

# ArcGIS Pro Q&A Session

NWGIS Conference, October 11, 2017

With John Sharrard, Esri GIS Solutions Engineer

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# ArcGIS Desktop

The applications

## ArcGIS Pro



## ArcMap



ArcCatalog  
ArcScene  
ArcGlobe

# ArcGIS Desktop | Professional GIS

## ArcGIS Pro 2.0



### Improvements

- Annotation Editing
- Measured Grids
- Charts and Graphs
- WFS
- 3D Editing
- Customization

### New

- Orthomapping
- Massive Point Clouds
- Vector Tiles
- Dynamic Aggregation
- Arcade Expressions
- Data Exploration
- GeoAnalytics Integration

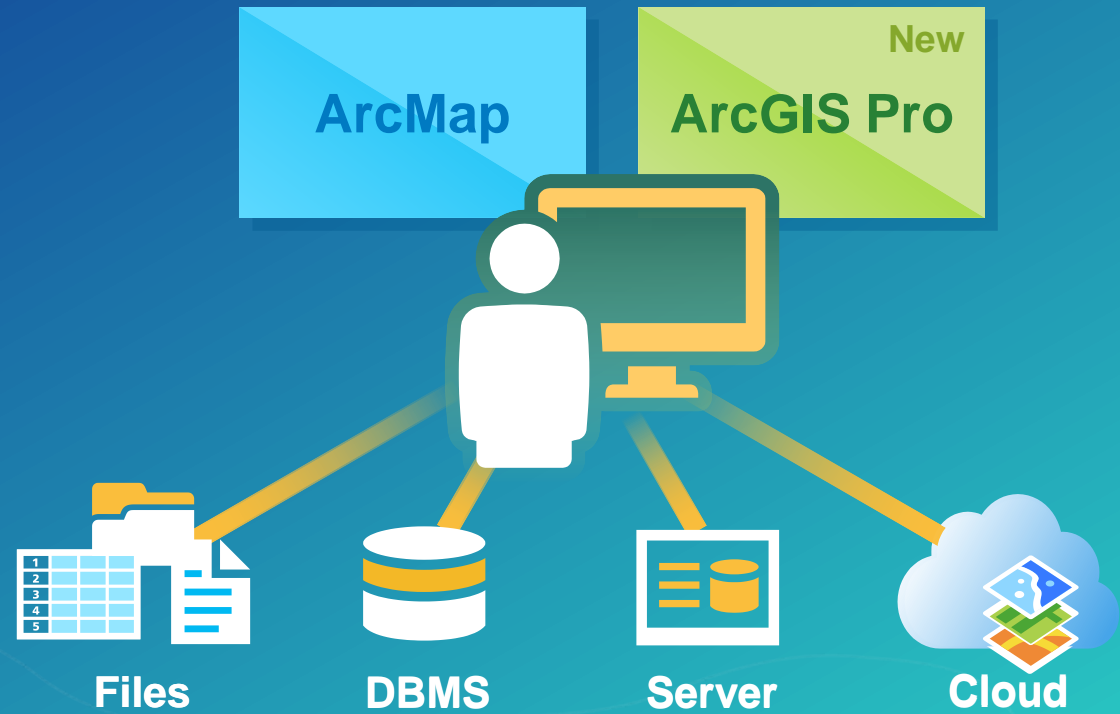
### Coming

- Utility Network
- Metadata
- Parcels

Advanced Mapping, Visualization, Editing, and Analysis

*Pro Is the New Standard . . .  
. . . For Desktop GIS*

# Is ArcGIS Pro a Replacement for ArcMap?





# Is ArcGIS Pro a Replacement for ArcMap?

- Yes
- ArcMap still supported
  - But not supported forever
- Eventually ArcGIS Pro will replace ArcMap



*ArcGIS Pro is the future for desktop GIS*

# What is the plan for ArcMap?

- ArcMap continues
  - Minor updates \ bug fixes

ArcMap 10.5.1

ArcMap 10.6



Desktop Product Life Cycle

# Migrating to ArcGIS Pro

# Getting Started With ArcGIS Pro

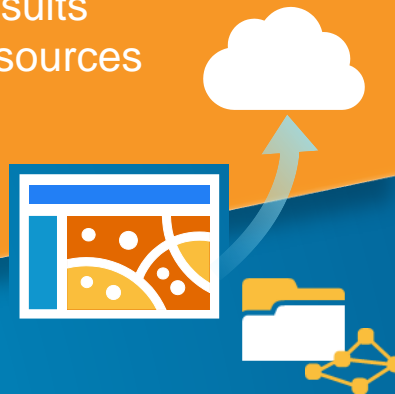
## Setup

- Download and Install
- Sign-in and Authorize
- Get Updates
- Set Display Language



## Migration

- Take inventory
- Create, connect, import
- Analyze results
- Consult resources



## Resources

- Tutorials
- Terminology Guide
- [Supported data types and items](#)
- Virtual Campus





# ArcGIS Pro Help



## Migrate content

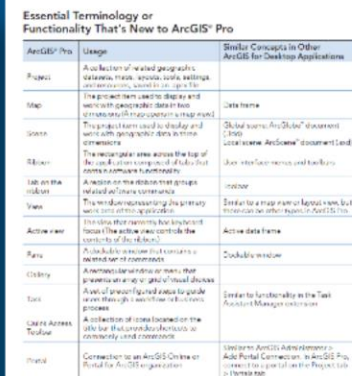
## Navigate your data

## Symbolize your data

## Label your map



# Terminology Guide

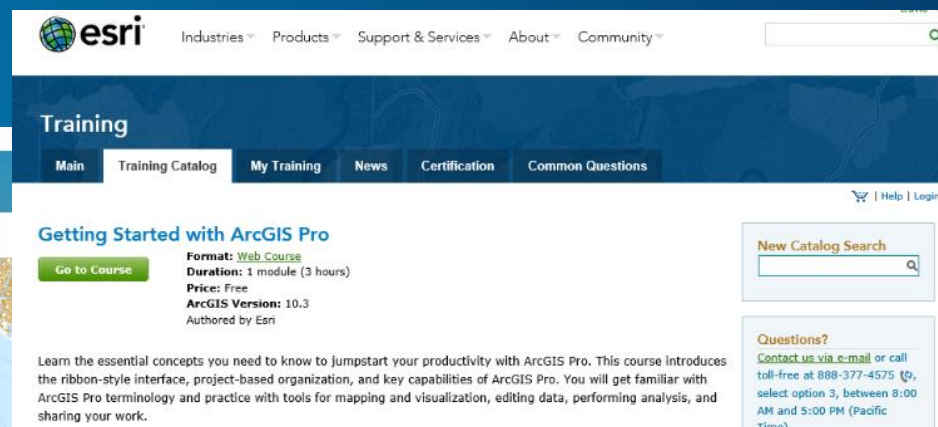
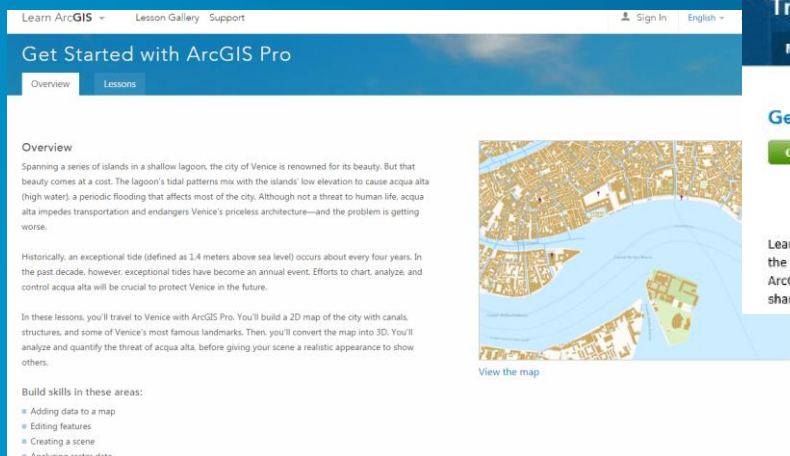


# Getting Started with ArcGIS Pro

# Publications



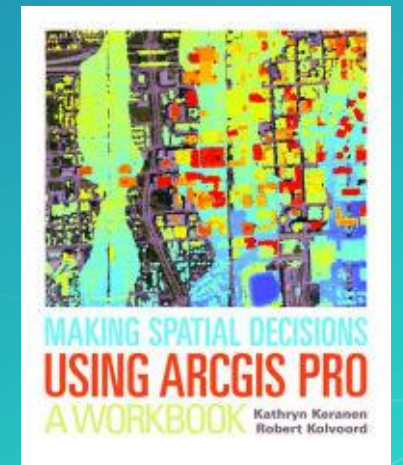
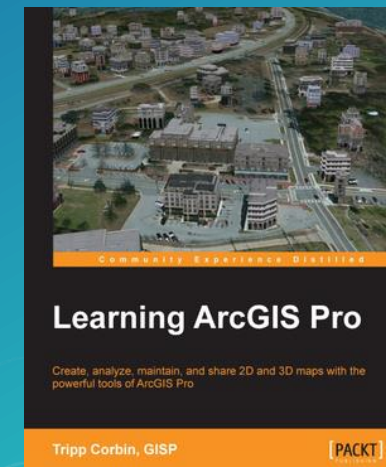
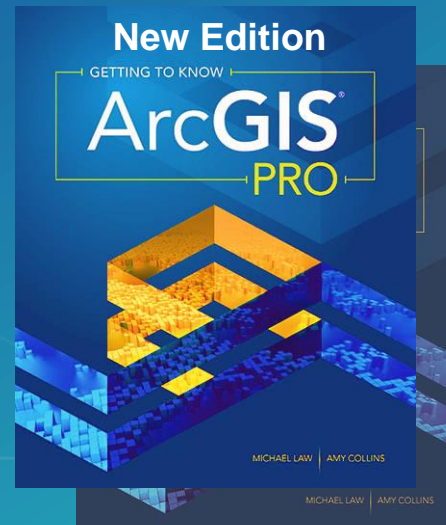
# Learn ArcGIS



# Responding to your education and training requests

## Learning Resources – Overcoming the learning curve

- 76 ArcGIS Pro tutorials, web courses, videos and seminars on [esri.com/training](https://esri.com/training)
- 15 Quick-start tutorials in Get started with ArcGIS Pro
- 11 ArcGIS Pro lessons on [learn.arcgis.com](https://learn.arcgis.com)
- 3 books plus a 4<sup>th</sup> on the way



# Pro.ArcGIS.com

ArcGIS Pro | ArcGIS Desktop

pro.arcgis.com/en/pro-app/

ArcGIS Desktop

ArcGIS Pro ArcMap

SEARCH

Sign In

English



## ArcGIS Pro

FREE TRIAL

Home

Get Started

Help

Tool Reference

ArcPy

SDK

Community

# The Foundation for Your GIS

Build projects from your maps, data, analytical models, and more with ArcGIS Pro. Collaborate with others in your organization and share your work with everyone on the web.

Search ArcGIS Pro Help



Version: 2.0 (June 2017)

[System requirements](#)

[Download & install](#)

[What's new in 2.0](#)

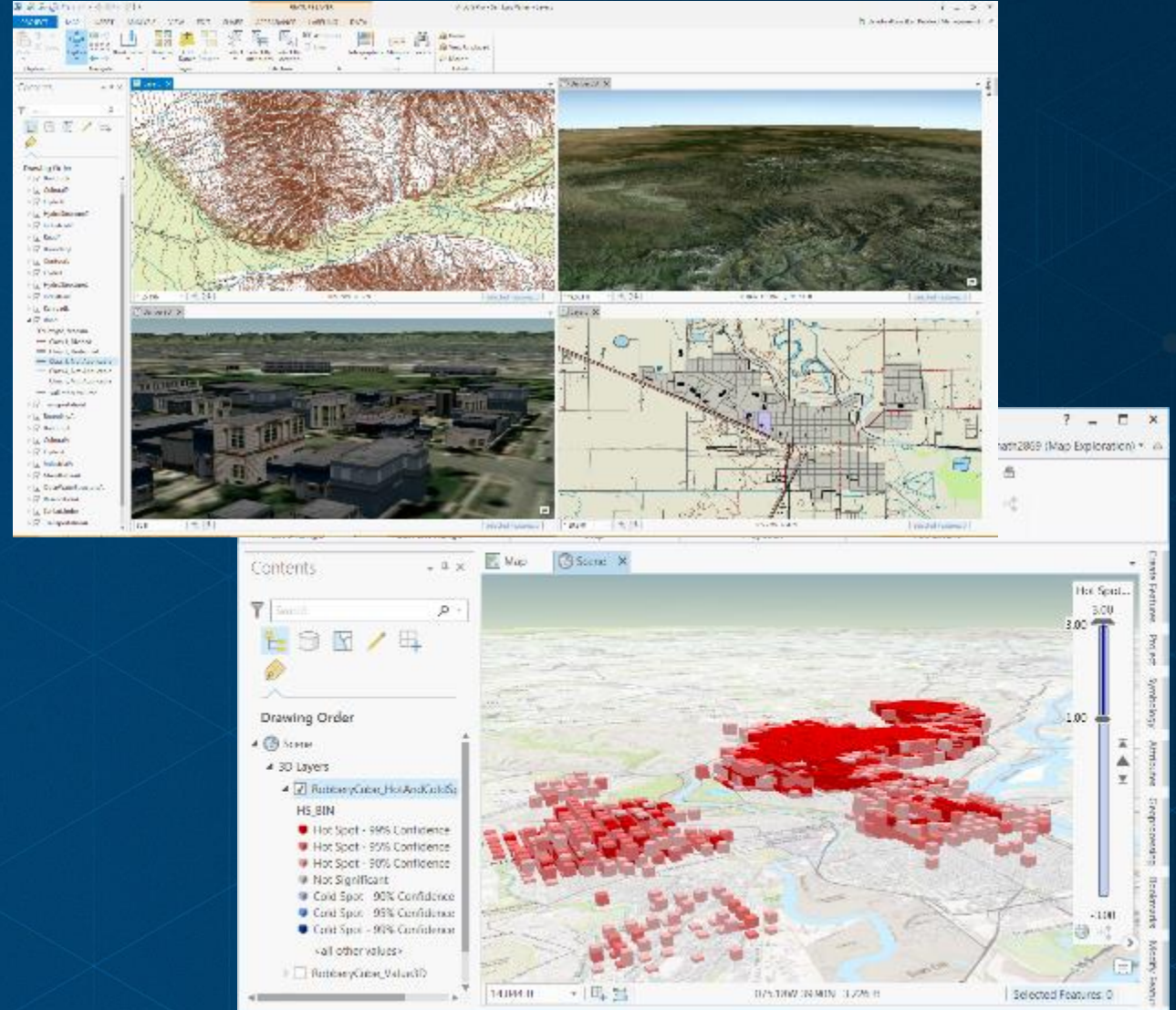
[Release notes](#)

