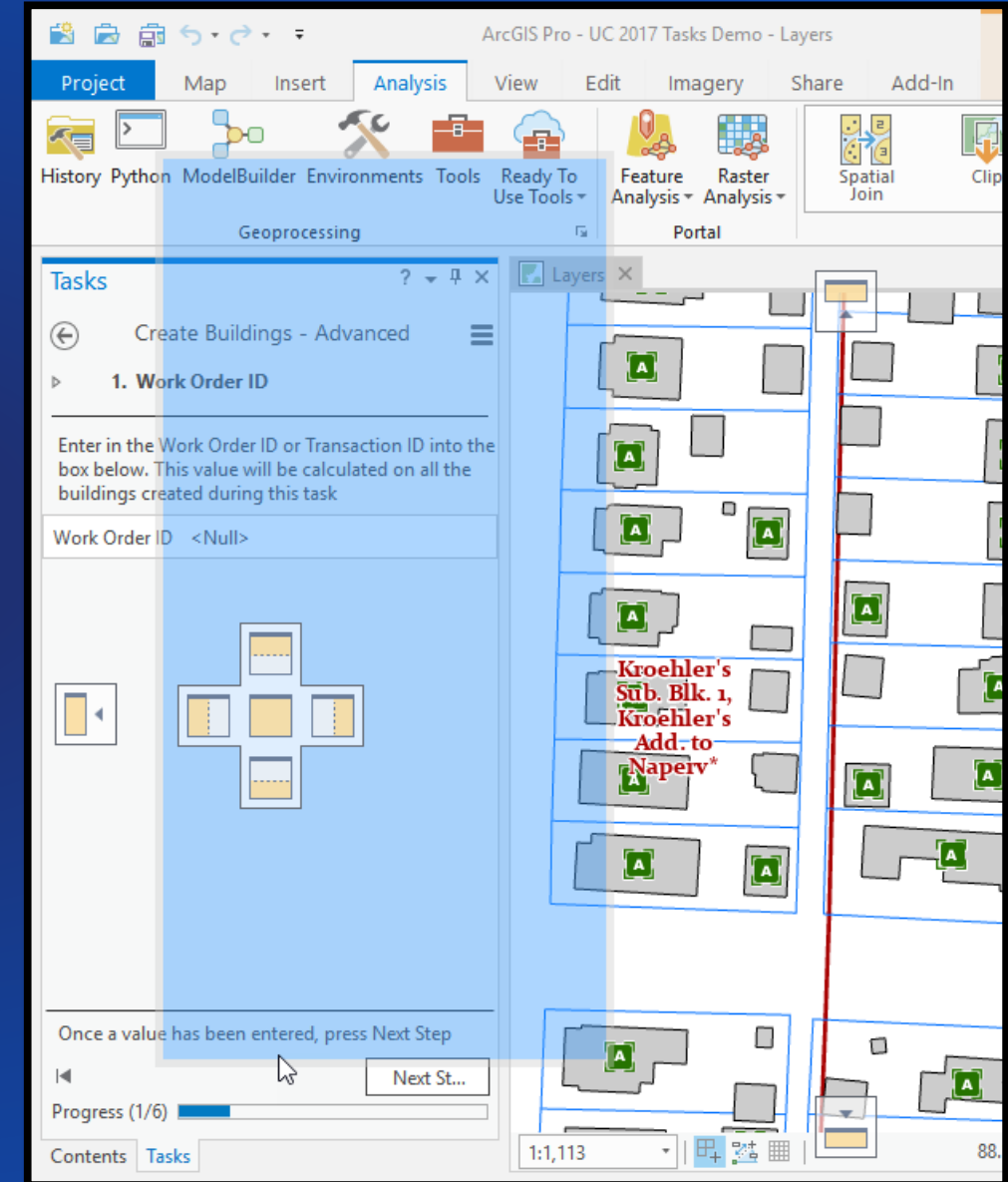
Make Use of That Giant Monitor

- Minimize the Ribbon
- Close all other dock panes
- Collapse the list of Steps



What's Up Dock?

- Undock the Tasks Pane
 - This prevents other panes from opening over tasks
 - Can move Task Pane to another monitor, give one screen a full Pro



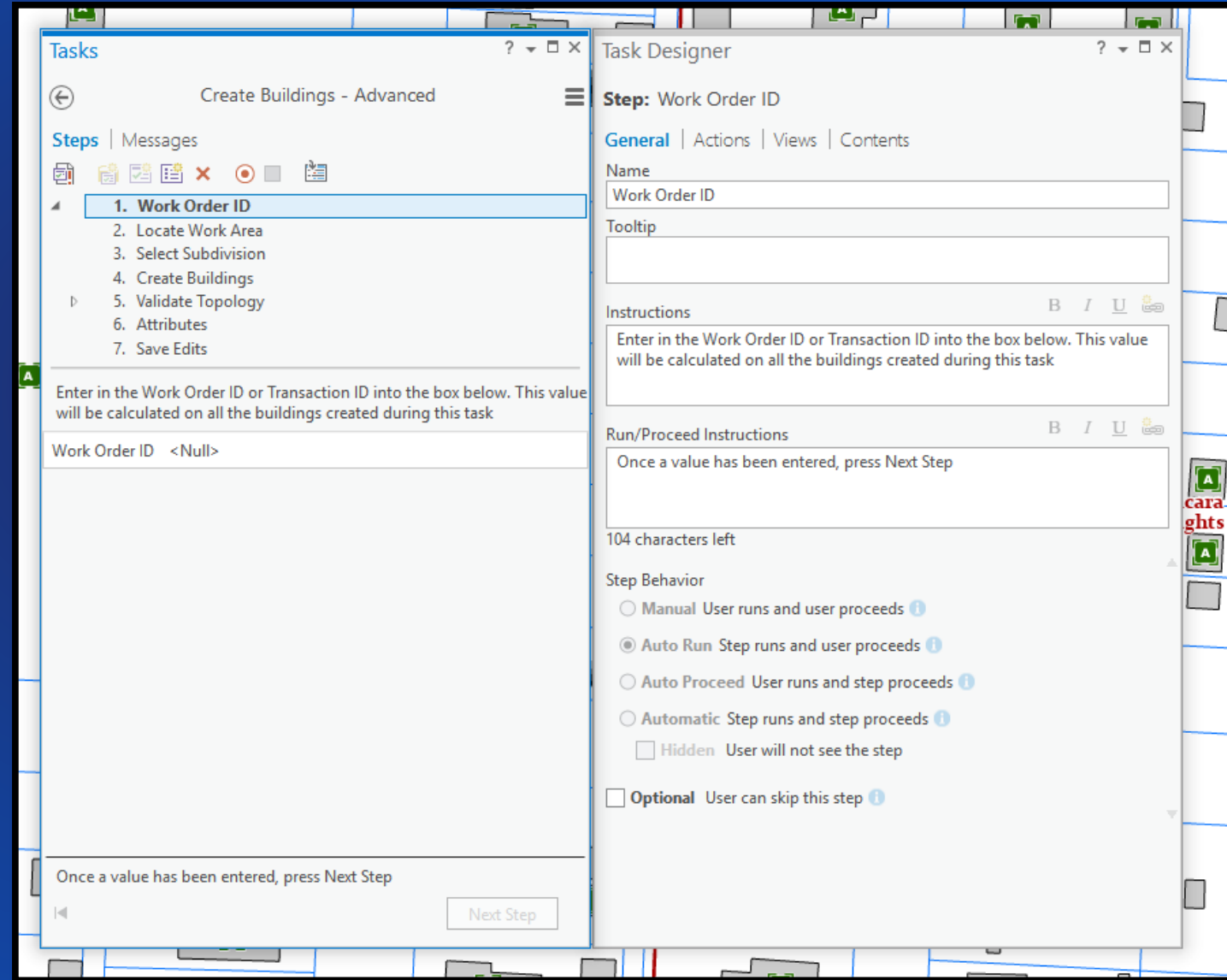
Time to Design

Tips and Tricks for the Designer



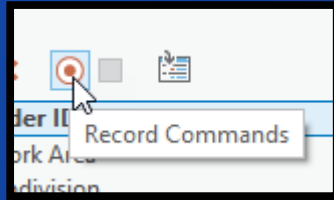
Untether From the Dock at Set Sail

- Undock the Designer Pane
- Place the panes side by side
- If you have a 2nd monitor, utilize it, place the Task Panes over there



