What's New from Esri in 2022!

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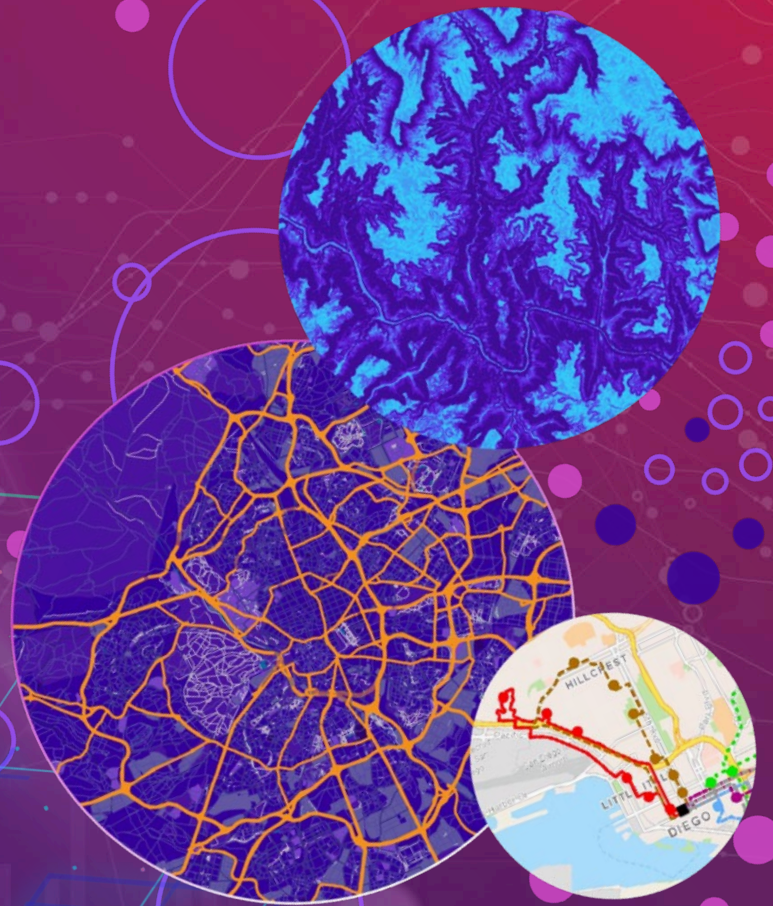


Trends

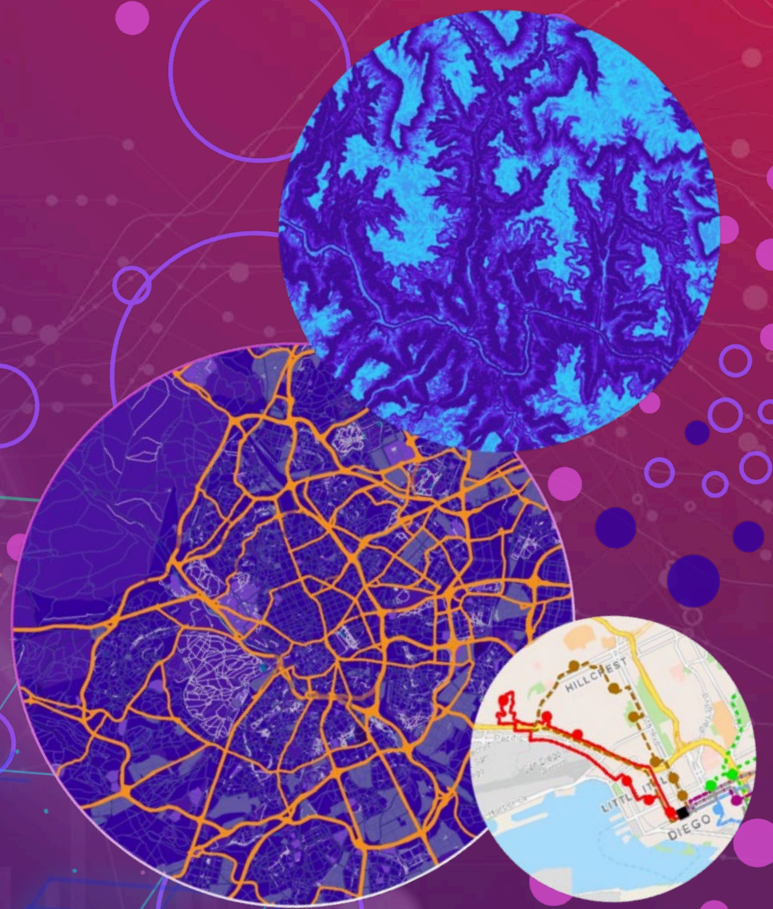
- Rebuild, Rethink & Reimagine Infrastructure
  - Capital improvement project (CIP) prioritization
  - Transparency, trackability, and equity of infrastructure investments
  - Applying an equity lens to infrastructure projects
  - Improved awareness of GIS capabilities (Artificial intelligence, machine
  - learning, AR/VR, etc.)
  - Preparing for mobility trends like electric vehicles (EVs), drone management,
  - autonomous vehicles
  - Zoning reform
  - Housing affordability
  - Prioritizing transportation safety and wildlife corridors (Vision Zero initiatives)
  - Broadband expansion
  - Safe drinking water (Lead and Copper Rule)
  - Outdoor recreation and parks management
  - Right of way management
  - Environmental impact review

