

Getting Started with ArcGIS Pro SDK Add-Ins and Configurations

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Agenda

- Introduction – 5 minutes
- Add-In Demos – 10 minutes
- Solution Configurations – 5 minutes
- Configuration Demos – 10 minutes
- Q&A and wrap-up – 15 minutes



ArcGIS Pro

Home Get Started Help Tool Reference ArcPy SDK Community

Extend ArcGIS Pro with your own unique tools and workflows using the ArcGIS Pro SDK for Microsoft .NET.

Shortcuts

- API Reference
- Community samples
- Documentation
- FAQ
- Quick start
- Snippets
- Training
- Videos
- Blog posts

Installation

Install the Pro SDK easily from the Visual Studio Gallery.
Show me how >

Samples

Access community samples and resources on GitHub.
Visit the GitHub samples page >

Documentation

Access comprehensive SDK concept and quick start guides.
Concepts | API Reference

FAQ

Find answers to common Pro SDK questions.
Read the full list >

What's New

With ArcGIS Pro 2.0, the Pro SDK brings a number of updates:

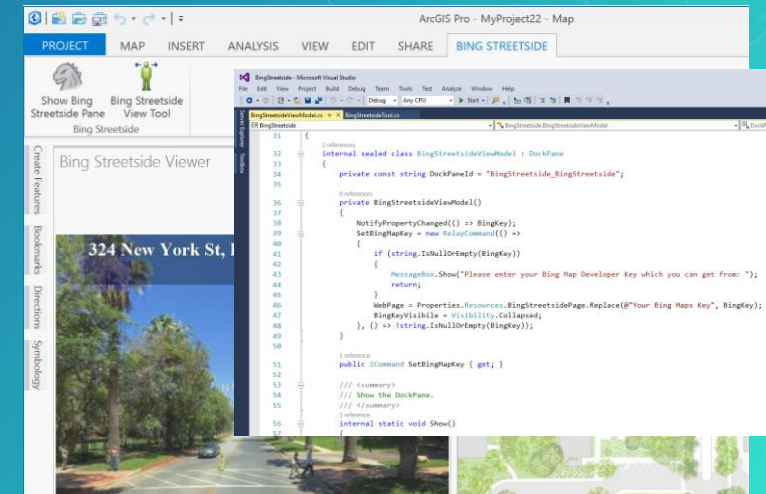
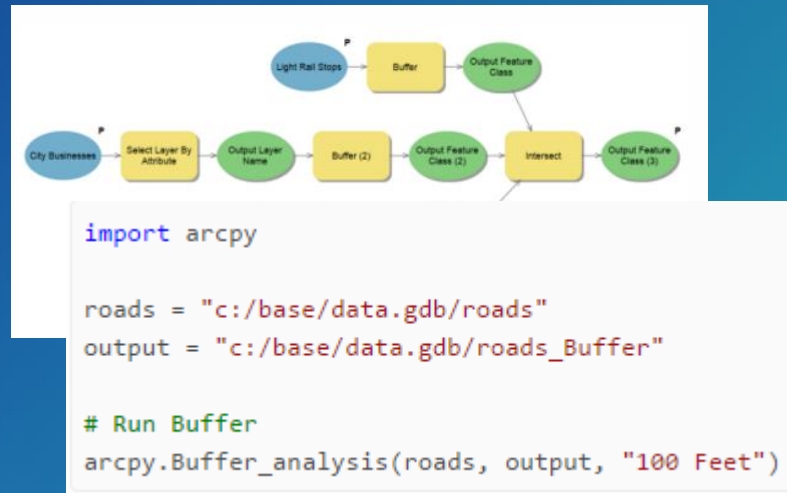
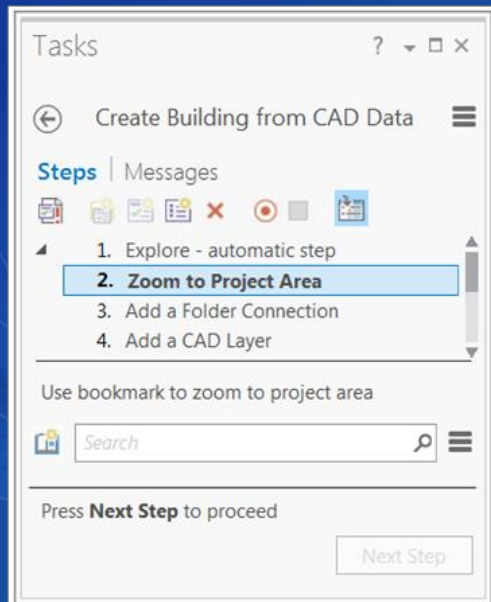
- API enhancements
- Visual Studio 2017 support
- New documentation and resources
- New code samples and guides

Extending ArcGIS Pro

Three ways to configure and extend Pro

Options:

- **Configure** UI through settings, and workflows through tasks
- **Automate** using geoprocessing and Python
- **Extend** with your own custom tools and solutions using the Pro SDK



ArcGIS Pro SDK for .NET

Build your own unique tools and workflows



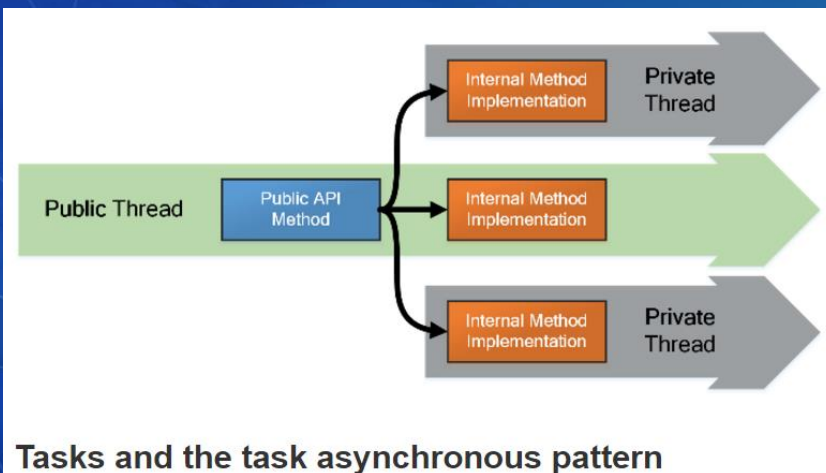
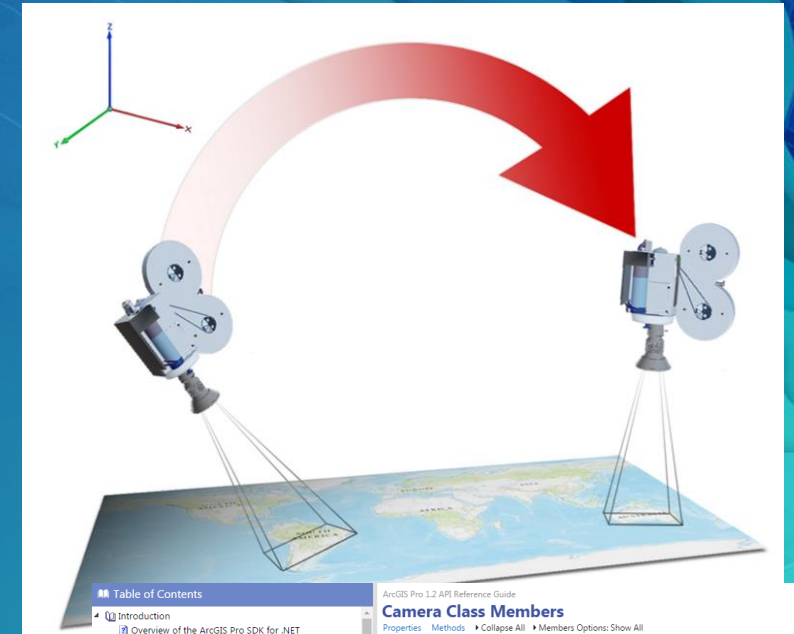
ArcGIS Pro SDK for Microsoft .NET

- Provides the ability to customize ArcGIS Pro
- Customize the Pro UI / UX with add-ins and configurations
- Microsoft .NET – develop in Visual Studio 2015 or 2017
- Releases are in sync with each ArcGIS Pro release



ArcGIS Pro SDK for Microsoft .NET

- Desktop Standards – WPF, XAML, MVVM, LINQ, TAP, etc.
- Modern, asynchronous development framework
- Templates and tools to streamline development
- Online guides, code samples and other resources
- Custom Editing, Map exploration, Data management, Raster management and much more!



