

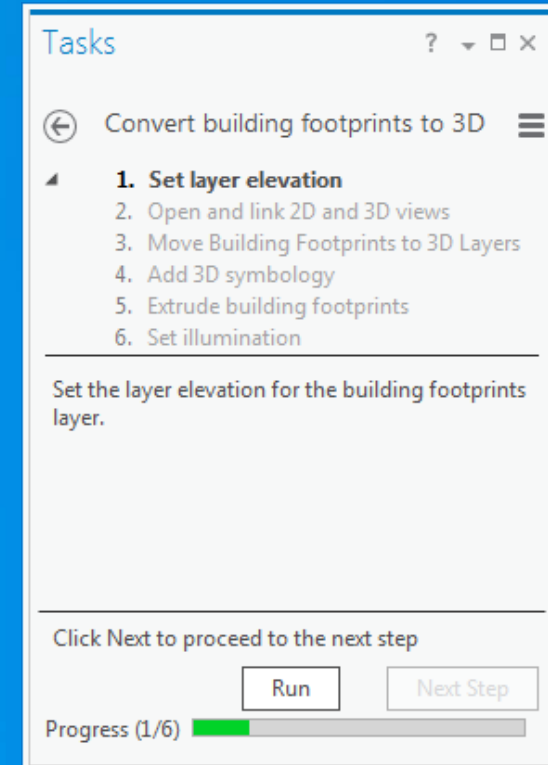


Introduction to Tasks in ArcGIS Pro

Christine Leslie
Jason Camerano

What is a task?

- Sequential steps that guide you through a repeatable workflow
- Steps that improve the efficiency of the workflow
- Interactive steps
- Steps that are configured by you
 - Configure the command/GP tool to load for the step
 - Set the active map for the step
 - Turn layers on and off
 - Clear/add selections for the step



What is a task?

- A task captures a workflow
 - Used as an interactive guide
 - Reduces mouse clicks, improves efficiency

Tasks

Convert building footprints to 3D

1. Set layer elevation
2. Open and link 2D and 3D views
3. Move Building Footprints to 3D Layers
4. Add 3D symbology
5. Extrude building footprints
6. Set illumination

Set the layer elevation for the building footprints layer.

Selects buildings layer and opens Layer Properties dialog box

Selects buildings layer and opens Contents window

Selects buildings layer and sets 3D view as active

Opens map view and 3D view and runs Link Views command

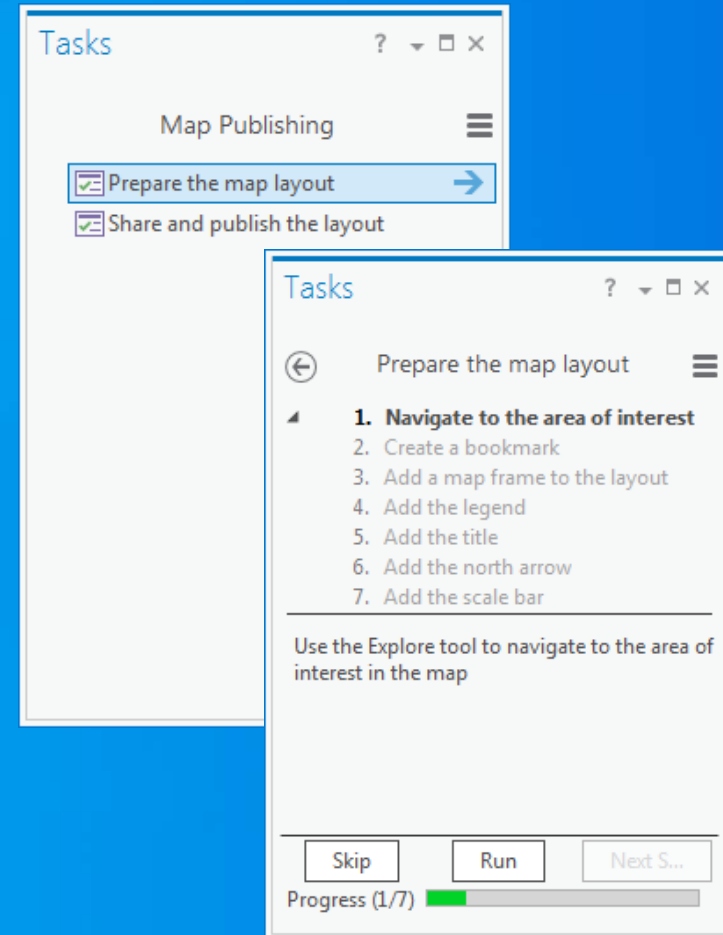
Selects Buildings layer and opens Contents window

