Migrating to ArcGIS Pro

Matthew Twietmeyer

Training

Seasoned ArcMap User

Migrating from ArcMap to ArcGIS Pro

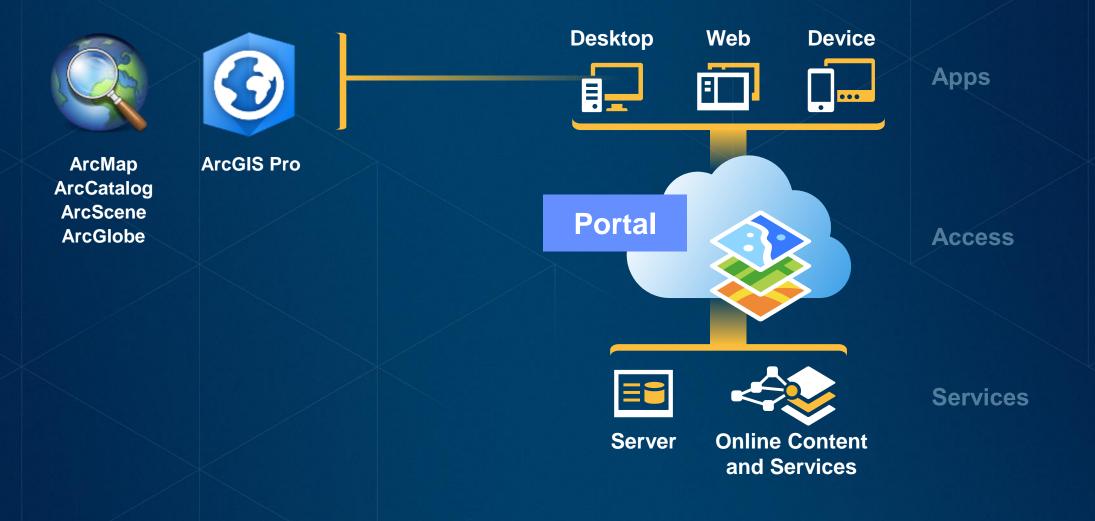
New Desktop User

ArcGIS Pro : Essential Workflows

Upcoming Seminar

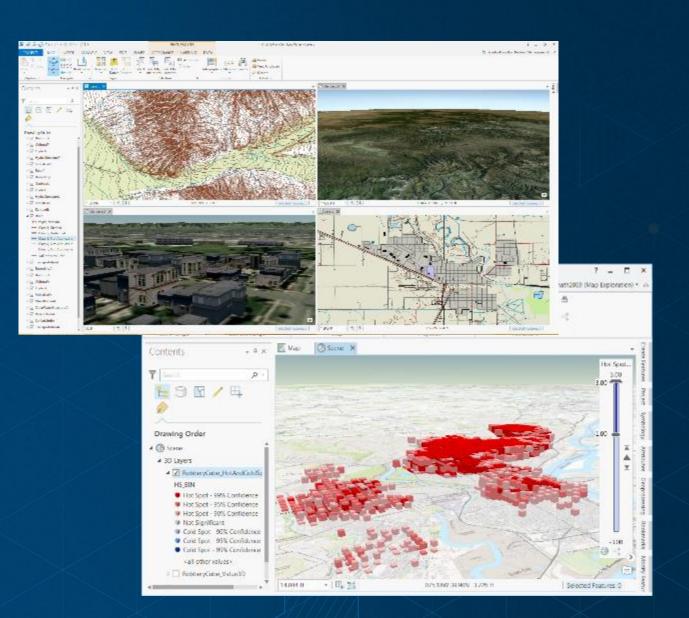
- ArcGIS Pro : Editing Essentials
- MOOC Cartography in ArcGIS Pro

ArcGIS Desktop



ArcGIS Pro

- 64 Bit, multi-threaded
- Simplified user interface
- Integrated with the Platform
- Combined 2D/3D experience
- Multiple maps and layouts
- Comprehensive analysis tools
- Simple search and query



Why migrate to Pro?

- Modern application
- Great sharing experience for maps, scenes, layers & analysis
- Author the best web maps and layers
- 3D GIS
- Most comprehensive set of geospatial analysis tools

Licensing ArcGIS Pro

Licensing





Tech support - your best friend

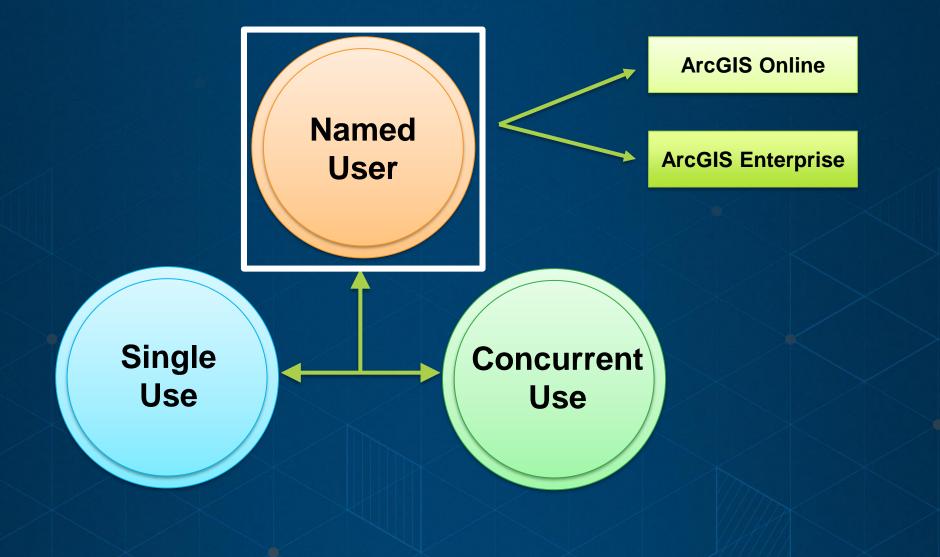


Single Use



Concurrent Use

ArcGIS Pro Licensing



Access Pro the best way for your organization

ArcGIS Pro Licensing

Named User

- Anytime / anyplace
 - Up to 3 machines
- Grant access by user
- Control product level and extensions
- Re-assign licenses
- Know who is using what and when
- ArcGIS Online or Enterprise



Named User Licensing in ArcGIS Online/Enterprise

Add members to your organization

- Users who need an ArcGIS Pro license must first be a member of the organization
- Organization tab > Invite Members
- ArcGIS Pro requires that members have a Level 2 account

Home Gallery Map Scene Groups Content	Organization			ArcGIS ▼	Q,
🙆 ArcGIS Pro Quick-Sta	rt / h				
BEDIT SETTINGS BEDIT SETTINGS Members	🗞 VIEW STATUS 🛛 🗹 VIEV	W SYSTEM HEALTH	http://www.actionse		bscription Status
Viewing: Current Members		Sea	arch for Name		credits remaining res: 8/19/17
▲ Name	Username La	ist Login Level	Role	Action	URCHASE SUBSCRIPTION
ArcGIS Administrator	ArcGIS_Administrator Ju	in 30, 2017 (2)	Administrator 👻	- <u>jó</u> r -	3565734421 ure Data Store ()
ArcGIS User	ArcGISPro_User Ju	in 29, 2017 (2)	User 👻	\$¢-	Standard
				Mem (1) (2)	bers per level: 1 0 of 3 2 of 2

ArcGIS Pro Licensing

Single Use

- Perpetual or Term
- Locked to your machine
- Online or Offline
- Secure



ArcGIS Pro Licensing

Concurrent Use

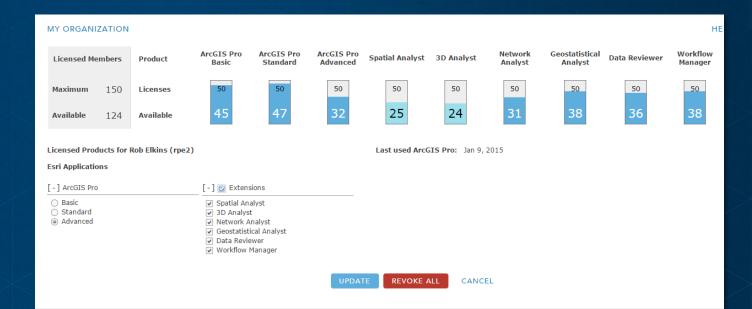
- Perpetual
- License Manager
 - Requires version 10.5.x
 Separate provisioning files
- On-premises \ Your network
- Online \ Offline
- Secure



Available for existing Concurrent Use customers

What extensions are available with ArcGIS Pro?