Trends (cont.)

- Address Humans in Crisis
  - Substance misuse (formerly opioid abuse)
  - Mental health
  - Homeless populations
  - Disparities and lack of equitable services, resources, access
  - Improved access to healthy food, services, transportation, jobs, education, etc.
  - Disaster response
  - Vector control
  - Environmental health
  - Safe drinking water (Lead and Copper Rule)
  - Remediate blight and stabilize neighborhoods

Trends (cont.)

- Improve Sustainability & Resiliency
  - Prepare for long term impacts (infrastructure, renewable energy)
  - Lead in Water
  - Conservation
  - Creating things that last
  - Bounce back from manmade and natural disasters
  - Transportation mobility
  - Economic mobility
  - Environmental health
  - Racial justice
  - Water
  - Parks and recreation
  - Tree canopy enhancement



Trends (cont.)

- Achieve Equity & Inclusion
  - Health equity
  - Racial equity
  - Civic inclusion
  - Economic mobility
  - Urban mobility
  - Digital divide
  - Infrastructure investment and project prioritization
  - Equitable budgeting
  - Underserved and unserved neighborhoods
  - Tree canopy enhancement

Trends (cont)

- Climate impact (carbon emissions, air quality, etc.)
  - Capital improvement project (CIP) prioritization
  - Transparency, trackability, and equity of infrastructure investments
  - Applying an equity lens to infrastructure projects
  - Improved awareness of GIS capabilities (Artificial intelligence, machine
  - learning, AR/VR, etc.)
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Advanced Spatial Analytics

