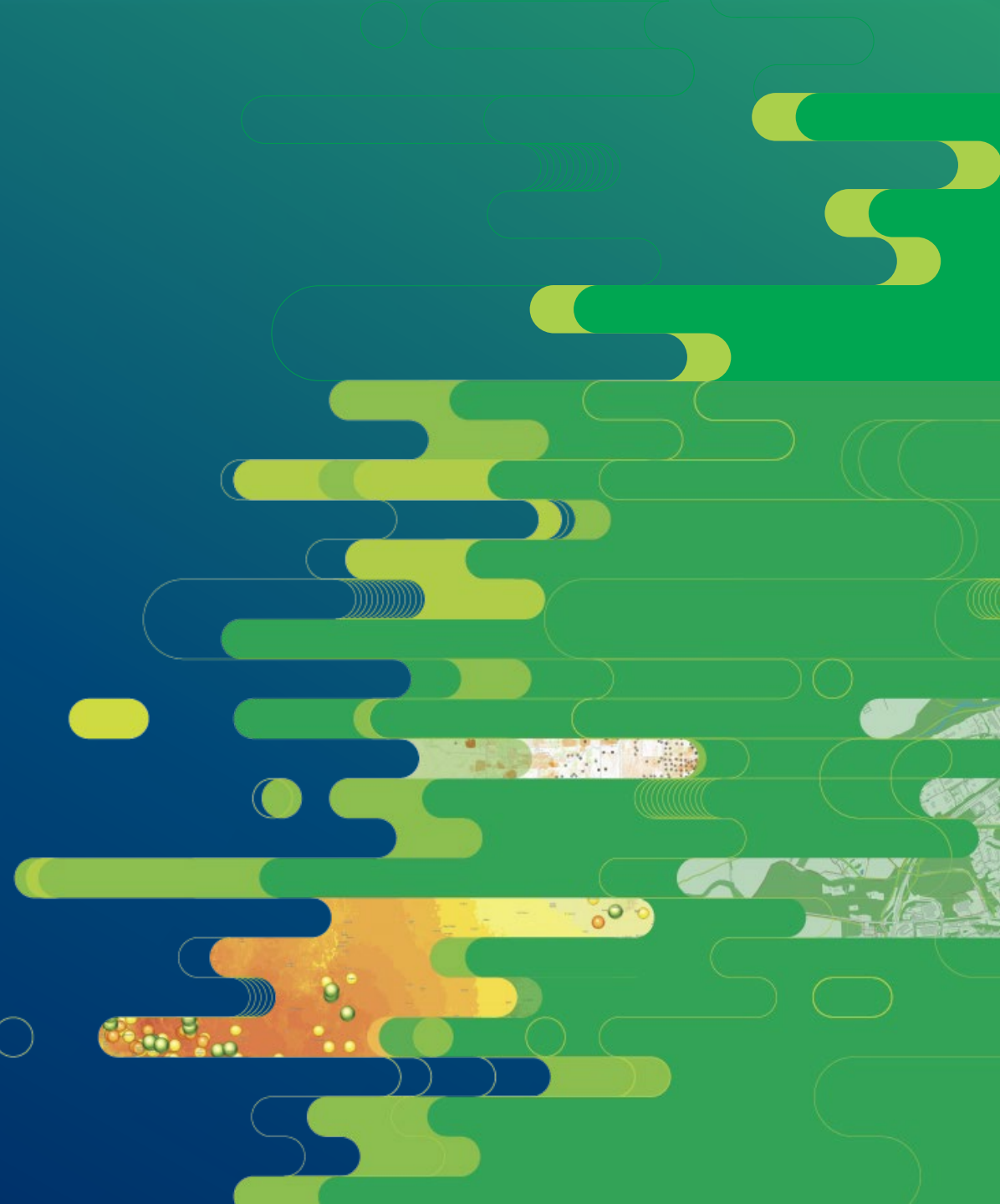
ArcGIS Pro: What's New and The Road Ahead

Kory Kramer | ArcGIS Pro Product Manager

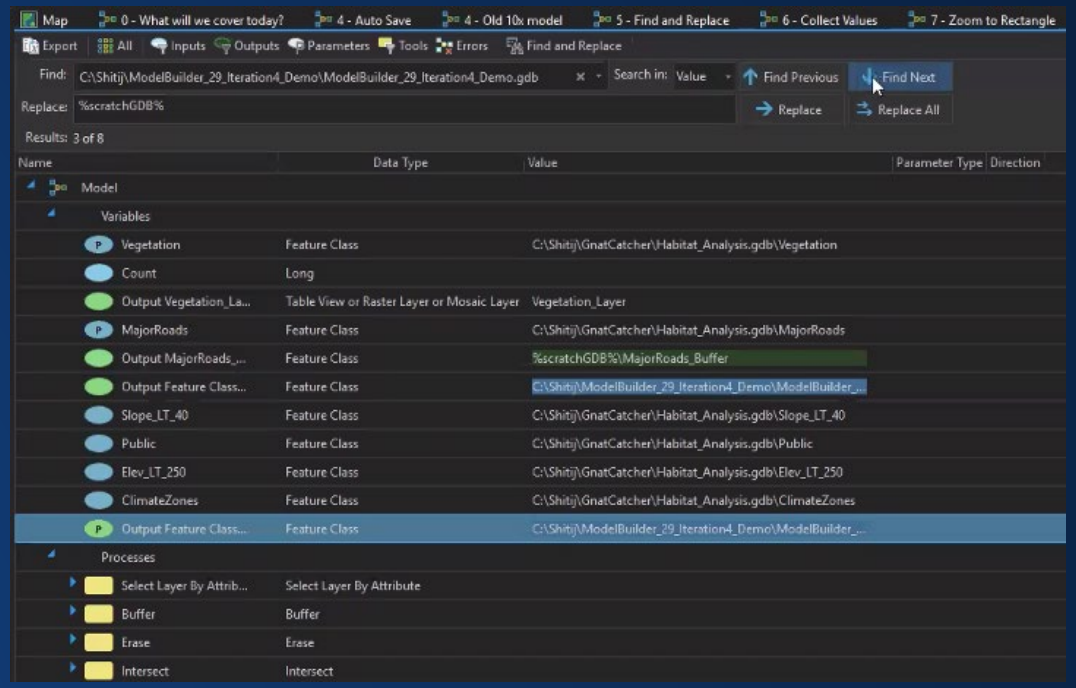
ENERGY RESOURCES GIS CONFERENCE 2022

ArcGIS Pro 2.9 Highlights



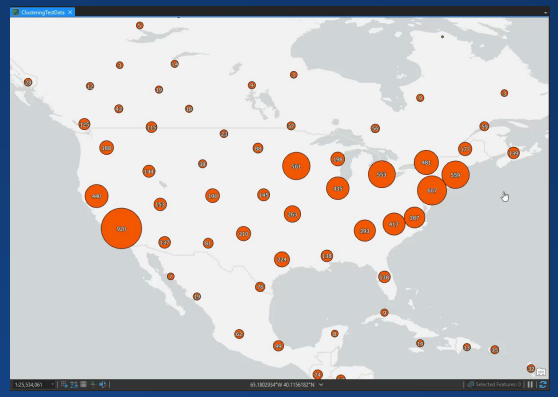
Performance and Productivity Enhancements