[FAQ](#)



# ArcGIS Pro

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



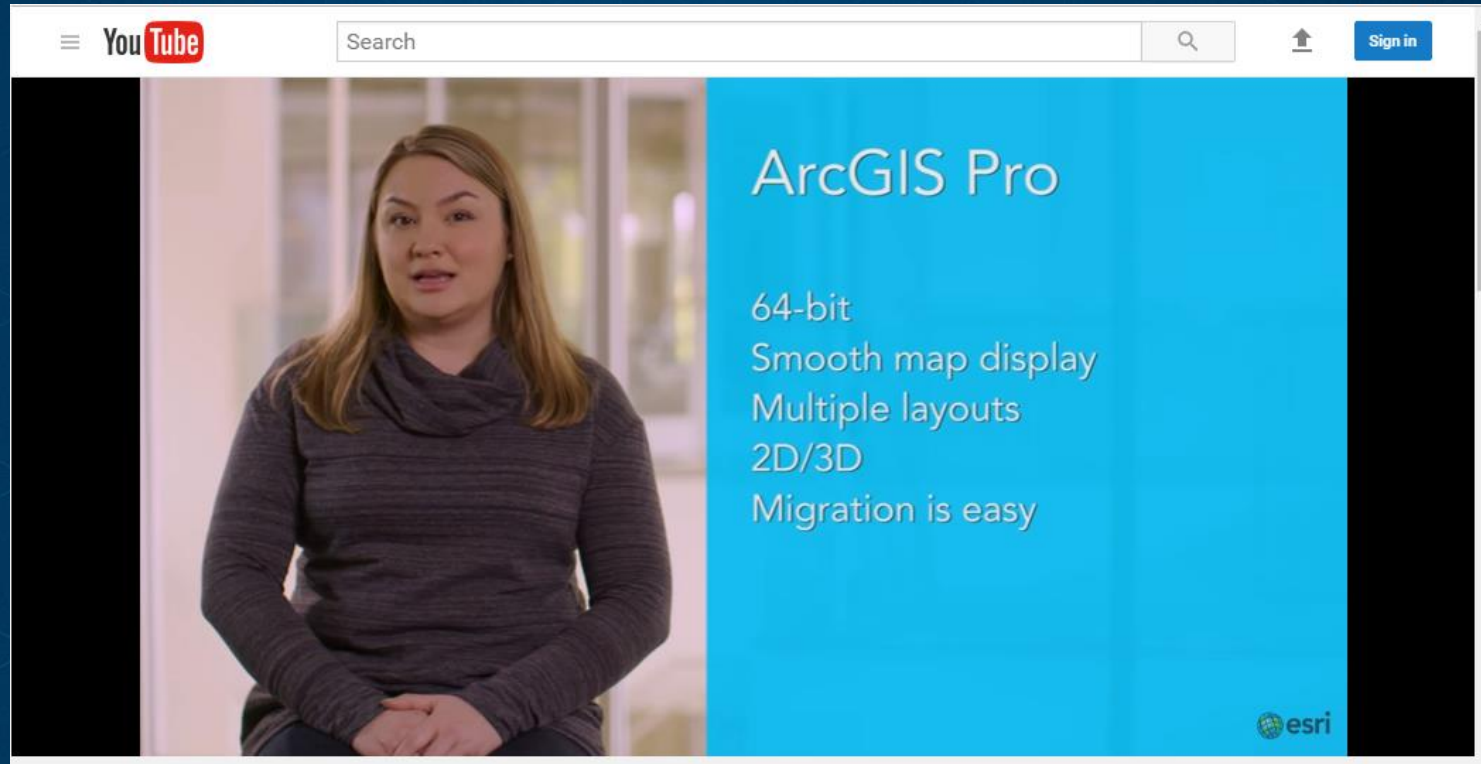
## Why migrate to Pro?

- **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**



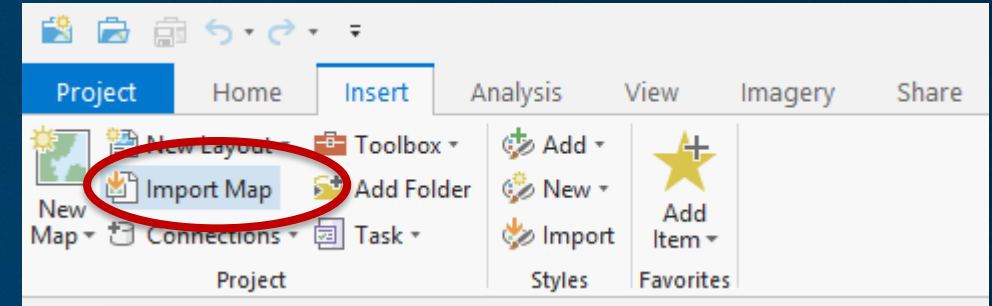
# Getting started

- Know before you Pro series

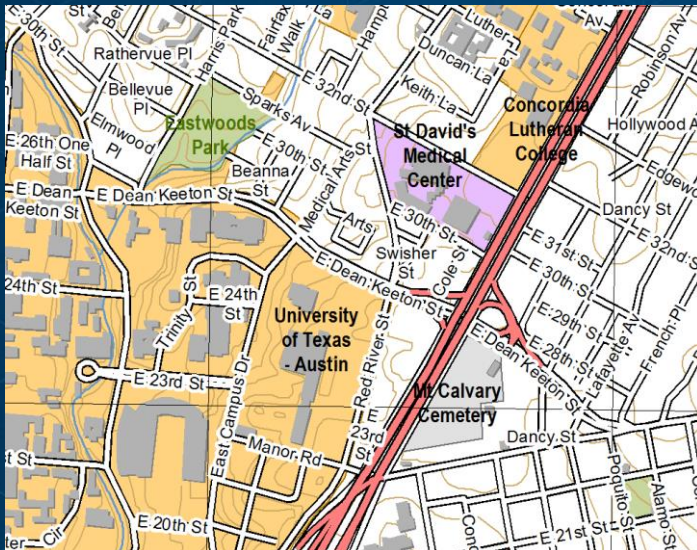


# Import your maps, scenes and globes

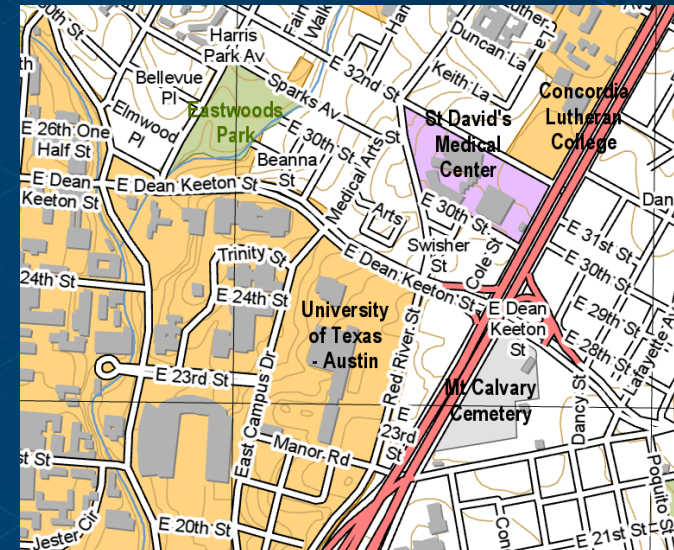
- Import .mxd, .sxd, and .3dd files
- What imports?
  - maps, layouts, symbology, styles, scenes, models
- Maps look the same



ArcMap



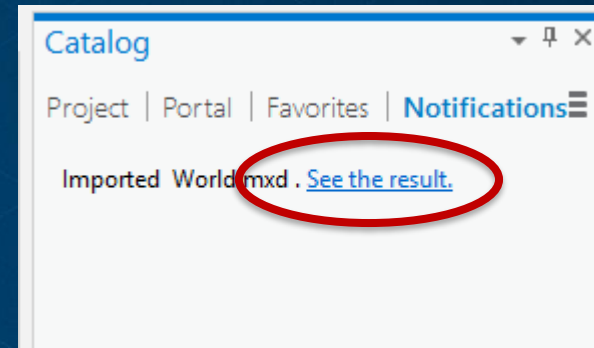
ArcGIS Pro





# 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

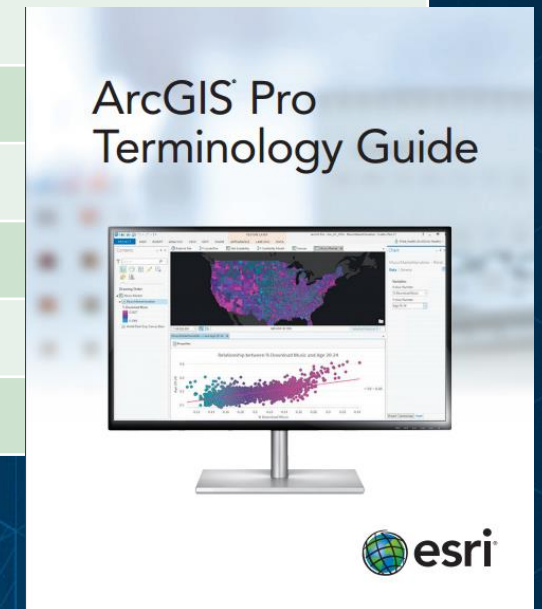
The following messages were produced when this map or scene was imported: C:\Users\dauidw\Desktop\World.mxd

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

# Terminology

## ArcGIS Pro Terminology Guide

ArcMap	ArcGIS Pro
Data View	Map View
Data Frame	Map Frame
Active Data Frame	Active View
Globe, Local Scene	Scene
Data Driven Pages	Map Series
Find tool	Locate tool
Create Folder Connection	Add Folder
Marker Symbol	Point Symbol
Fill Symbol	Polygon Symbol

