



The Age of the Modern Utility

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Connected
24/7

Generating massive volumes of
'location aware' telemetry

Notifications. Fitness.
Smart Watch / Bracelet

Smart Phone
6:00 a.m.

Breaks

Tablet 10 p.m..
Reading. Bedtime.

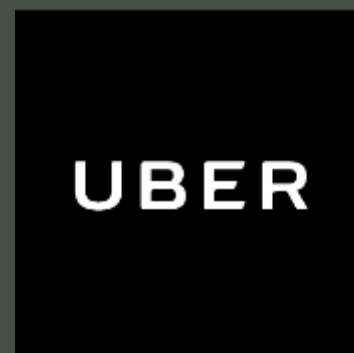
Evening
Prime Time

Work. Business.
Computer
9 a.m.

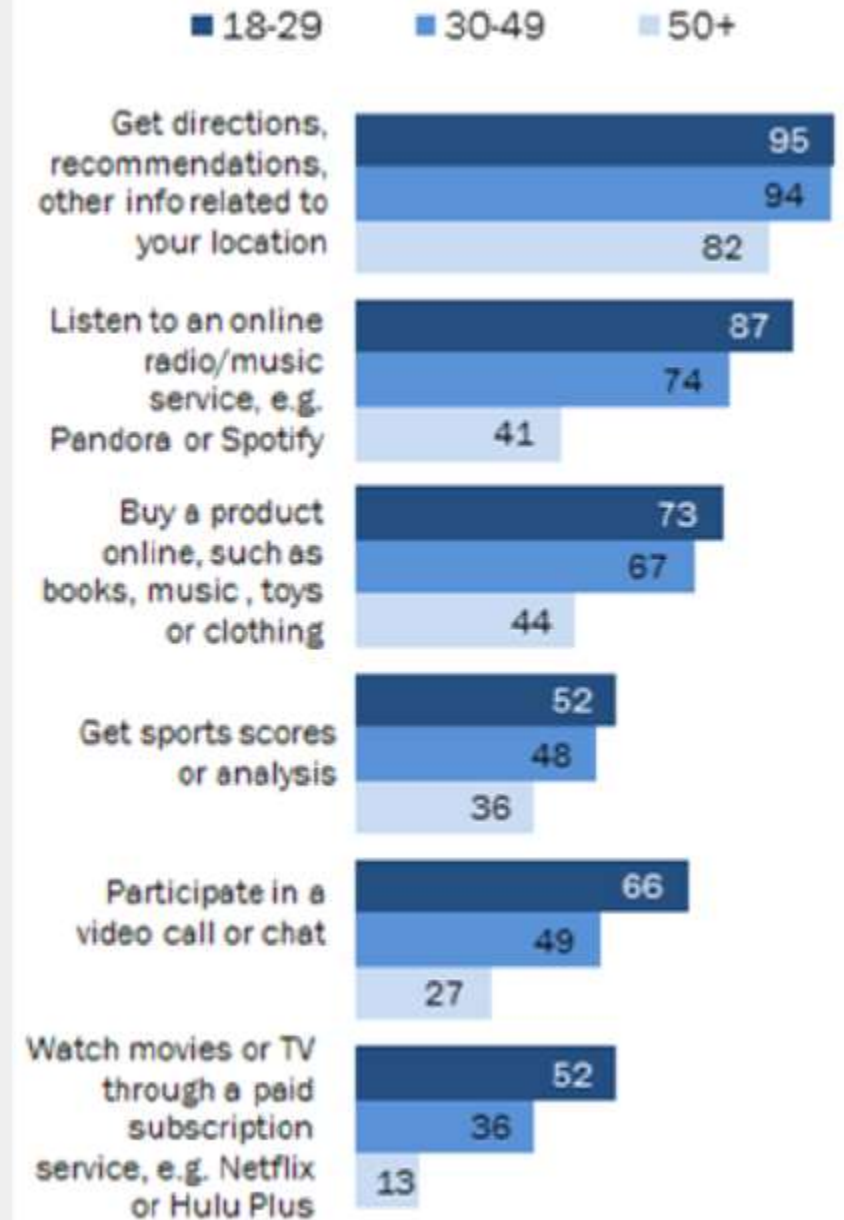
8:45 a.m.
News. Commute.