Selects Buildings layer and opens Symbology pane

Opens Contents window

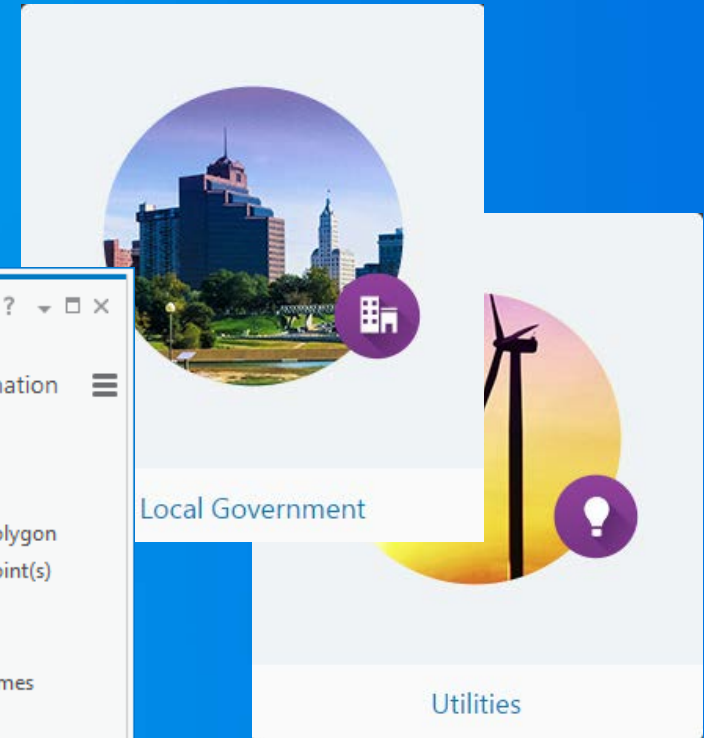
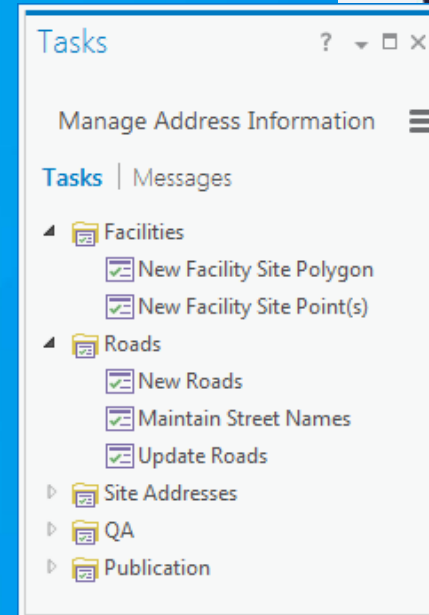
Why use tasks?

- **Improve efficiency of workflows**
 - Reduce mouse clicks
 - Open the right tool at the right time
 - Reduce clutter (panes, ribbons, etc)
 - Save time (manage layer settings, etc)
- **Define best practice workflows**
 - Multiple ways to do the same workflow
 - Reduce confusion
 - Improve quality
- **Guides**
 - Tutorial, learning, knowledge sharing