Analysis

Analytical Methods and Spatial Algorithms

Data Science

Identify Patterns, Trends, and Anomalies

Artificial Intelligence

Solve Complex Problems Using ML and DL Techniques

Data

Deriving Intelligence, Understanding, and Decisions

Data

ArcGIS Has the Right Tools and Frameworks for Your Enterprise Data Workflows

Geospatial Infrastructure

Collect

Model

Store

Maintain / Prepare

Access

Share

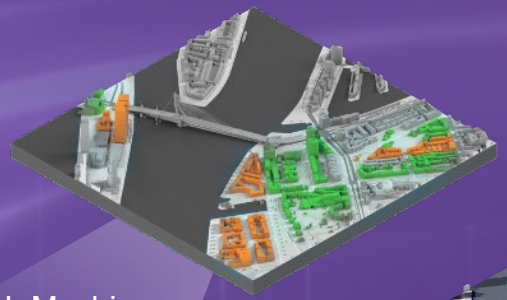
Analyze

Visualize

Engines

Purpose-Built Analytics

Spatial Analysis and Geoprocessing Tools



AI, Machine Learning, Deep Learning

Raster Analysis, Deep Learning

Big Data Analysis

Graph Analysis

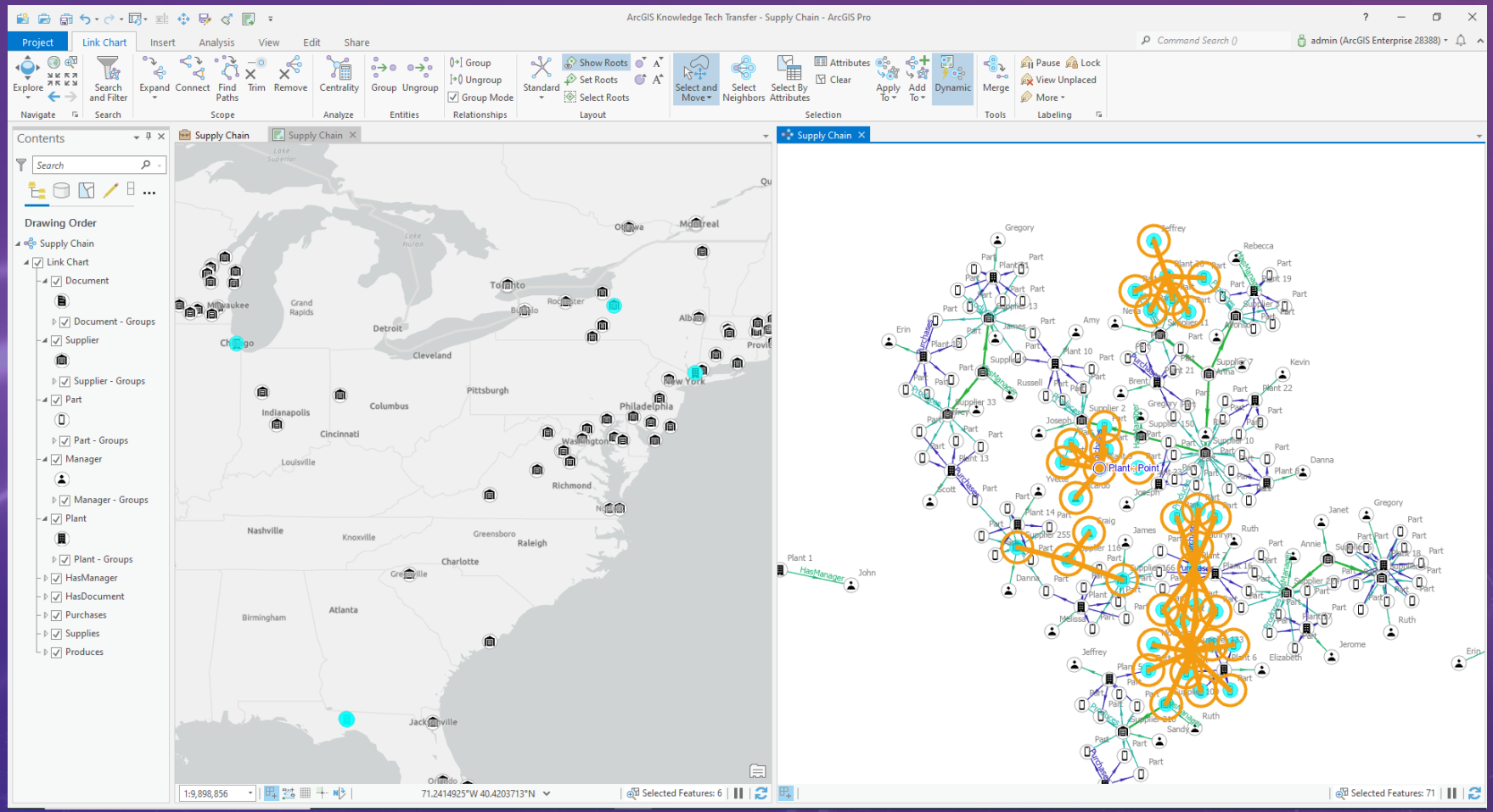
Real Time Analysis

ArcGIS Knowledge

ArcGIS Knowledge connects ArcGIS Pro to the enterprise graph store, enabling users to explore and analyze spatial, nonspatial, unstructured, and structured data to accelerate decision-making.