Social. Breakfast.
Tablet

Today's Digital Lifestyle

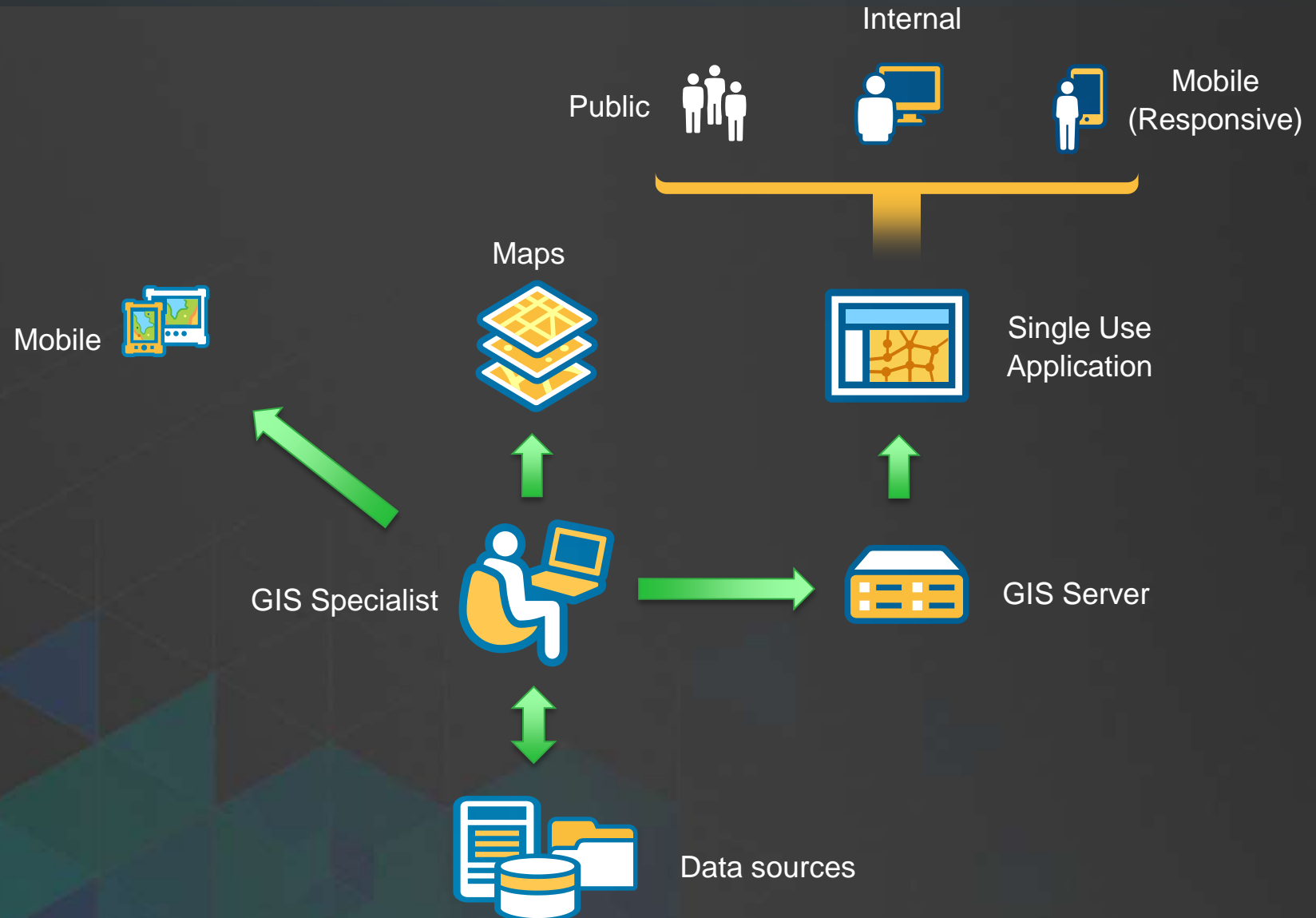


Unlike other mobile activities, location-based services appeal to smartphone owners of all ages