- Application
- CAD/BIM
- Geodatabase
- Sharing
- Geoprocessing
- Annotation/Labeling
- Content Management



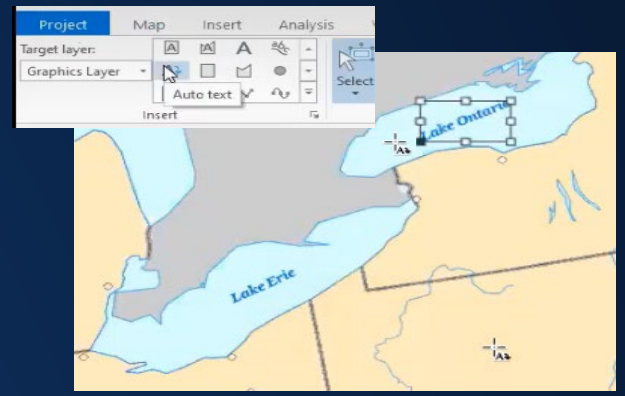
Model Builder Find & Replace

ArcGIS Pro 2.9 Highlights

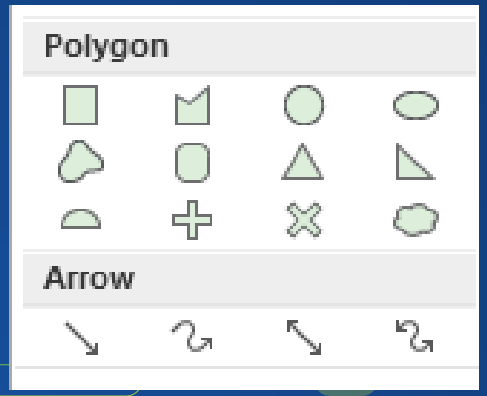


Dynamic Feature Clustering

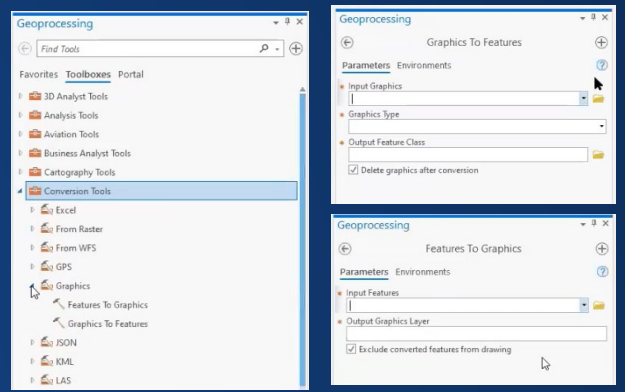
Animated Symbology



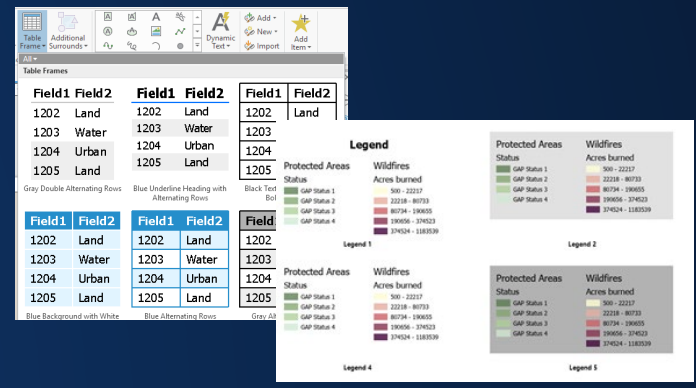
Auto Text Tool



Insert Graphic Shapes

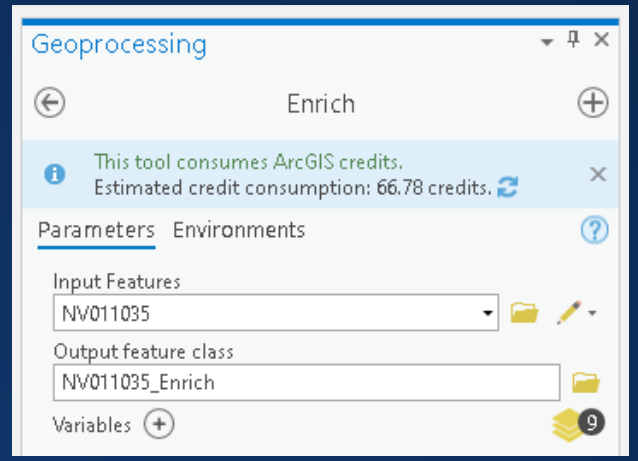


Graphics to Features / Features to Graphics



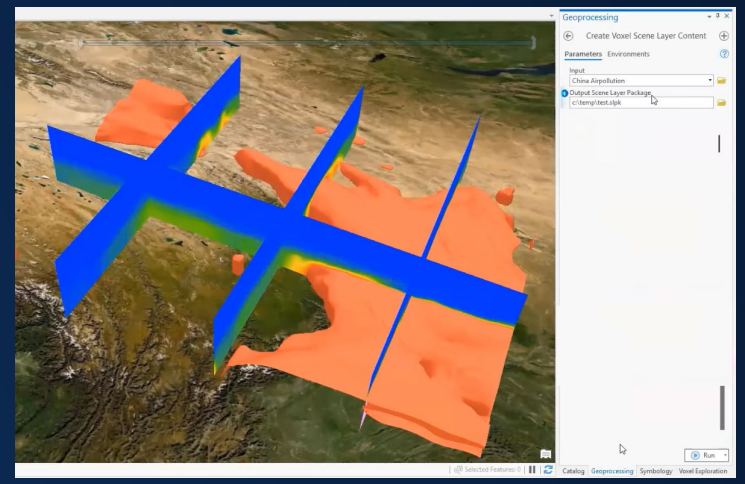
Legend & Table Styles

ArcGIS Pro 2.9 Highlights



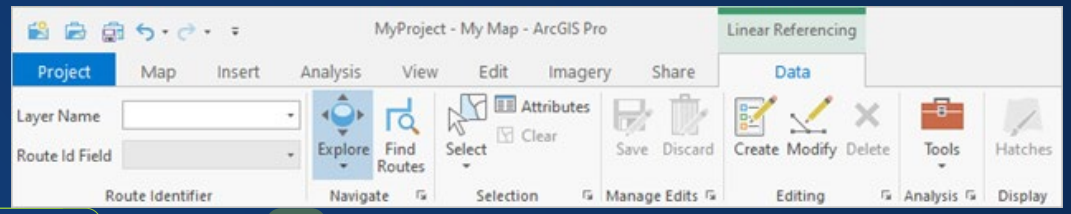
Credit Estimation

Enrich Layer, Summary Reports, Drive Times

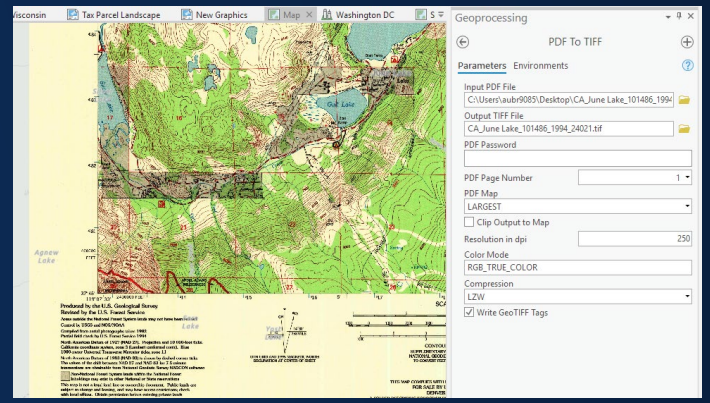


Share Voxel Scene Layers

Online 2.9 | Enterprise 3.0

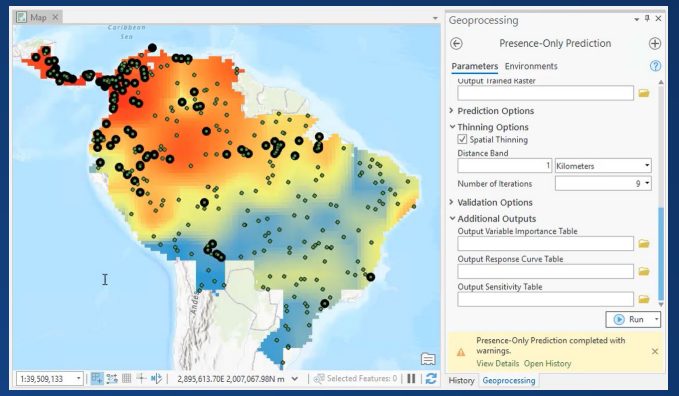


Linear Referencing UI



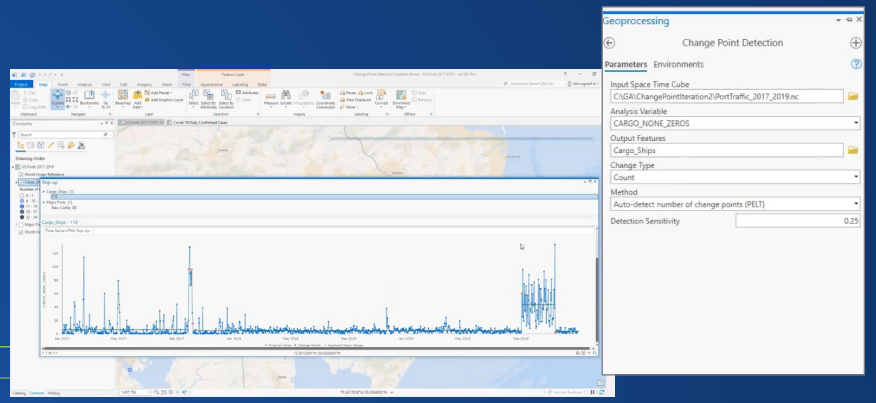
PDF to TIFF Tool

ArcGIS Pro 2.9 Highlights



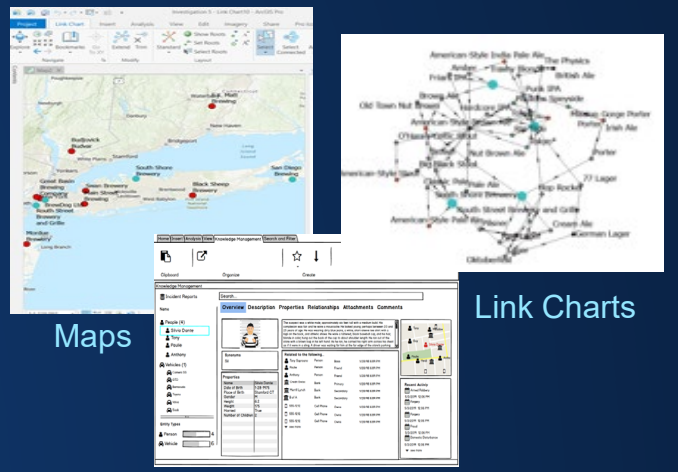
Presence-only Prediction

Cloud Data Warehouses