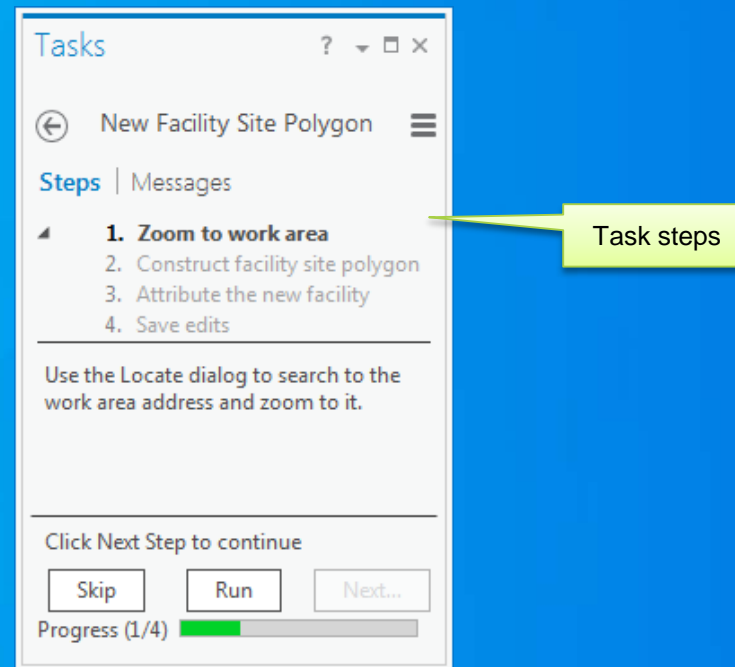
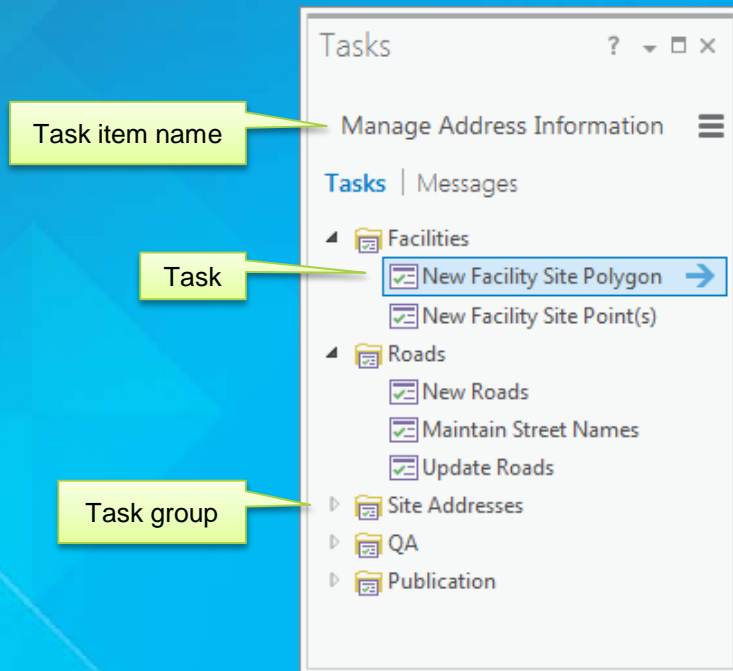
Why use tasks?

- **Focused workflows** for an industry or solution
 - **Emergency management, Local Government, Utilities, etc**
- **Users know the software but not the workflow**
- **Use business language, not command names**
 - **Create Features Vs Add road centerline**



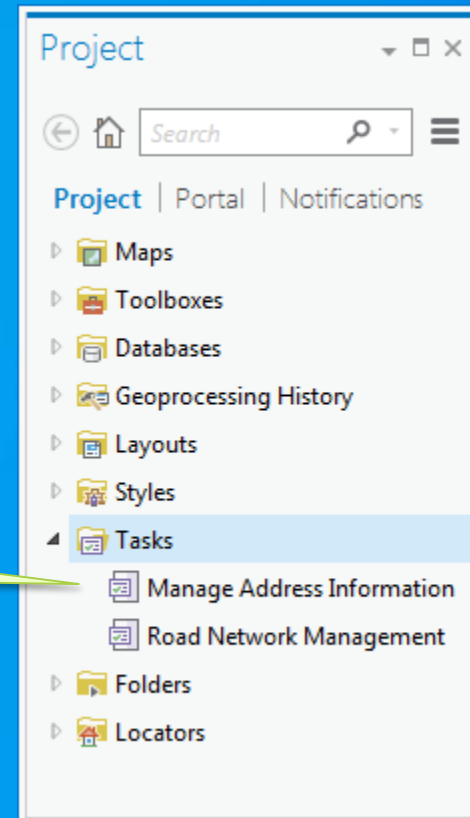
Using tasks

- A task is created in a task item
 - A task item is a project item in ArcGIS Pro