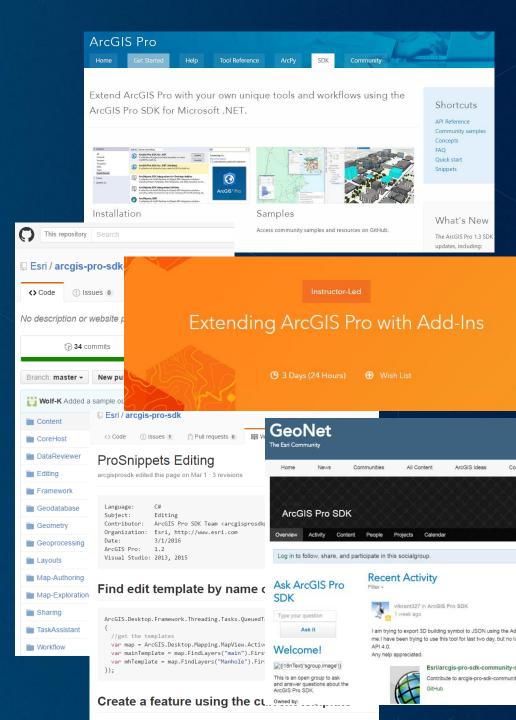
- Spatial Analyst
- 3D Analyst
- Network Analyst
- Geostatistical Analyst
- Data Reviewer
- Workflow Manager
- Data Interoperability
- StreetMap Premium
- Pipeline Referencing
- Defense Mapping
- Aviation Airports
- Full Motion Video
- Image Analyst



Extending ArcGIS Pro

Many Pro SDK Resources

- <u>Esri Training</u> Instructor-led Esri training course
- <u>SDK landing page</u> main resource page
- <u>SDK Wiki on GitHub</u> primary documentation site with concept and guide docs, and much more
- <u>Community Samples</u> ready to use code solutions categorized by functional area
- <u>SDK Snippets</u> code snippets by functional area
- <u>GeoNet Pro SDK Group</u> developer community
- <u>API Reference</u> full API reference
- <u>FAQ</u> answers to common questions
- SDK Blog posts focused on the Pro SDK



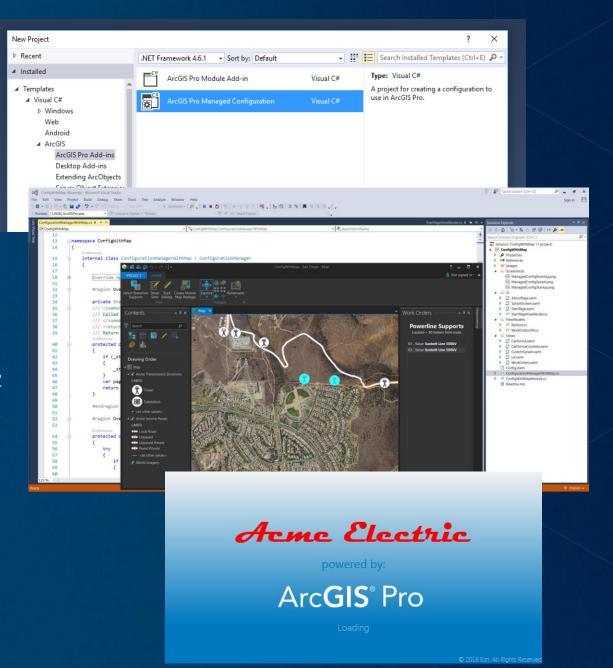
Solution Configurations

Configurations

- A new add-in pattern / template at Pro 1.4
- Solution branding of the Pro UI
- Conditional or role-based customization

Documentation

- ProConcepts: <u>https://github.com/Esri/arcgis-pro-</u>sdk/wiki/ProConcepts-Configurations-Manager
- ProGuide: <u>https://github.com/Esri/arcgis-pro-</u> sdk/wiki/ProGuide-Configurations-Manager



Virtualizing ArcGIS Pro

On-premise Virtualization

Virtualization Platform

- VMWare
 - ESXi
 - Horizon View
- Citrix
 - XenServer
 - XenDesktop



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DRIVERS > PRO	ODUCTS >	DEEP LEARNING AND AI >	COMMUNITIES +	SUPPORT	SHOP AB	DUT NVIDIA 🕨	
NVIDIA GRID					TECHNOLOGY	TRY	BUY
NVIDIA Home > Products >	NVIDIA GRID >	Buy > Certified Servers > Esri ArcG	IS Desktop Virtualization App	liance			Subscribe
NVIDIA GF Esri ArcGIS Pr		ERS Virtualization Applian	ce				
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> Improved mo		video. xibility let GIS users transfor where they're located. See ho		egardless	Standard configu	ration Rack Workstation 791	D
Large GIS da	atasets are ea	asily assessable and secure in d concurrent users on a single	n the data center. IT ma		 2x NVIDIA GRIE 2x Twelve-Core 2680 v3 2.5 GH: 	Intel ® Xeon ® E5-	
> Multiple GIS	users can co	llaborate on the same data in synchronization. See benefits.	n the cloud to avoid dow	CALCULATION OF STATE	> 256 GB RAM (1 RDIMMs)	6 x 16 GB DDR4	
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NV	/IDIA Home > Produ	cts > NVIDIA GRID > Virtual Desktop and Ap	ps > Eari ArcOIS 3D Pra 1.0			🔀 Su	bacribe
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GRID VGPU APP GUIDE FOR ESRI ARCGIS PRO

Cloud-based Virtualization

Microsoft Azure
• NV-Series VM

- Nvidia GPU
- 56 Gb Memory
- 380 Gb storage
- Demo'd at Microsoft Ignite

AWS

- GPU Workspace
 - Nvidia GPU
 - 8 vCPUs
 - 15 Gb Memory
 - 200 Gb storage



Available Now

Tested by Esri Performance Engineering – Great UX

The demo really demonstrated the "Workstation in the Cloud" scenario that is now really possible with Azure NV based Virtual Machines at Ignite! - Karan Batta, Microsoft Azure

ArcGIS Pro Roadmap (June 2018)

Near-term

- Attribute Rule enhancements
- Dimensions
- Contingent Values
- Building Scene Layer
- Reports
- Offset Printing
- Extract Locations from Text
- Dynamic Feature Binning and Clustering
- Mobile Scene Package
- 3D Interpolation
- Voxel Scene layer
- Parallel desktop processing using Spark
- Deep Learning for Image Analysis

Mid-term

- Parcel Management
- Projects in the Enterprise
- Scatter plot matrix
- Layer blend modes
- Presentations
- Animated Symbols
- Materials
- 3D Effects
- GPS Support
- Terrain Editing
- Trend Profile Chart
- 3D Mesh as ground
- Extensions

Long-term

- Physically based rendering
- Geoprocessing in the database

User Interface in ArcGIS Pro

Terminology

ArcGIS Pro Terminology Guide

АгсМар	ArcGIS Pro	0
Data View	Map View	
Data Frame	Map Frame	
Active Data Frame	Active View	
Globe, Local Scene	Scene	
Data Driven Pages	Map Series	ArcGIS Pro
Find tool	Locate tool	Terminology Guide
Create Folder Connection	Add Folder	
Marker Symbol	Point Symbol	The second secon
Fill Symbol	Polygon Symbol	

🎯 esri⁻

Project Templates

In Pro there is no normal.mxt

- You can have many templates
 - Editing, mapping, viewing
- Customize and share
 - User interface
 - Project styles
 - Layouts
 - Connections
 - Toolboxes

			ArcGIS Pro	? – 🗆 X
ArcGIS	Pro			O davidwatkins http://www.arcgis.com/ Sign out
Open a recen	t project			Create a new project Select a project template
				Blank
MyProject18	Denver_Overview	MyProject99	MeasuredGrids	Global_Scene.aptx
				Local_Scene.aptx
San Diego	ArcadeDemo2.0	DisplayFilters	Georeferencing	Map.aptx
📔 Open anot	her project			Editing.aptx
				Mapping.aptx
 About ArcGI 	S Pro			Select another project template

