UC



# Using the Power of ArcGIS Enterprise in Your ArcGIS Pro Analysis Work

**Drew Flater** 

## **Analysis in ArcGIS Pro**

Pro is a powerful desktop GIS, with hundreds of tools for performing spatial analysis, 3D analysis, network analysis, statistical analysis, in 2D, 3D, and 4D

Pro is also a premium client of the ArcGIS Platform

**Incorporates the Web GIS model of ArcGIS Online and ArcGIS Enterprise** 

Pro is at its best when connected to Web GIS, allowing you to integrate web capabilities into your desktop work

Layers from a portal (including Living Atlas)

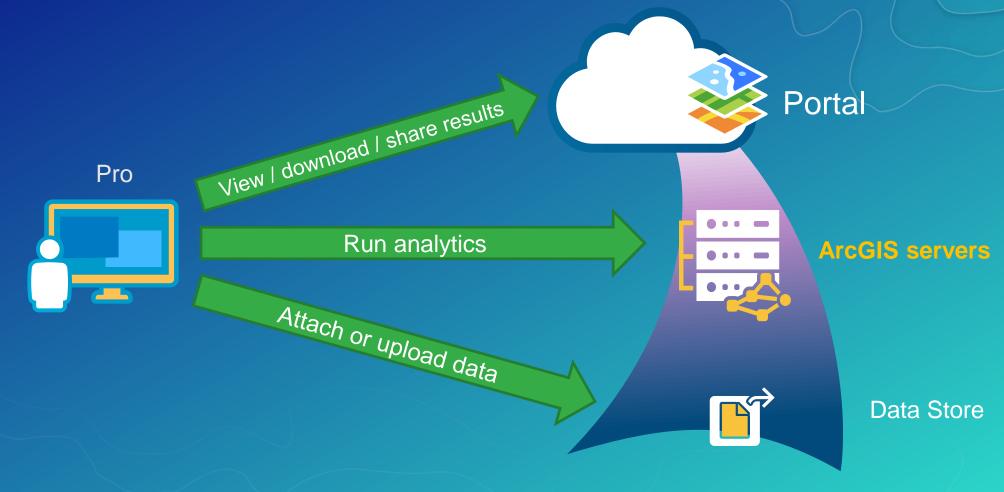
**Analysis tools** 

**Sharing results is easier** 



## **Enterprise Analysis Tools in Pro**

Extend your desktop with Enterprise



## **Enterprise Analysis Tools**

Enterprise or Portal analysis tools are those that run on your ArcGIS servers

Have similar capabilities compared to desktop geoprocessing tools

Input and output data is stored as items in portal (creates backend services)

Can be run from various clients

Pro, as geoprocessing tools

**Browser - Portal Web Map Viewer, Perform Analysis** 

**REST API (geoprocessing services)** 

**Includes Standard Feature Tools, GeoAnalytics Tools, and Raster Analysis Tools** 



#### **Standard Feature Tools**

Contains tools for performing spatial analysis on feature data in your ArcGIS Enterprise

Tools to analyze patterns, manage, overlay, and summarize data, and create buffers

Run on a single server machine and are optimal for your standard sized

feature services

**Output layers in My Contents** 



## **GeoAnalytics Tools**

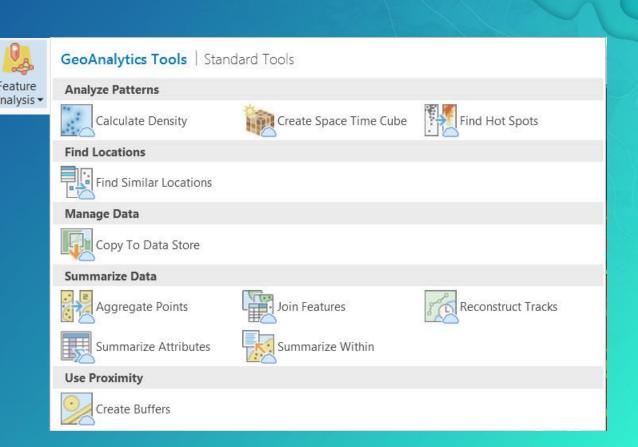
Spatiotemporal analysis tools that can be used with standard feature data or with feature and tabular data that is too big for a single desktop machine, normally stored in a big data file share