Tasks and the task asynchronous pattern

C#	VB	Name
		ArcGIS Pro Module Add-in
		ArcGIS Pro Backstage Tab
		ArcGIS Pro Button
		ArcGIS Pro Button Palette
		ArcGIS Pro Combo Box
		ArcGIS Pro Construction Tool
		ArcGIS Pro Custom Control
		ArcGIS Pro Dockpane
		ArcGIS Pro Dockpane with Burger Button
		ArcGIS Pro Drop Handler
		ArcGIS Pro Embeddable Control
		ArcGIS Pro Gallery

ArcGIS.Core Assembly
ArcGIS.CoreHost Assembly
ArcGIS.Desktop.Catalog Assembly
ArcGIS.Desktop.Core Assembly
ArcGIS.Desktop.DataReviewer Assembly
ArcGIS.Desktop.Editing Assembly
ArcGIS.Desktop.Extensions Assembly
ArcGIS.Desktop.Framework Assembly
ArcGIS.Desktop.GeoProcessing Assembly
ArcGIS.Desktop.Layouts Assembly
ArcGIS.Desktop.Mapping Assembly
ArcGIS.Desktop.TaskAssistant Assembly
ArcGIS.Desktop.Workflow Assembly

ArcGIS Pro 1.2 API Reference Guide

Camera Class Members

Properties Methods Collapse All Members Options: Show All

ArcGIS.Desktop.Mapping Namespace : Camera Class

The following tables list the members exposed by Camera.

Public Constructors

Name	Description
Camera Constructor	Overloaded.

Public Properties

Name	Description
Heading	Gets or sets the Heading of the Camera, in degrees.
Pitch	Gets or sets the Pitch of the Camera, in degrees.
Roll	Gets or sets the Roll of the Camera, in degrees.
Scale	Gets or sets the Scale of the Camera, as a ratio.
SpatialReference	Gets or sets the Spatial Reference of the Camera.
Viewpoint	Gets or sets the Viewpoint of the Camera.
X	Gets or sets the X position of the Camera, in meters.
Y	Gets or sets the Y position of the Camera, in meters.
Z	Gets or sets the Z position of the Camera, in meters.

Public Methods

Name	Description
Equals	Overloaded.
GetHashCode	Serves as the default hash function.

See Also

Reference

Camera Class
ArcGIS.Desktop.Mapping Namespace

Pro SDK Add-Ins

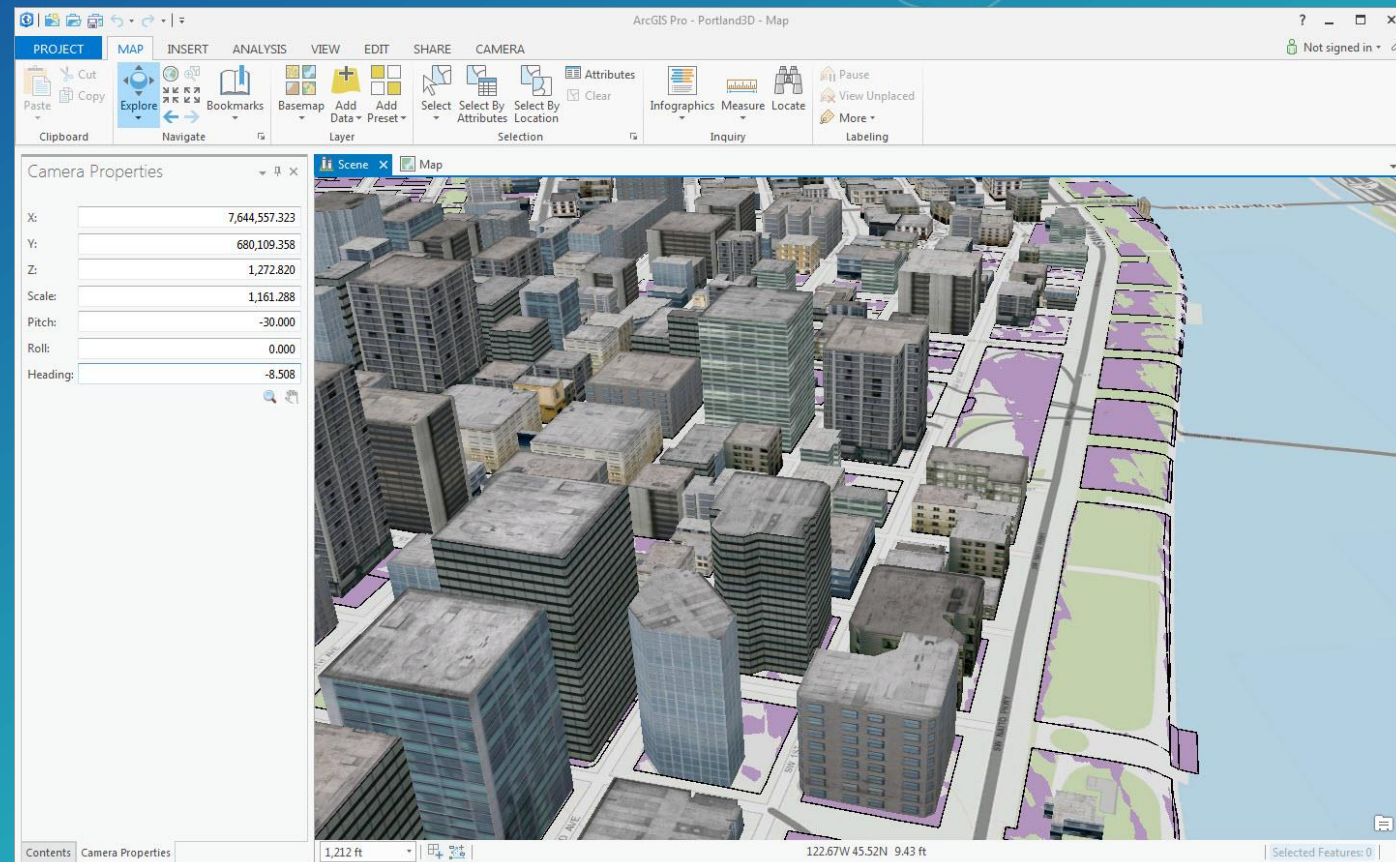
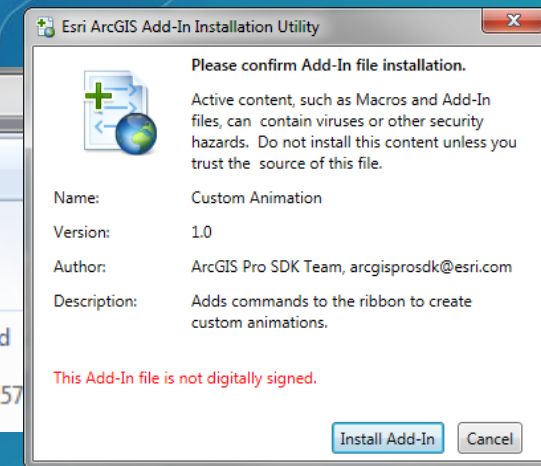
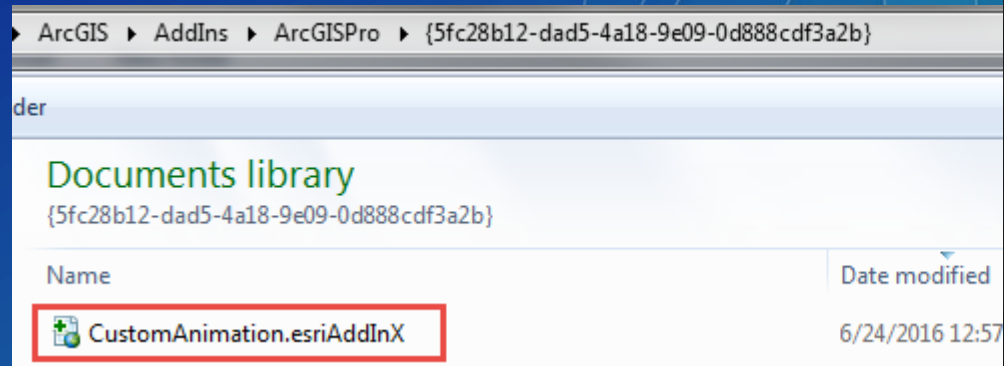
- Single zip file package
- Easy to share and distribute
- Can be secured