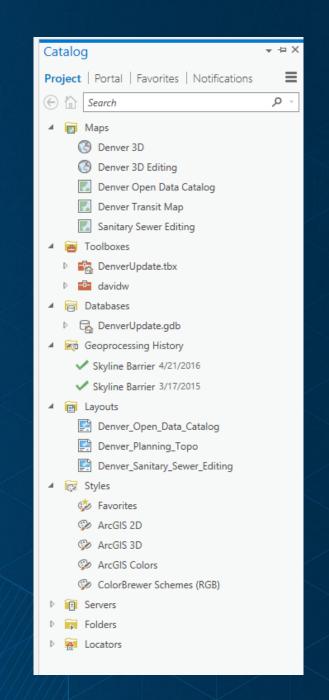
Your templates show up in the start experience

Working with Projects

- Multiple Maps and Layouts
- Database, Folder, Server connections
- Tools and Toolboxes
- Default Geodatabase

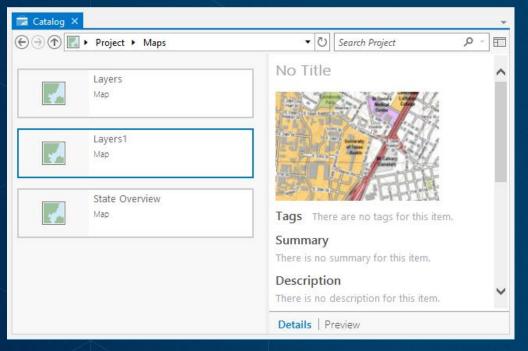
All can be easily packaged and shared

How should I organize my work moving forward?



Project \rightarrow **Catalog**

Project View and Project Pane are now Catalog View and Catalog Pane



Catalog - + × ≡ Project | Portal | Favorites | Notifications € 1 Search Q 🖌 📷 Maps Denver 3D Onter 3D Editing Denver Open Data Catalog Denver Transit Map Sanitary Sewer Editing Toolboxes Þ RenverUpdate.tbx davidw A G Databases DenverUpdate.gdb Geoprocessing History Skyline Barrier 4/21/2016 Skyline Barrier 3/17/2015 Interpretation Denver_Open_Data_Catalog Denver_Planning_Topo Denver_Sanitary_Sewer_Editing ▲ 😿 Styles 🎲 Favorites ArcGIS 2D ArcGIS 3D ArcGIS Colors ColorBrewer Schemes (RGB) Servers Folders Example 2 Contractors