Change Point Detection

Mean shift, Std Dev, Count 2.9 | Slope 3.0



Maps

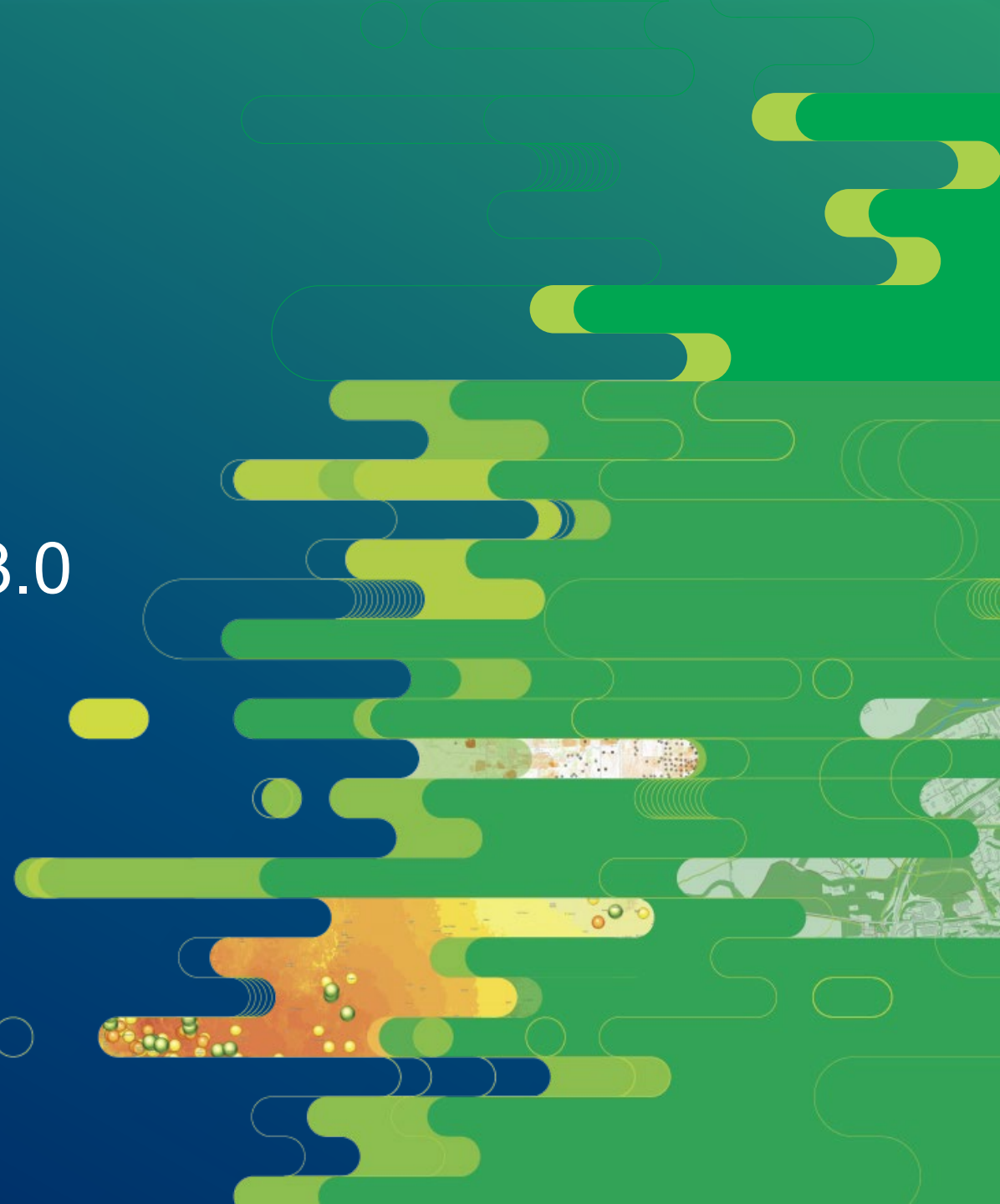
Link Charts

Entity cards

Knowledge Graphs

What's New in ArcGIS Pro 2.9 Demo

What’s Coming in ArcGIS Pro 3.0



Semantic Versioning

- ArcGIS Pro version numbers use the semantic versioning specification

- Given a version number MAJOR.MINOR.PATCH, increment the:
  - MAJOR version when you make incompatible API changes,
  - MINOR version when you add functionality in a backwards compatible manner, and
  - PATCH version when you make backwards compatible bug fixes.

Example **2.9.2**

The next release of ArcGIS Pro is…

3.0.0

This is a breaking change release

ArcGIS Pro 3.0

At 3.0 ArcGIS Pro is moving to .NET 6 (formerly known as .NET Core)

- 4.8 was the last release of the .NET Framework
- .NET 6 is the current Long Term Support release of the new .NET line

This will result in breaking changes to the Pro APIs

- Add-ins will need to be converted to .NET 6
- Recompiled to work with Pro 3.0 and breaking changes fixed