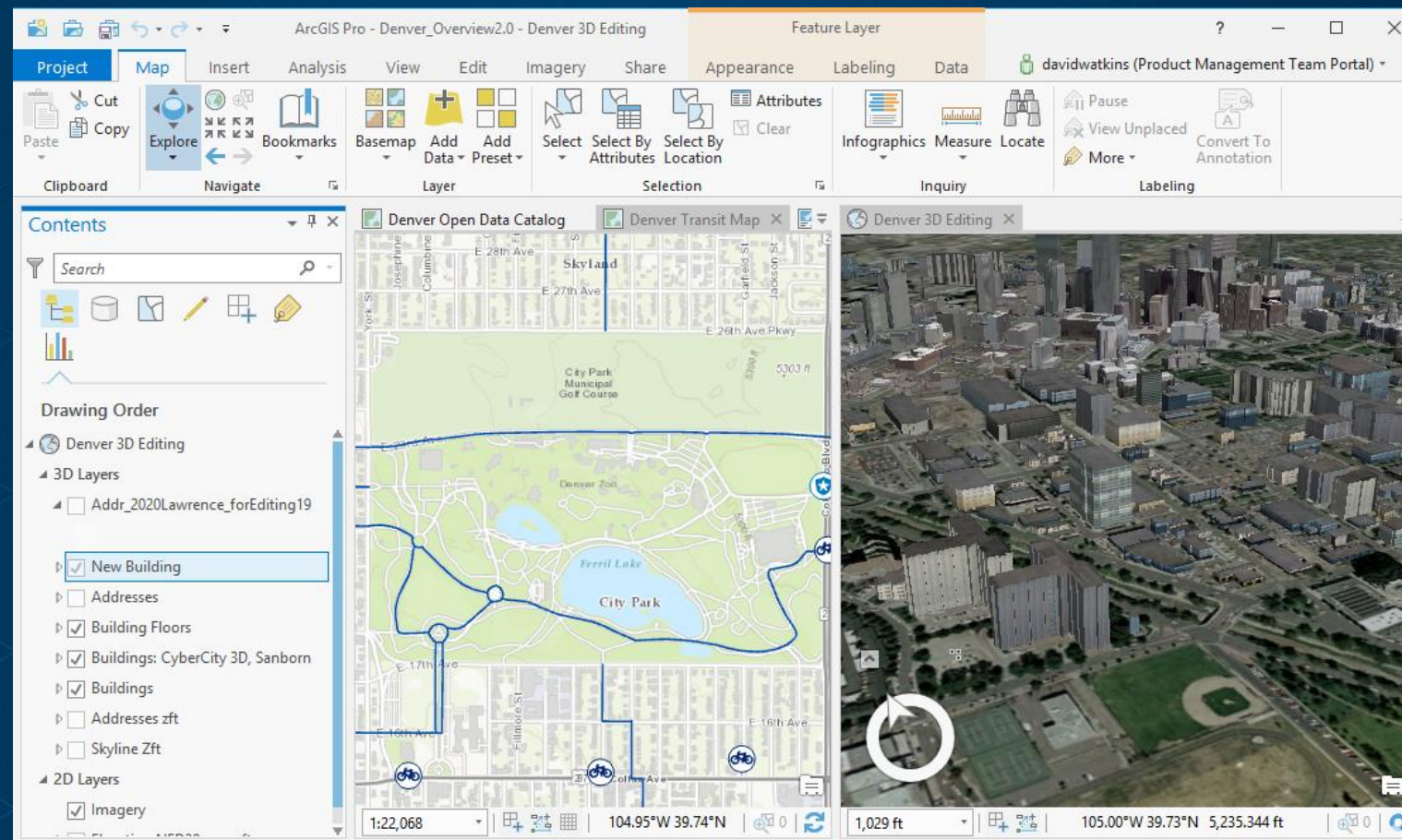




# Working with ArcGIS Pro

Familiar but new and improved

## Ribbon contextual user interface and multiple views

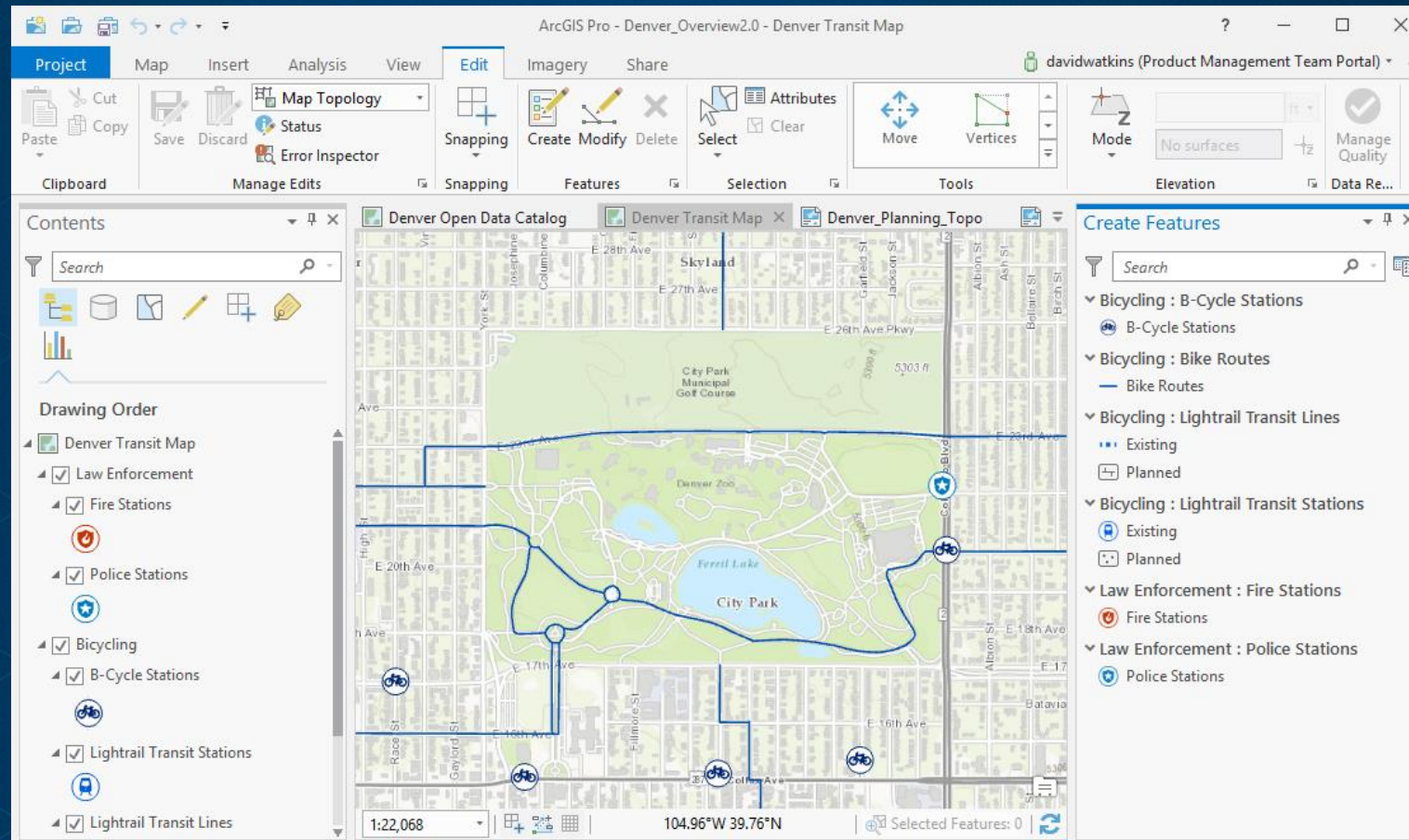




# Working with ArcGIS Pro

Familiar but new and improved

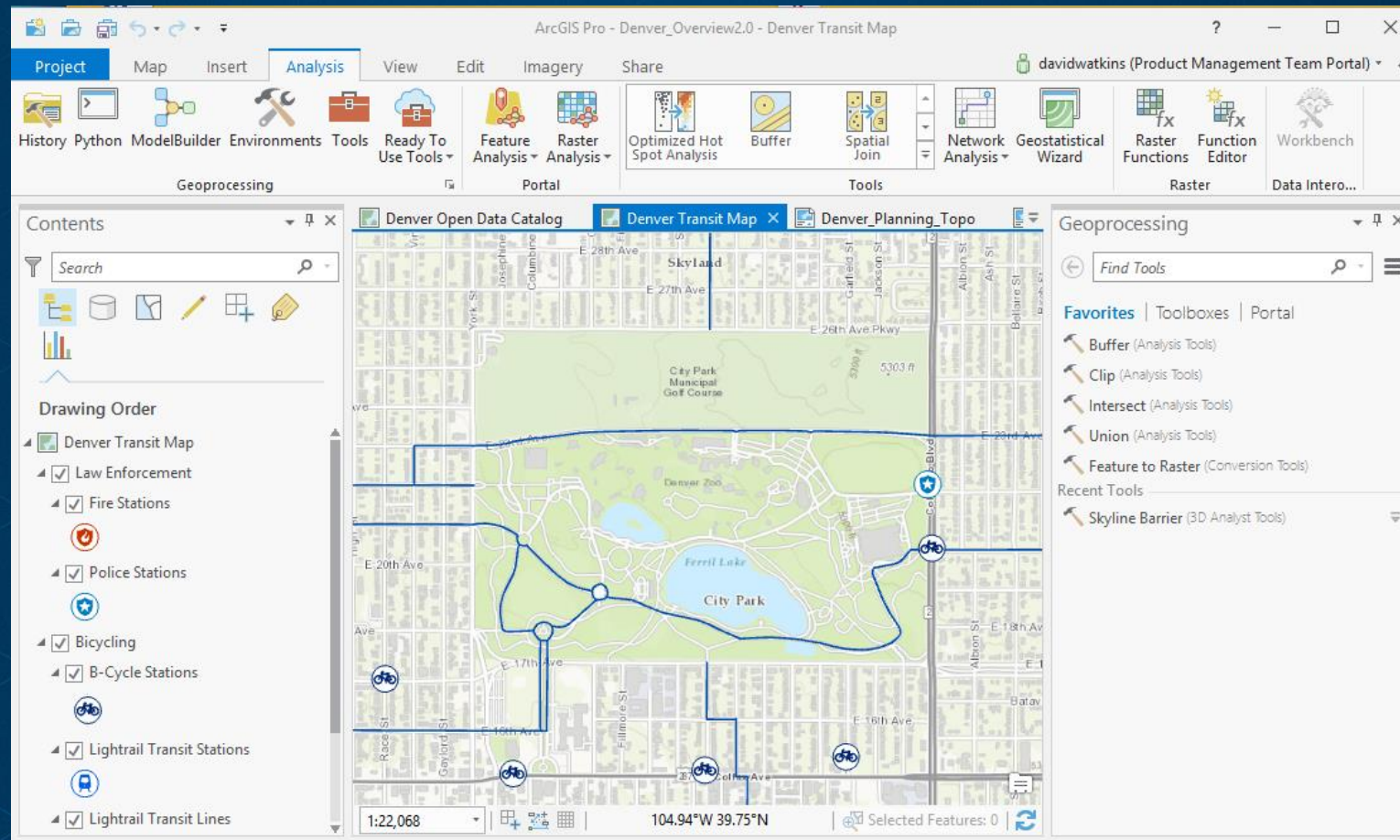
“What do you mean, I don’t have to start editing?”