Developed to seamlessly connect analysts to the data they need and the analytical tools they trust, ArcGIS Knowledge empowers collaborative all-source investigations and sharing this information across the enterprise.

Analysts can visualize information through multiple perspectives like maps, link charts, histograms, and entity cards to solve spatial and nonspatial problems. ArcGIS Knowledge is a cost-effective and flexible way to add enterprise knowledge graph analytics to your existing ArcGIS investment.

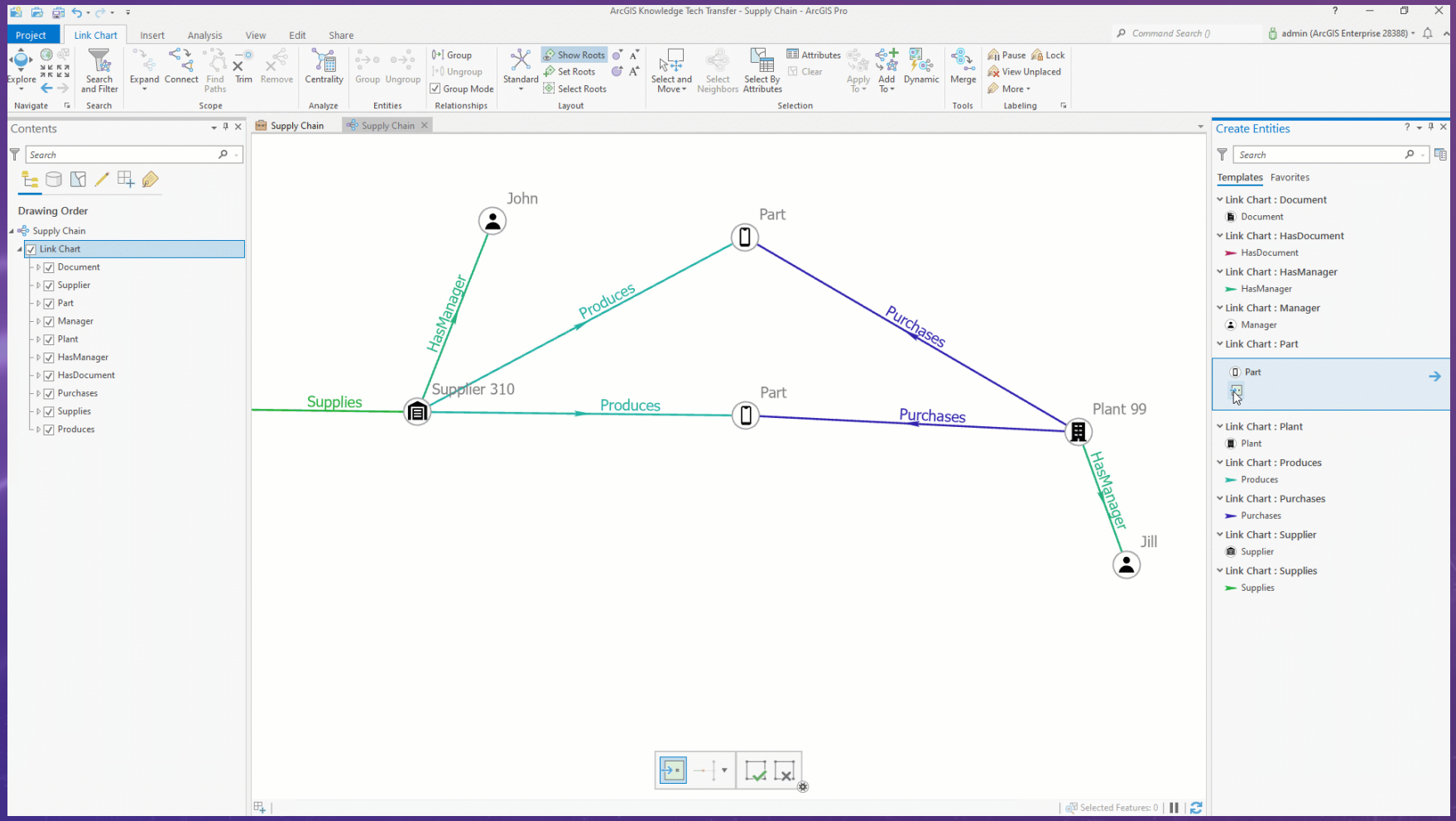


Knowledge Graphs

ArcGIS Knowledge provides an entity-centric approach to data modeling and analysis.

Information in a knowledge graph is structured around entities and the relationships between them.

This network of things is primarily nonspatial, even if some entities and relationships have an associated spatial location.



Knowledge Graphs

A knowledge graph allows you to create and query a graph network.

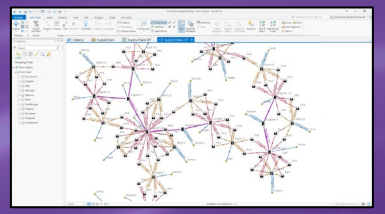
This network connects people, places, and things (represented by entities) with each other through relationships that define how they are associated.

An entity with a spatial location can be connected with other entities that do not have a spatial location, making it easy to work with spatial and nonspatial data together.