API Breaking Changes

Breaking changes are related to:

Changes required to accommodate .NET 6 (minor)

- Classes and methods deprecated in 2.x will be deleted. Add-ins must switch to their replacements
- Object ID APIs will be 64-bit
- Changes to the APIs to improve consistency and quality

ArcGIS Pro SDK is also moving to Visual Studio 2022

- Support .NET 6
- Visual Studio 2019 and 2017 are not supported

Projects in 3.0

ArcGIS Pro projects are a zip archive

- 1.x and 2.x projects contained CIM objects persisted as XML

At 3.0, the CIM objects in the zip archive move to JSON

- Smaller size
- Faster
- Matches lyrx, mapx, pagx, files and styles
- Matches the use of the CIM on web and mobile
- We document the CIM spec as JSON at https://github.com/esri/cim-spec
    - This will expand to include JSON Schema

Sharing

Use packages to share 3.x content with 2.x deployments

- Contain 3.x and 2.x versions of content

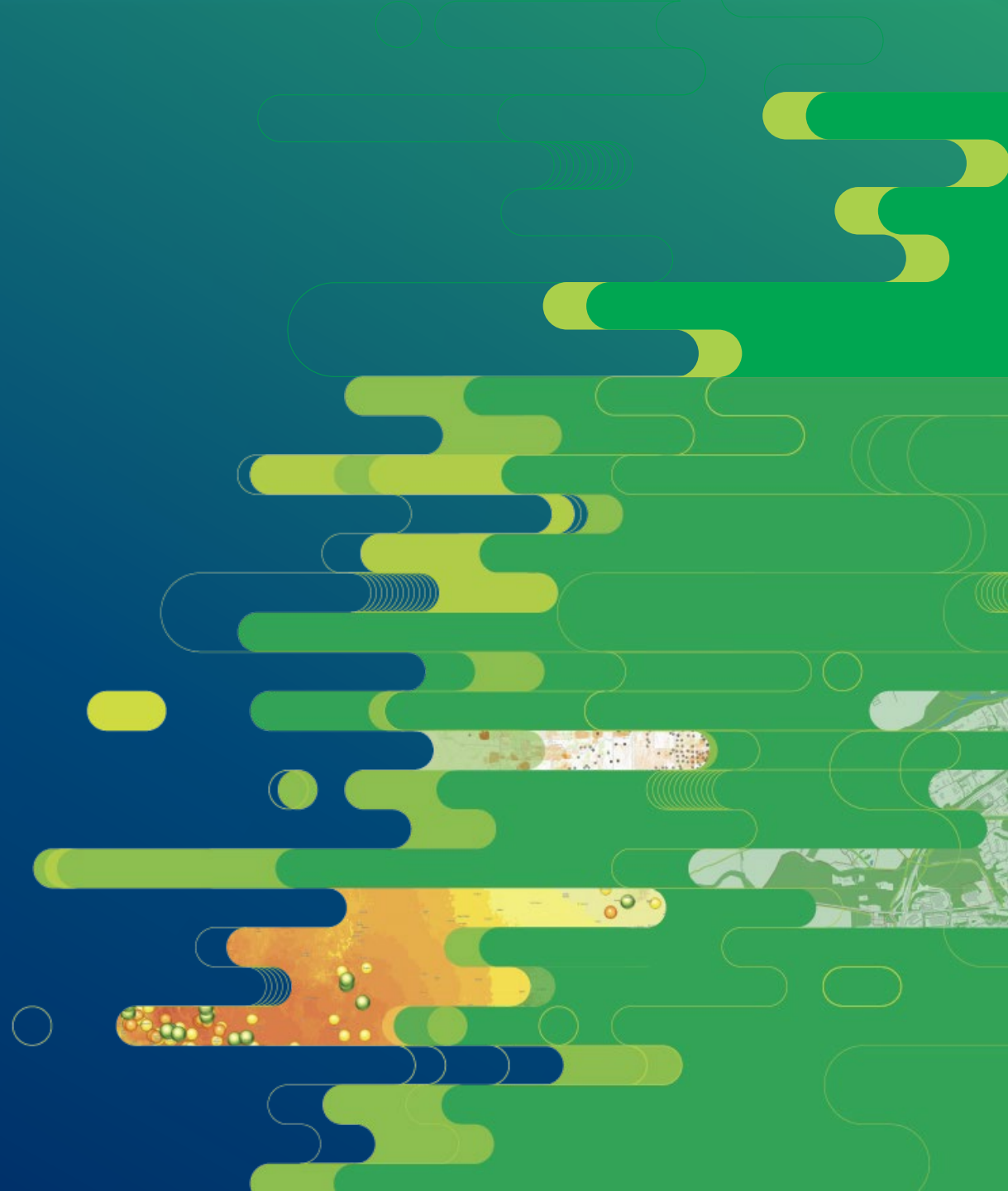
Service sharing will create 2.x content for older Enterprise versions