# Working with ArcGIS Pro

Familiar but new and improved

Analysis is where you'll find geoprocessing

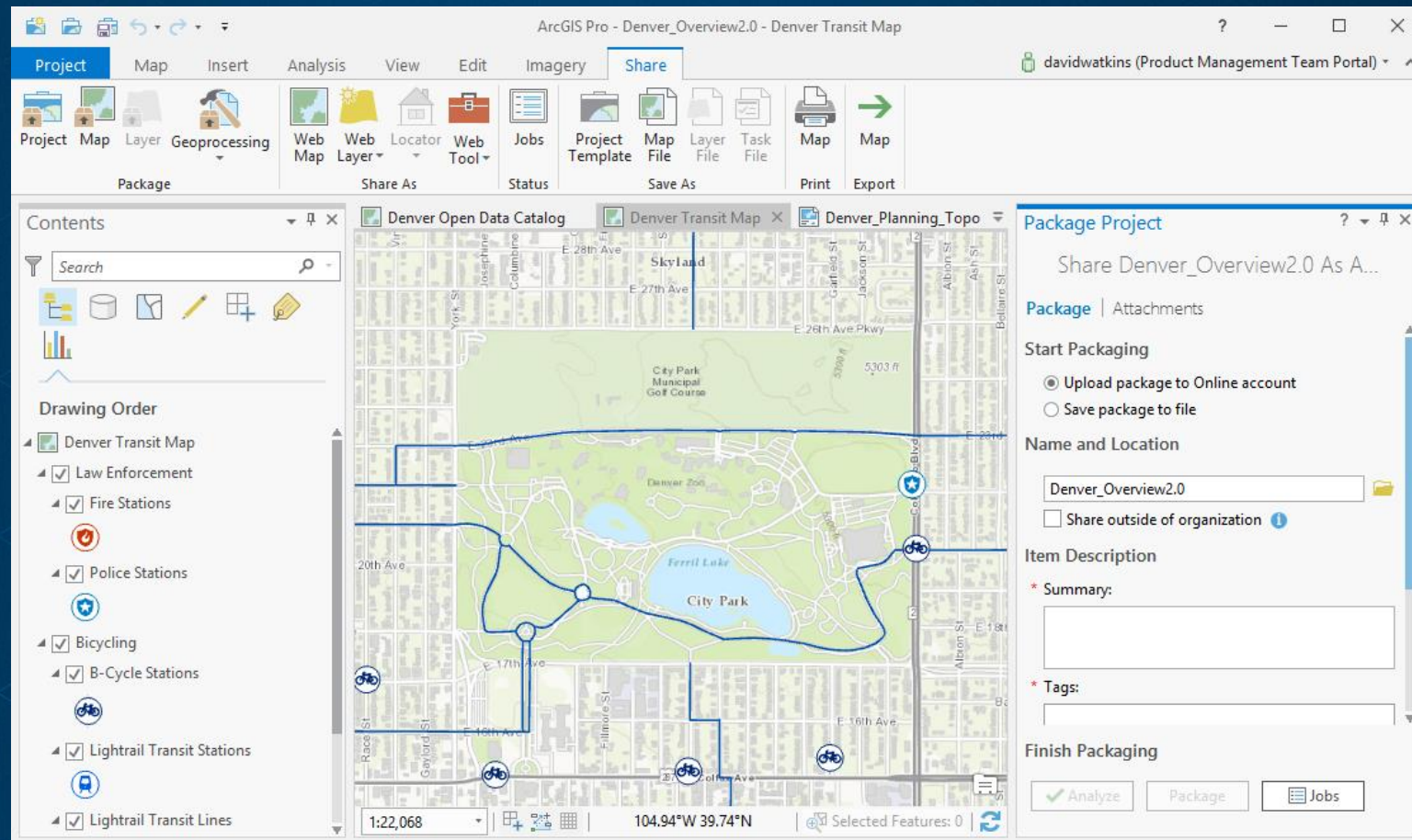




# Working with ArcGIS Pro

Familiar but new and improved

## Share and really use the full power of the platform

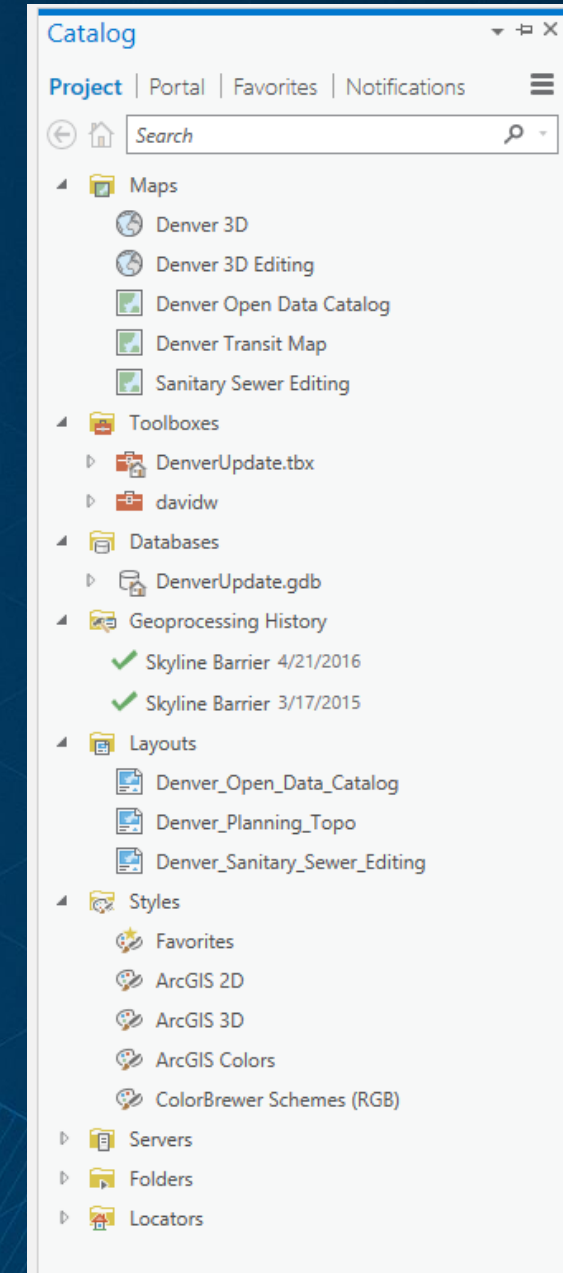


# Working with Projects

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

All can be easily packaged and shared

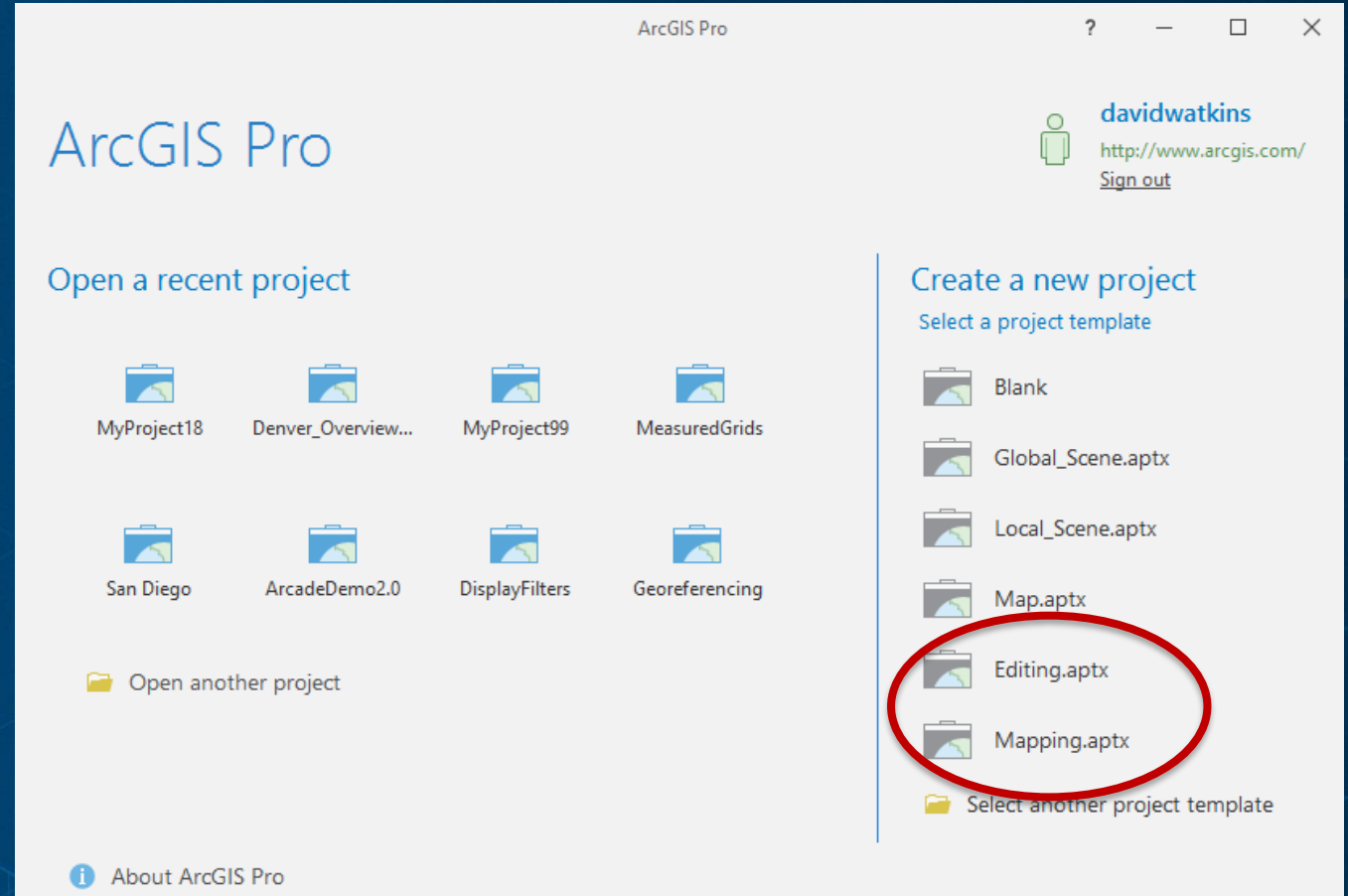
How should I organize my work moving forward?



# Project Templates

In Pro there is no normal.mxt

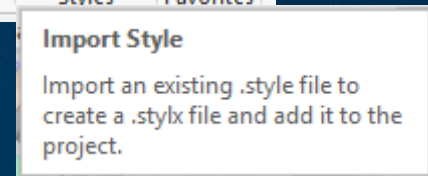
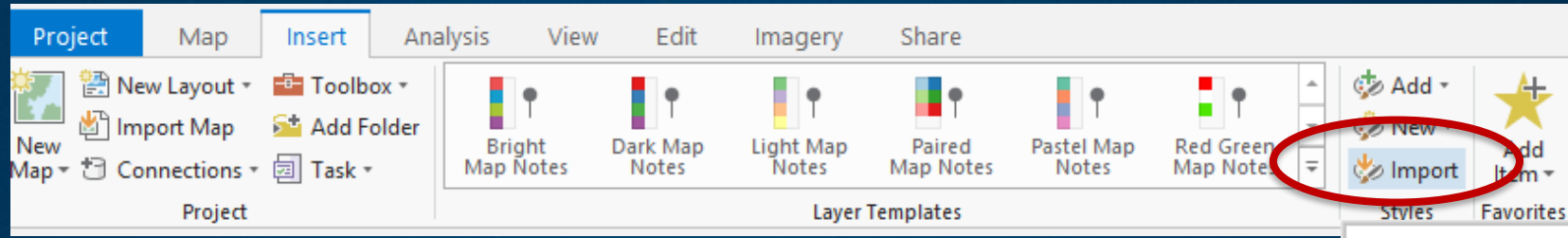
- You can have many templates
  - Editing, mapping, viewing
- Customize and share
  - User interface
  - Project styles
  - Layouts
  - Connections
  - Toolboxes



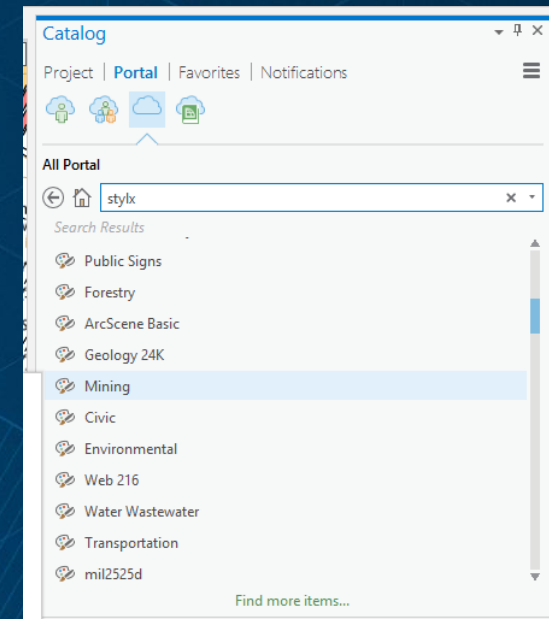
Your templates show up in the start experience



# 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

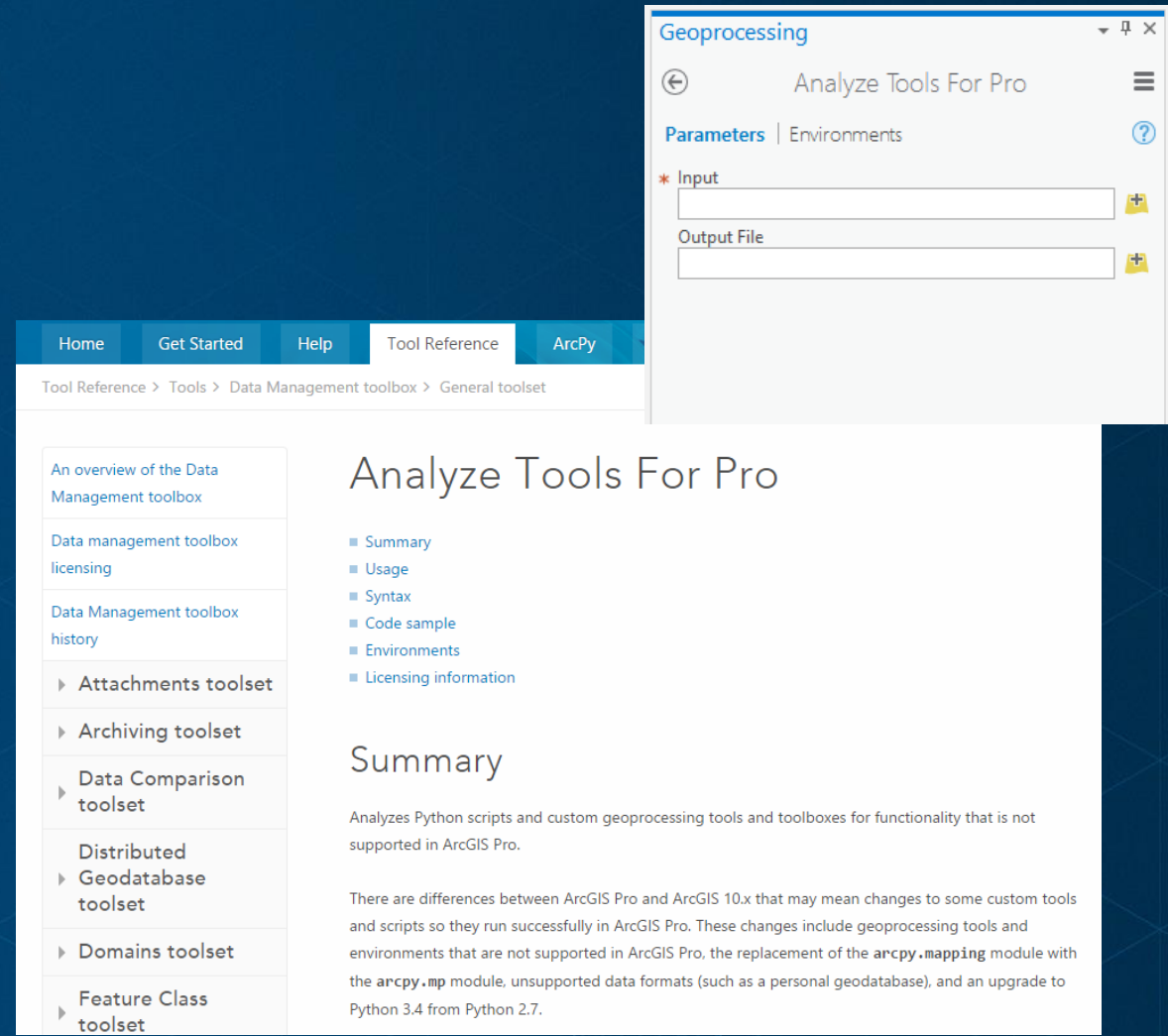


# Analyze Tools for Pro

Will my tool “just work?”

- Analyze models
- Toolboxes
- Python scripts
- Script tools

Returns anything not supported  
with helpful hints as to why



# ArcGIS Ideas

- Visit [ideas.arcgis.com](https://ideas.arcgis.com) to:
  - Vote
  - Comment
  - Submit new ideas
- ArcGIS Pro team wants your feedback!
  - Regular review
  - Your use case matters
  - Your ideas can result in new features for everyone

Put your  
Ideas in Motion



Visit the ArcGIS Ideas space on GeoNet



# Responding to your requests and feedback

## ArcGIS Desktop Ideas On the Move: June 2017

Blog Post created by **Kory Kramer** on Jun 27, 2017

Like • 1

Comment • 4

With today's release of ArcGIS Pro 2.0, it's time for another summary of what's happening with Ideas.

11 Desktop ideas have been moved to **Implemented**:

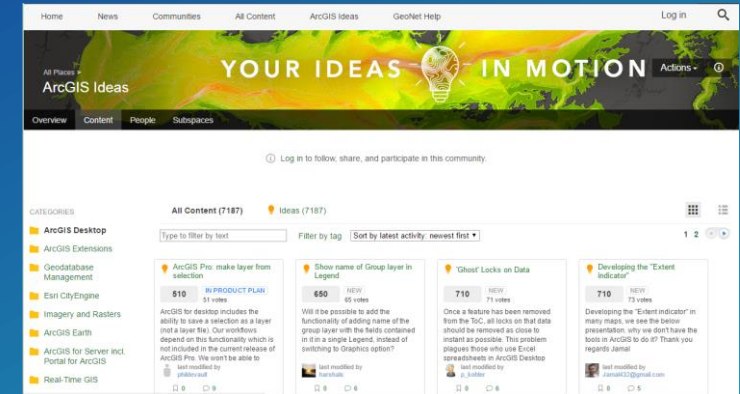
- 💡 Run more than one instance of ArcGIS Pro
- 💡 Saving Service and SDE Connection in ArcGIS Pro
- 💡 Grid and Graticules
- 💡 Rename Shapefiles (better data-management) in ArcGIS Pro (1.4)
- 💡 Make Enterprise GDB Connections User-Wide for ArcGIS Pro
- 💡 Using a Web Feature Service (WFS) without converting it to a feature layer (ArcGIS Pro)
- 💡 ArcGIS Pro: Rearrange Fields in Field View
- 💡 Exporting Data from Project View in ArcGIS Pro
- 💡 Native/Direct WFS Support in ArcGIS Pro
- 💡 ArcGIS Pro - Extract Data tool - polygon input as in ArcMap
- 💡 ArcGIS Pro: Allow connection to .sde files in folders

2 Desktop ideas have been moved to **In Product Plan**:

- 💡 Drag & Drop Data into ArcGIS Pro
- 💡 Add full OGC WFS support in next version of ArcGIS Desktop (no extension use)

2 Desktop ideas have been moved to **Under Consideration**:

- 💡 Add an autosave feature for ArcGIS Desktop.
- 💡 Add Direction to the Measure Tool



Ideas.ArcGIS.com

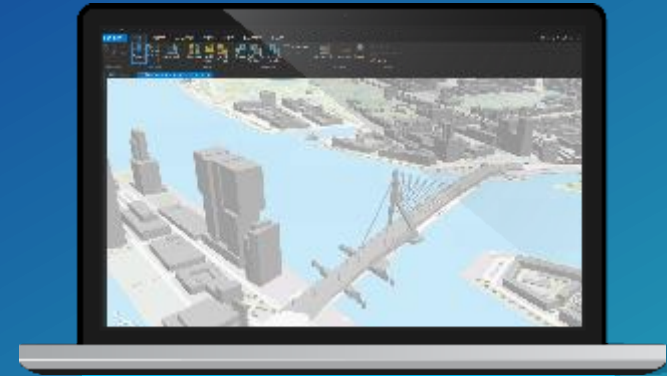
# ArcGIS Pro Licensing



# ArcGIS Pro Licensing



**Named User**



**Single Use**



**Concurrent Use**

# How do you get ArcGIS Pro?

- **Purchase ArcGIS Desktop (Basic, Standard or Advanced) Perpetual or Term**
  - Perpetual – No expiration (Software + Maintenance)
  - Term – Subscription (Access until specified date)
  - Enterprise License Agreement
- **3 License types**
  - Concurrent Use (Perpetual)
  - Single Use (Perpetual or Term)
  - Named User (Term)