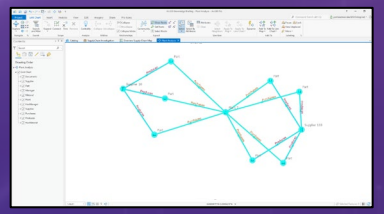
Data Discovery

Explore and Analyze Connection in your Data

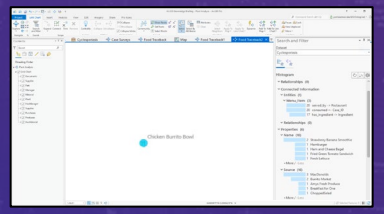
Data Management



Knowledge Graphs

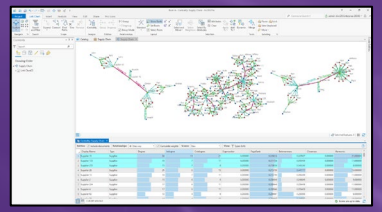


Relationships

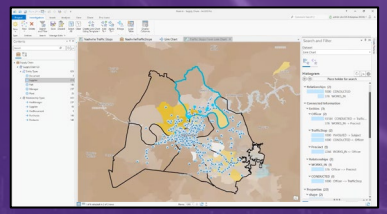


Entities

Graph Analytics

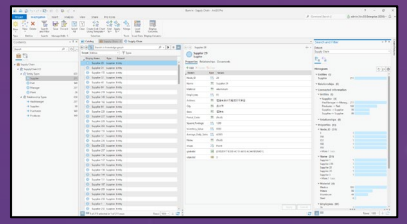


Graphs

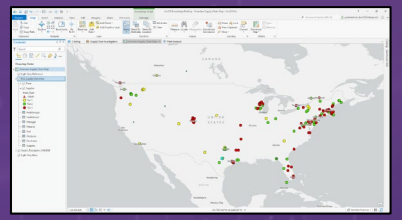


Spatial

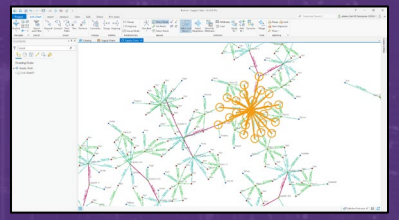
Visualizations



Investigations



Maps



Link Charts

Collaboration

Across the enterprise, in real-time

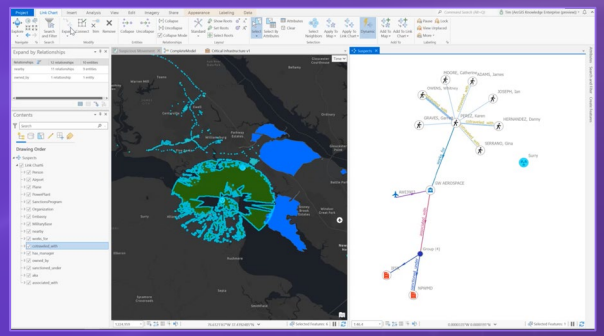
Individually, **no single user** can see the **whole picture** even though they are part of the **same enterprise** organization.

By contributing their connected data into ArcGIS Knowledge, these individuals can collaborate to build a more robust understanding of their data in context, enabling everyone across the enterprise to answer more complex analytic questions.