- e.g. ArcGIS Pro 3.0 sharing to Enterprise 10.9.1 will write 2.9 content

ArcGIS API for JavaScript and ArcGIS Runtime are prepared to handle 3.0 CIM objects

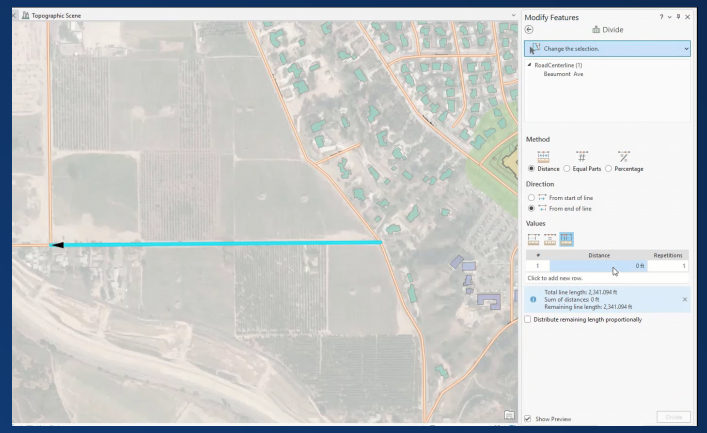
- Very few changes in the CIM symbol model

ArcGIS Pro 3.0 Highlights

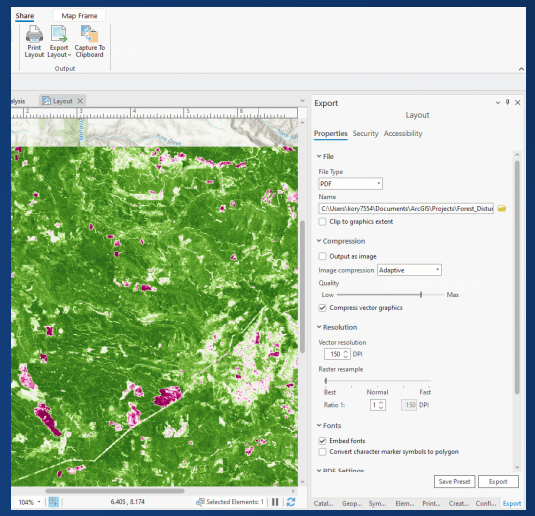


Performance and Productivity Enhancements

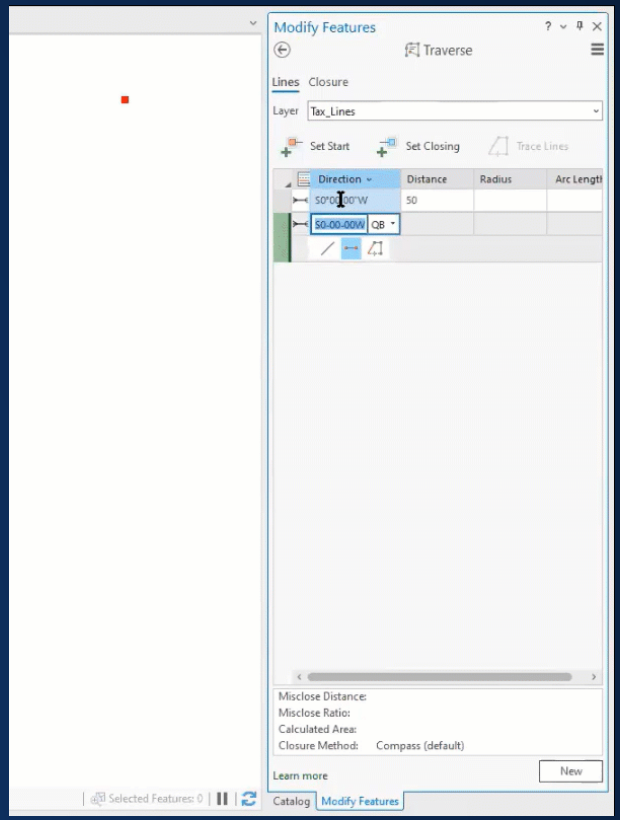
- Content Management
- Editing
- Display
- Geodatabase
- Geoprocessing
- Layout
- Map Authoring
- Parcel Fabric
- Scene Layers