Sample add-in file contents

Name	Type
Images	File folder
Install	File folder
Config.daml	DAML File

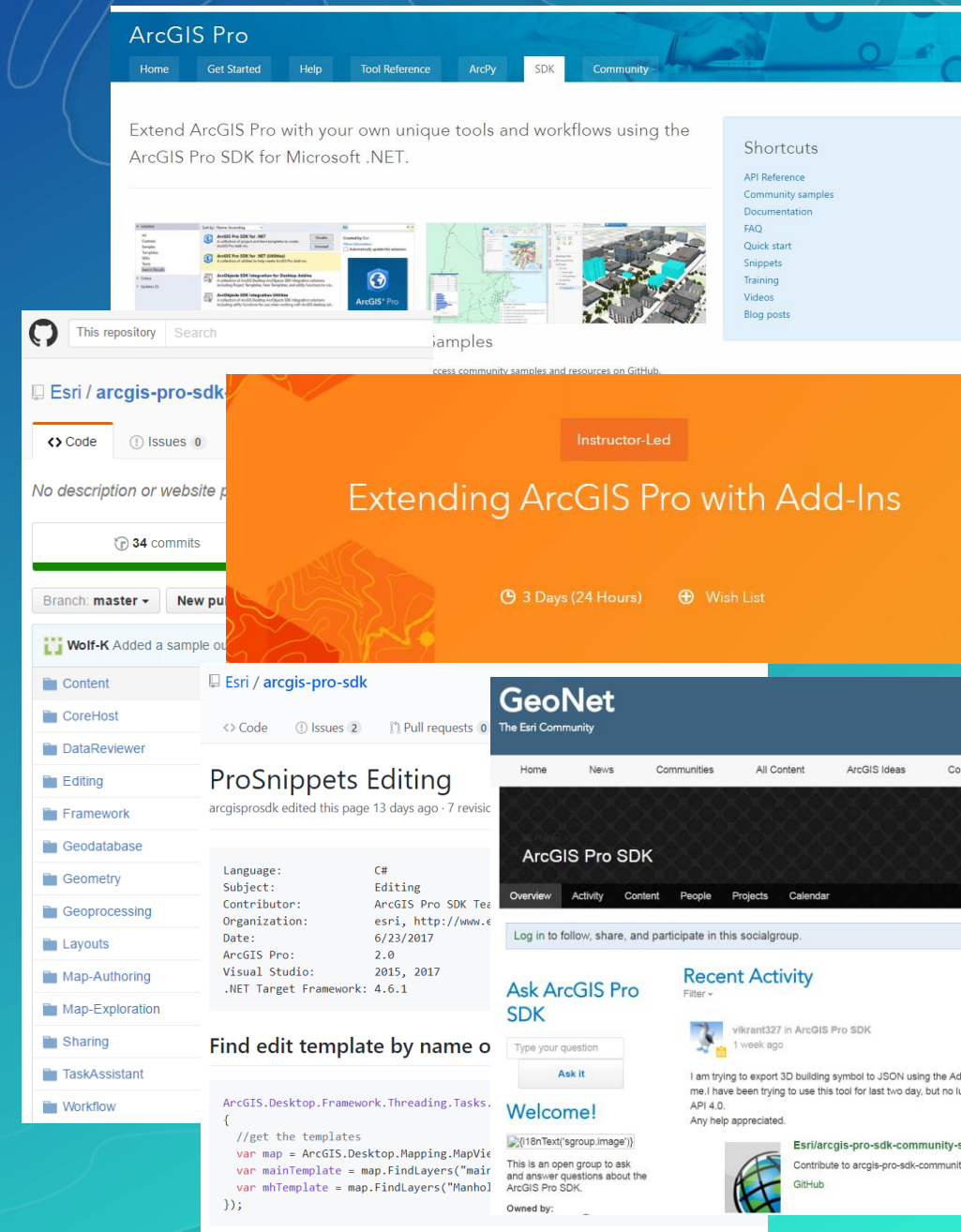
Sample contents of an install folder

Name	Type
CustomAnimation.dll	Application extension
CustomAnimation.dll.config	XML Configuration File
CustomAnimation.pdb	VisualStudio.pdb.12.0
CustomAnimation.xml	XML Document



Many Pro SDK Resources

- [SDK home page](#) – main resource page
- [Esri Training](#) – instructor-led Esri training course
- [Documentation Wiki](#) – primary documentation site with concept and guide docs, and much more
- [Community Samples](#) – ready to use code solutions categorized by functional area
- [Snippets](#) – code snippets by functional area
- [GeoNet Pro SDK Group](#) – developer community
- [API Reference](#) – full API reference
- [FAQ](#) – answers to common questions
- [Blog posts](#) – focused on the Pro SDK




Pro SDK Training


- [Extending ArcGIS Pro with Add-Ins](#) – Esri Instructor-led training course on the Pro SDK
- Great way to get a comprehensive introduction
- Online offerings – very interactive and productive
- [Esri.com/training](https://esri.com/training)




Goals




Develop, test, and deploy ArcGIS Pro SDK customizations using the add-in extensibility framework.



Customize the ArcGIS Pro ribbon and apply key programming patterns.



Create custom tools to interact with maps and scenes and select or edit geodatabase features.



Create dock panes and other controls to work with projects, portals, items, views, layers, symbols, and renderers.

[Download Table of Contents](#)

Upcoming Classes [Get Assistance](#)

Date & Time	Location	
August 21 - 23, 2017 8:30 AM - 5:00 PM	Broomfield, CO	Register
October 4 - 6, 2017 8:30 AM - 5:00 PM Mountain Daylight Time	Online	Register
October 23 - 25, 2017 8:30 AM - 5:00 PM	Olympia, WA	Register
October 31 - November 2, 2017 8:30 AM - 5:00 PM Mountain Daylight Time	Online	Register