Using tasks

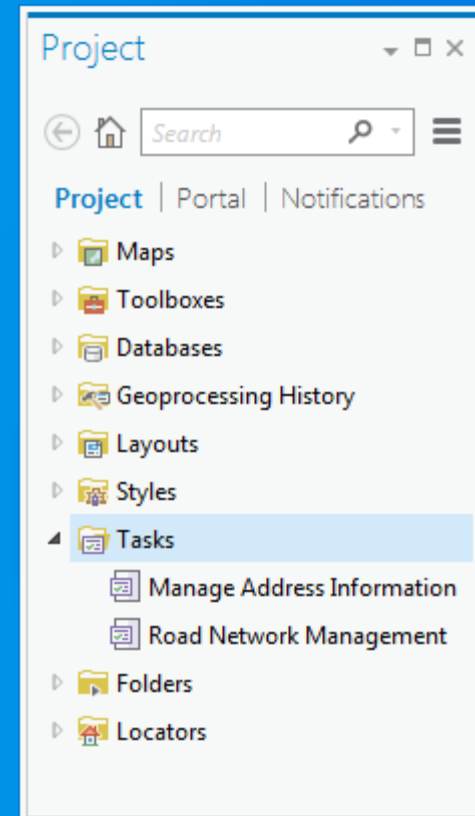
- A task item is a project item in ArcGIS Pro
- A task item is saved with the project



Task item

Sharing tasks

- A task item can be shared via a task file
 - **.esritasks file**
- A task file can be imported into a project
- A task item is an AGOL item and can be shared via email