# ArcGIS Pro Licensing

## Single Use

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

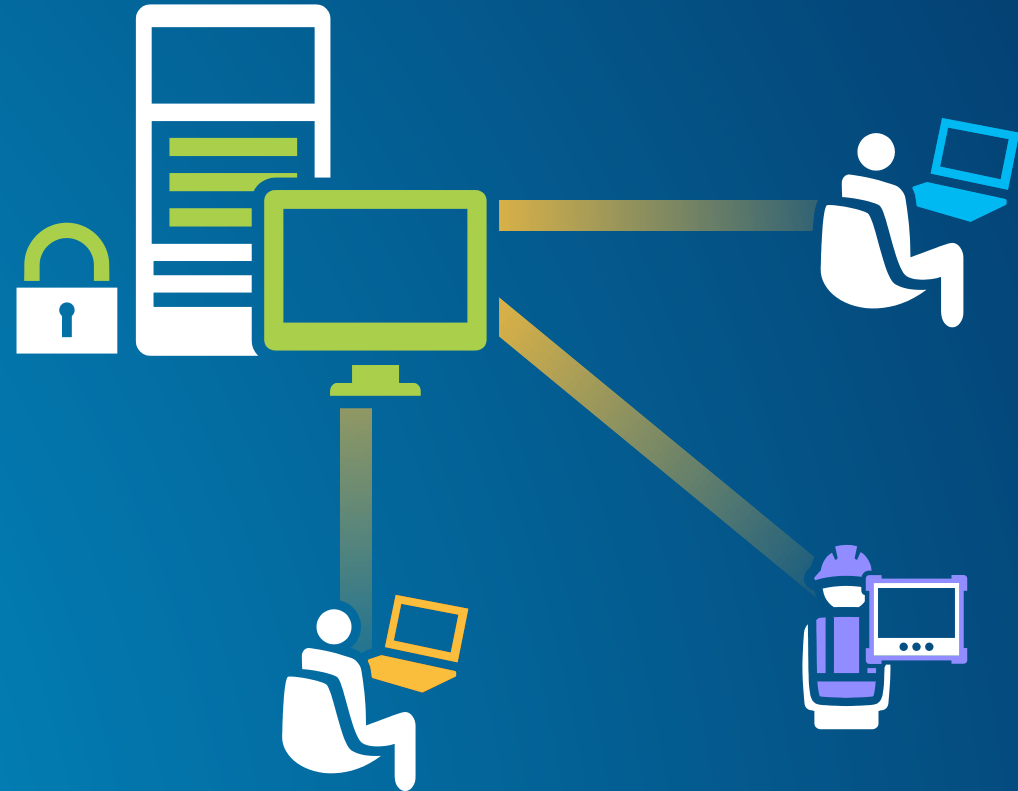




# ArcGIS Pro Licensing

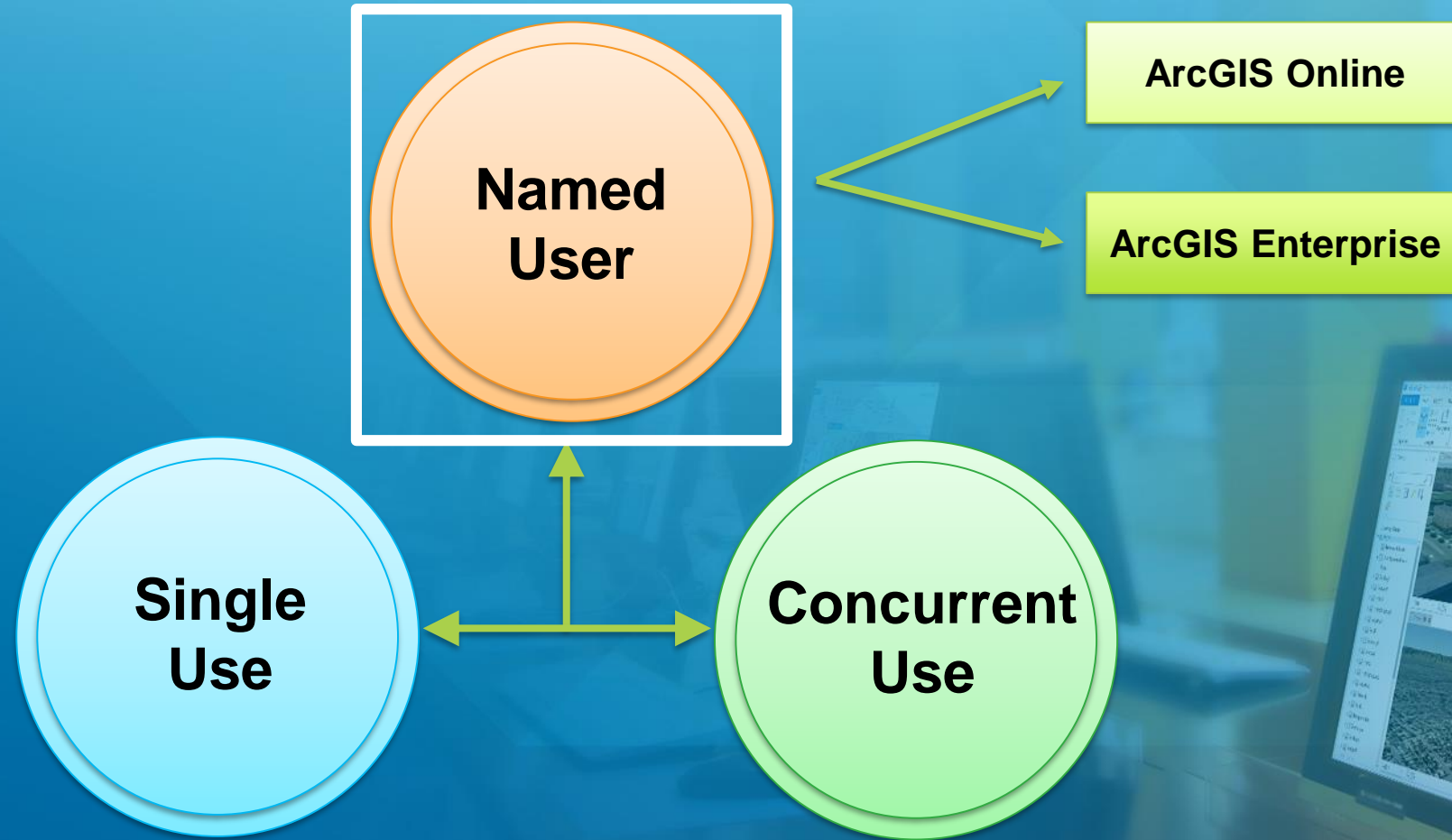
## Concurrent Use

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



*Available for existing Concurrent Use customers*

# 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

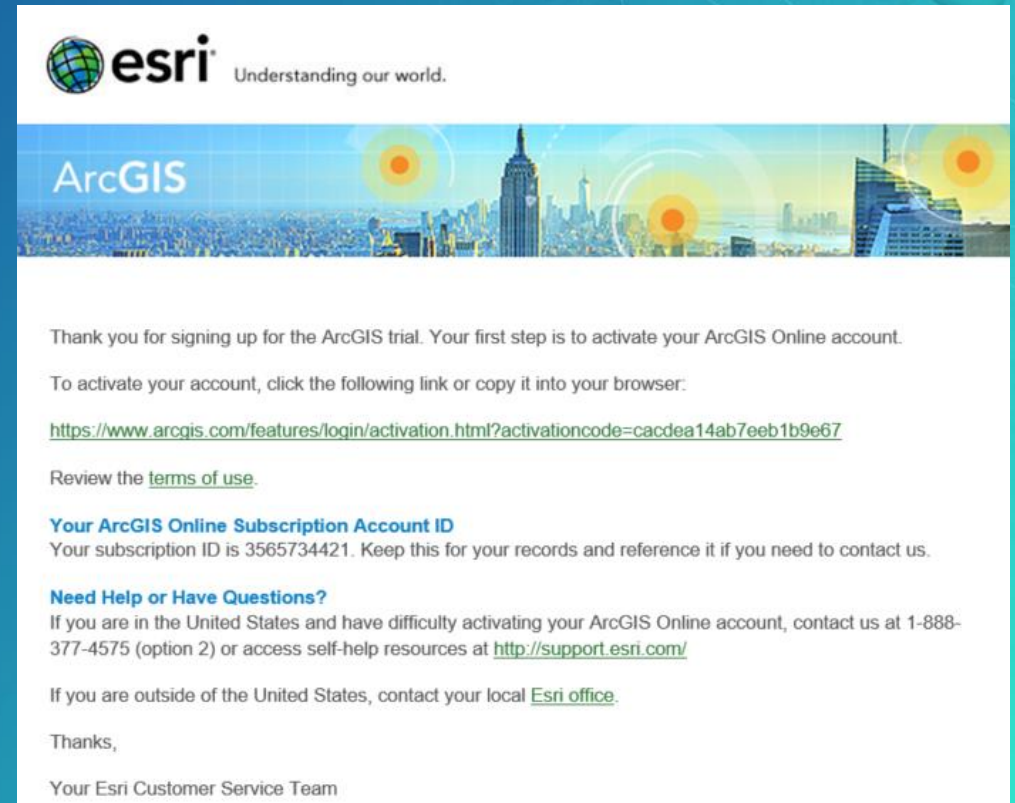




# Named User licensing in ArcGIS Online

## Activate organization

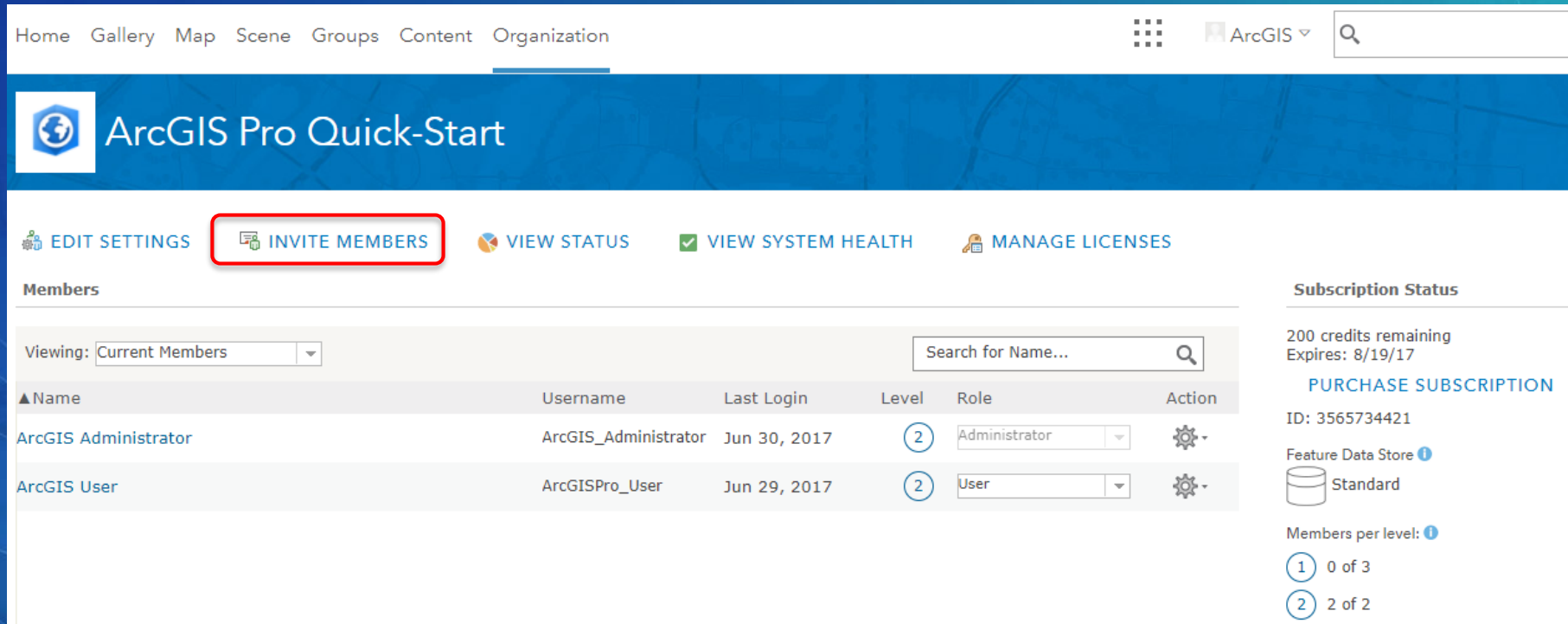
- Named User licenses are managed through organization accounts (not public accounts)
- Account must be activated by the person who will administer the ArcGIS Online organization
- Click the activation link from Customer Service
- This email can be forwarded



# Named User licensing in ArcGIS Online

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



The screenshot shows the ArcGIS Online interface. The top navigation bar includes links for Home, Gallery, Map, Scene, Groups, Content, and Organization. The Organization tab is selected. Below the navigation bar, there's a header for 'ArcGIS Pro Quick-Start'. A row of action buttons is displayed: EDIT SETTINGS, INVITE MEMBERS (highlighted with a red box), VIEW STATUS, VIEW SYSTEM HEALTH, and MANAGE LICENSES. Below these buttons, the 'Members' section is visible. It includes a dropdown menu set to 'Current Members' and a search bar labeled 'Search for Name...'. A table lists the current members:

Name	Username	Last Login	Level	Role	Action
ArcGIS Administrator	ArcGIS_Administrator	Jun 30, 2017	2	Administrator	[Settings Icon]
ArcGIS User	ArcGISPro_User	Jun 29, 2017	2	User	[Settings Icon]

On the right side of the 'Members' section, there's a 'Subscription Status' panel. It displays '200 credits remaining' and 'Expires: 8/19/17'. Below this, there's a 'PURCHASE SUBSCRIPTION' link, the ID '3565734421', and a 'Feature Data Store' section showing 'Standard'. At the bottom, it indicates 'Members per level: 1' with a list: 1 0 of 3, 2 2 of 2.