Repetitions for distances - Divide tool

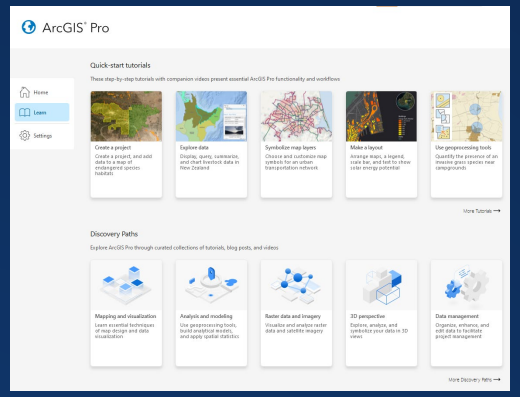


Export presets

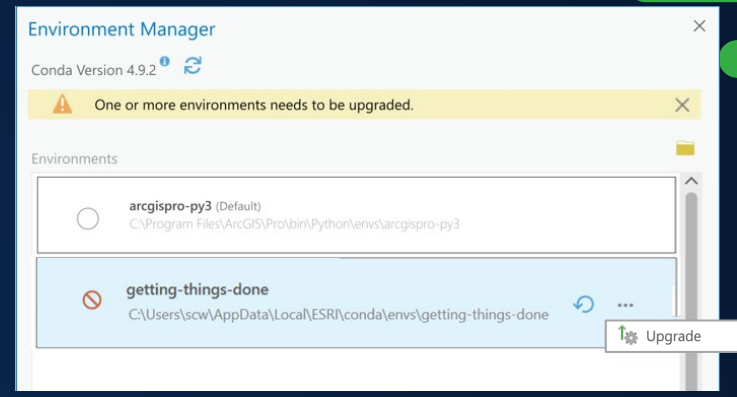


Traverse entry grid performance

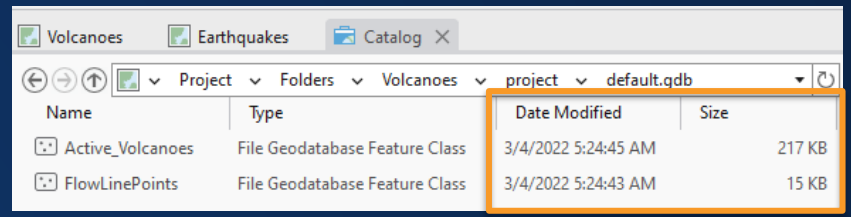
ArcGIS Pro 3.0 Highlights



Dedicated Learn Page

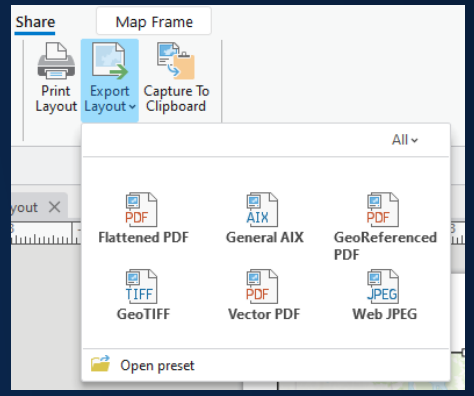


Update Cloned Python Environments



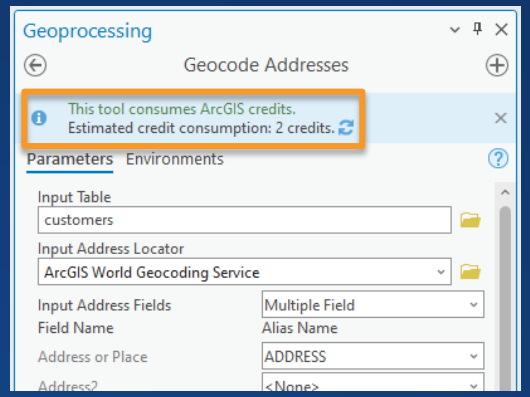
Date Modified & Size in Catalog View

OpenStreetMap 3D Layers

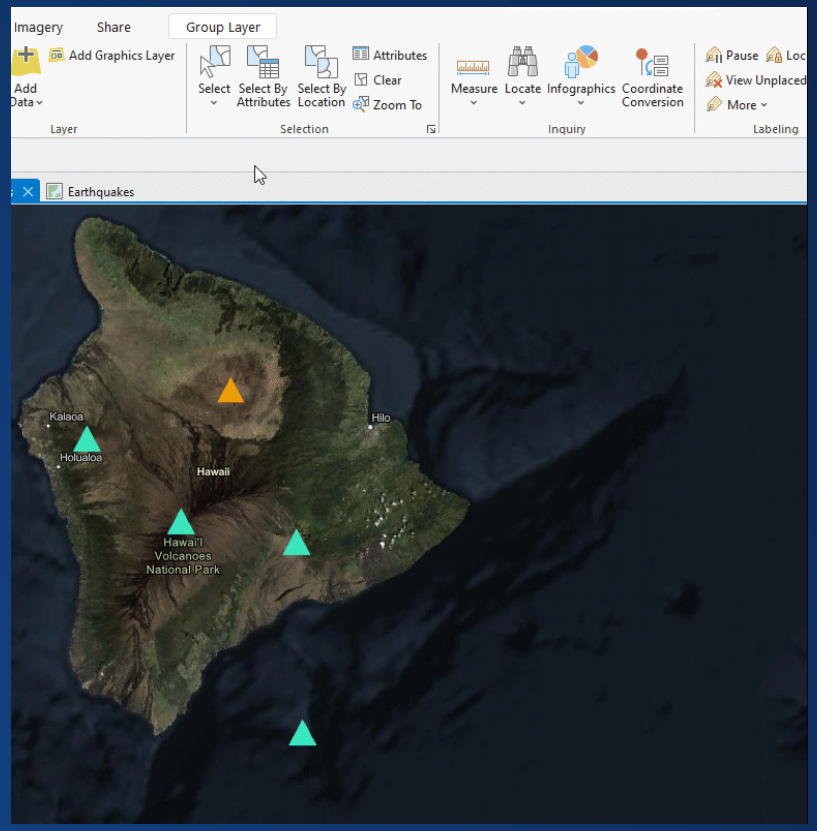


Export Presets

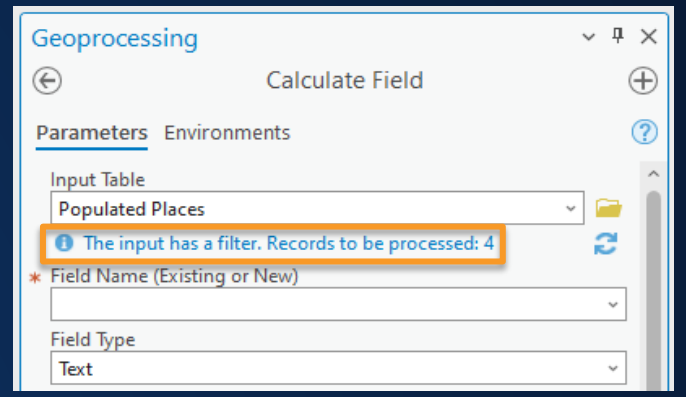
ArcGIS Pro 3.0 Highlights



Geocoding Credit Estimation

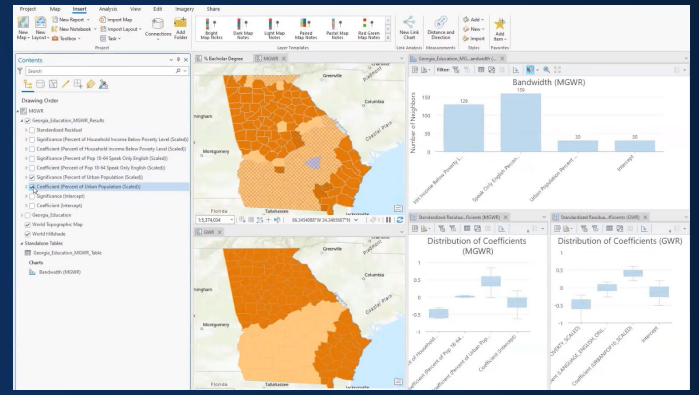


Tool parameter memory/autofill



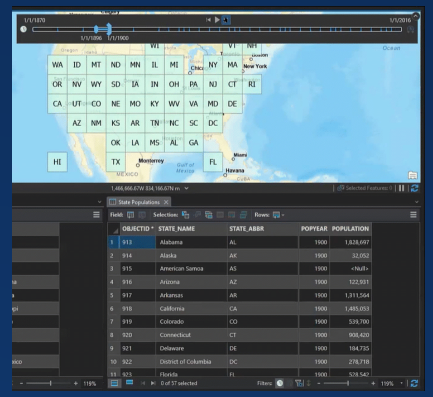
Selection and filtered input notification

New Hydrology Analysis Tools

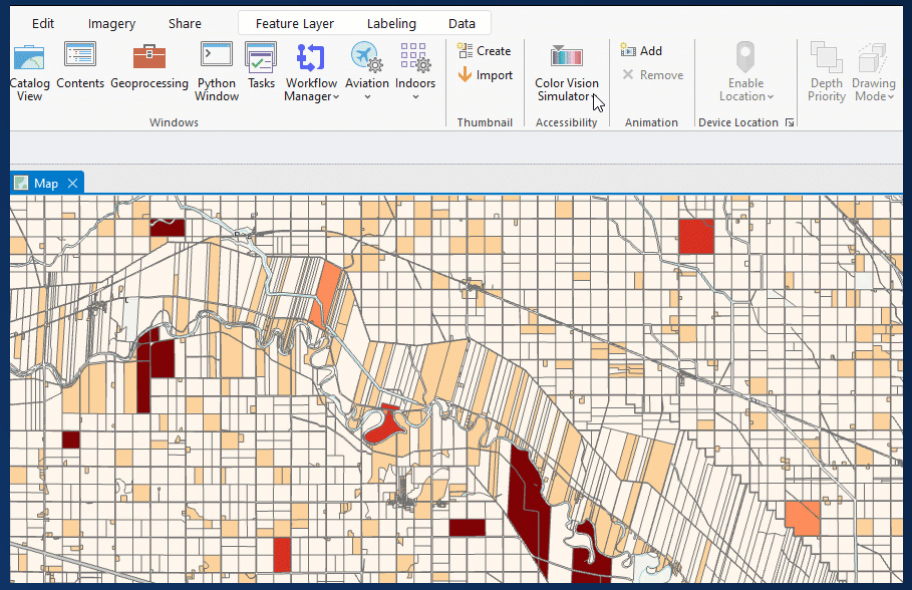


Multiscale Geographically Weighted Regression (MGWR)