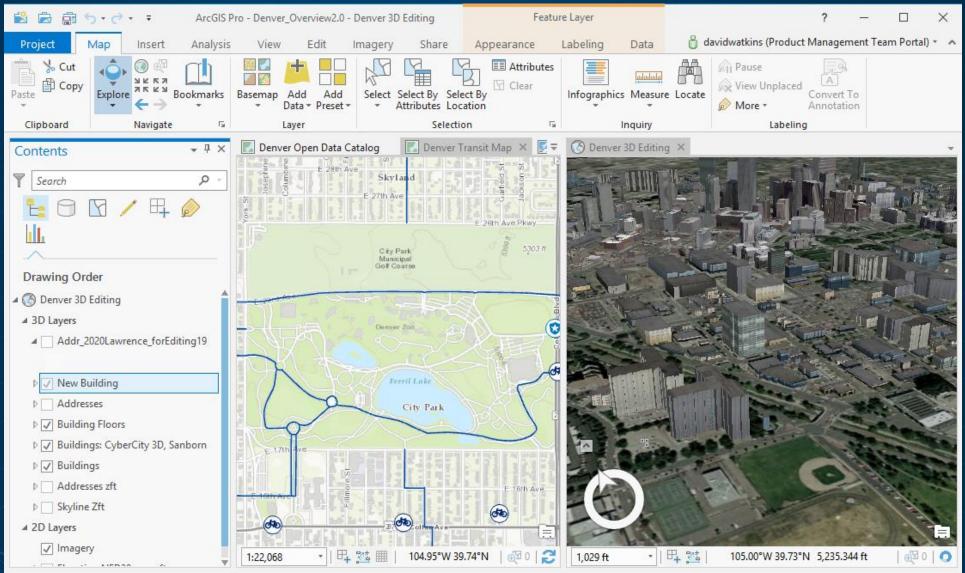
Catalog View

Catalog Pane

Working with ArcGIS Pro

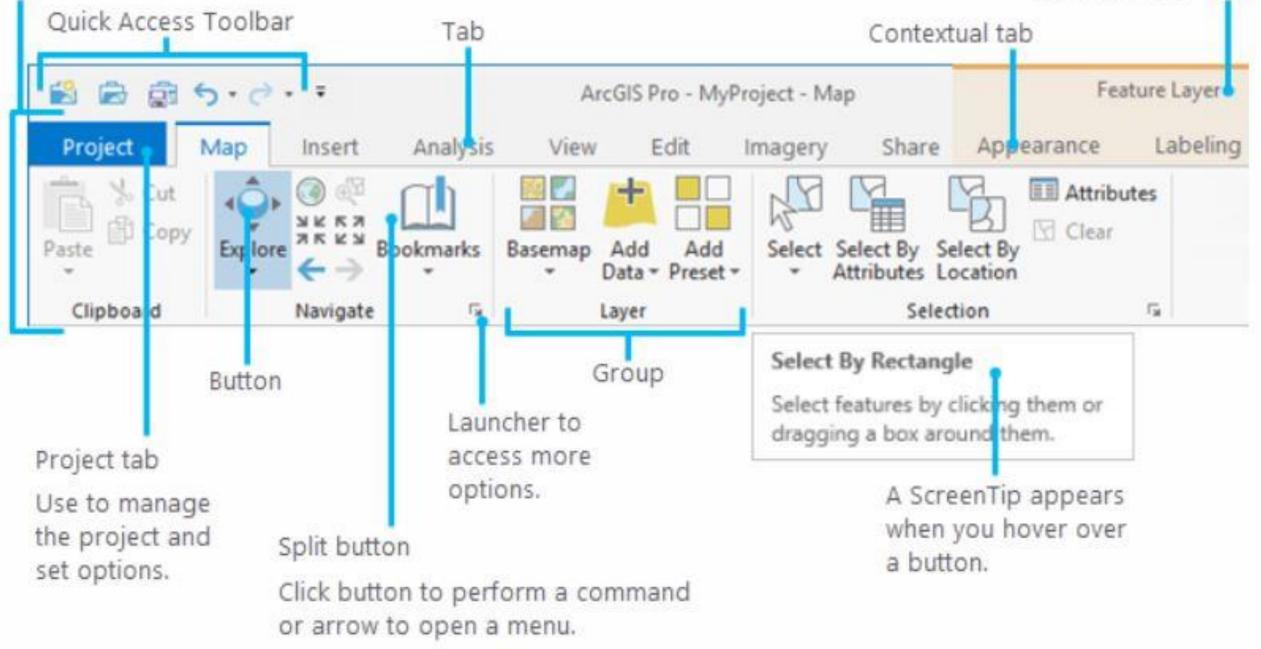
Familiar but new and improved

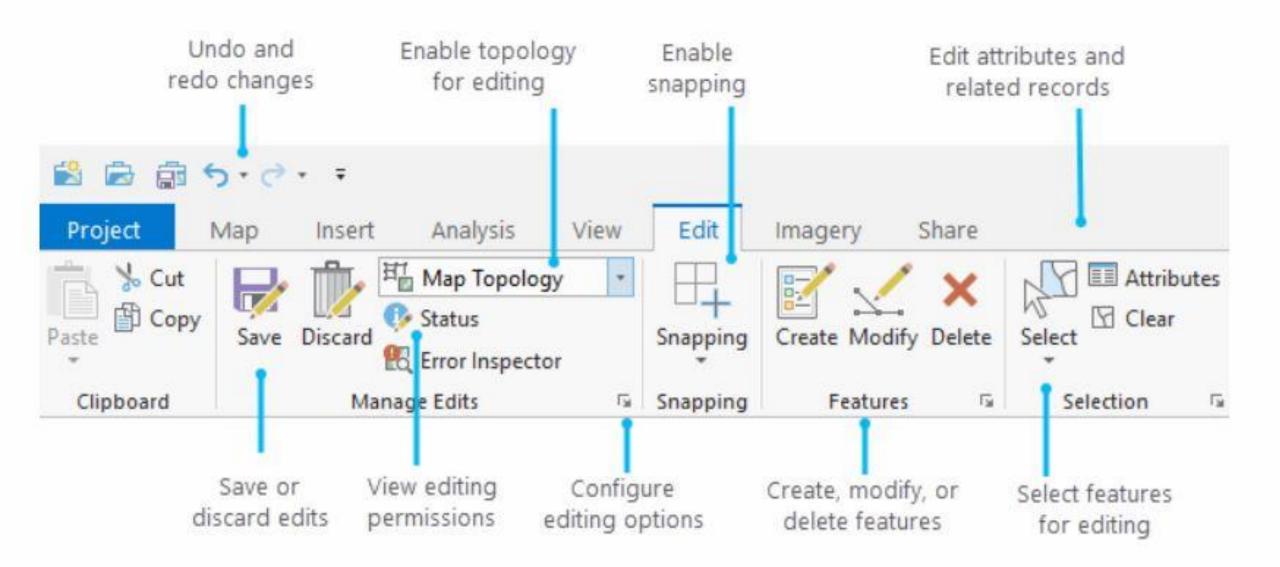
Ribbon contextual user interface and multiple views



Ribbon

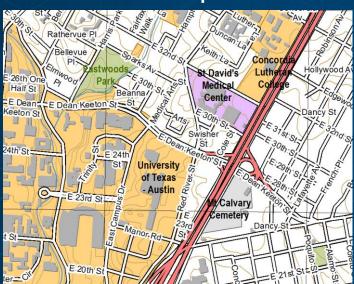
Contextual tab set





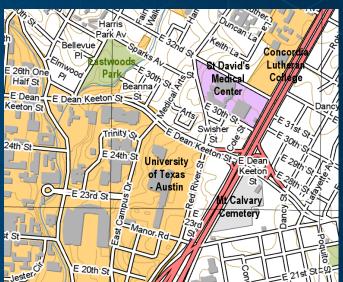
Import your maps, scenes and globes

- Import .mxd, .sxd, and .3dd files
- What imports?
 - maps, layouts, symbology, styles, scenes, models
- Maps look the same







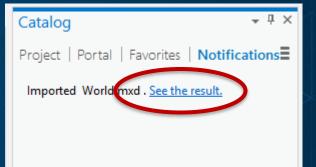


ArcGIS Pro

What if something doesn't look the same?

In a few cases things may be slightly different

- Check the Notifications
- I.e. OLE Objects are not supported

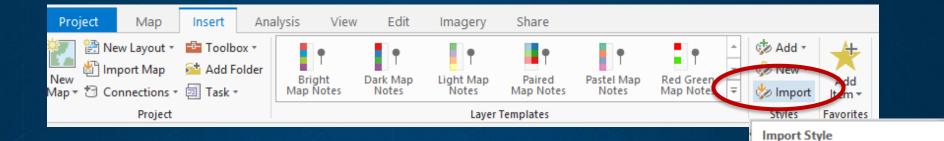


Import results for World.mxd

The following messages were produced when this map or scene was imported: C:\Users\davidw\Desktop\World.mxd

Message Name	Туре	Severity	Code	Description	Component Name	Component Type
	Warning	Medium	20039	OLE objects are not supported and were dropped from the layout.	World	Layout

Where are my styles?



- New style format (.stylx)
- Not all styles are installed with ArcGIS Pro
- Referenced styles are imported with maps
- Styles from ArcMap and Custom styles can be imported
- Add styles to your project
- Styles can be shared via ArcGIS Online or your portal

- II > Catalog ≡ Project | Portal | Favorites | Notifications All Portal 🕞 🟠 🛛 stylx × Public Signs Sorestry ArcScene Basic Geology 24K 🌮 Mining ② Civic Environmental 🧼 Web 216 Water Wastewater Transportation >mil2525d Find more items...

Import an existing .style file to

project.

create a .stylx file and add it to the

Favorites

- Add Database, Server and Folder connections
- Connections saved on a per user basis

Catalog			* ů ×
Project	Portal Favori	tes	Notifications
			쑺 Add Item 💌
	Data	54	Add Folder
	ArcGISPro	<u>*</u>	Add <u>D</u> atabase
8	Adirondacks.gdb	<u>9</u>	New File <u>G</u> eodatabase
	AustinEast.gdb	<u>9</u>	New Database <u>C</u> onnection
8	Portland.gdb	•	New ArcGI <u>S</u> Server
		* 1	New WCS Server
		* =	New WMS Server
			New WFS Server
		自	New WMTS Server

Favorites

Demo

Exercises

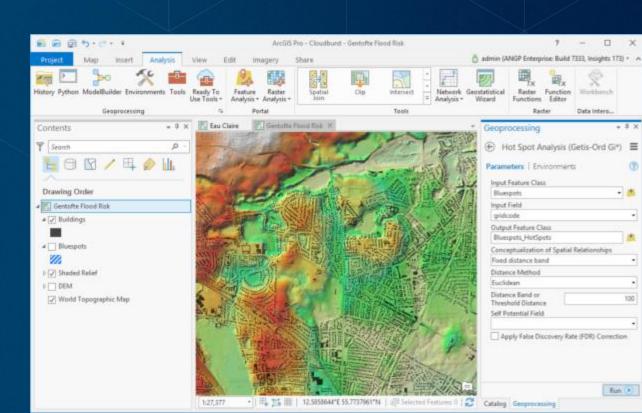
http://arcg.is/29yhU9T

Analytics/Analysis in ArcGIS Pro

Analysis in ArcGIS Pro

ArcGIS Pro provides incredible analysis capabilities in 2D, 3D, and 4D (time) Scalable 64-bit execution, non-blocking threading, and improved visualization

Geoprocessing is the technology that enables spatial analysis in the ArcGIS Platform



Analysis in ArcGIS Pro

The Analysis ribbon tab provides access to Gallery of commonly-used tools Suite of all ~800 geoprocessing tools ArcGIS Enterprise and Online analysis tools Geoprocessing History Python command line

ModelBuilder Network Analysis Imagery processing / raster functions Data Interoperability Workbench



Charts

Use charts to explore your data and communicate a message

Include as part of your analysis workflow to:

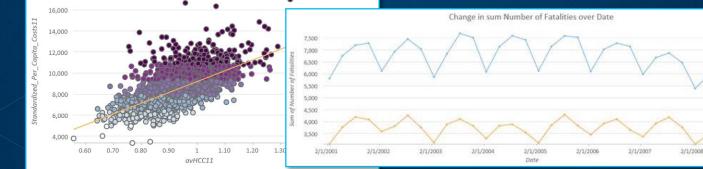
Understand patterns and relationships before running an analysis

Communicate information about your analysis results

Create a bar chart, scatter plot, histogram, line chart, profile graph or box plot



Fully interactive with the map layers and extent, attribute table, and range and time filters



Spatial Statistics

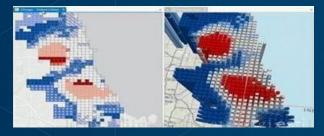
Statistical tools for analyzing spatial distributions, patterns, processes and relationships

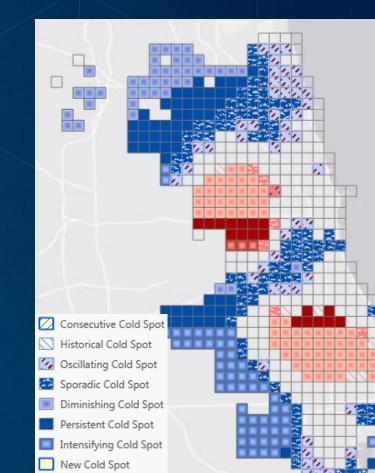
Summarize key characteristics of a spatial distribution Identify significant clusters and outliers, hot and cold spots Model and explore spatial relationship through regression