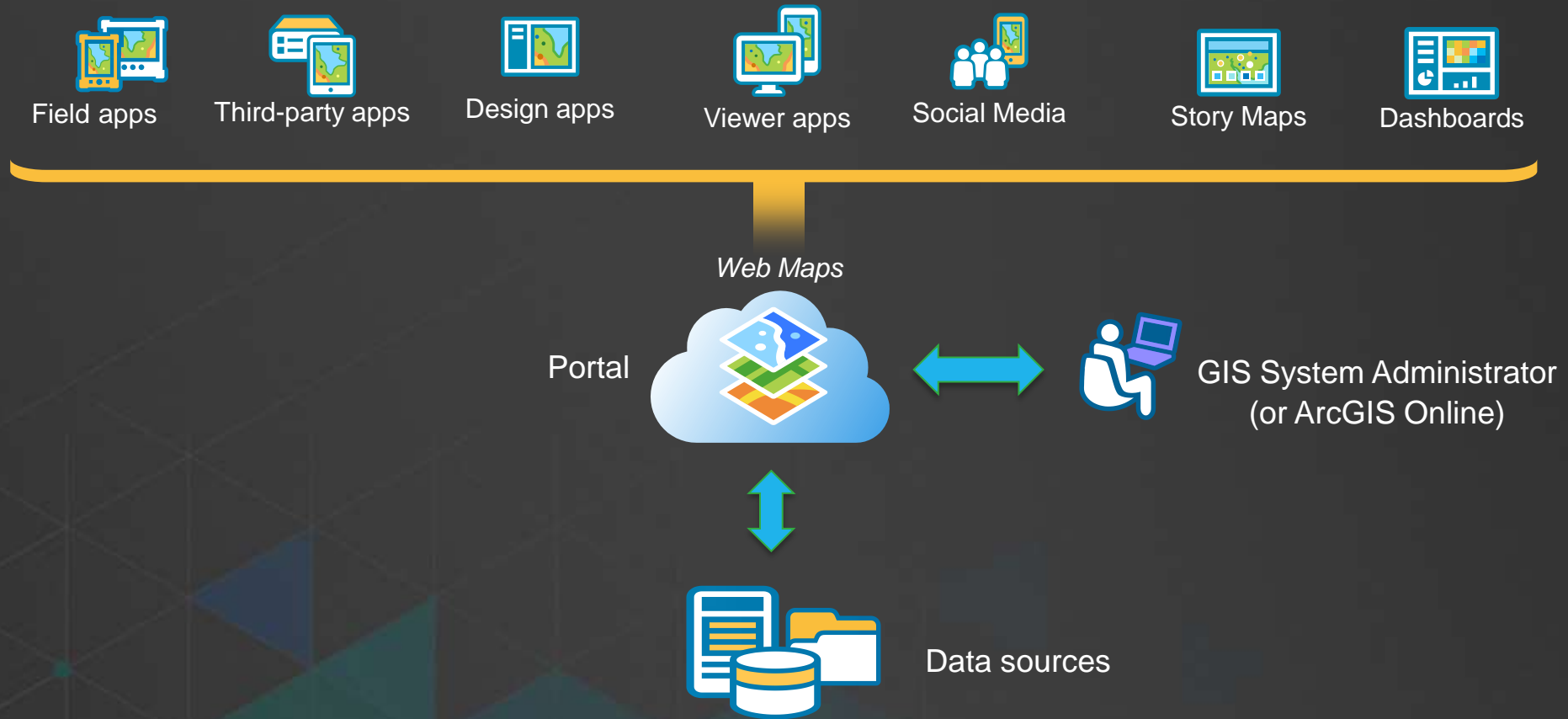


is your organisation prepared ?