# Manage Licenses

- Must be Administrator or have the Manage Licenses privilege
- Manage Licenses experience in ArcGIS Online
  - Search by Group or Role
  - Assign and revoke licenses
- ArcGIS Pro user experience
  - Licensing portal and active portal
  - Take license offline



# 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

MY ORGANIZATION HE

Licensed Members		Product	ArcGIS Pro Basic	ArcGIS Pro Standard	ArcGIS Pro Advanced	Spatial Analyst	3D Analyst	Network Analyst	Geostatistical Analyst	Data Reviewer	Workflow Manager
Maximum	150	Licenses	50	50	50	50	50	50	50	50	50
Available	124	Available	45	47	32	25	24	31	38	36	38

Licensed Products for Rob Elkins (rpe2) Last used ArcGIS Pro: Jan 9, 2015

Esri Applications

[ - ] ArcGIS Pro [ - ] ☒ Extensions

☐ Basic  
☐ Standard  
☒ Advanced

☒ Spatial Analyst  
☒ 3D Analyst  
☒ Network Analyst  
☒ Geostatistical Analyst  
☒ Data Reviewer  
☒ Workflow Manager

UPDATE REVOKE ALL CANCEL

# ArcGIS Pro – The Road Ahead

# ArcGIS Pro Release Timeline





## Near-term

- Utility Network
- Attribute Rules
- Reports
- Layout Tables
- Full Motion Video
- Stereo Mapping
- Oblique Imagery
- Interactive 3D Analysis
- Real Time Streaming
- Offline Web Maps & Layers
- SAP HANA
- New Extensions

## Mid-term

- Parcel Management
- Dimensions
- Exploratory Spatial Data Analysis
- Spell Check
- ModelBuilder if-Then-Else Branching Logic
- Metadata Enhancements
- New Extensions

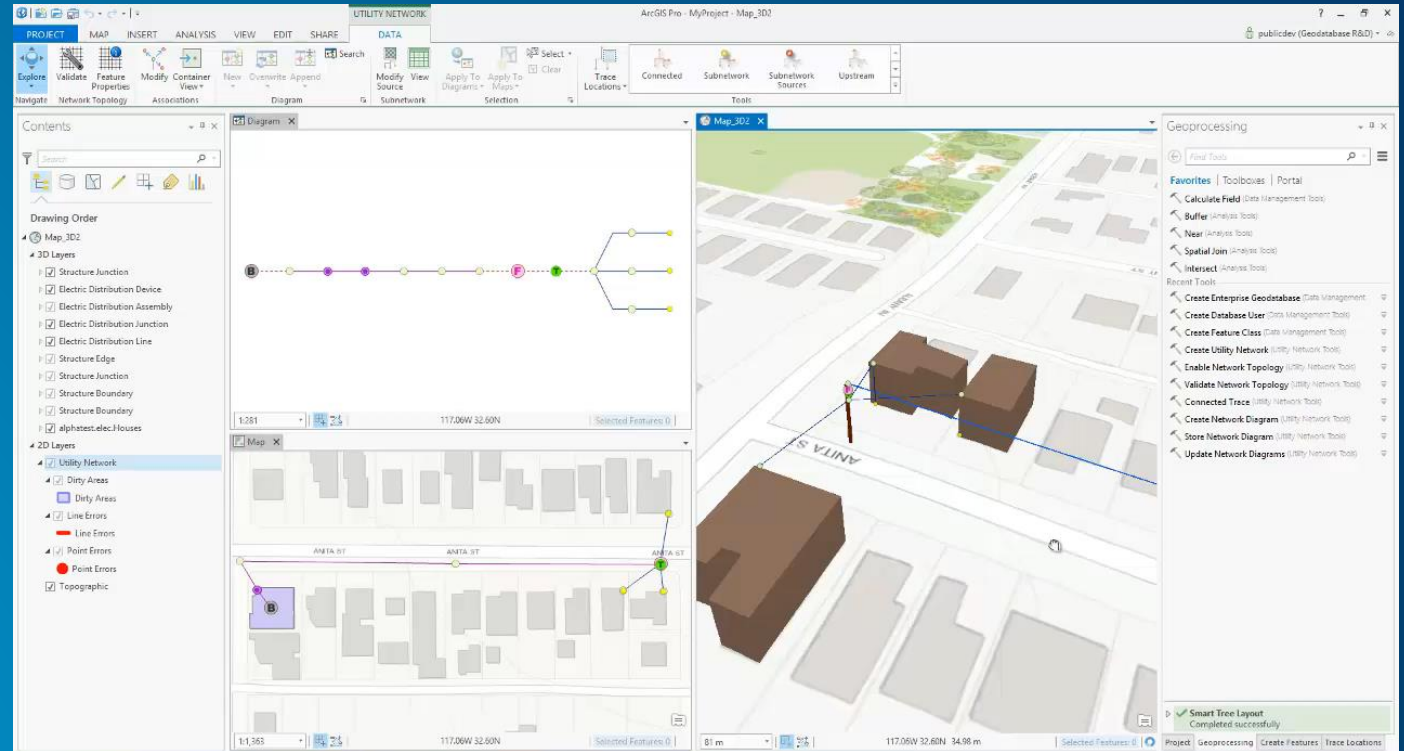
## Long-term

- Animated Symbols
- Presentations
- Offset Printing
- ...

# ArcGIS Pro Roadmap

## Near-term

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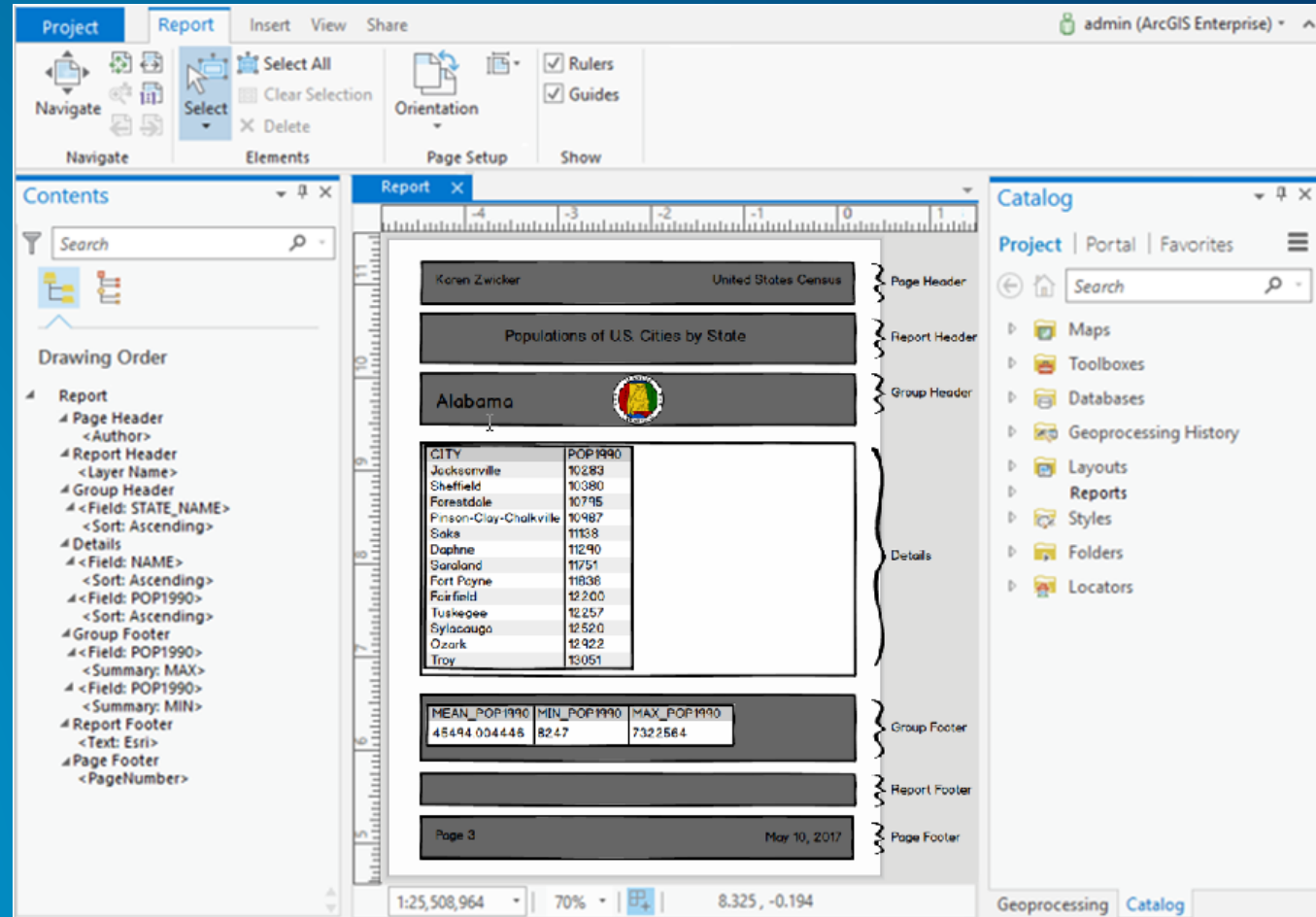
The image displays three overlapping screenshots of the ArcGIS Pro Geoprocessing interface, specifically the 'Attribute Rule' configuration panels. The top-right panel is titled 'Create Attribute Rule' and includes fields for 'Rule Name', 'Rule Description', 'Rule Type', 'Table', 'Subtype', 'Field', and 'Expression'. The middle-left panel is titled 'Update Attribute Rule' and includes the same fields as the 'Create' panel, plus a 'Trigger' section with 'Create' and 'Update' checkboxes, and a 'Multiple Services' section with a checkbox for 'Rule can span multiple services'. The bottom-left panel is titled 'Delete Attribute Rule' and includes a 'Rule Name' field and a 'Run' button. Each panel has a 'Parameters | Environments' tab and a 'Run' button at the bottom.



# ArcGIS Pro Roadmap

## Near-term

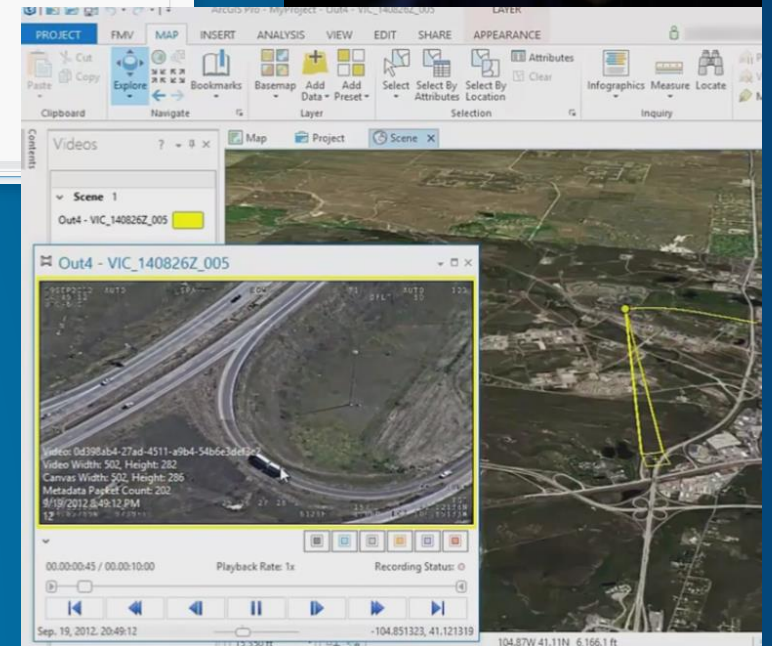
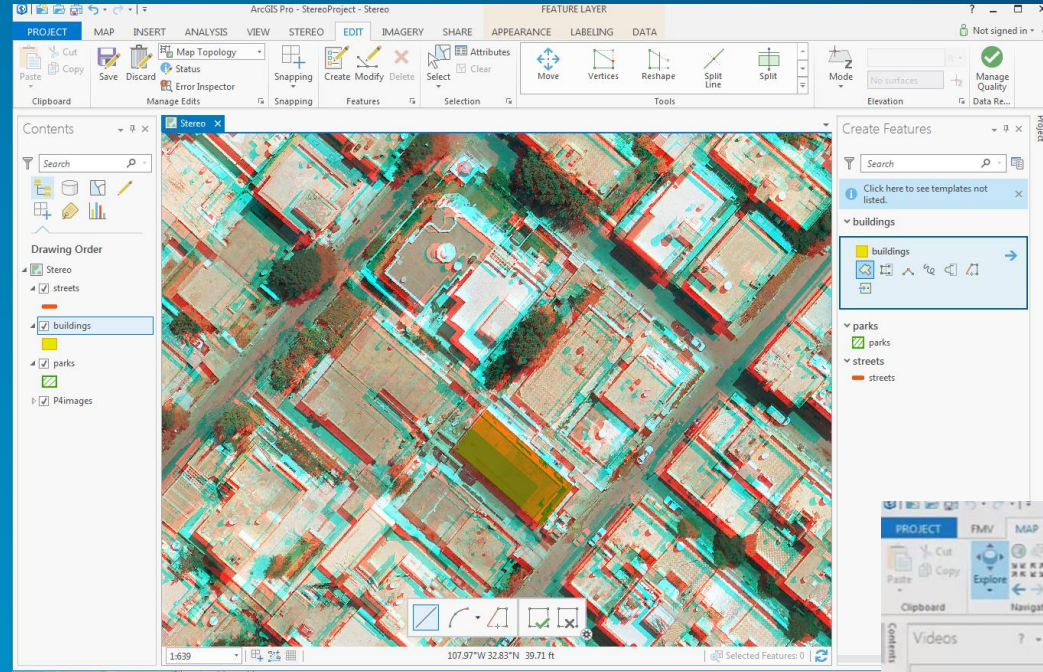
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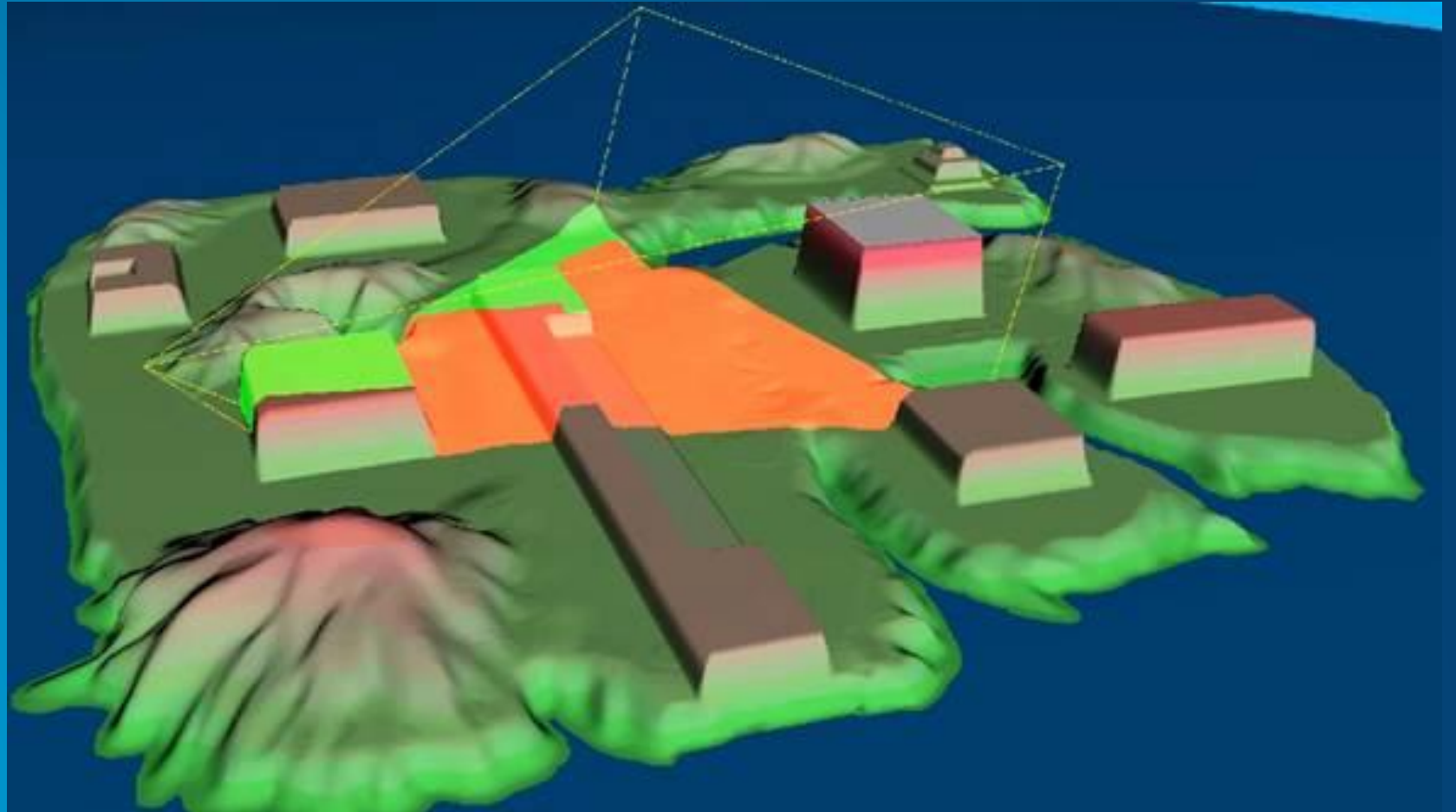