Space-Time Pattern Mining

Aggregate data into cube data structure and identifies hot and cold spot trends and outliers Visualize the cube in 3D (add-in makes it easy)





R-ArcGIS Bridge



R is the most widely-used statistical computing language in the world

Includes thousands of libraries for diverse applications

R-ArcGIS Bridge makes it easy to use GIS data in an R script

R-based script tool provides familiar geoprocessing tool for GIS users, but executes in the R engine

Requires installation of R and R-ArcGIS bridge

R-ArcGIS Bridge

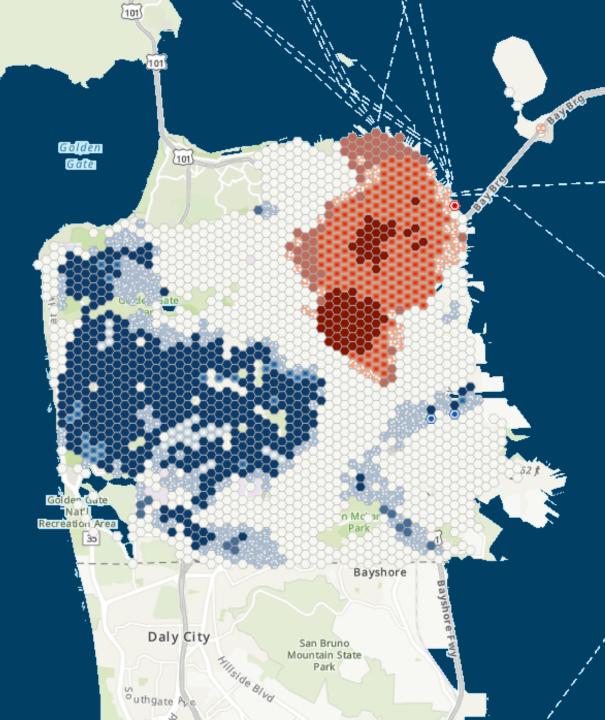
Options

roject	Set options for running geoprocessing tools and scripts.	
Current Settings		
Jnits	Allow geoprocessing tools to overwrite existing datasets	
lasks 🛛	Write geoprocessing operations to log file and dataset metadata	
pplication	Analyze script and model tools for ArcGIS Pro compatibility 🕕	
General	Script Editor	
Map and Scene		~
Navigation	ModelBuilder Options	
Selection	Do not show warning when overwriting model from previous version	
Editing		
Geoprocessing	R-ArcGIS Support 🕕	
Raster and Imagery	Detected R home directories	
CAD	[R-3.4.2] C:\Program Files\R\R-3.4.2	*
Display	Installed 'arcgisbinding' package version: [1.0.0.128] 🖳 🔻	
ayout		
/letadata		
ndexing		
ocation Referencing		
anguage		
Customize the Ribbon	Learn more about geoprocessing options	

OK

Cancel

SF Crime Analysis Tutorial



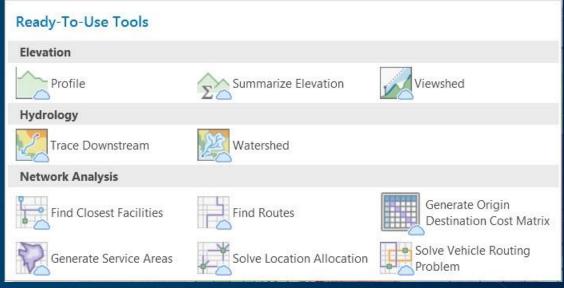
Ready to use tools

ArcGIS Online

Analytical operations hosted by ArcGIS Online, using Esri curated elevation, hydrologic, and street network data

Simply provide a few basic inputs

Uses ArcGIS.com credits and you must be connected to an ArcGIS online organization with analysis privileges



Analysis Extensions

Extensions build on the core analysis capabilities of ArcGIS Pro

ArcGIS 3D Analyst

ArcGIS Spatial Analyst

ArcGIS Geostatistical Analyst ArcGIS Data Interoperability

ArcGIS Network Analyst

ArcGIS Data Reviewer

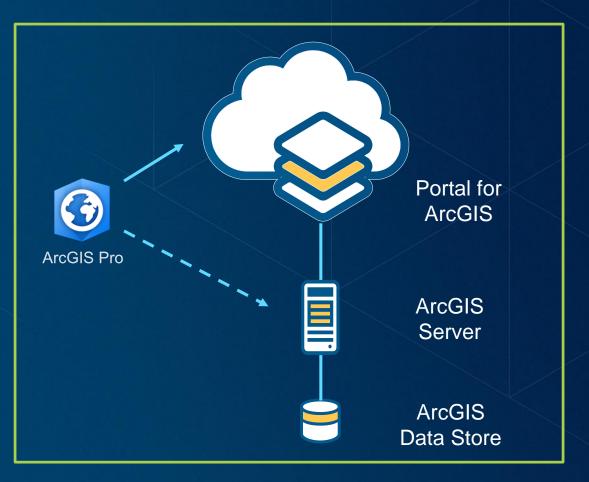
Primarily comprised of additional geoprocessing toolboxes Licensing same as ArcMap

Manage extension licenses the same way you license Pro (Named User, Single Use, Concurrent Use)

Publishing in ArcGIS Pro

Sharing from ArcGIS Pro





ArcGIS Pro – Sharing User Experience

- **1.** Sign into a portal
- 2. Share from:
 - i. The ribbon to share your entire map
 - ii. The context menu to share a selection of layers

Se	gn in It As Active Portal lit Portal Connection st Availability

PROJECT	MA	P INSERT	ANALYSIS	VIEW	EDIT	IMAG	GERY	SHARE				
Project Map	Layer	Geoprocessing	Web Web Map Layer	Locator	Web Tool •	Jobs	Projec Templ		Layer File	Task File	Hap	→ Map
	Packag	e	Sha	ire As		Status		Save	As		Print	Export

ArcGIS Pro – Sharing User Experience

- Analyze your data for potential 3. issues
- **Click Share/Publish** 4.

		Attribute lable		
 Search Capi Capitals 		Design	•	
0		Joins and Relates	•	
🚺 Topograp	ևև	Create Chart	•	
	Q	Zoom To Layer		
	ã	Zoom To Make Visible		
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	!	Disable Pop-ups		
	쪫	Configure Pop-ups		
		Data	•	
	-	Save As Layer File		Fin
	æ .	Share As Layer Package		
	9	Share As Web Layer		
		Overwrite Web Layer		
	P	Properties		

Warnings Type: Code: 24078 Medium Severity: Unresolved Status: Topographic Vame: Description: Layer's data source is not supported

nish Sharing



Web Layers and Web Services





Web Layer	Web Service
Map Image layer	Dynamic/Cached map service
Feature Layer	Feature service
Tile Layer	Cached map service (hosted)
Vector Tile Layer	Vector tile service
Scene Layer	Cached scene service

Exercises

Desktop Analytics case studies <u>http://arcg.is/2iZcBTP</u>
Determine relationships: <u>http://arcg.is/2iZDI6t</u>
ModelBuilder Tutorial: <u>http://arcg.is/2mxcjZc</u>
R-ArcGIS Bridge: <u>http://arcg.is/2uglPys</u>

ArcGIS Solutions

Platform Configurations for Organizations

Ready-to-Use Maps and Apps

- Easily Configured
- Fully Supported
- Open Source
- Free

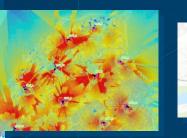


Local and State Government



Parks and Gardens





Utilities and Telco



Military and Security



Public Safety and Emergency Management

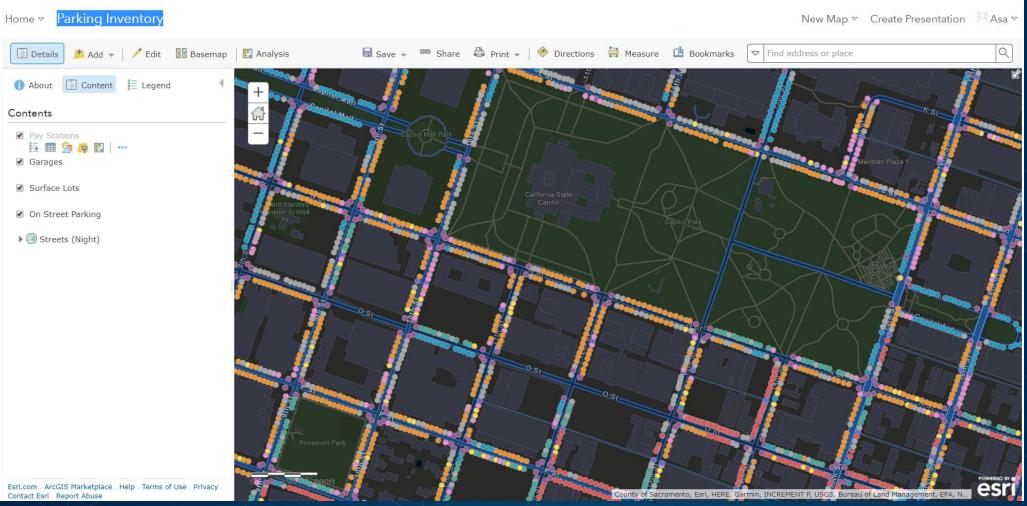
... Improving Productivity and Leveraging Best Practices