Distributed processing using Spark on cluster of server nodes

Includes both spatial (location) and temporal (time) analysis

Output to a spatiotemporal big data store or relational data store

Requires GeoAnalytics Server



## **Raster Analysis Tools**

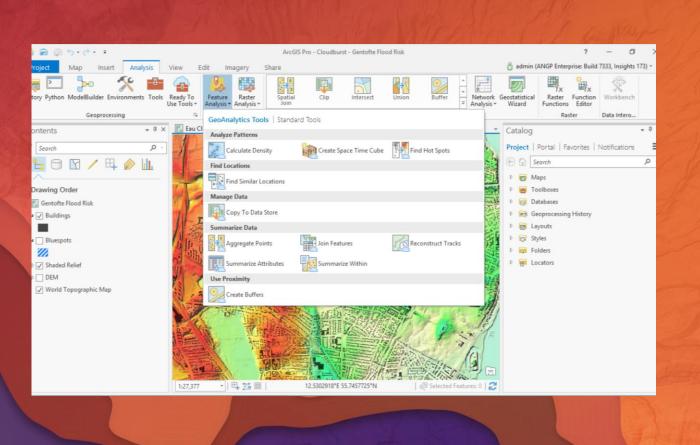
Enabling massive distributed processing and analysis of imagery and rasters

Leverages distributed processing

**Capability of Image Server** 

A preconfigured set of tools; additionally supports custom raster function chains uploaded to image server





## Demo

Using Enterprise tools in Pro

## When should I use Desktop vs. Enterprise tools?

Use Desktop tools if you need everything but the kitchen sink ©

Use Desktop tools if your data is standard-sized and in a local format or SDE database

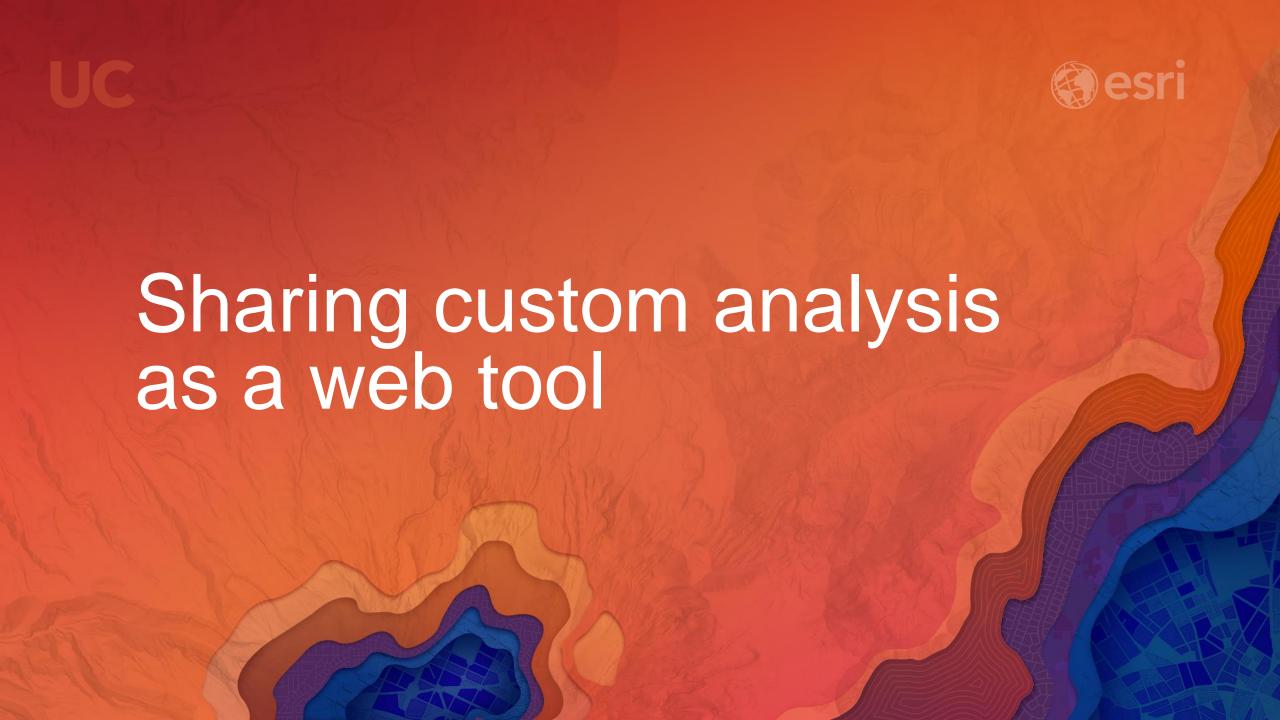
Can still use this data with Enterprise tools, but it needs either manual or automatic upload to servers first