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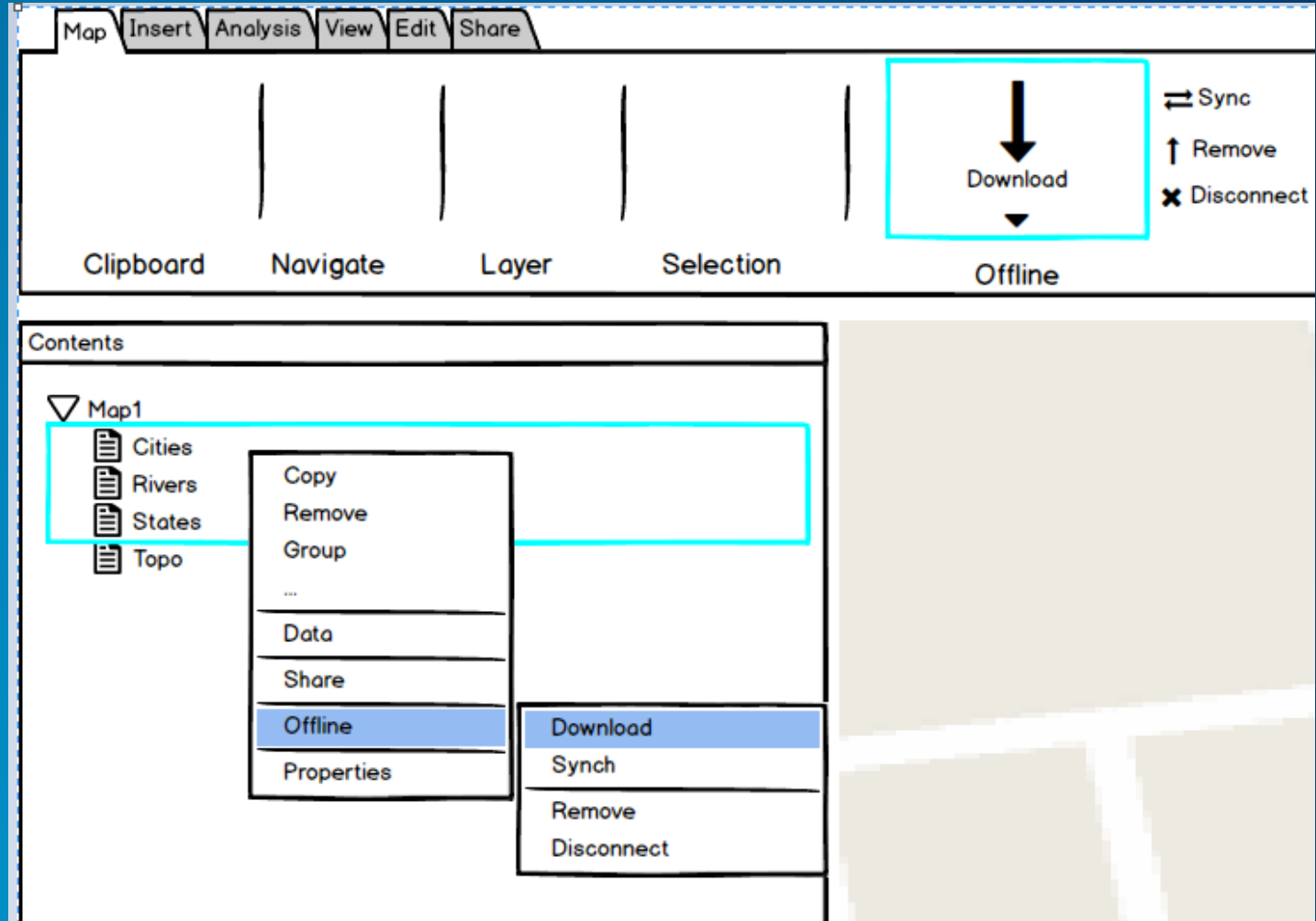
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## Near

- **Utility Network** – Next generation network management capabilities for Utilities and Telecoms
- **Attribute Rules** – Validation rules for attributes
- **Reports** - Generate and share tabular and graphic reports from your GIS Data
- **Layout Tables** – Insert dynamic tables in page layouts
- **Full Motion Video** – Video integrated with your spatial data
- **Stereo** – View and collect features from stereo imagery
- **Oblique Imagery** – Improved user experience for oblique imagery
- **Interactive 3D analysis** – Visualize 3D line of sight, view sheds, and threat domes interactively
- **Real Time Streaming** - Visualize real-time data in 2D and 3D
- **Offline Web Maps and Layers** - View web maps and edit feature layers when disconnected
- **SAP HANA**– New geodatabase support
- **Table Statistics** - Get histogram and numeric statistics for columns in your Table view
- **Enhanced capabilities in the following areas:**
  - SDK - Ongoing updates and new APIs for the .NET SDK
  - Representations – Adding support for overrides that allow you to store an alternate symbol or geometry for features
  - Spatial Adjustments - Feature level editing-based workflow
  - Topology - Ability to create and manage topologies
- **New Extensions** - Publisher, Business Analyst, Esri Production Mapping



# ArcGIS Pro Roadmap

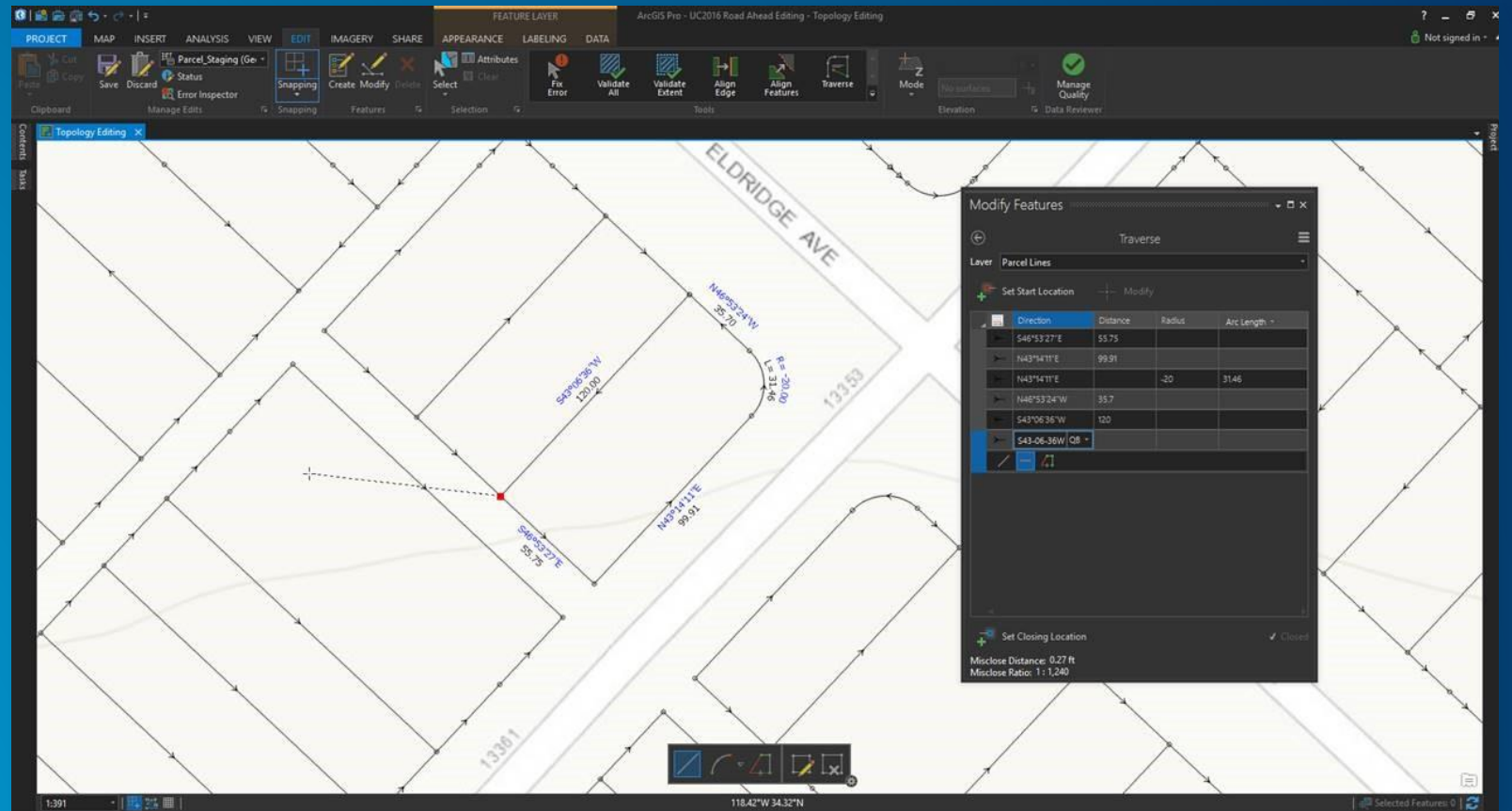
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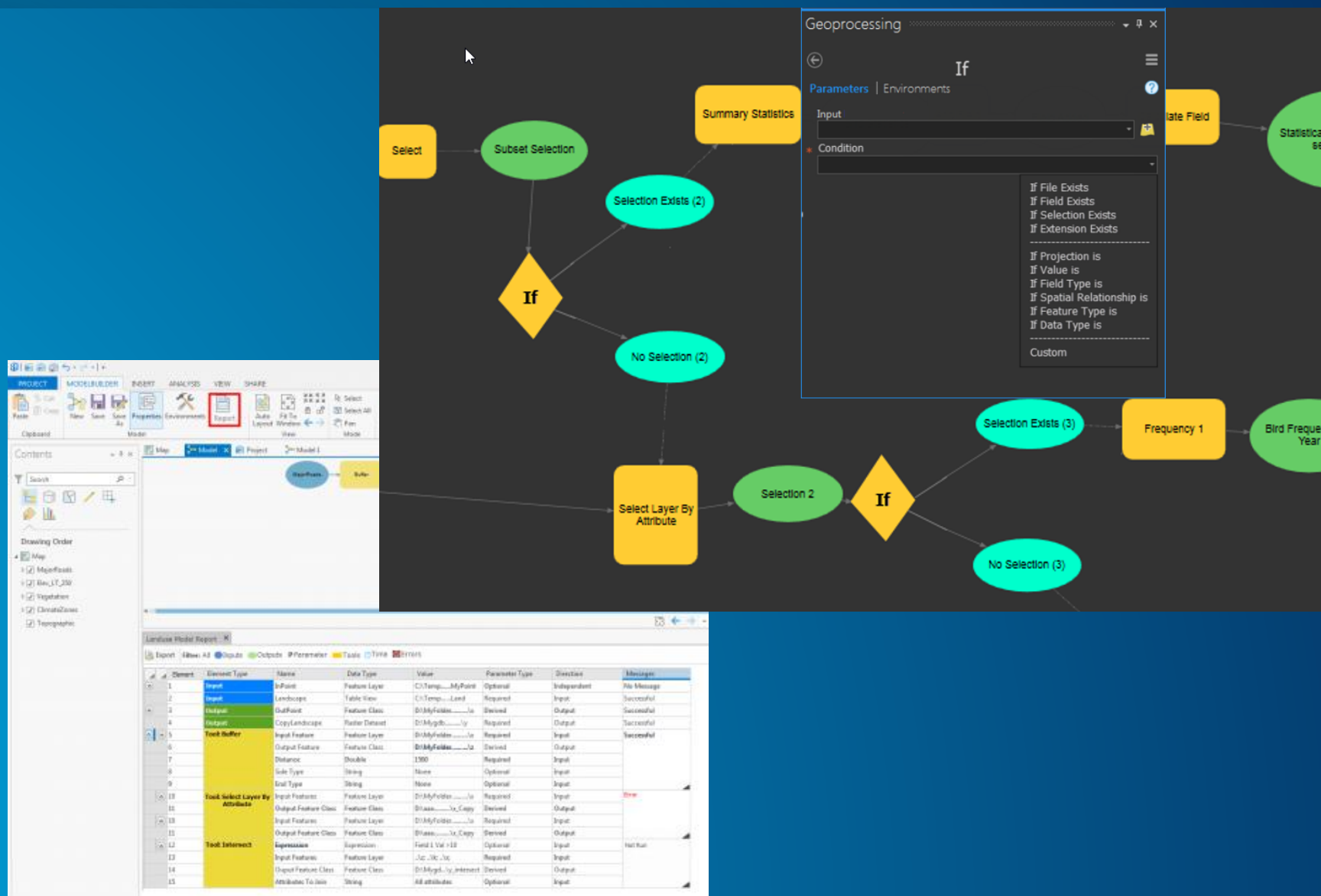
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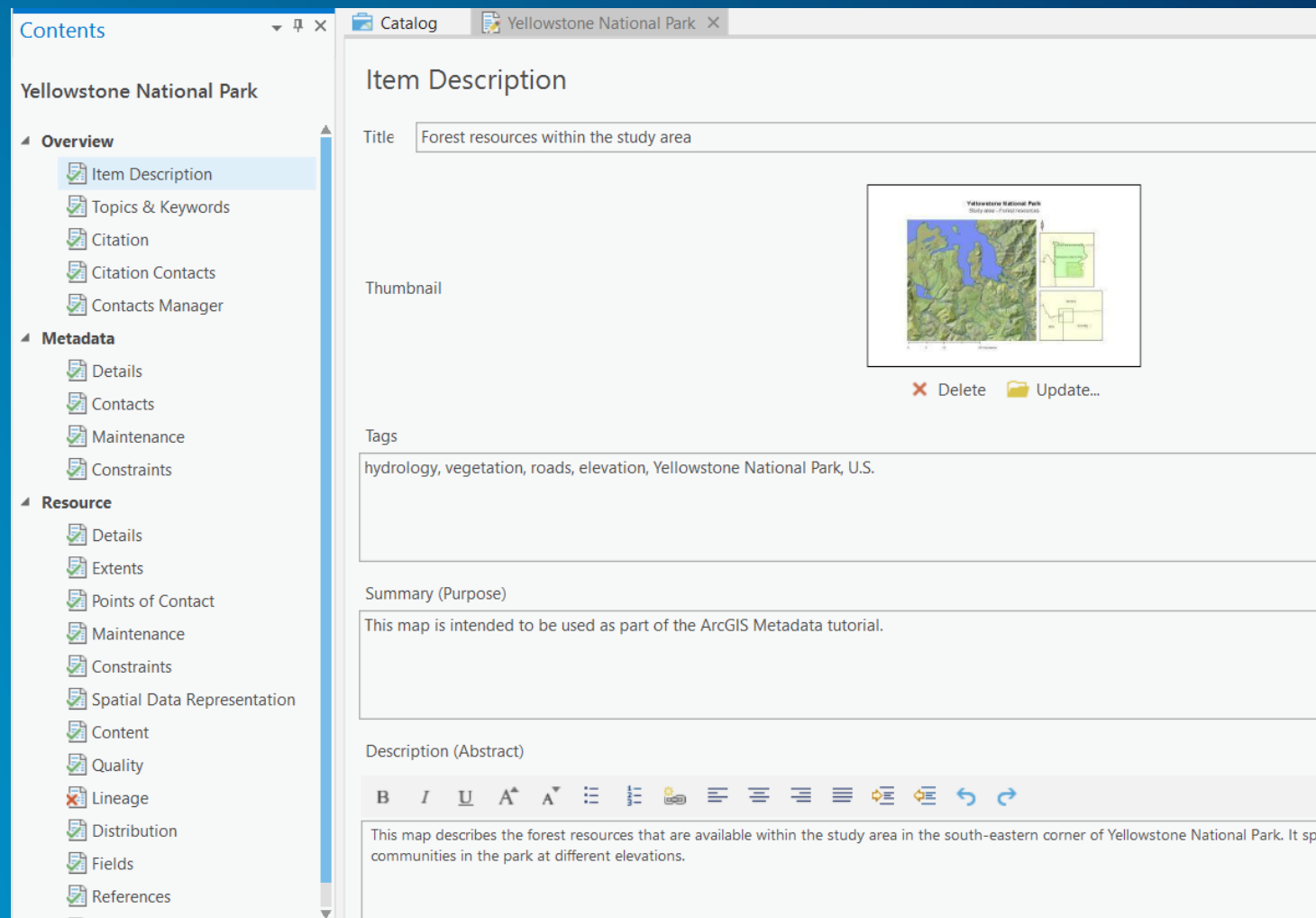