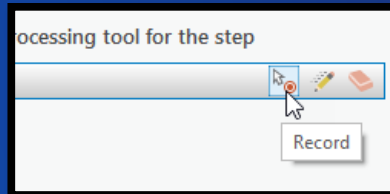
Don't Forget To Press Record

- Record your entire workflow

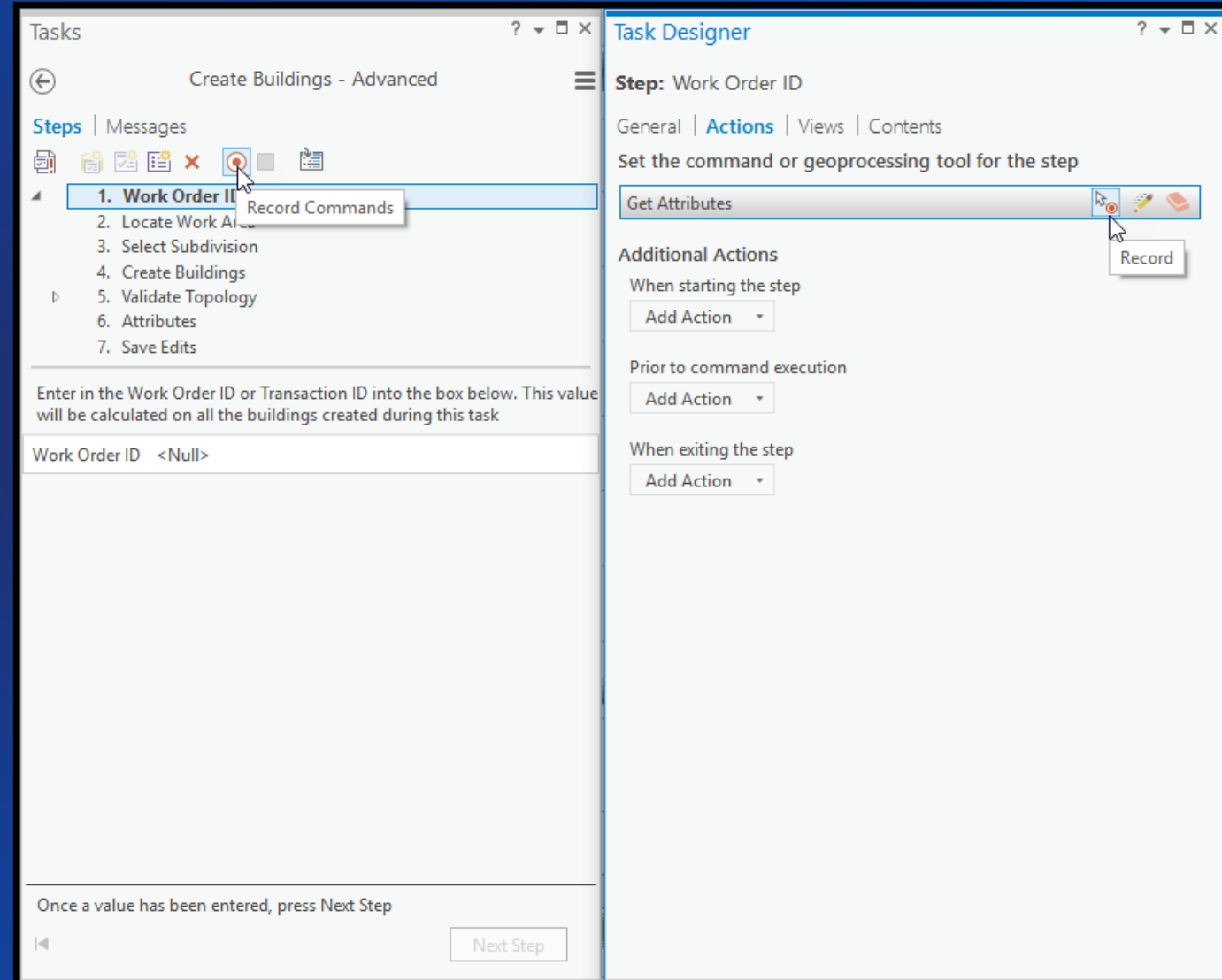


- Use this to record your workflow by creating new steps for each command clicked. Press stop to end recording