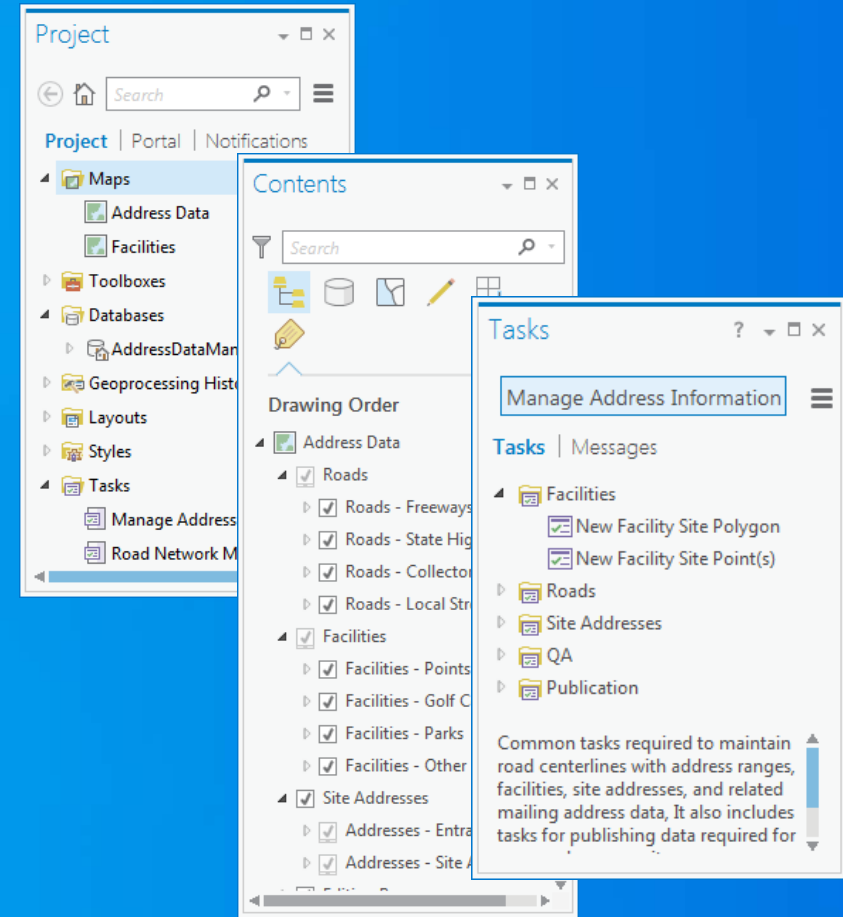


Demo: Using Tasks

Jason Camerano

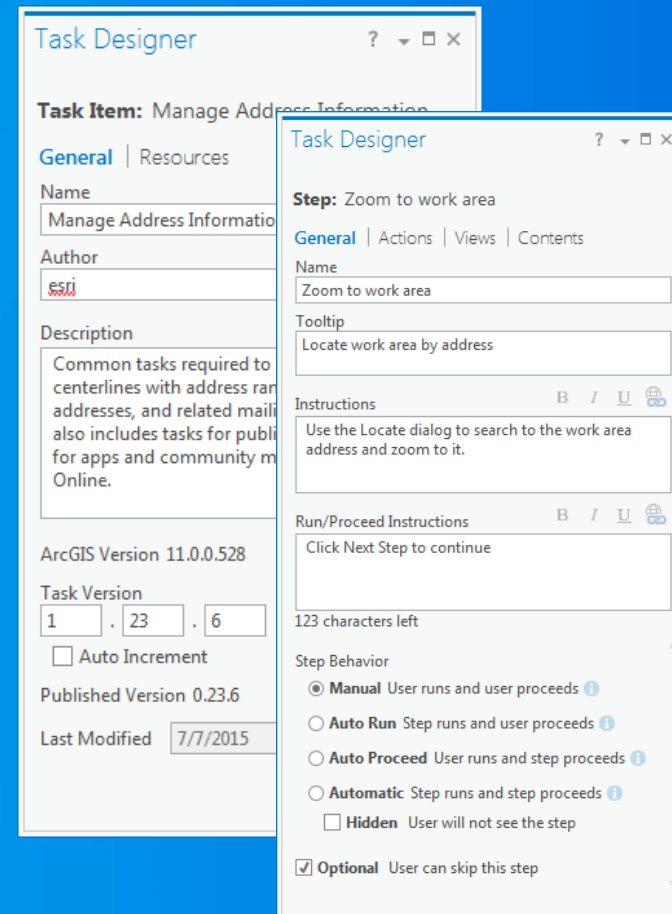
Design a task item

- Repeatable workflows
- Know your business and workflows
- Know your users
- Know your data – this is what the task will use
 - Project
 - Maps
 - Layers
 - Tools
 - Etc



Design a task item

- Run the workflow before creating the task
- Tasks are configured using the Task Designer pane
 - Create a new task item
 - Insert a new task
 - Add and configure task steps
- Add descriptions, instructions and help links



Create a task step

- You can create and configure a task step that
 - Loads a command or geoprocessing tool
 - Embeds commands and geoprocessing tools in the tasks pane
 - Selects layers in the Contents pane
 - Creates, saves and clears feature selections
 - Sets the active map view, close/opens views
 - Sets visibility, selectability, editability and snapability of layers
 - Labels layers

Configure a step

Step Behavior

- Manual or automatic step behaviors
 - Task user manually runs step or steps can run automatically
- Configure step behavior to improve efficiency
 - Reduce mouse clicks

Step Behavior

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

Task Designer

Step: Zoom to work area

General | Actions | Views | Contents

Name
Zoom to work area

Tooltip
Locate work area by address

Instructions B I U ⓘ
Use the Locate dialog to search to the work area address and zoom to it.

Run/Proceed Instructions B I U ⓘ
Click Next Step to continue

123 characters left

Step Behavior

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



Configure a step

Step Behavior

- **Manual**

- **User clicks Run to start the step, performs action, clicks Next Step to proceed**

Step Behavior

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



Tasks

← Convert building footprints to 3D ☰

▲ **1. Set layer elevation**

2. Open and link 2D and 3D views
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5. Extrude building footprints
6. Set illumination

Set the layer elevation for the building footprints layer.

Click Next to proceed to the next step

Progress (1/6)

User clicks Run to open Layer Properties dialog box

User sets layer elevation and clicks Next Step to proceed

User can skip past step (optional step)

Configure a step

Step Behavior

- **Auto Run**

- **Step automatically starts, user performs action and clicks Next Step to proceed**

Step Behavior

- 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



Tasks

← Prepare the map layout

- 1. Navigate to the area of interest**
2. Create a bookmark
3. Add a map frame to the layout
4. Add the legend
5. Add the title
6. Add the north arrow
7. Add the scale bar

Use the Explore tool to navigate to the area of interest in the map

Next Step

Progress (1/7)