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- Parcel Management
- Dimensions
- Exploratory Spatial Data Analysis
- Spell Check
- ModelBuilder If-Then-Else Branching Logic
- **Metadata Enhancements**
- New Extensions



## Mid-term

- **Parcel Management** - The next generation of the parcel fabric will introduce 2D/3D editing capabilities and a simpler, more efficient approach for parcel maintenance across the platform.
- **Dimensions** - Create, manage, and edit dimensions in an updated format for the ArcGIS Platform
- **Exploratory Spatial Data Analysis** - Ability to create charts to explore spatial data for comparing distributions between datasets and/or “normal distributions” and examine data for the presence and direction of trends.
- **Spell Check** – Spell check for text throughout the application
- **ModelBuilder if-Then-Else Branching Logic** – Build logic into your models that test conditional statements to determine how a model should proceed.
- **Metadata Enhancements** – Support majority of metadata functionality
- **New Extensions** - Aviation: Charting

## Long-term

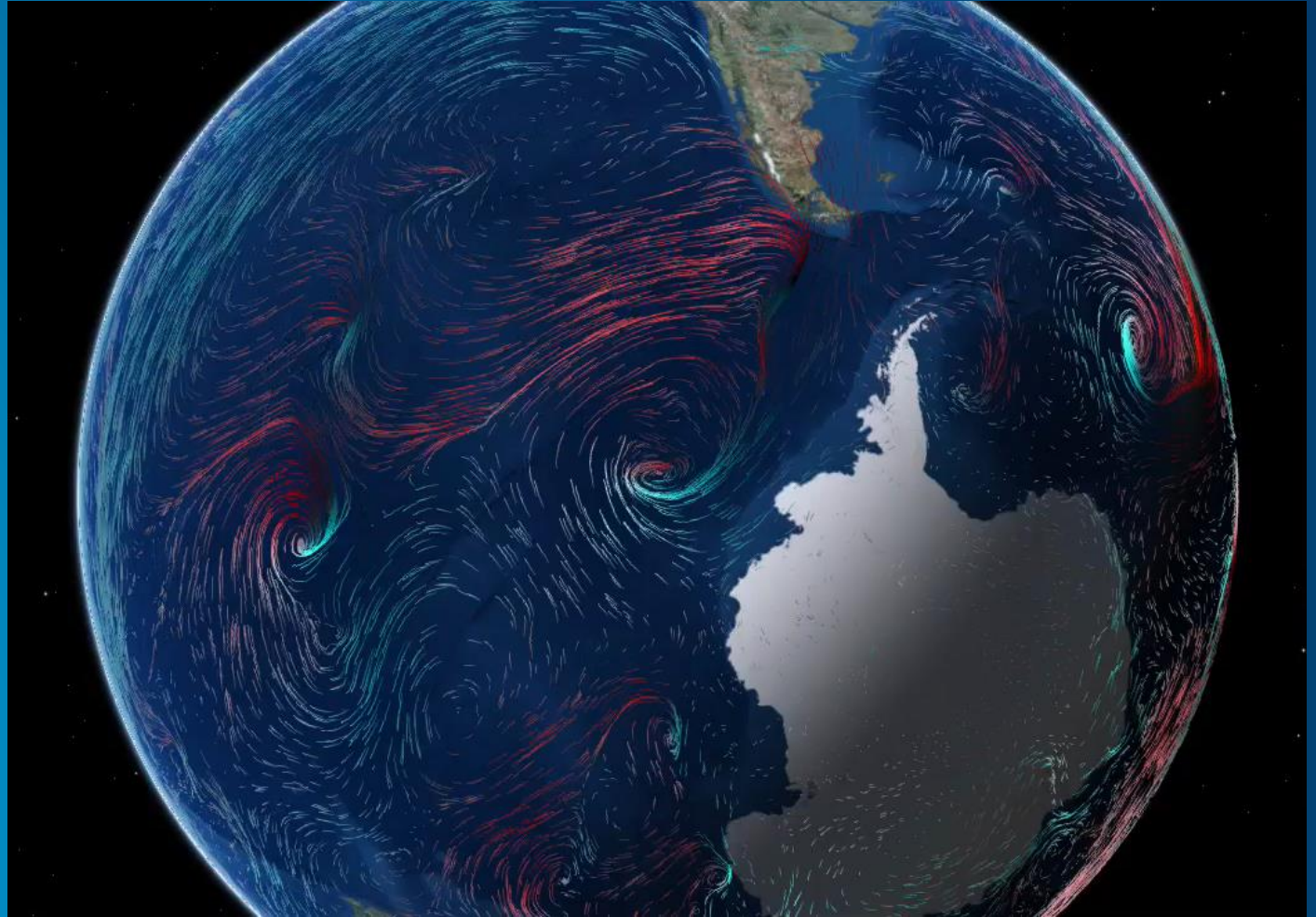
- **Animated Symbols** - Scientific temporal visualizations
- **Offset Printing** - For high quality printed map products
- **Presentations** - Create and share presentations
- **New Extensions:**

Maritime: Charting and Bathymetry  
Roads and Highways

# ArcGIS Pro Roadmap

## Long-term

- Animated Symbols
- Presentations
- Offset Printing
- ...





# ArcGIS Pro Industry Focused Extensions

2017

## New Extensions

Business Analyst

Image Analyst

Publisher

Aviation: Airports

Defense Mapping

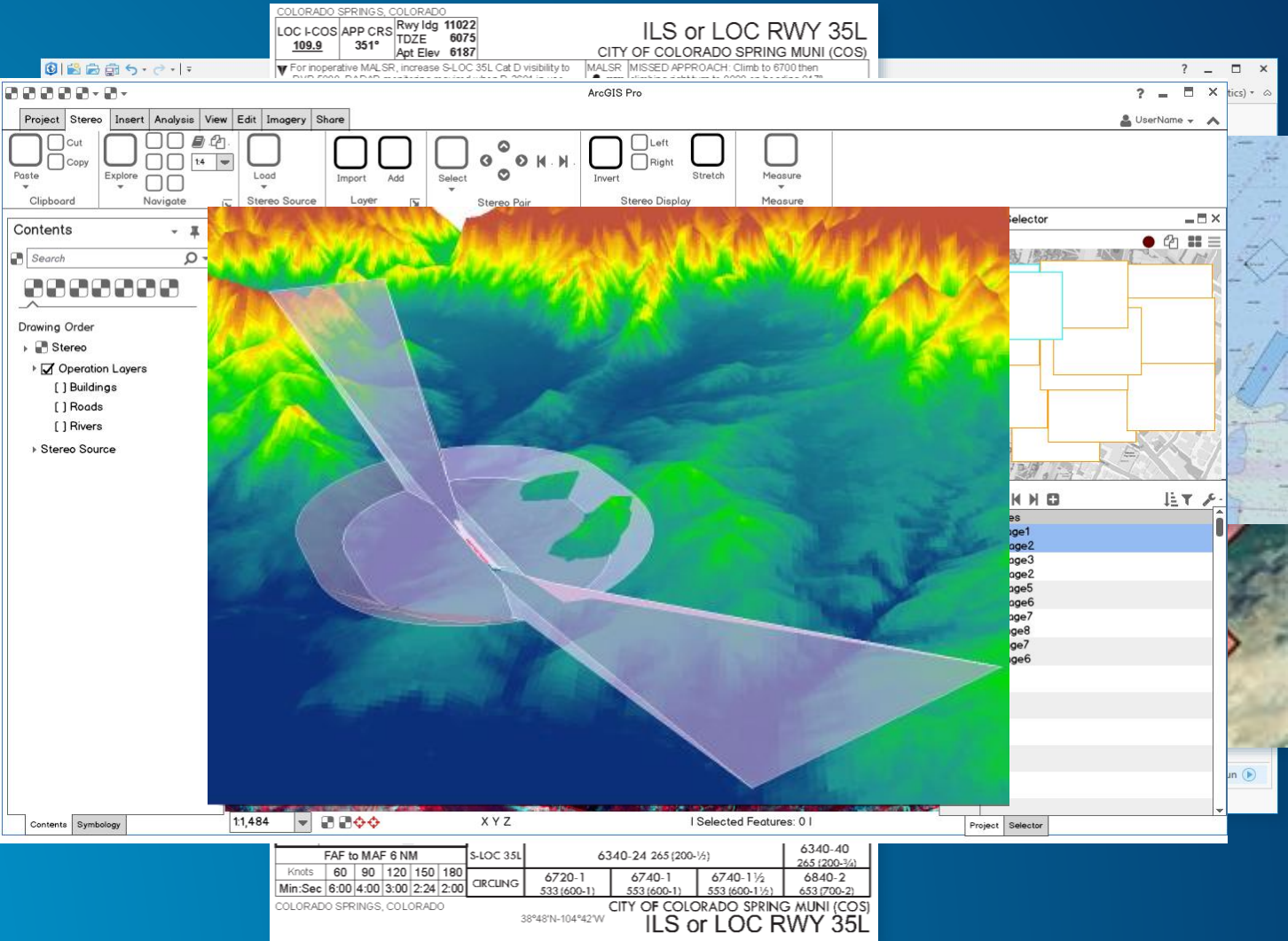
2018

Production Mapping

Aviation: Charting

Maritime: Bathymetry & Charting

Roads and Highways





# The Next Generation of Parcel Management

What is your added value from services?



- Service Oriented Architecture (REST API) → Pro, mobile, web apps
- Simple feature classes
- Pro is the premium client
- Efficient, easy to adopt, easy to use
- Built in quality management: detect errors → provide fixes
- Easy upgrade process from 'Parcel Fabric for ArcMap'
- More ...



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