Use Enterprise tools if you want the analysis to use server resources instead of burning out your desktop

Use Enterprise tools if you want analysis results to automatically create portal items that your organization can access from a variety of clients (namely browser)

Use GeoAnalytics tools if your data is so large it cannot be mapped (hundreds of millions to billions), it is split into multiple files, or is in a big data file share

Use GeoAnalytics tools if time-stepping, binning, or temporal relationships are fundamental to the analysis



#### Web Tools

Web tools allow you to share your analysis with others in your organization

Any tool, including custom model and script tools, can be shared as a web tool

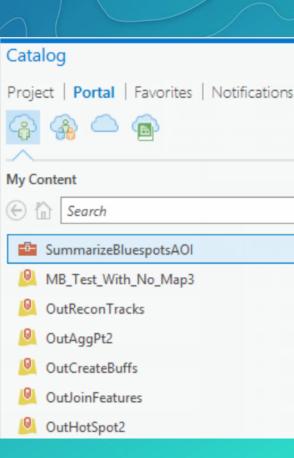
Uploads the tool and anything it needs to successfully run to a federated ArcGIS server

Creates a web tool item in your portal, and starts a geoprocessing service on the server

Web tools take your tradecraft and analysis expertise and make it easy for others to use

From a variety of clients including Pro, web apps, and the Portal Web Map Viewer\*

\*coming soon to ArcGIS Enterprise 10.6





### Ready to use tools

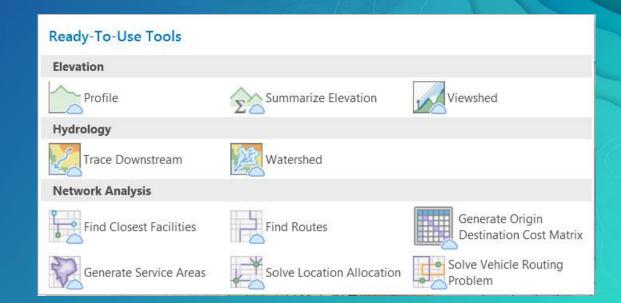
**ArcGIS Online** 

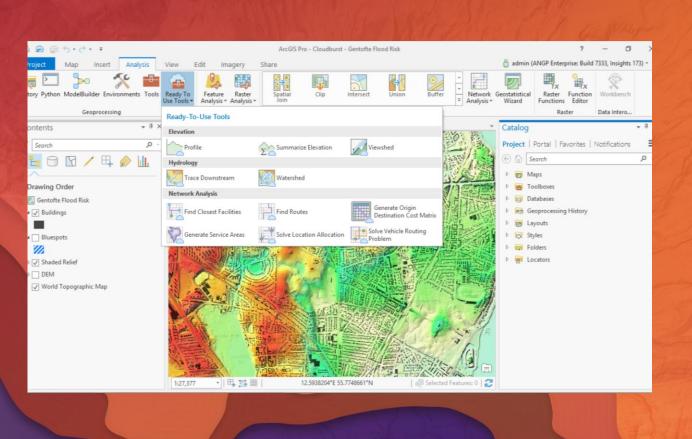
Analytical operations hosted by ArcGIS Online, using Esri-curated elevation, hydrologic, and street network data

Simply provide a few basic inputs

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

Jump start your analysis, as no data preparation or extension license is required





## Demo

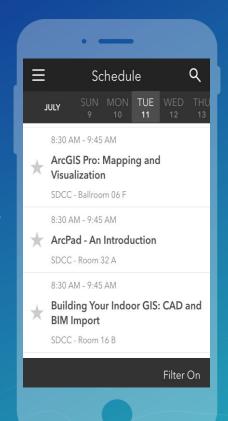
Ready To Use Tools in Pro

### Please Take Our Survey on the Esri Events App!

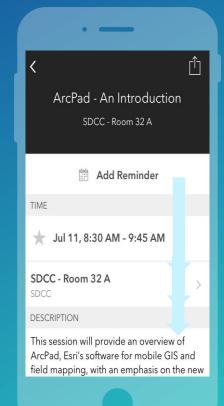
#### Download the Esri Events app and find your event



## Select the session you attended



## Scroll down to find the survey



## Complete Answers and Select "Submit"