Suggested Skills

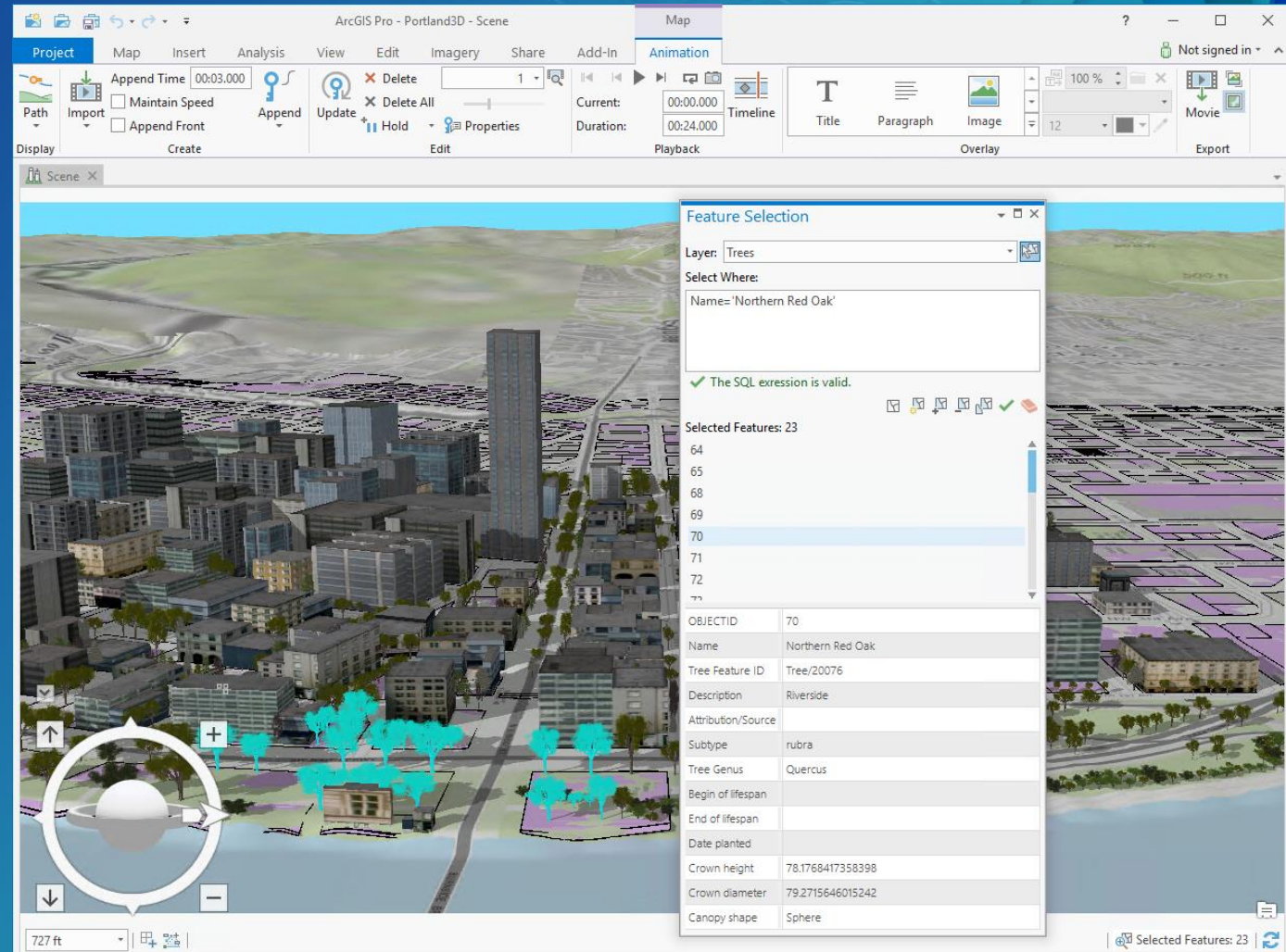
C# or Visual Basic.NET programming skills and completion of ArcGIS Pro: Essential Workflows or equivalent knowledge are required.

Software

ArcGIS Pro SDK 2.0

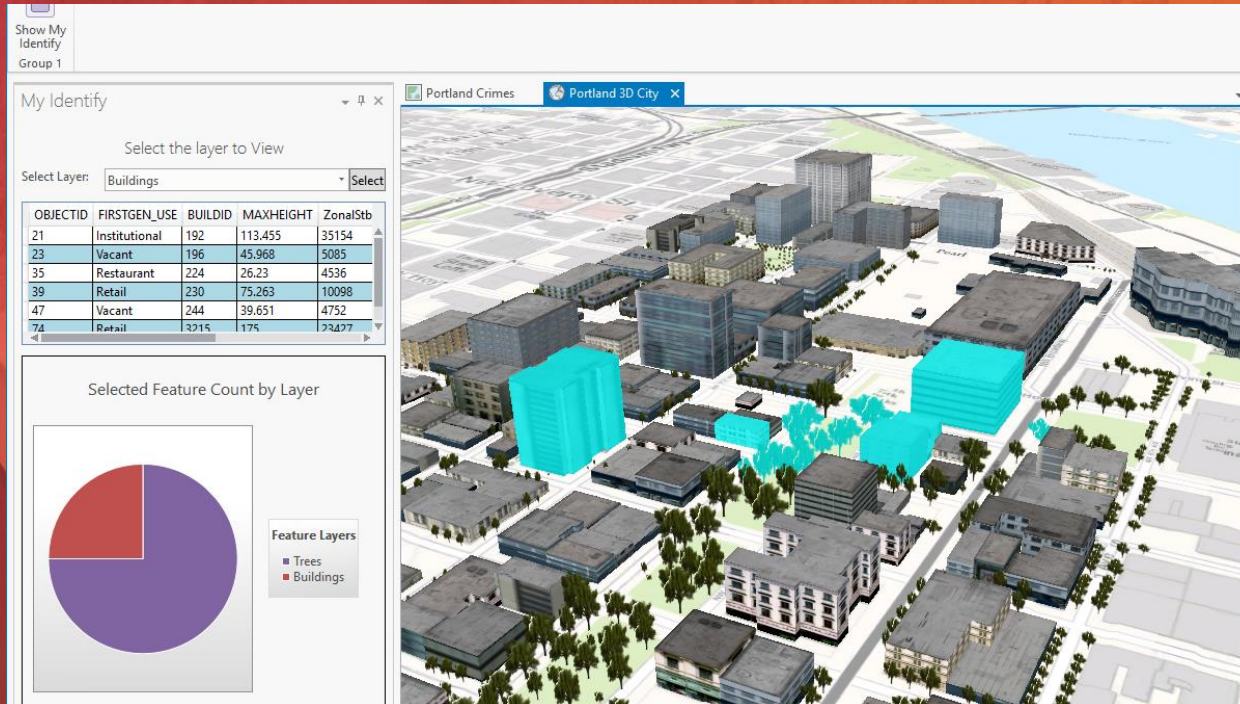
New:

- API enhancements
- Styling updates
- Visual Studio 2017 Support
- New code samples and guides



Add-In Demos

- Building your first add-in
- Creating a feature construction tool
- Online resources