- Record a single command



- Use this to record and set a single command on the currently selected step



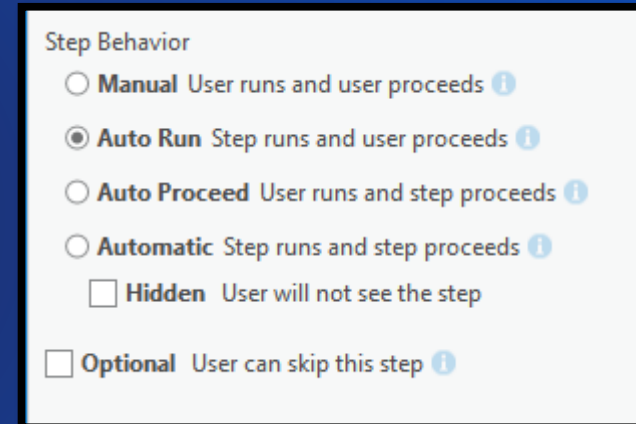
You Better Be on your Best Behavior

Manual Mode: Geoprocessing Tools / Modify Tools that you'll run more than once

Auto Run: Selection Tool, Explorer Tool, Embedded Panes defaults

Auto Proceed: GP Tools / Modify Tools you want the user to run only once

Automatic: Hidden Tool activation, Scripts that don't require user input

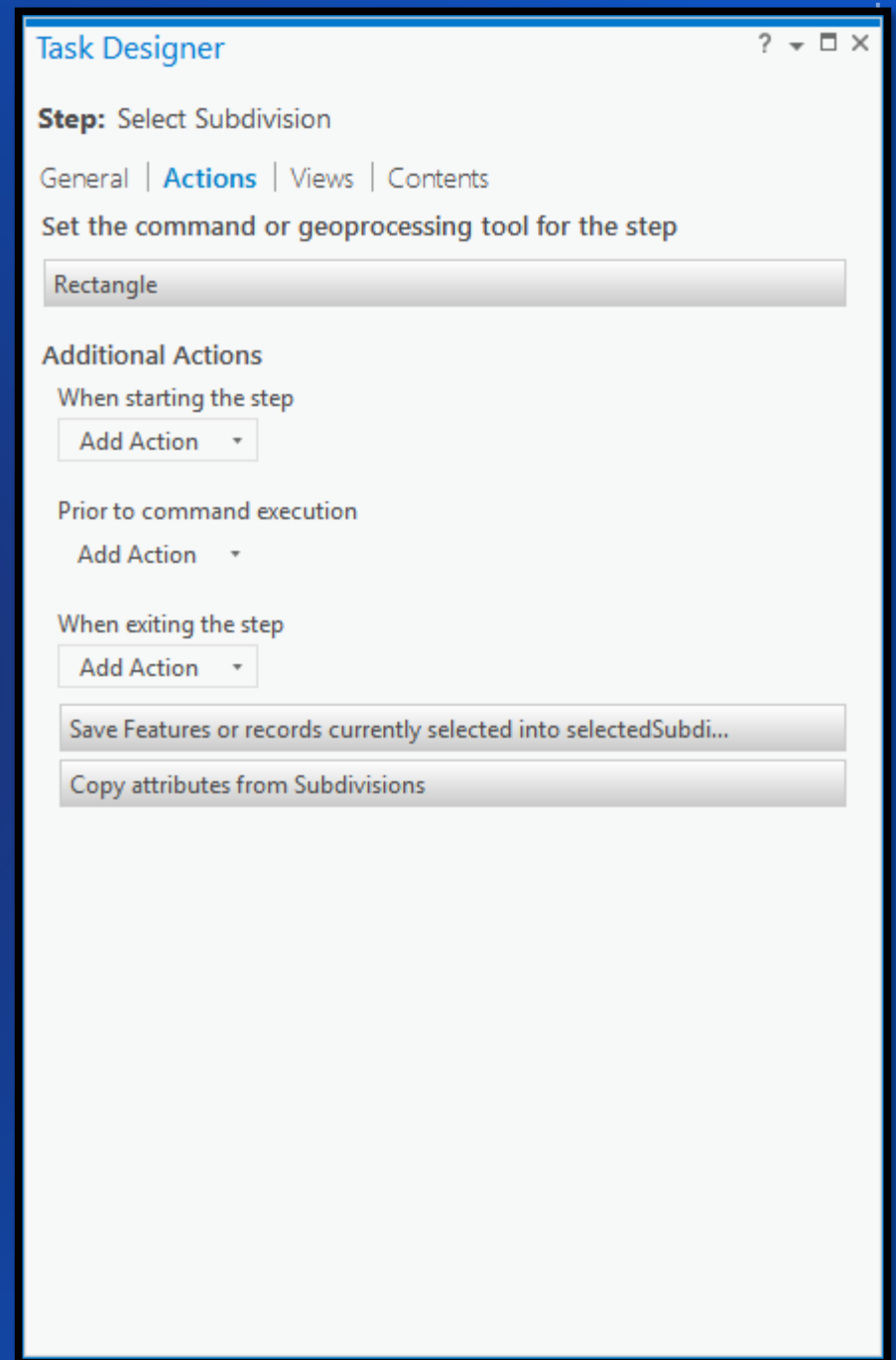


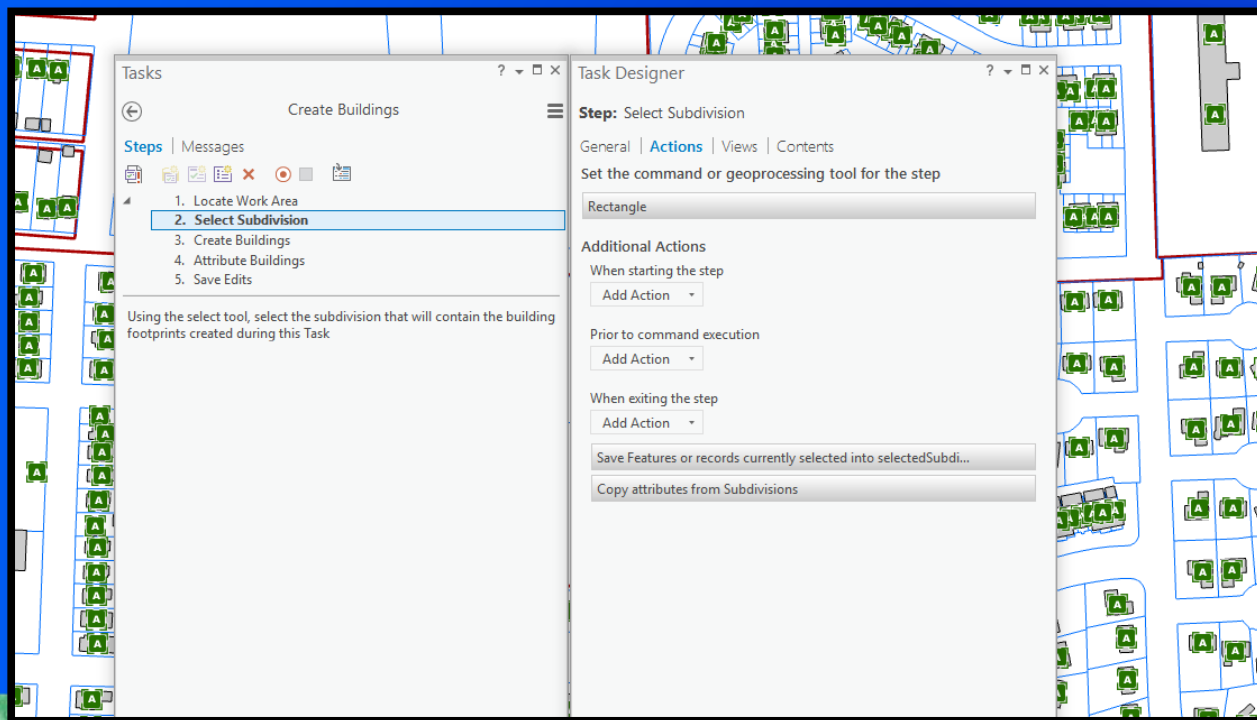
The screenshot shows a 'Step Behavior' dialog box with the following options:

- ☐ **Manual** User runs and user proceeds ⓘ
- ☒ **Auto Run** Step runs and user proceeds ⓘ
- ☐ **Auto Proceed** User runs and step proceeds ⓘ
- ☐ **Automatic** Step runs and step proceeds ⓘ
- ☐ **Hidden** User will not see the step
- ☐ **Optional** User can skip this step ⓘ

Ready, Set, Action!