Step automatically runs and loads the Explore tool

User locates area and Clicks Next Step to proceed

Configure a step

Step Behavior

- **Auto Proceed**

- **User clicks Run to start step, step performs action, and automatically proceeds**

Step Behavior

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



Tasks ? ▾ □ ×

← Add road polygons ☰

- ✓ 1. Zoom to work area
- ✓ 2. Construct road features
- ✓ 3. Attribute new roads
- 4. Create road buffers**
5. Save Edits

Parameters | Environments ⓘ

Input Features
Roads - Local Streets +

Output Feature Class
RoadCenterline_Buffer +

Distance [value or field] Linear unit
5 Feet

Run

Progress (4/5)

User enters tool parameters and clicks Run to start the step

Step runs the Buffer tool and Proceeds to the next step

The Buffer geoprocessing tool is embedded

Configure a step

Step Behavior

- **Automatic**

- **Step automatically starts, performs an action and proceeds**

Step Behavior

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



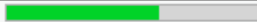
Tasks ? ▾ □ ×

← Add road polygons ☰

Steps | Messages

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1. Zoom to work area
2. Construct road features
3. **Select and zoom to new roads**
4. Attribute new roads
5. Create road buffers
6. Save Edits

Progress (3/5) 

Step automatically zooms to the selected roads and proceeds to the next step

Step is hidden

Tasks pane is in designer mode

Configure a step

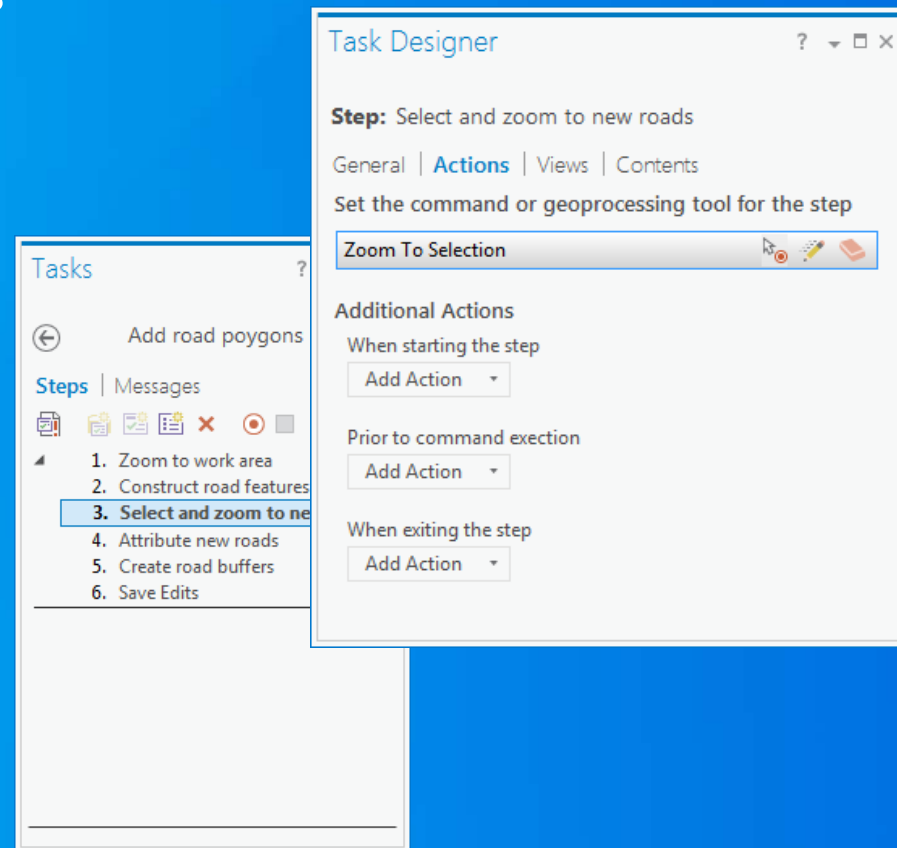
Step Actions

- **Step can load/run a command or geoprocessing tool**
 - **Step can load any command or geoprocessing tool in ArcGIS Pro**
 - **Step can load Add-In commands**
- **Step can manage selections**
 - **Clear selections**
 - **Save selections**
 - **Create selections**