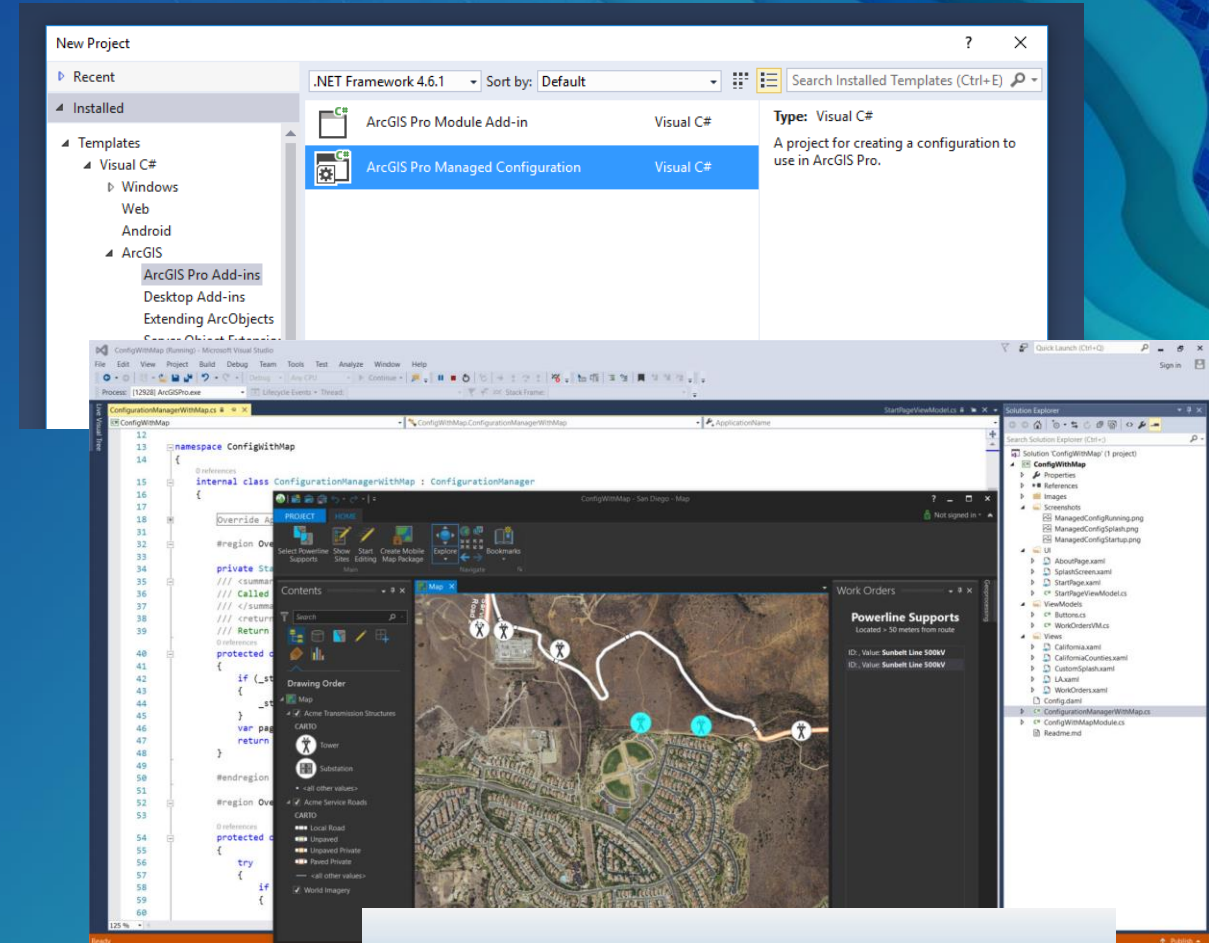
Solution Configurations

Create a custom, branded experience with ArcGIS Pro



Solution Configurations

- Configurations
 - Another add-in pattern / template
 - Solution branding of the Pro UI
 - Conditional or role-based customization
- Documentation and Resources
 - [ProConcepts](#)
 - [ProGuide](#)
 - [ConfigurationManager](#) API reference
 - Intro blog posts and videos



Acme Electric

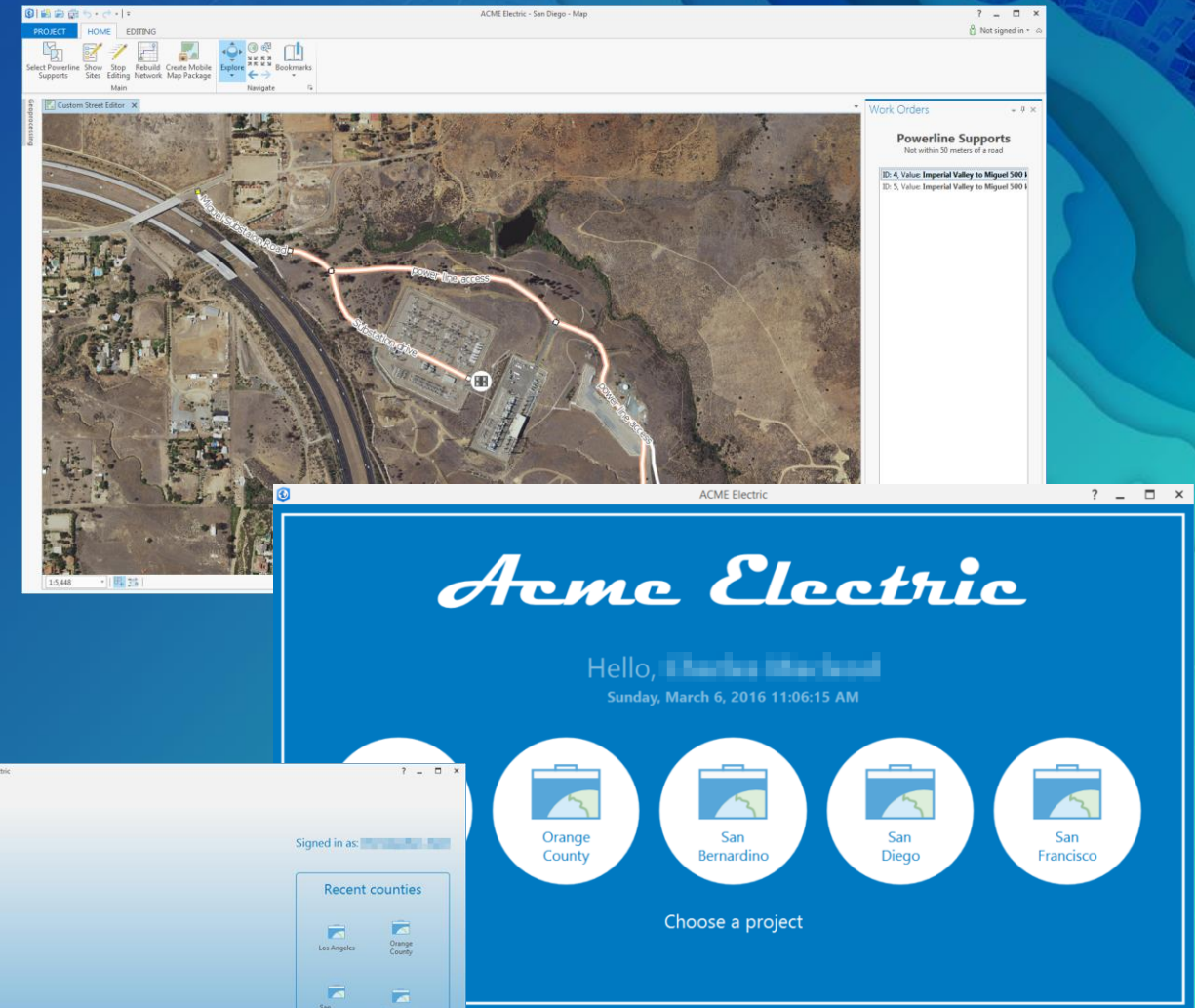
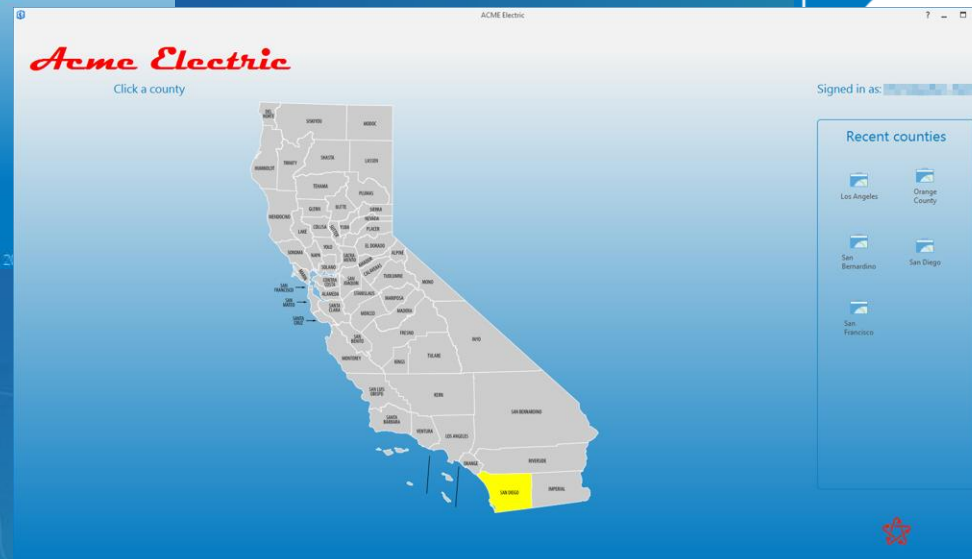
powered by:

ArcGIS® Pro

Loading

Configurations

- Customized:
 - Splash screen
 - Start up page view
 - UI based on a user role / workflow