- Actions are very powerful
- They can occur at 3 different times within a step
 - When starting the step
 - Prior to command execution
 - When exiting the step
- Note: Certain actions are limited based on time of execution
 - No verification when starting the step
 - Selections when starting the step are limited to features currently selected or created/modified

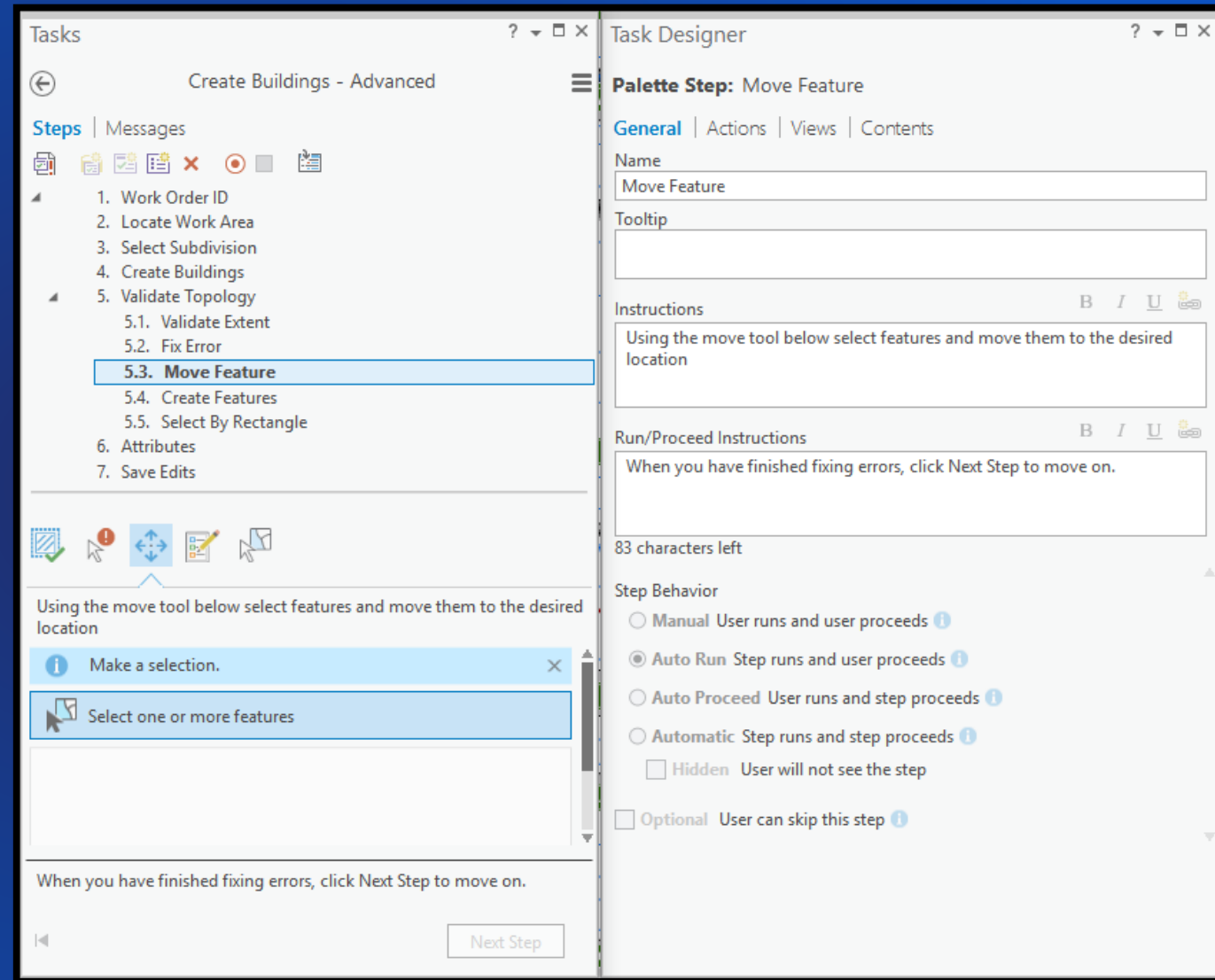




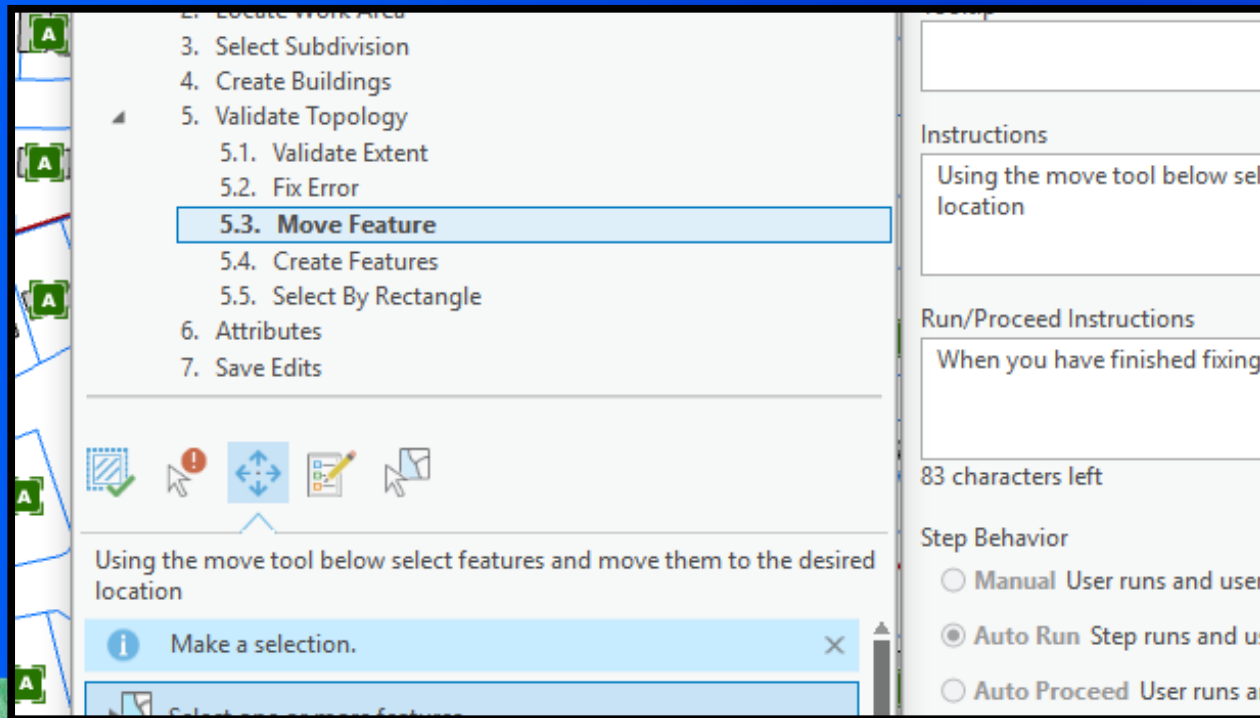
Demo: Actions in Action

Design Palettes Like an Artist

- A Palette is used when
 - Multiple commands need to be run an unknown amount of times
 - The sequence of command are unknown
- A Palette is a container for steps
- Each step in a palette functions identically to a step outside a palette (almost)
- Steps can be dragged in and out of palettes
- User sees the Palette Container Name