Solutions Deployment Tool

ArcGIS Pro tasks and tools

- Discover, deploy and configure solutions in an ArcGIS Organization
- <u>Download here</u>
- Helps you:
 - Discover solution offerings available
 - Deploy the services, maps, and configurable apps to your organization
 - Configure the solution to meet specific needs in your organization
 - Add fields
 - Modify field domains and aliases
 - Load your data

Tasks ? → □ ×
← Deploy ArcGIS Solution
> 1. Deploy ArcGIS Solution
This tool is used to add solutions to your organization. It will create all the groups, services, maps, and applications required for the solution.
Search
Events Coordination
T Events Map Gallery
💽 Events Permit
Events Permit Review
The Events Site Map
Mosquito Adulticide Planning
Mosquito Field Operations
Mosquito Health Concerns
Output Folder Events *
Deploy 🕟
The tool can be run multiple times for different solutions.
Finish
Progress (1/1)
Contents Tasks





Arcade : New Expression Language in ArcGIS Pro

What is Arcade?

A new expression language for the ArcGIS Platform

- ArcGIS Pro
- Runtime SDKs
- JavaScript API
- Web apps

Primarily designed for ArcGIS web maps and web scenes

Arcade Purpose

- Arcade is NOT intended to be a Full Programming / Scripting Language
- Goal : Lightweight and Simple
- Equivalent to a Spreadsheet Cell Calculation
- Embedded Expressions
- Labeling, Rendering, Symbol Variation
- Sharing

Not a replacement for Python for geoprocessing and Automation

Arcade Goals

Portable

• Write and Expression in Pro, have it run in a Browser, or on a Device

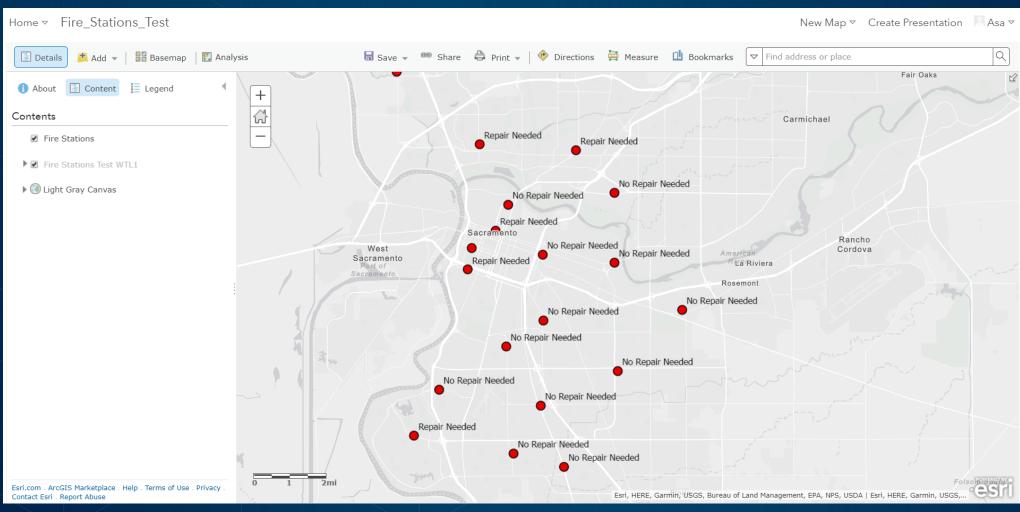
Secure

Ensure that Expressions or Scripting do not compromise Security

- Lightweight
- Most requirements for Scripts and Expressions are Lightweight. The language should be small, and fast

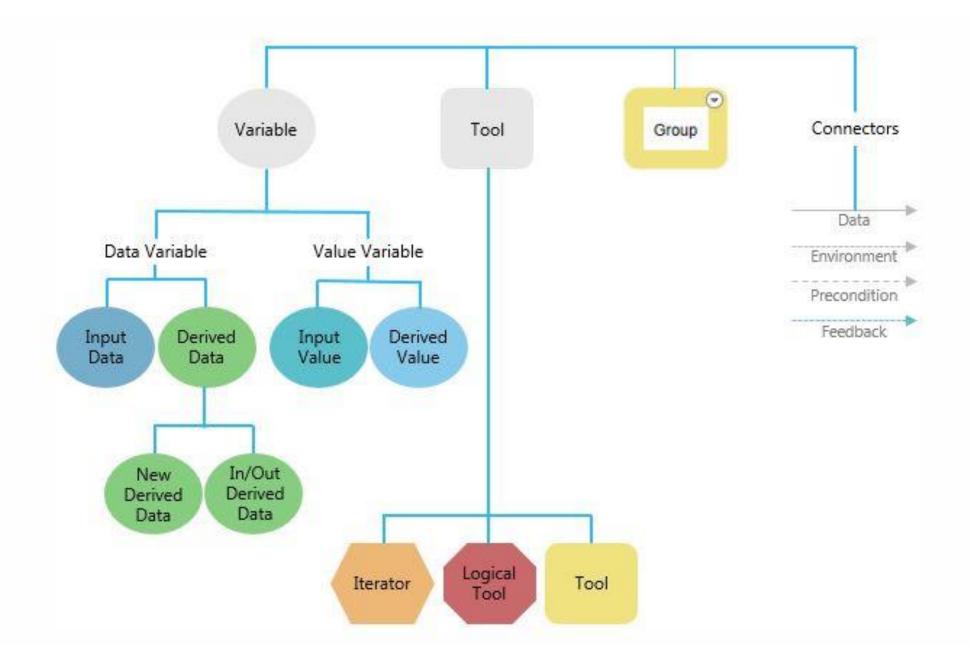
Arcade Resources

- <u>ArcGIS Arcade Main Site</u>
- How to Arcade Story Map
- Introducing Arcade
- Using Arcade expressions in web apps
- Using Arcade to map the land
- How to Arcade Video
- Using Arcade in your ArcGIS API