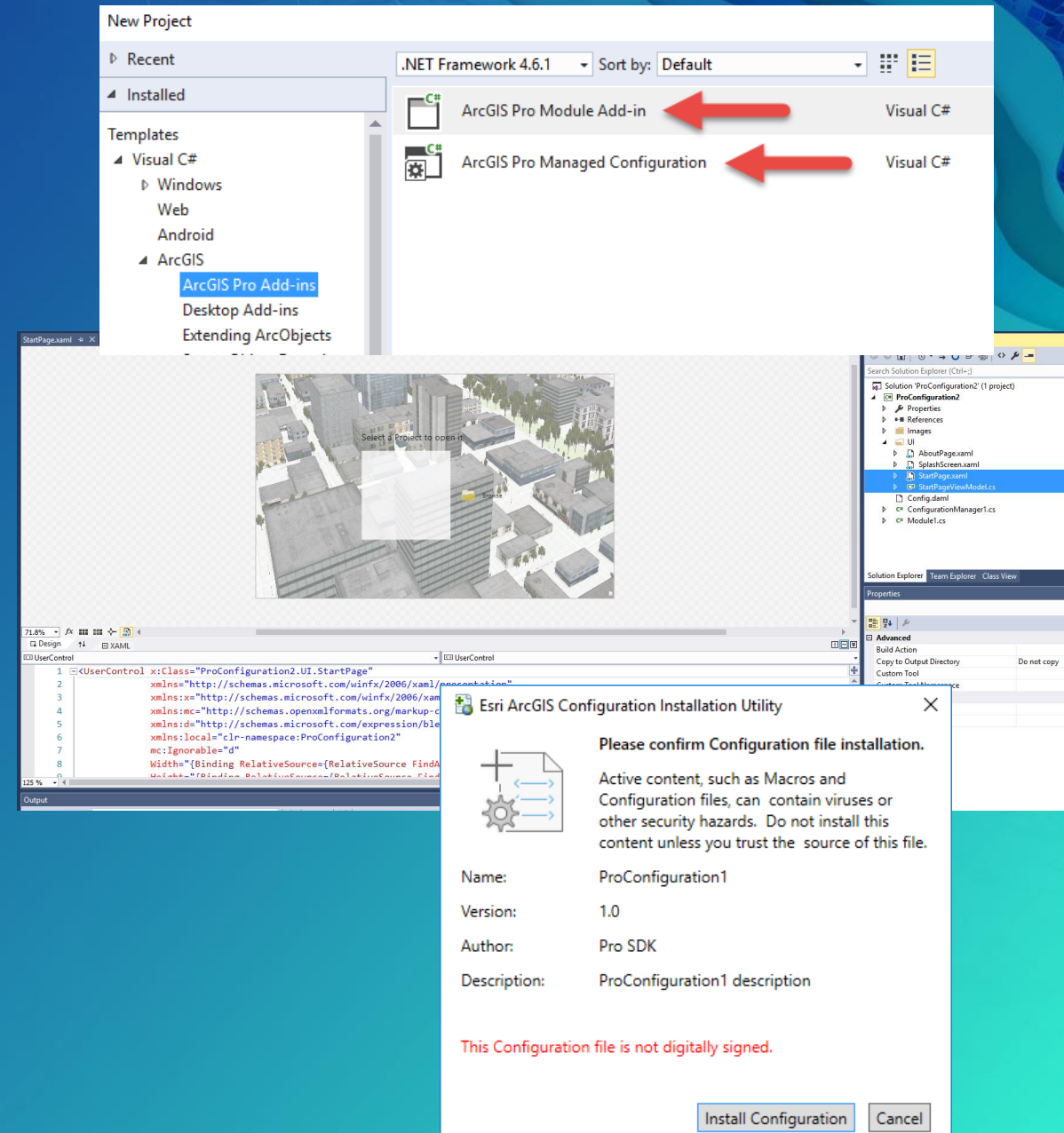
Pro SDK Add-ins and Configurations

• Similarities

- Built from SDK project templates
- Compiled and deployed with the standard double-click installation
- Both allow for customization of the UI

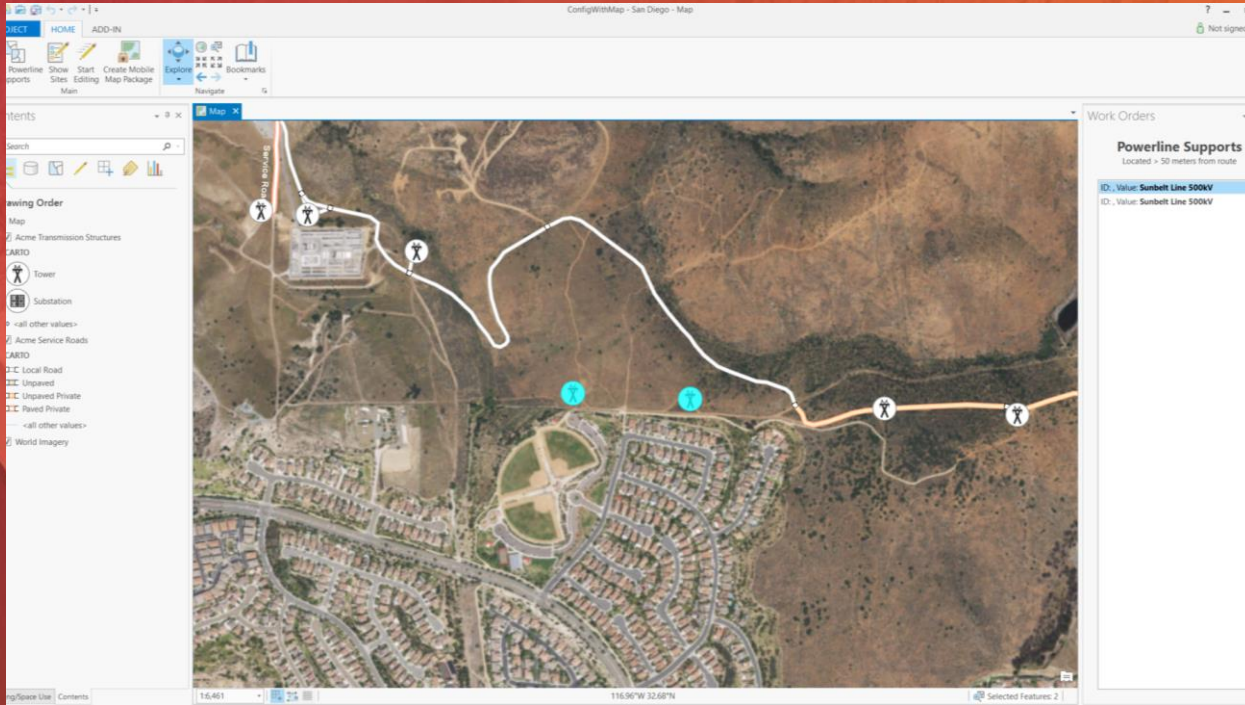
• Differences

- Add-in
 - Multiple add-ins per Pro session
- Configuration
 - One configuration per Pro session – intended for larger, focused solution experience
 - Custom start-up experience – splash screen and startup page, conditional start-up logic, etc.