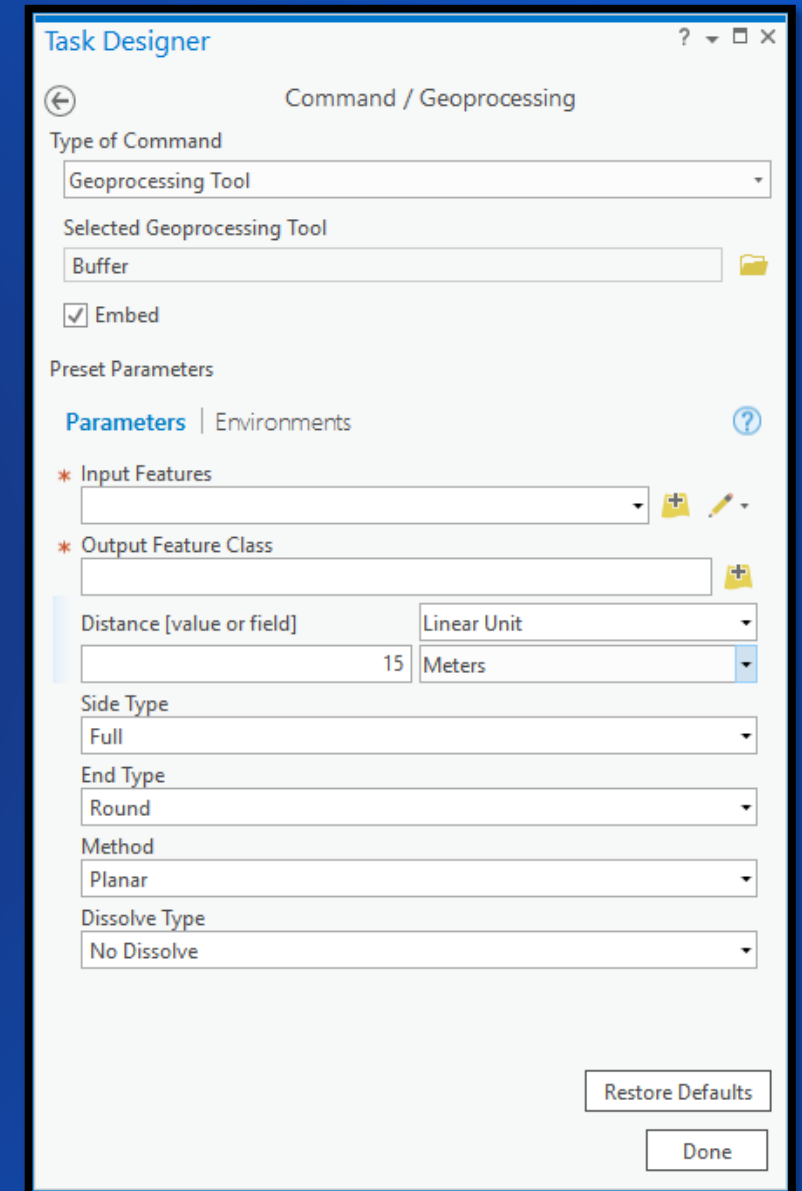


Demo: Palette for your Palate



Embed Your Mind With Embedding Commands

- No Pane, All Gain
- All Geoprocessing tools can be embedded
- Many other tools can be embedded
- Geoprocessing and some other tools can also have pre-set parameters when embedded
- Many embedded commands have specific step behavior



The screenshot shows the 'Task Designer' window for the 'Buffer' tool. The window has a title bar with a question mark, maximize, and close buttons. Below the title bar is a navigation bar with a back arrow and the text 'Command / Geoprocessing'. The main area is divided into sections: 'Type of Command' with a dropdown menu set to 'Geoprocessing Tool'; 'Selected Geoprocessing Tool' with a text box containing 'Buffer' and a folder icon; a checkbox labeled 'Embed' which is checked; 'Preset Parameters' with tabs for 'Parameters' (selected) and 'Environments'; and a list of parameters for the Buffer tool. The parameters include 'Input Features' (a dropdown with a plus icon), 'Output Feature Class' (a text box with a plus icon), 'Distance [value or field]' (a text box with '15'), 'Linear Unit' (a dropdown with 'Meters'), 'Side Type' (a dropdown with 'Full'), 'End Type' (a dropdown with 'Round'), 'Method' (a dropdown with 'Planar'), and 'Dissolve Type' (a dropdown with 'No Dissolve'). At the bottom right, there are two buttons: 'Restore Defaults' and 'Done'.

Task Designer

Command / Geoprocessing

Type of Command

Geoprocessing Tool

Selected Geoprocessing Tool

Buffer

☒ Embed

Preset Parameters

Parameters | Environments

* Input Features

* Output Feature Class

Distance [value or field] 15

Linear Unit Meters

Side Type Full

End Type Round

Method Planar

Dissolve Type No Dissolve

Restore Defaults

Done

Hey Look! Locate Can Now Be Embedded

- Pre-set a locate search string
- Set which locate providers are enabled for a given step
- Existing Tasks will now have this functionality, just click Embed

Command / Geoprocessing

Type of Command
Command

Selected Command
Locate

☒ Embed

Preset Parameters

Search

From the list of locate providers below, set the state for this step

Locate provider	Enable
Subdivisions	—
XY provider	—
Esri World Geocoder	—

Don't Forget To View the Contents of View and Contents

- You can select multiple layers (and now tables) and change the properties of an entire column
- You can right click and make a single layer the only Visible, Selectable, Editable, etc.
- **Note:** Limit the amount of layers that are controlled each step. Use the “-” option more often
- Drag step up/down in Task Pane and click Previous Step to take another step's contents
- Clear Selection Action Not Command
- Linking Views can now be done in the Views tab

The screenshot displays the 'Task Designer' interface with the 'Contents' tab selected. The 'Active View' is set to 'Layers'. The interface shows a list of layers and tables with their states for the current step. A mouse cursor is hovering over the 'Subdivisions' row.

	Visible	Selectable	Editable	Printable	Exportable	Linkable
Buildin_Address_Topology	✓					
AddressPoints	✗	✓	✓	✓	-	✗
BuildingFootprint	✗	✓	✓	✓	-	✗
OwnerParcel	✗	✓	✓	✓	-	✗
Subdivisions	✗	✓	✓	✓	-	✓
World Imagery	✗				-	