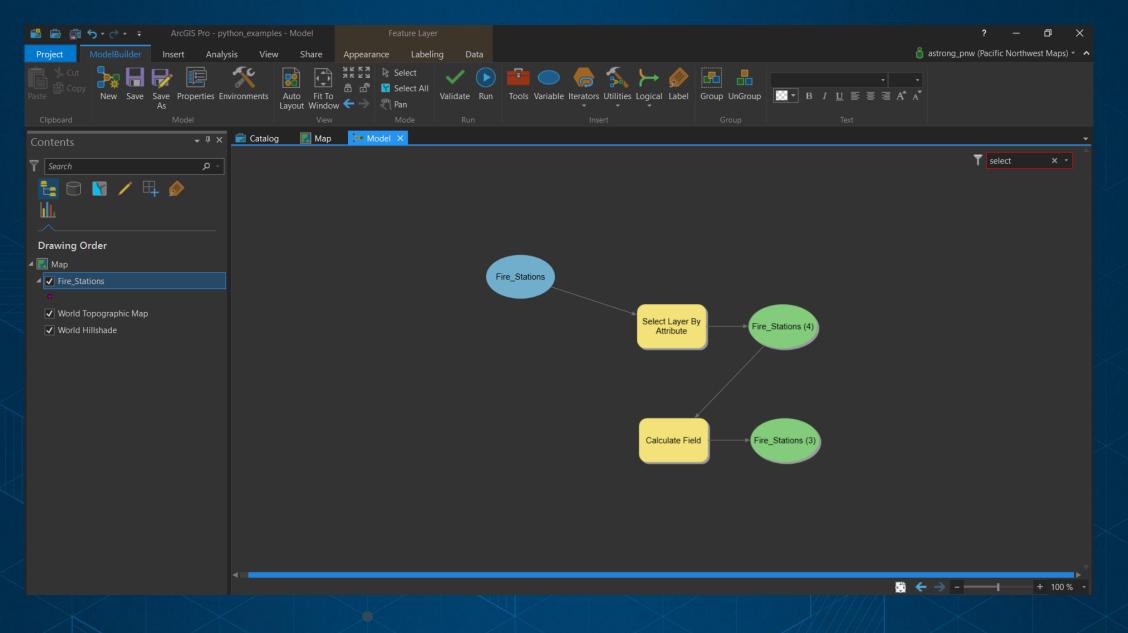
ModelBuilder in ArcGIS Pro

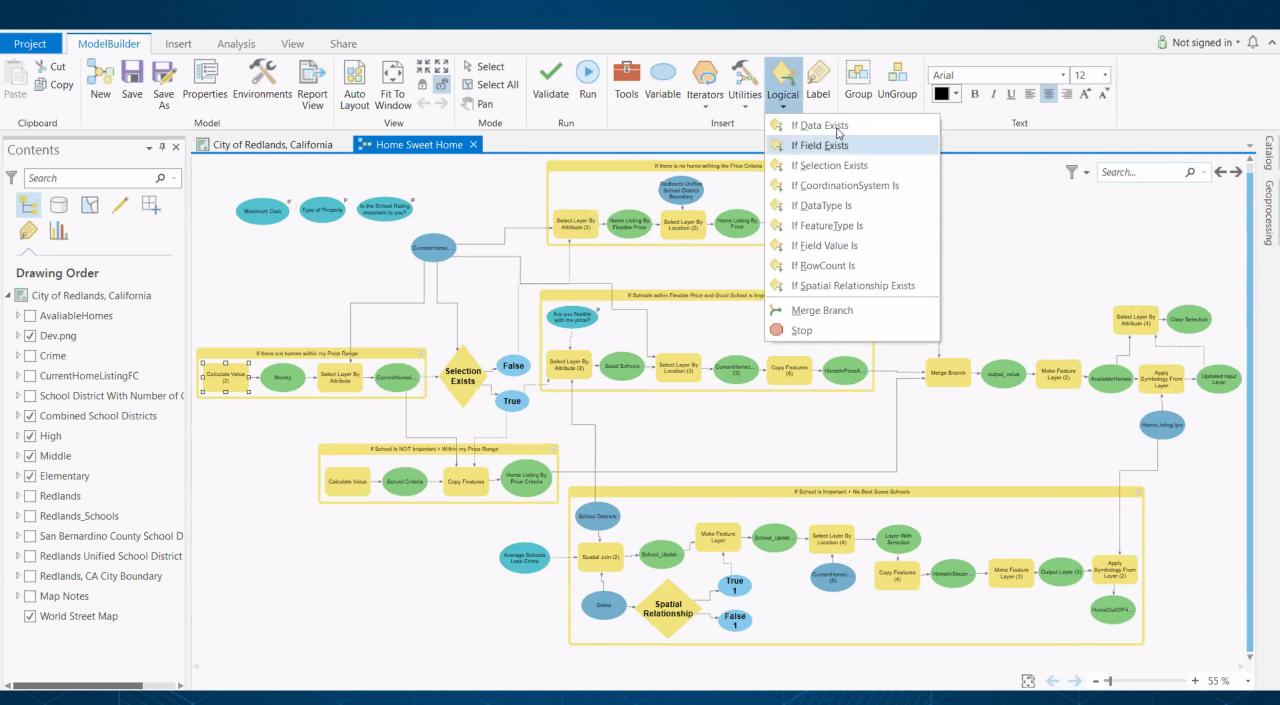


Migration from ArcMap ModelBuilder Highlights

- Make a copy of original toolbox/model before editing in ArcGIS Pro.
- ModelBuilder models created in ArcGIS Pro are not backwards compatible. To use the models you most save the toolbox of the current version into the version you desire.
- Calculate Field tool now no longer supports VB expressions. All expressions must now use Python syntax. You will need to update your syntax if your models are saved in VB.
- All intermediate/managed data options have been removed. All intermediate output data is automatically deleted when tools complete. Except on datasets that are output parameters.
- In ArcGIS Pro, models have a slightly different color scheme. You cannot change colors, shapes, background images of model elements, and you cannot add images to the model diagram. Models from ArcMap will display these custom settings and objects in ArcGIS Pro when imported.
- List and series are not support in ArcGIS Pro. You can use iterators to perform batch processes on a collection of datasets
- Interactive drawing and entering of features or records is not fully supported in ArcGIS Pro

Demo





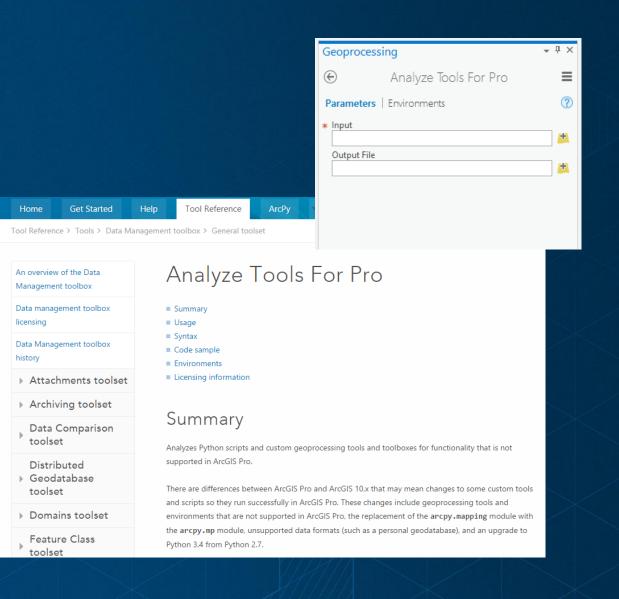
Migrating to Python 3.X in ArcGIS Pro

Analyze Tools for Pro

Will my tool "just work?"

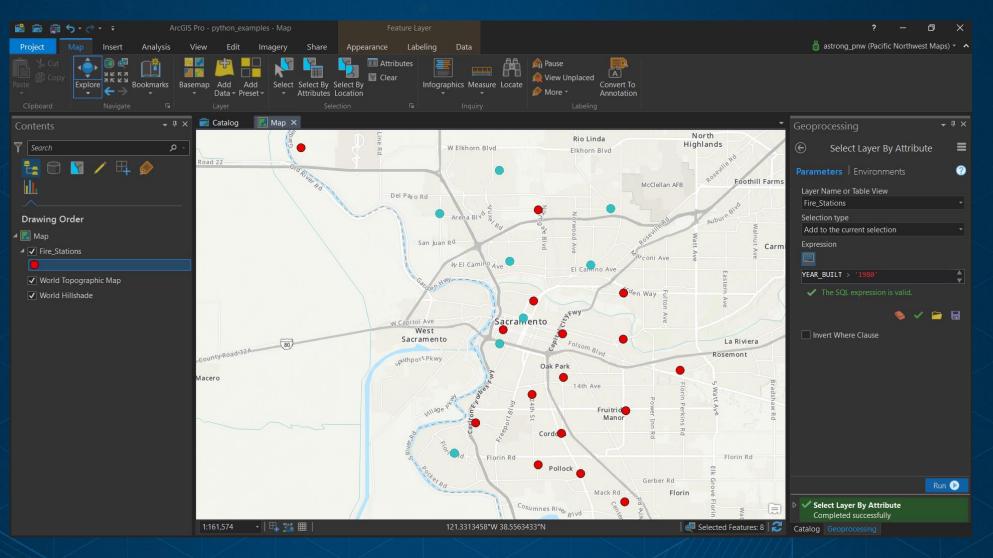
- Analyze models
- Toolboxes
- Python scripts
- Script tools
- Built on 2to3 Utility