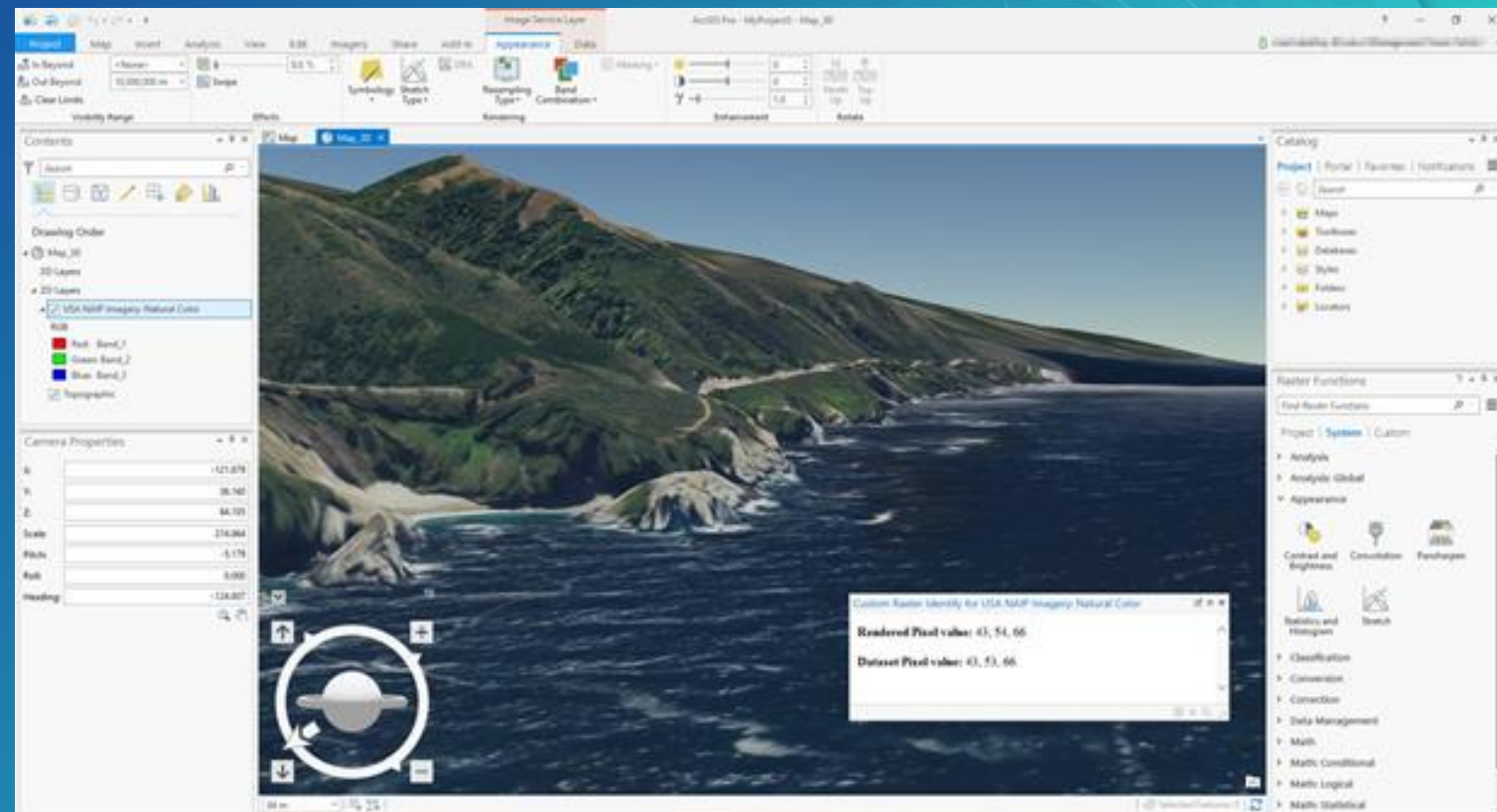
Configuration Demos

- Configuration project template
- Online Resources
- ConfigWithMap sample
- ConfigWithStartWizard sample



Takeaways

- The Pro SDK is ready for you to extend Pro with custom tools and solutions
- Extensive learning resources
- Start working with Pro SDK 2.0
- **We value your feedback!**



Pro SDK Technical Workshops – Remaining at UC

ArcGIS Pro SDK for .NET: UI Design and MVVM

- Wednesday, July 12, 8:30 am – 9:45 am. Location: SDCC – Room 33 A

ArcGIS Pro SDK for .NET: Configurations

- Wednesday, July 12, 1:30 pm – 2:45 pm. Location: SDCC – Room 32 A

Esri Developer Summit Europe

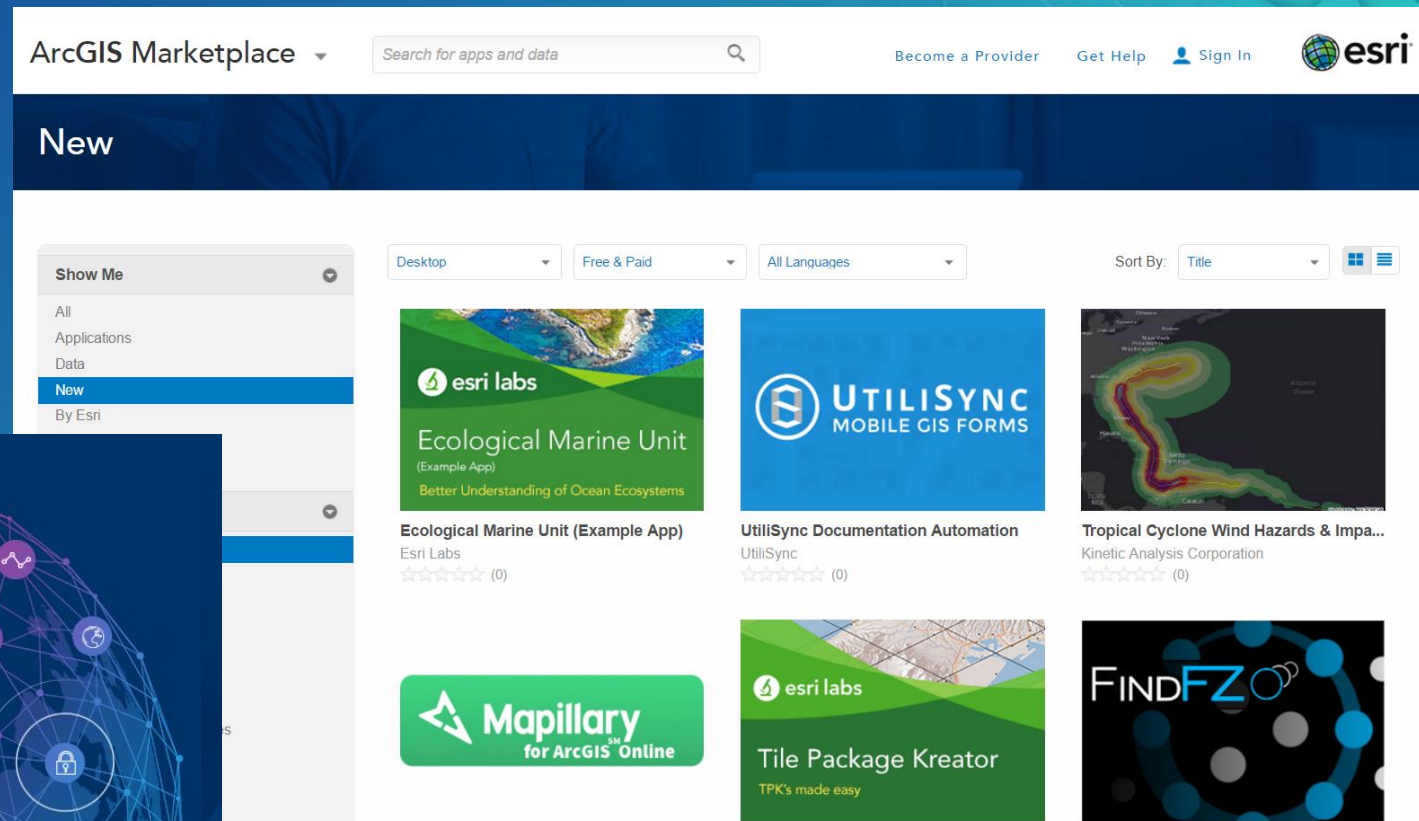
October 24-26 Berlin Congress Center Germany

- Pre-Summit Hands-On Training
 - Introduction to the ArcGIS Python API
 - Introduction to the ArcGIS Pro SDK for .NET
 - Introduction to the ArcGIS API for JavaScript
 - ArcGIS Developer Workshop for Esri Distributors and Esri Partners
- Technical Sessions
 - Over 60 sessions on ArcGIS Runtime, Enterprise, Online, Python, JavaScript, Desktop, and Pro
- User Presentations
- Speedgeeking
- Exhibit and Networking Opportunities for Partners

ArcGIS Marketplace and Pro Add-Ins

A new way to get your Pro Add-Ins into the Marketplace

- Pro add-in sales directly from the Marketplace
- Contact your partner manager for next steps
- Visit Marketplace Area in Showcase