Task Designer

Step: New Step

General | Actions | Views | Contents

Active View: Layers

From the list of layers and tables below, set the states for this step

View

None

Layers

AddressDataManagement

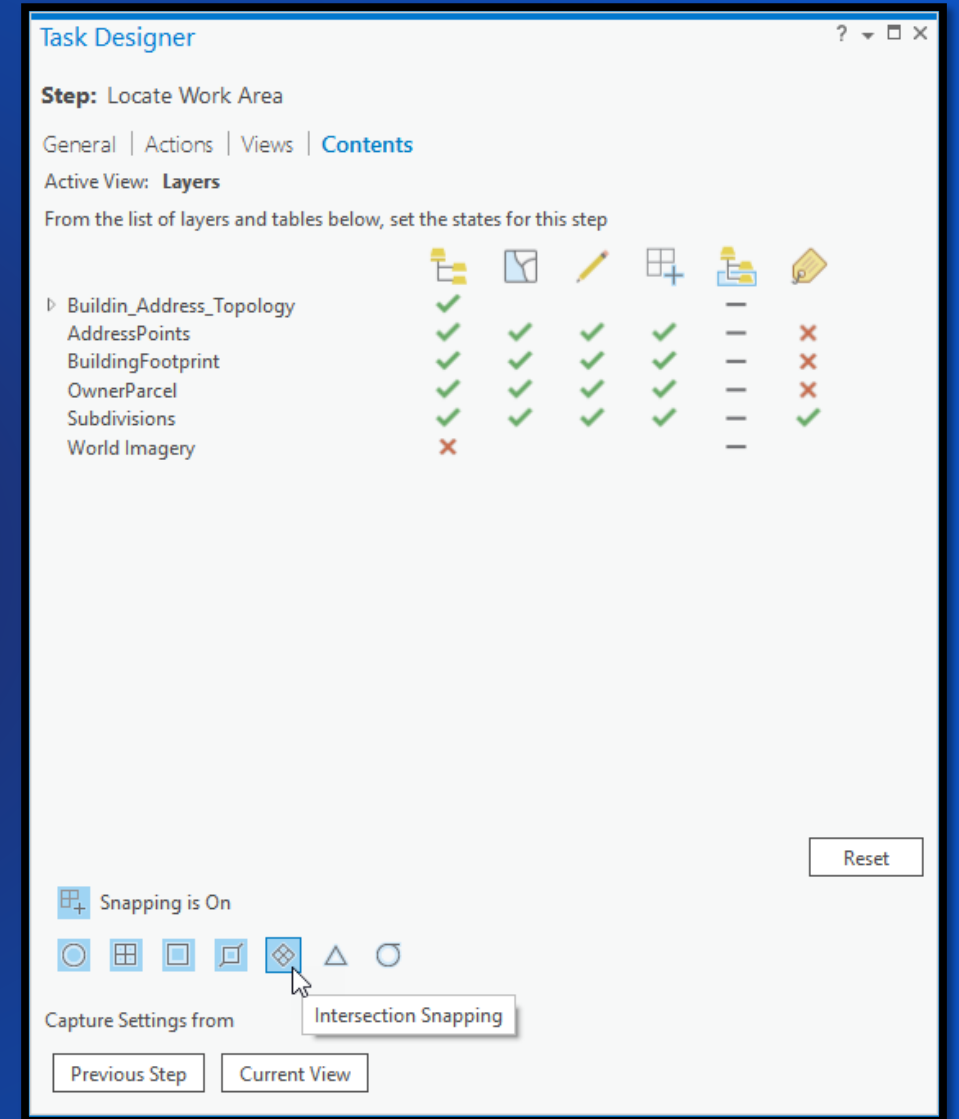
Link Views

Capture View Settings from

Previous Step Current View

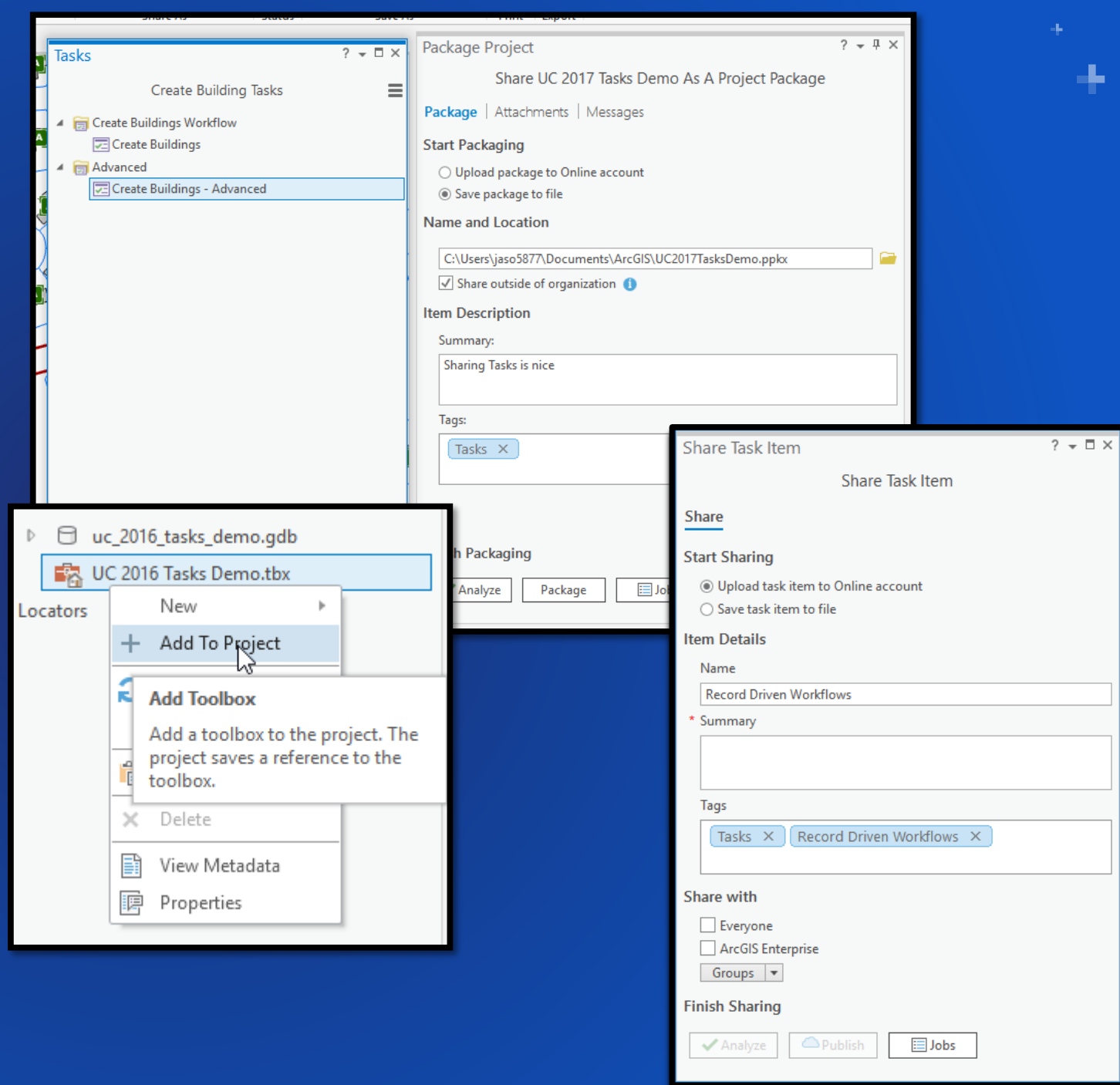
Setting Snapping Properties is a... Snap

- Snapping properties can be changed on a step by step basis
- Each newly created step inherits previous snap properties