Configure a step

Step Actions: load a command or tool

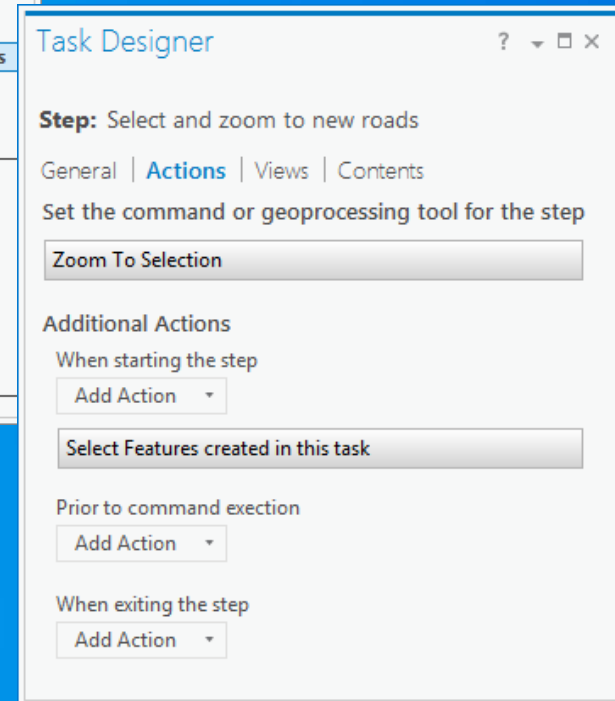
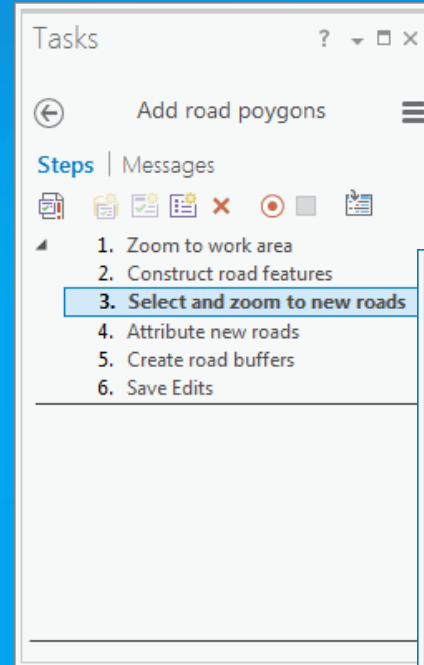
- Quickly create steps by recording command clicks
 - A step is created for each command clicked
 - Command/tool is automatically loaded for the step
- Or configure the command/tool under the Actions tab



Configure a step

Step Actions: manage selections

- **Manage selections**
 - **When starting**
 - **Before loading a command/tool**
 - **When exiting**
- **A step can**
 - **get selections**
 - **modify selections**
 - **create selections**
 - **clear selection**
 - **filter selections**



Configure a step

Step Views

- Set the active view for the step
- Open and close views
- Step command/tool works with data in the active view

Task Designer

Step: Add a map frame to the layout

General | Actions | **Views** | Contents

Set the active view and which view(s) are open

| View | Active | Open |
|-----------------|----------------------------------|-------------------------------------|
| None | <input type="radio"/> | <input type="checkbox"/> |
| Redlands_map | <input type="radio"/> | <input type="checkbox"/> |
| Redlands_3D | <input type="radio"/> | <input checked="" type="checkbox"/> |
| Redlands Layout | <input checked="" type="radio"/> | <input type="checkbox"/> |

Reset

Capture View Settings from

Unchanged from previous step (Open)