ArcGIS Ideas

- Visit ideas.arcgis.com with your ArcGIS Pro ideas:
 - Vote
 - Comment
 - Submit new ideas
- The ArcGIS Pro team wants your feedback!
 - Regular review
 - Your use case matters
 - Your ideas can result in new features for everyone

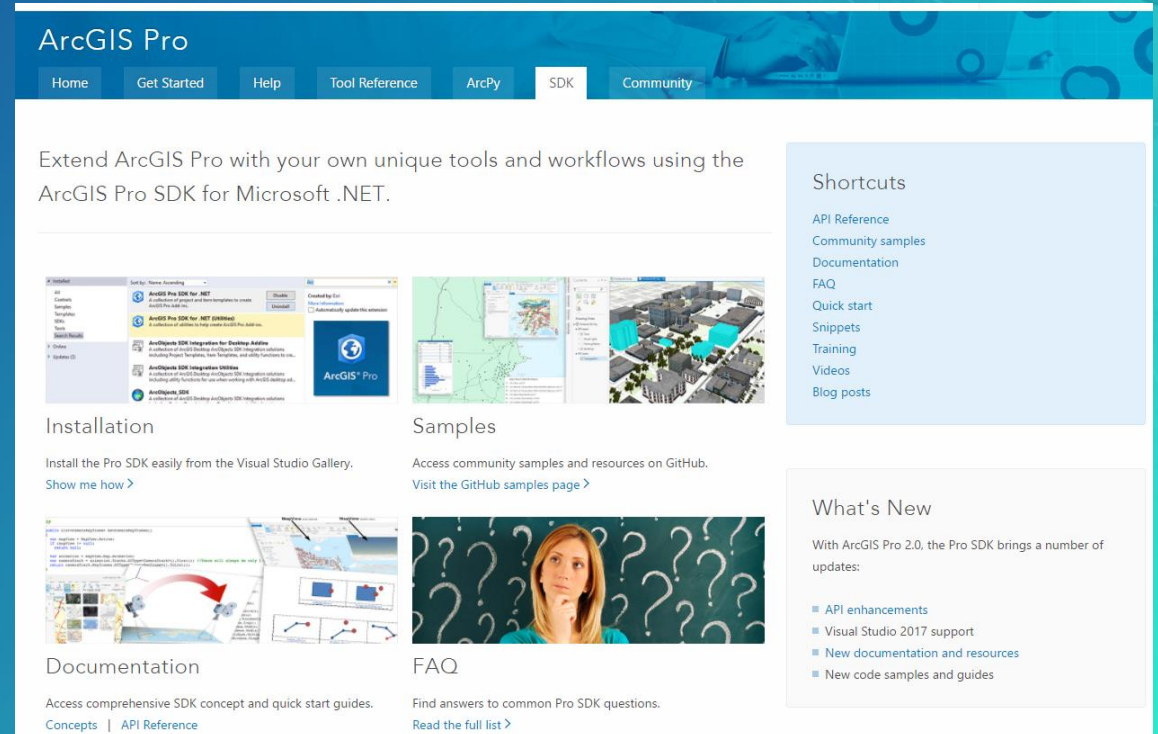
Put your
Ideas in Motion



Visit the ArcGIS Ideas space on GeoNet

For Questions and Follow-up

- Come by the ArcGIS Pro Area in the Showcase
- SDK tab on the ArcGIS Pro main page:
 - pro.arcgis.com
- Pro SDK feedback – czent@esri.com



The screenshot shows the ArcGIS Pro SDK main page. At the top is a navigation bar with tabs: Home, Get Started, Help, Tool Reference, ArcPy, SDK (selected), and Community. Below the navigation bar is a main heading: "Extend ArcGIS Pro with your own unique tools and workflows using the ArcGIS Pro SDK for Microsoft .NET." To the right of this heading is a "Shortcuts" sidebar with links: API Reference, Community samples, Documentation, FAQ, Quick start, Snippets, Training, Videos, and Blog posts. The main content area is divided into four sections: "Installation" (with a "Show me how" link), "Samples" (with a "Visit the GitHub samples page" link), "Documentation" (with links to "Concepts" and "API Reference"), and "FAQ" (with a "Read the full list" link). There is also a "What's New" section on the right side of the main content area, which mentions updates for ArcGIS Pro 2.0, including API enhancements, Visual Studio 2017 support, new documentation and resources, and new code samples and guides.

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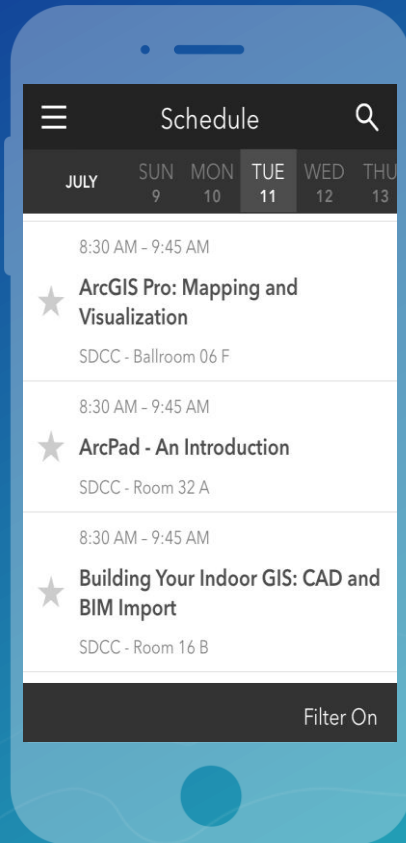
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Please Take Our Survey on the Esri Events App!

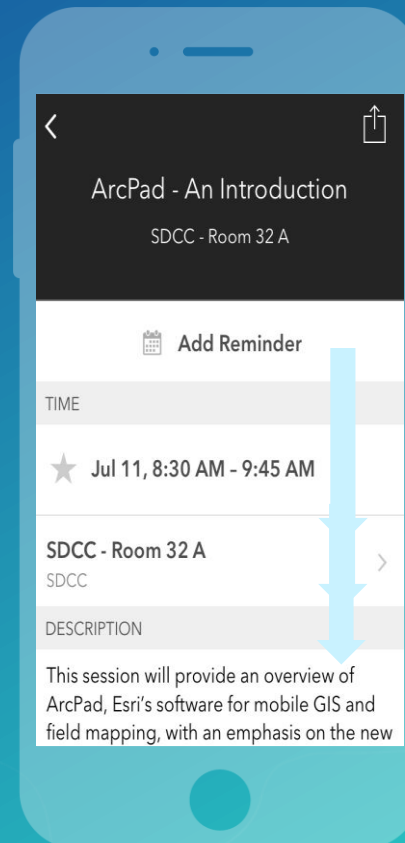
Download the Esri Events app and find your event



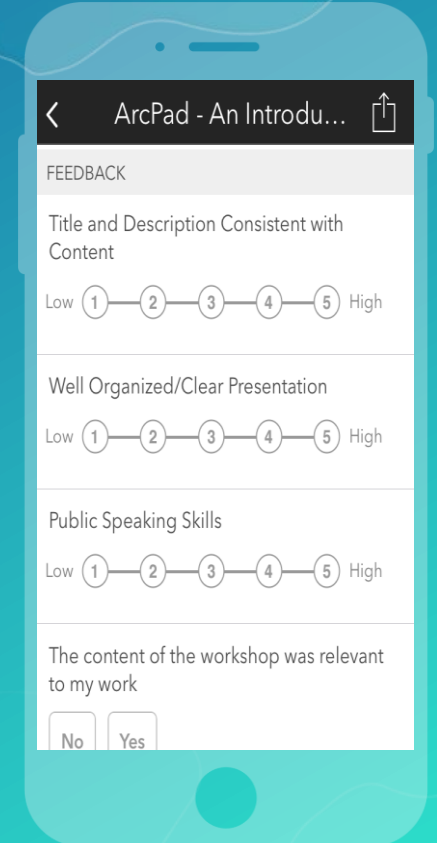
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"





Thank you!

Questions?



esri

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SCIENCE
OF
WHERE