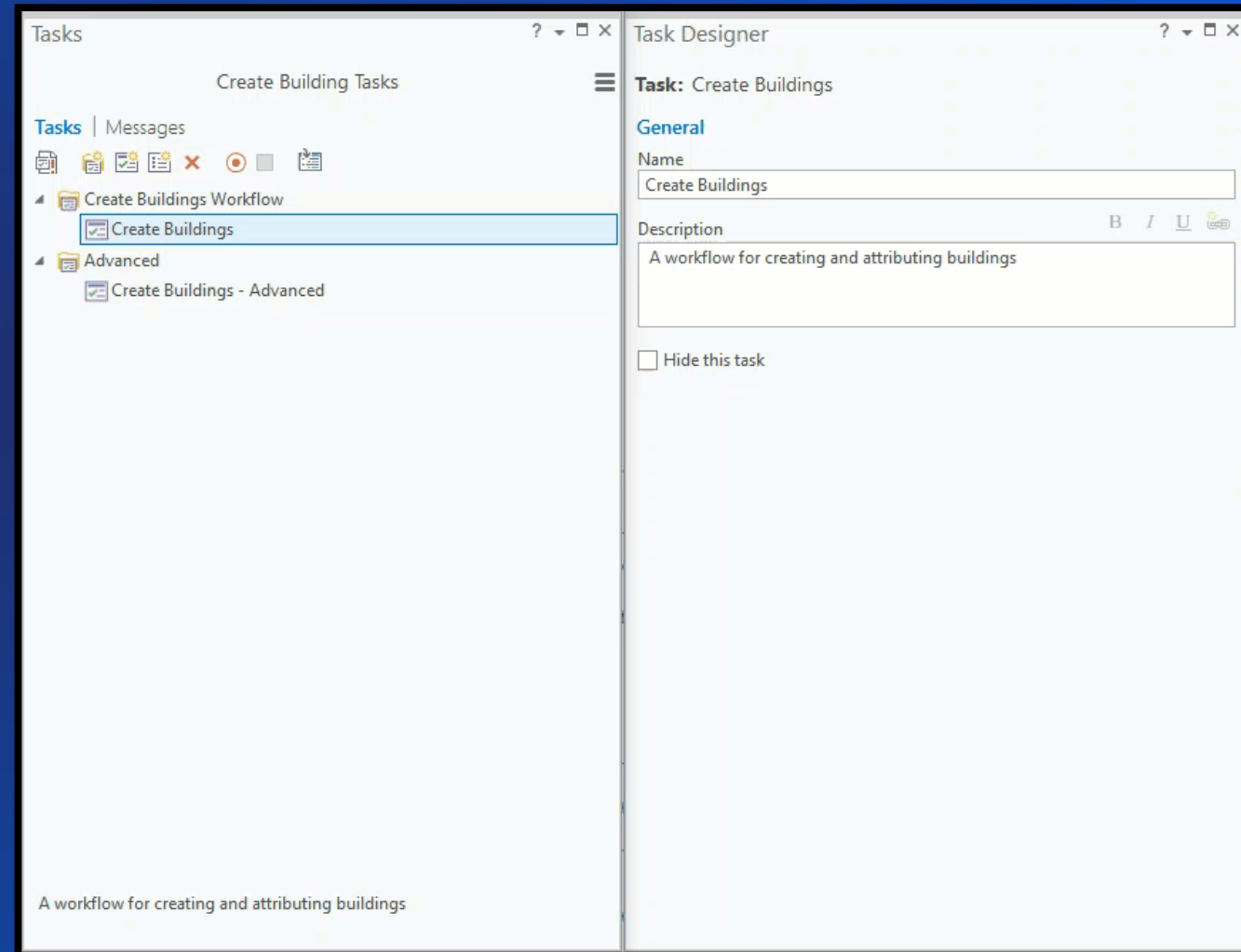
Sharing is Caring

- To share Tasks it's important you share the entire project as a Project Package
- If you have custom GP Scripts or Add-Ins make sure they've been added to the project
- Share Tasks directly to Portal



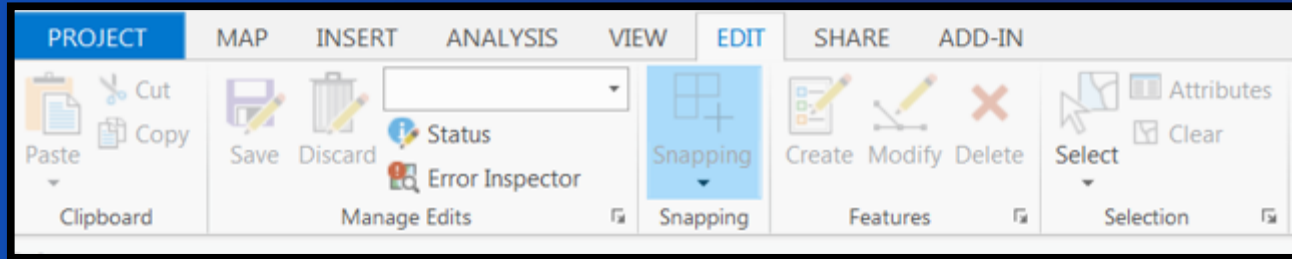
Recourses for Broken Resources

- Task Item references a layer that you don't have
 - Re-map it
 - Remove it
- Task Item resources can be remapped at any time
- Resources include:
 - Maps
 - Layers
 - Geoprocessing Tools
 - GP Scripts, Models, Add-Ins

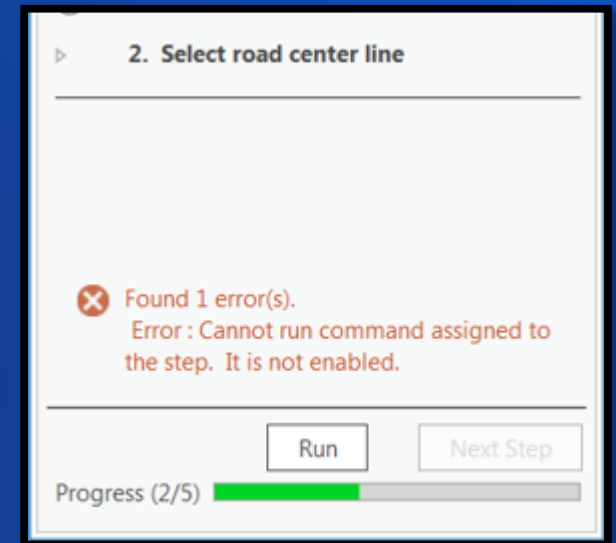


Woah, Why Am I Getting This Error?

- Sometimes during runtime a user might get an error like this:
- Remember commands are contextual