Returns anything not supported with helpful hints as to why



Analyze Tools for Pro

Arcpy Select Example



Ch-Ch-Changes

- Arcpy.mapping module is replaced with arcpy.mp to support mapping workflows in ArcGIS Pro
- Some tools are not available yet or are not supported in ArcGIS Pro. See this <u>link</u> for the not supported list currently. (e.g., parcel fabric arcpy module: arcpy.fabric)
- A key decision point will be whether you will update your Python code to work in both 10.x and ArcGIS Pro, or just ArcGIS Pro. If you're doing a one-way conversion of code from Python 2 to Python 3, there is a 2to3 command line utility that can be used to automate much of the process. This utility is available with both Python 2 and 3. It is important to note that 2to3, while an excellent tool, is not a complete solution (it is sometimes estimated as a 95 percent solution), and additional changes may be necessary. If you need to support Python 2 and 3, see this link for strategies in supporting both versions

ArcGIS API for Python

Install with Conda 'conda install -c esri arcgis'

Python in the cloud

Automate administration of AGOL/ Portal

Perform Spatial Analysis/ Data Management in the cloud

Create Jupyter Notebooks

Learn more at the <u>Dev Docs</u>

ArcGIS API for Python

Ċ jupyter	Python API Last Checkpoint: a minute ago (unsaved	I changes)	Logout
File Edit	View Insert Cell Kernel Widgets Help	Trusted	Python 3 C
+ % (2		
In [3]:	#Get Set Up from arcgis.gis import GIS from IPython.display import display gis = GIS("https://www.arcgis.com", "astrong_f	pnw", "*****")	
In [5]:	<pre>#print items items = gis.content.search('Parking Inventory' for item in items: display(item)</pre>	')	
	Klamath County Mo	n 27, 2017	
	Klamath County Mo Proof of Concept for Workforce Project by Last Modified: March 0 comments, 17 view	/ jsharrard3 27, 2017	
	Parking Inventory Parking Inventory is a lots, garages and on-	a configuration of Collector for ArcGIS that can be used by parking staff to inventory public street parking.	parking

Jupyter Notebook

Introducing Tasks in ArcGIS Pro

Workflow Production Challenges

You have told us...

- People are unfamiliar with how to do standard work flows
- Every user does things differently
- Hard to maintain Quality Assurance
- Training time on current / new employees
- Standard Operating Procedures change or not followed
- Technology changes rapidly



What is a Task?

- <u>Sequential</u> steps that guide you through a <u>repeatable</u> workflow
- Tasks:
 - Used to guide and share knowledge
 - Are <u>interactive</u>
 - Improve <u>efficiency</u>
 - Improve <u>quality</u>
- Tasks use your (business) language
- Tasks are configurable

Task	(S ? - 🗆 ×
e	Create Buildings
4	 Locate Work Area Select Subdivision Create Buildings Attribute Buildings
Using area.	g the Locate Pane, find the address of your work
	e work area found, click next step to continue Skip Next Step ess (1/4)

"The right tool in the right time"

When NOT to use Tasks?

- A workflow that takes very long time
- Task resources keep changing frequently: maps, layers, Geoprocessing tools
- Micro Management tool
- Does not replace Geoprocessing models:
 - Geoprocessing is used for <u>automation</u>
 - Tasks are interactive



Creating a Task

INSERT new Task Item

• A project might contains 0 - many TASK ITEMS that are stored in the APRX file

🔇 📾 📾 🗲 र 🧷 र 🛄 र 🖛

🖄 Import Ma

Map 🗸 🔁 Connections 🔻 🗐 Task 🔻

Project

PROJECT

New

MAP

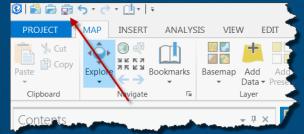
🚰 New Jayout 🔹 📫 Toolbox 🔹

INSERT

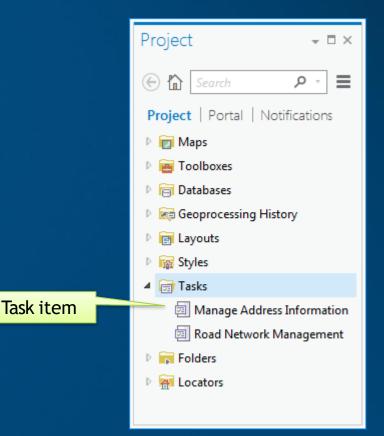
Mad Folder

• Use INSERT \rightarrow Task Item

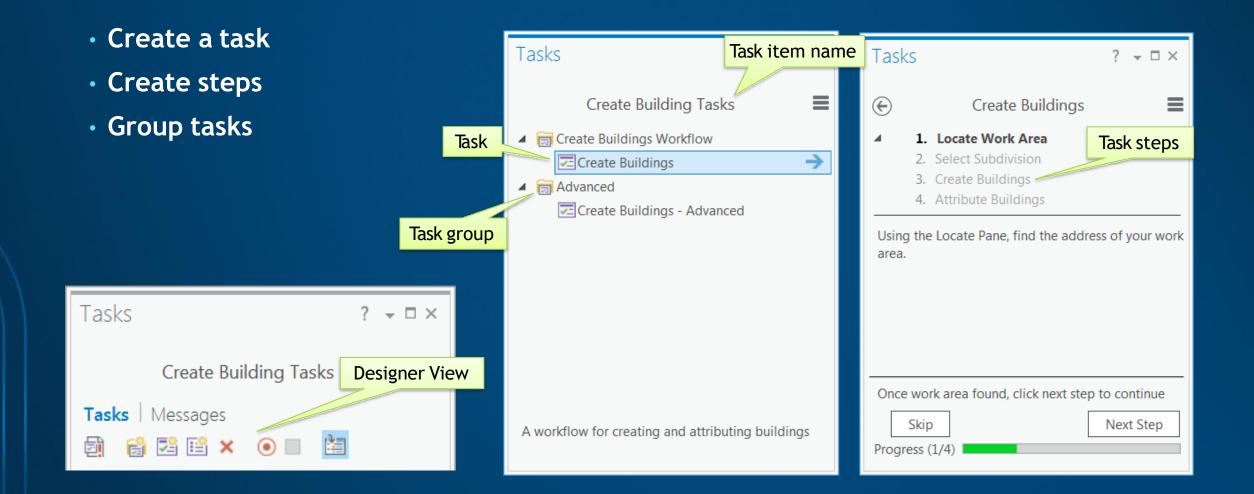
Use 'Save Project' to save task modifications



• Use 'Package Project' to share with a project



Create Tasks & Steps



General - Step Behavior

- Manual 2 mouse clicks
- Auto Run / Auto proceed 1 mouse click
- Automatic no mouse clicks



Step Behavior

- Manual User runs and user proceeds ①
- O Auto Run Step runs and user proceeds ①
- O Auto Proceed User runs and step proceeds (1)
- 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

Task Resources

- Workflows in ArcGIS Pro
- Introduction to Tasks in ArcGIS Pro (video)

Exercises

 Desktop Analytics case studies http://arcg.is/2iZcBTP - Determine relationships: http://arcg.is/2iZDI6t -Geoprocessing Tools: <u>http://arcg.is/2nm5k5T</u> -ModelBuilder Tutorial: <u>http://arcg.is/2mxcjZc</u> -R-ArcGIS Bridge: <u>http://arcg.is/2ugIPys</u> -Share a Web Map : http://arcg.is/2AzEWL3 -Create a Task : http://arcg.is/2nn44iP -Automate Using Tasks: <u>http://arcg.is/2wZkfqP</u> -Getting Started with Arcade: http://arcg.is/2zUKa4G

Resources

Start Here!

- 1. <u>FAQs</u>
- 2. Downloading, Installing, and Licensing ArcGIS Pro
- 3. <u>Terminology Guide</u>
- 4. Quick Start Tutorials
- 5. ArcGIS Pro Help Site
- 6. Training for ArcGIS Pro Guide
- 7. Learn ArcGIS Curriculum Map

Machine Learning

- Machine Learning with Pro
- https://www.youtube.com/watch?v=aKq50 YM8a8w
- https://www.youtube.com/watch?v=KCkGif
 <u>6wSMo</u>