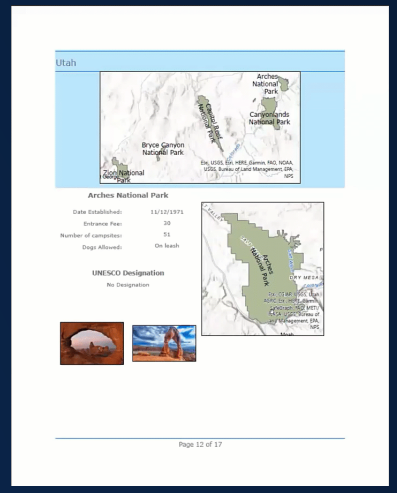
ArcGIS Pro 3.0 Highlights



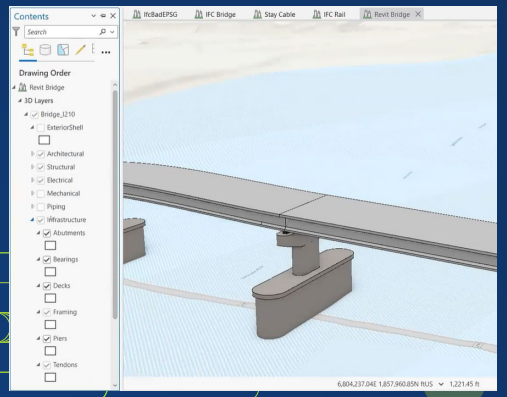
Time aware stand-alone tables



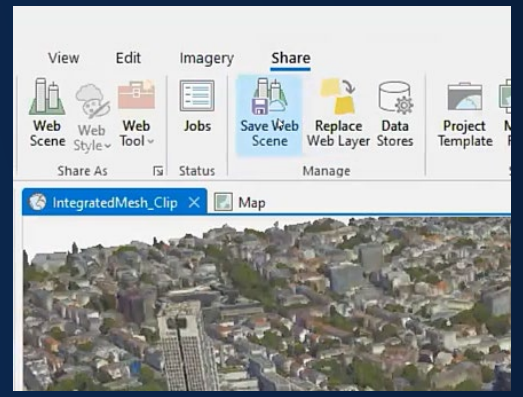
Color Vision Deficiency Simulator



Maps in Reports



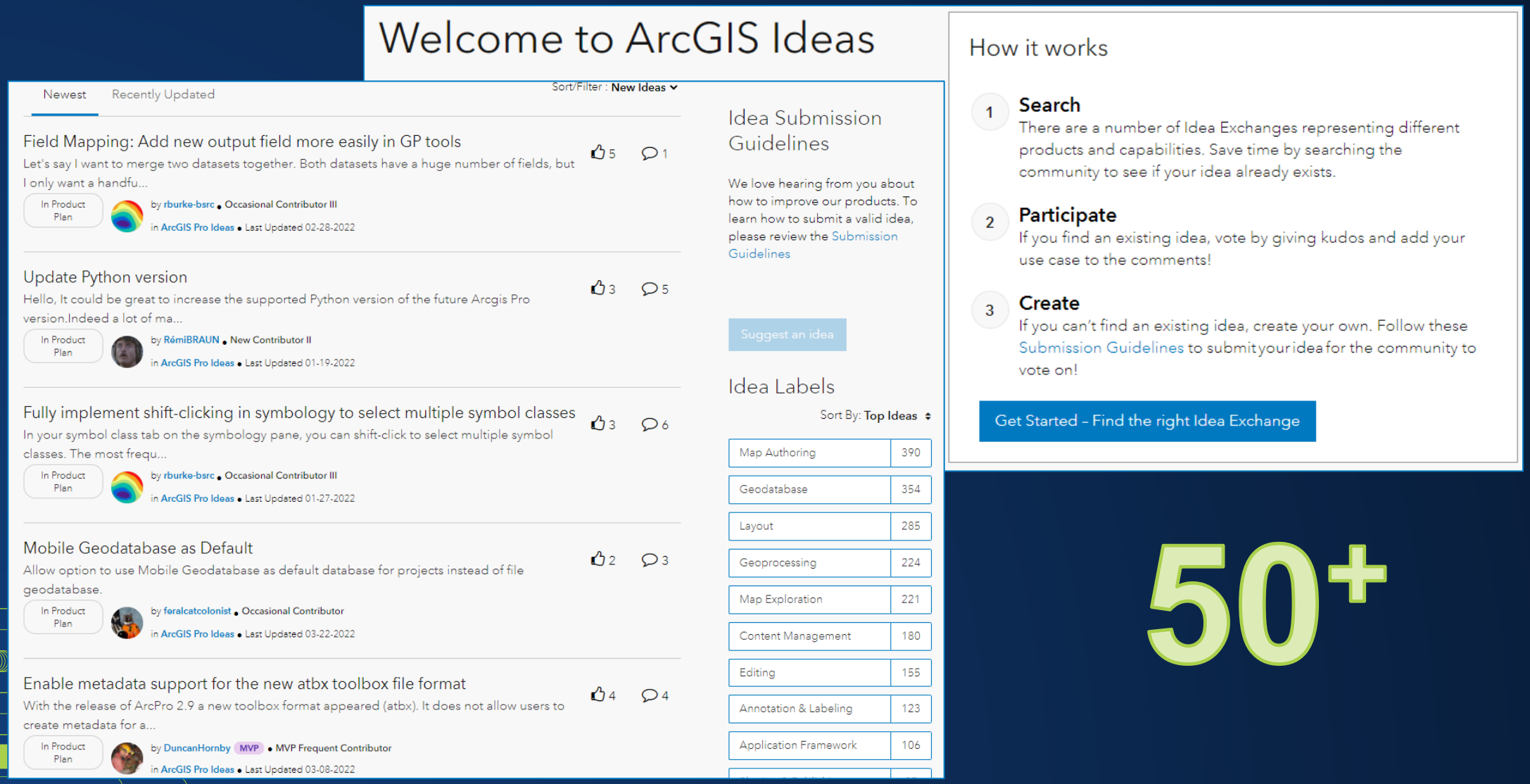
IFC Infrastructure Discipline Support



Save Web Scene

What's Coming in ArcGIS Pro 3.0 Demo

Ideas in ArcGIS Pro 3.0

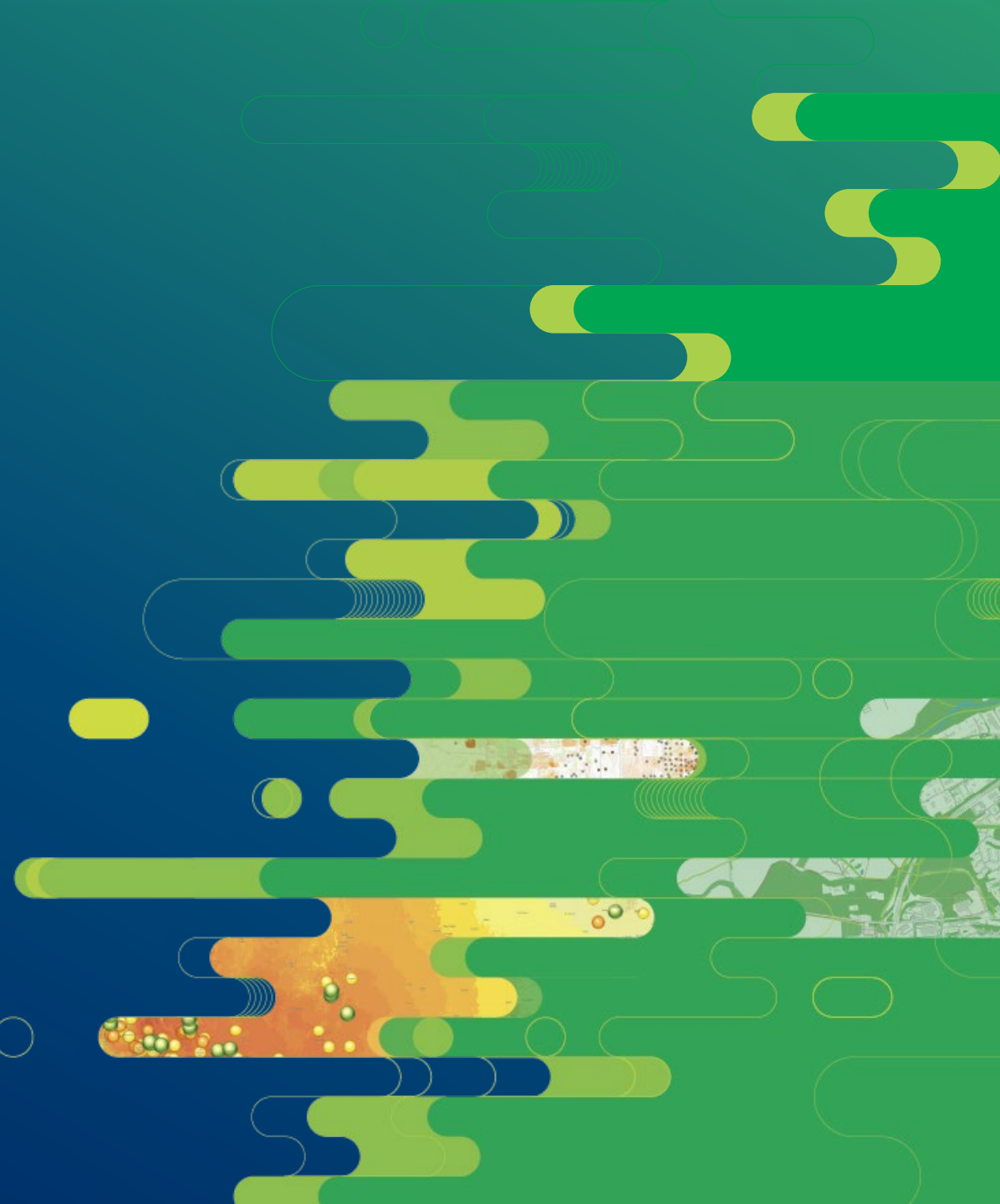


50+

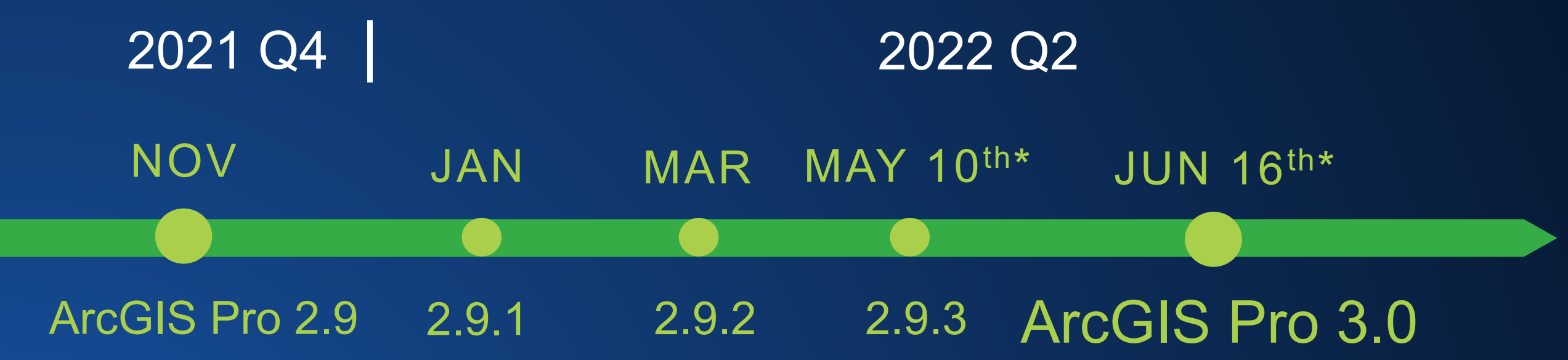
Search, participate, and create at ideas.arcgis.com

Roadmap

Go.esri.com/ProRoadmap



ArcGIS Pro | Release Plans



*Subject to change

ArcGIS® Pro Roadmap

go.esri.com/ProRoadmap

Near-term

- Upgrade Python Environment
- Reality Mapping Extension
- Projects in the Enterprise
- Export Presets
- Provenance in Knowledge Graphs
- Indoor Positioning
- Suitability Modeler Additional Weighting
- Parcel metes and Bounds Visualization
- Roof Editing
- Enhanced Radar Data Support
- Hydrologic Analysis
- Multiscale GWR
- Scene Layer Performance
- OSM Streetmap 3D Layers
- Maps in Reports

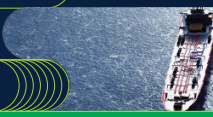
Mid-term

- Simulation Modeling
- Catalog Layers
- Point Cloud Scene Layer Data Management
- Non-versioned Editing
- Presentations
- Spatio-temporal Density Analysis
- Scientific Data (DSG) Ingestion
- Managed Indoor Data Pipeline
- Roof Editing in Stereo
- ENC Chart Viewing
- 64-Bit Object ID

Long-term

- Terrain Editing
- Materials Authoring
- High Fidelity Rendering
- 3D Mesh as Ground
- Integrated Mesh Scene Layer Data Management
- New Data Types (BigInteger, Timestamp with Time zone)

December 2021



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