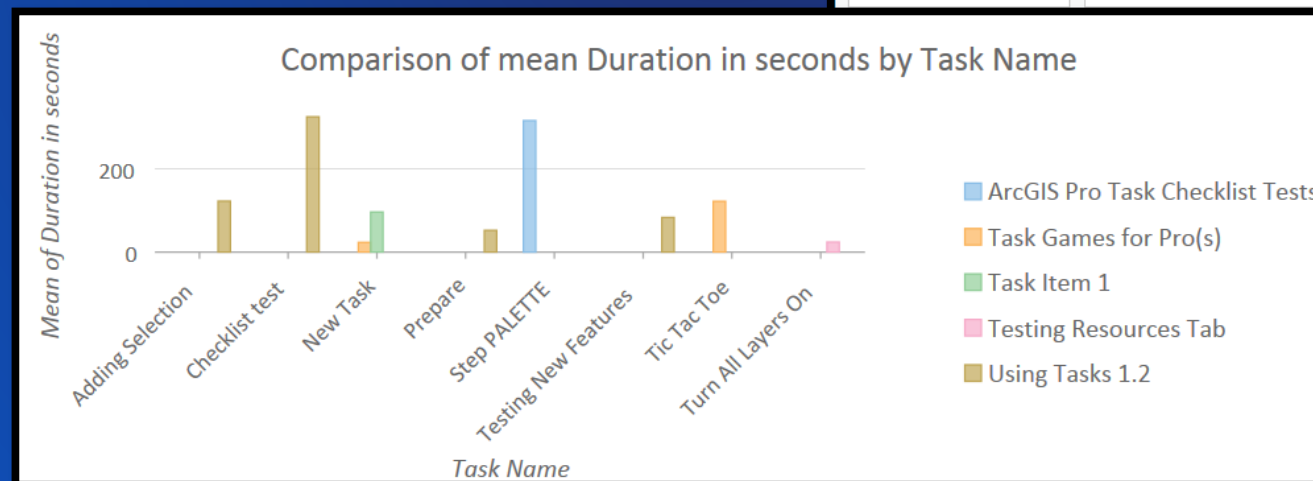
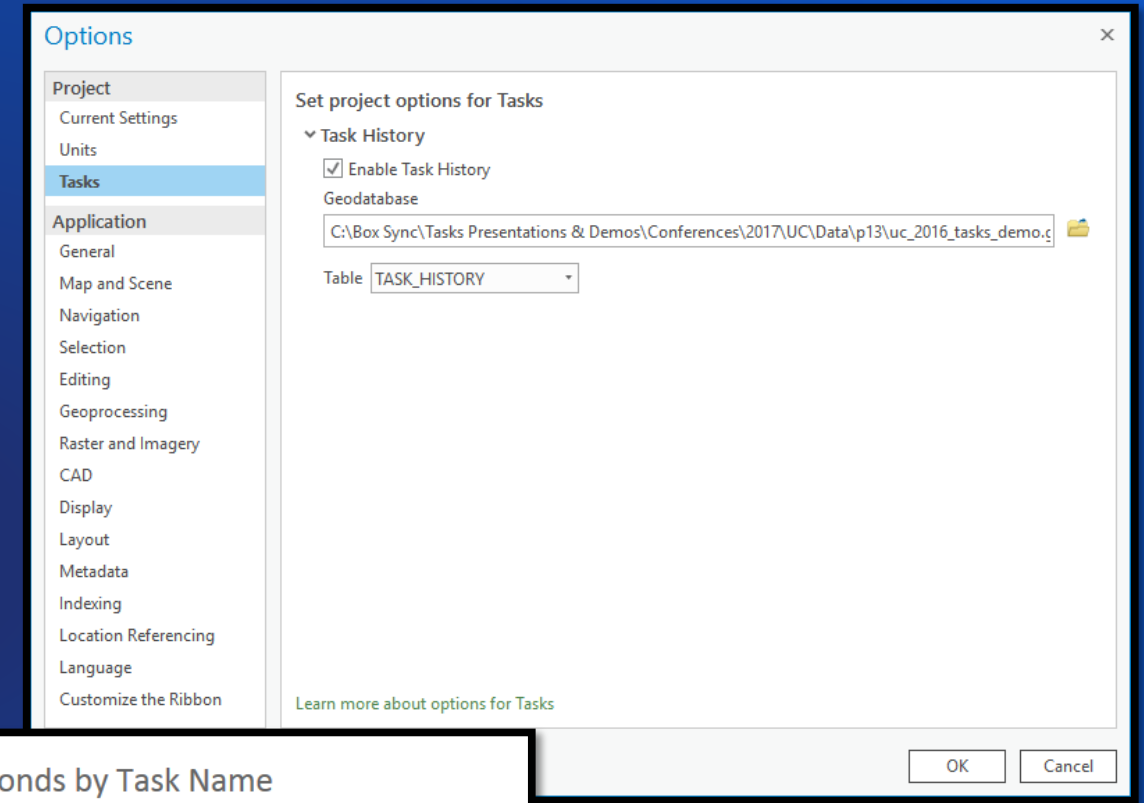


- Check to see if command is currently active
- Check to see if the Task can be performed outside of Tasks



Time to Make History

- Pro Backstage Options -> Tasks
- Create a New Table
 - Can be on SDE Database
 - Can use an existing Table that was used by another Project
- Using Charts you can display stats in a nice bar graph
- Does not record idle time

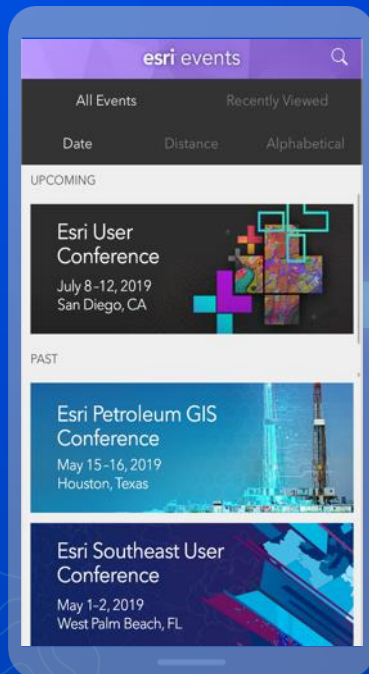


Summarized Summary

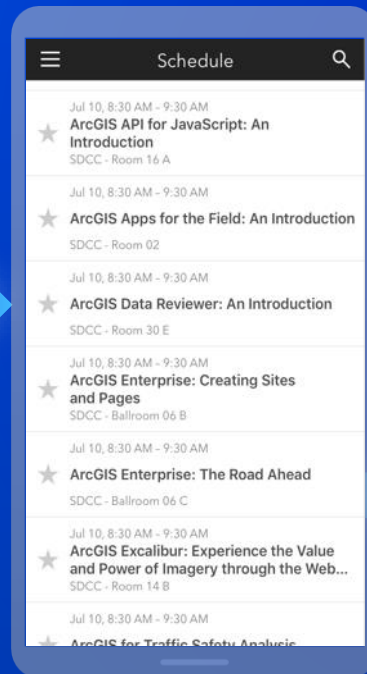
- **Configure Vs. Customization: Consider Tasks before writing Add-Ins**
- **Tasks have an SDK (Open a Task Item and Open A Specific Task)**
- **Create Tasks that save time and improve quality**
- **Breakdown a long workflow into multiple Tasks**
- **Understand your workflow and build your Task from that**
- **Take your time and examine each step for efficiency and correctness**

Please Share Your Feedback in the App

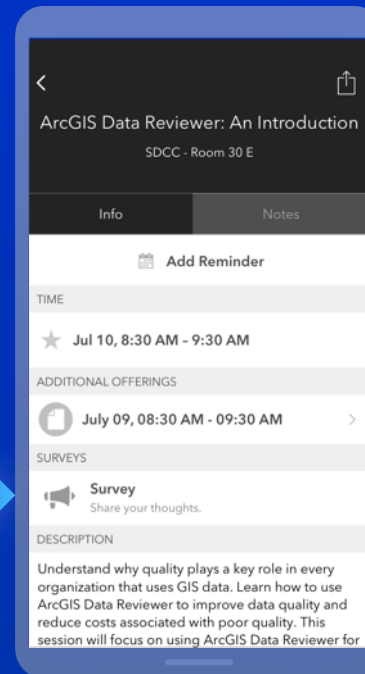
Download the Esri Events app and find your event



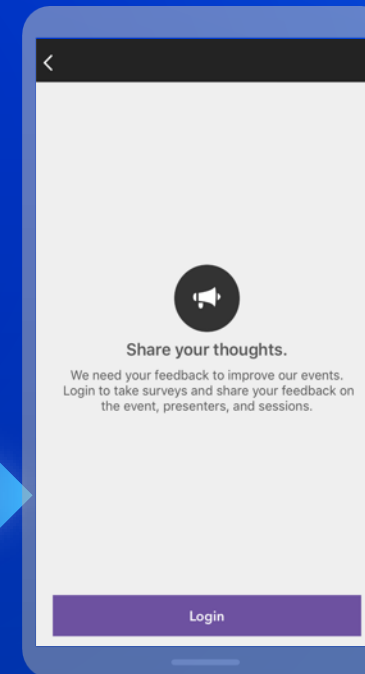
Select the session you attended



Scroll down to "Survey"



Log in to access the survey



Complete the survey and select "Submit"