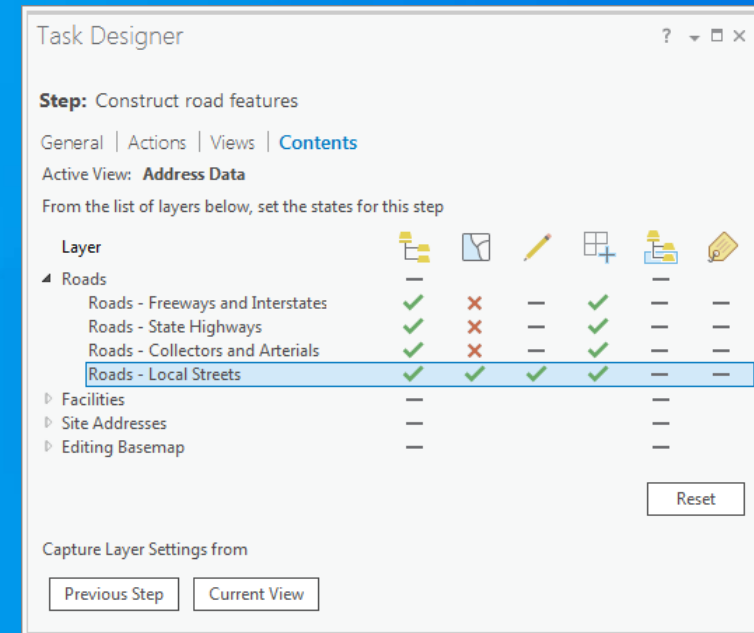
Close view for this step

Open and activate view

Configure a step

Step Contents

- Configure the contents (map layers) of the active view
 - Contents are displayed in the Contents pane
- Set layer visibility, selectability, editability and snapability
- Select layers
- Turn on/off labels





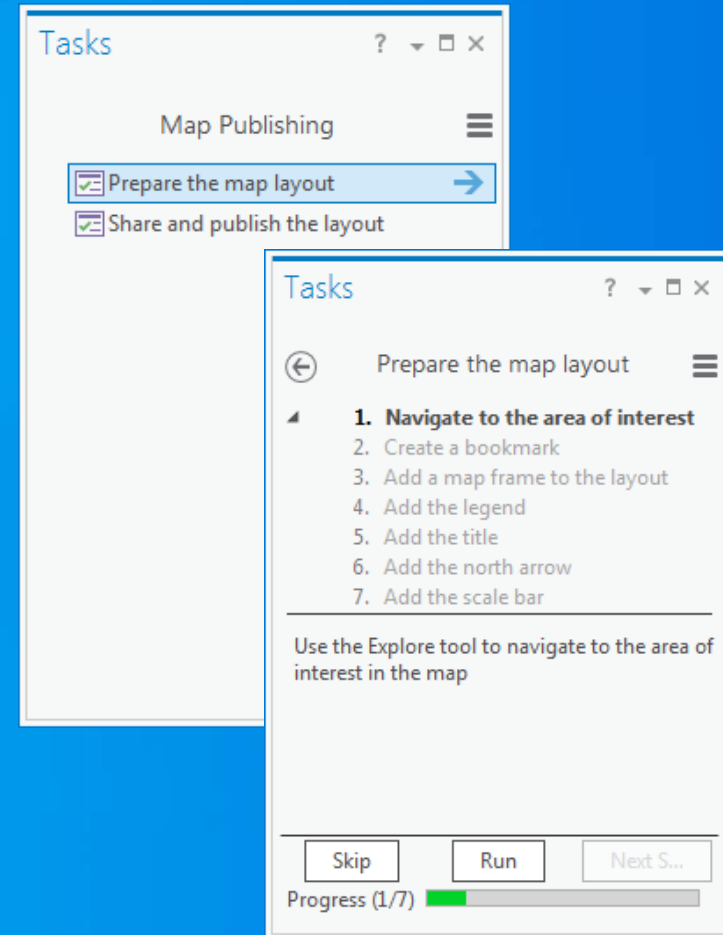
Demo: Create a task

Jason Camerano

Summary

Tasks

- **Improve efficiency of workflows**
 - Reduce mouse clicks
 - Open the right tool at the right time
 - Reduce clutter (panes, ribbons, etc)
 - Save time (manage layer settings, etc)
- **Define best practice workflows**
 - Multiple ways to do the same workflow
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Additional Sessions

Tasks

- **ArcGIS Workflow Manager: Tasks and Enterprise Workflows**
 - **Demo Theatre 6, Tuesday, 4.30pm – 5.15pm**
- **Introduction to Tasks in ArcGIS Pro**
 - **Repeat session, Wednesday, 1.30pm – 2.45pm, Room 02**
- **ArcGIS Pro Tasks Functionality and Design**
 - **Demo Theatre 14, Wednesday 2:30pm – 3.15pm**
- **Tasks SDK**
 - **SDK island**



Understanding our world.