User Experiences

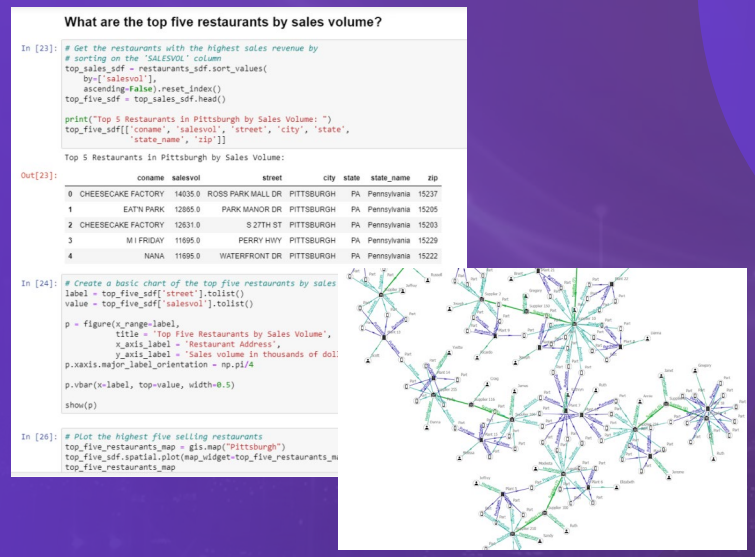
Across the enterprise

ArcGIS Pro



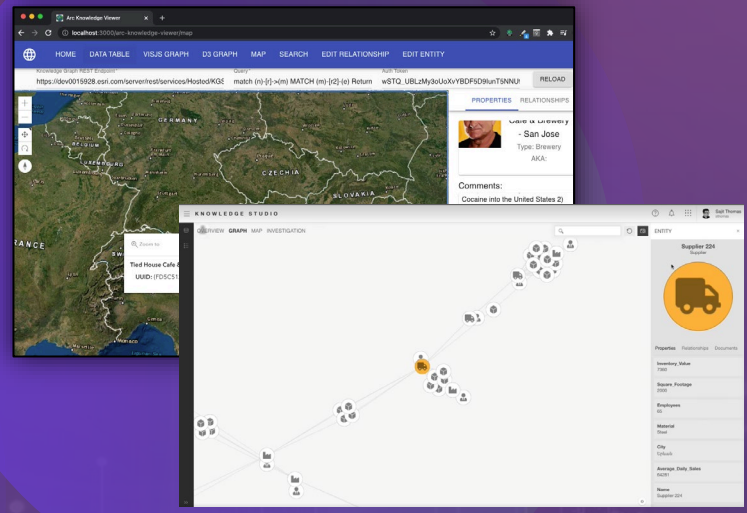
For Existing GIS Professionals

Notebooks & Data Science



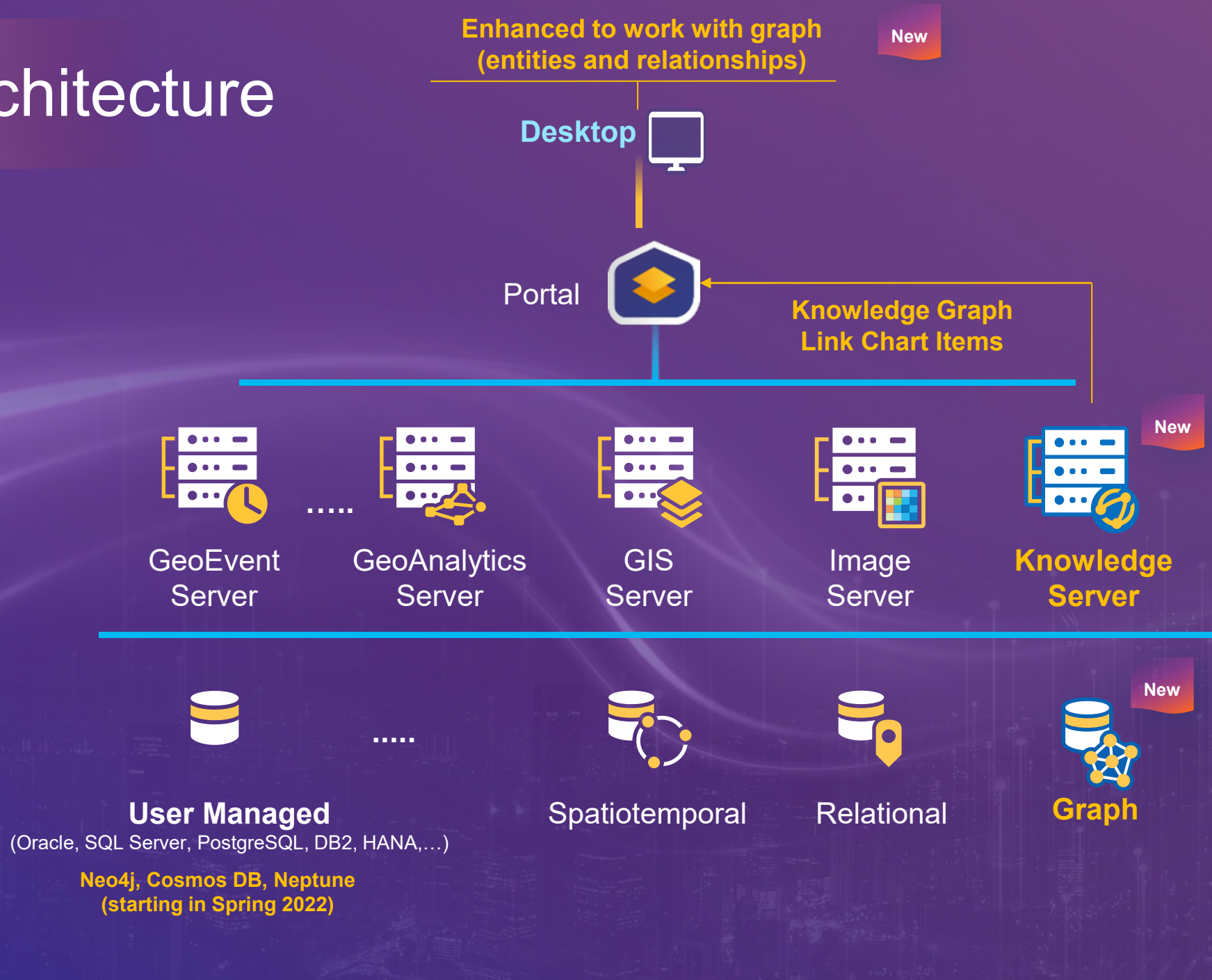
Python API Integration (Spring 2022)

Web



Open Source Web Sample

Architecture



Questions	Answers
Can you please name the state legislatures that enlisted ESRI for redistricting consultations between 2020 and 2022. Thank you!	California was one of the only states that gave permission to talk about their efforts. Otherwise, a little over 15 states, a similar number of state political parties, and a number of courts (separate from the Leg they oversee) use our solution. This doesn't include cities and counties and advocacy groups and school systems.

Q & A