Traditional centralised GIS



Modern Enterprise Web GIS

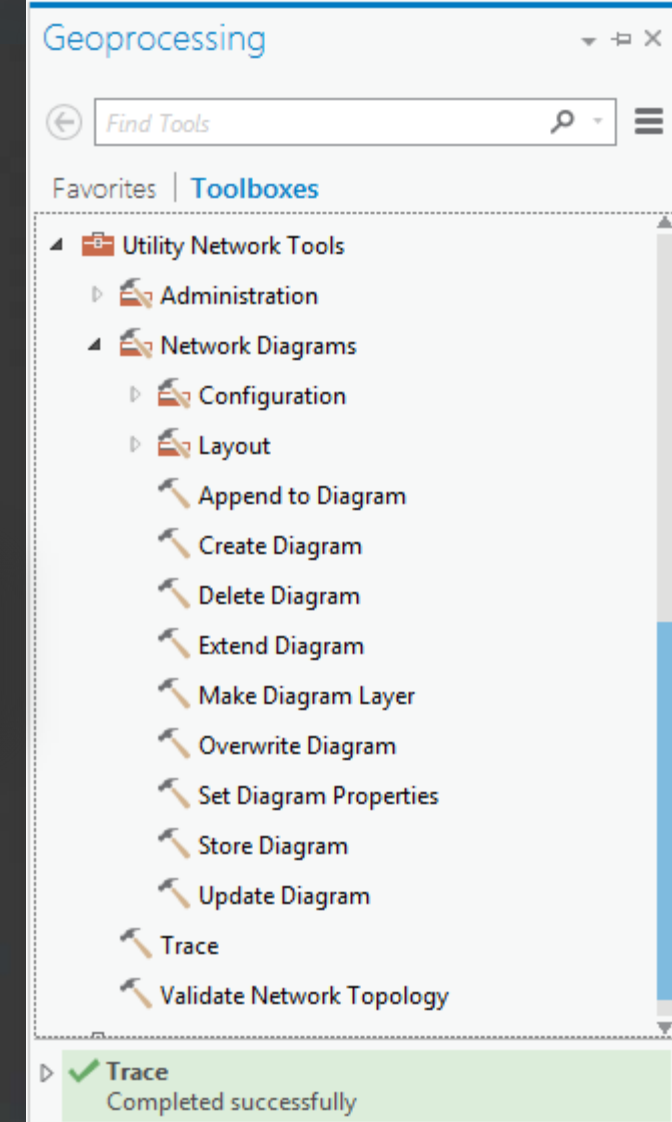
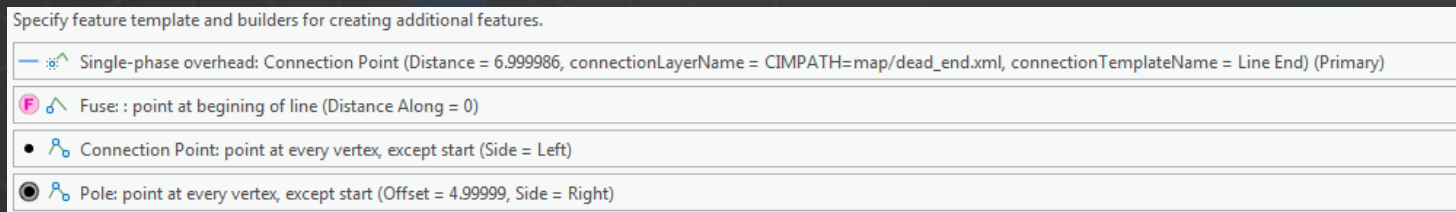
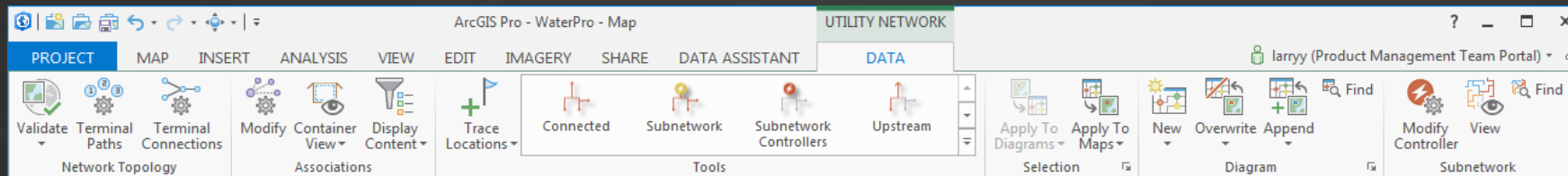


The New *Utility Network*



Network Management Project

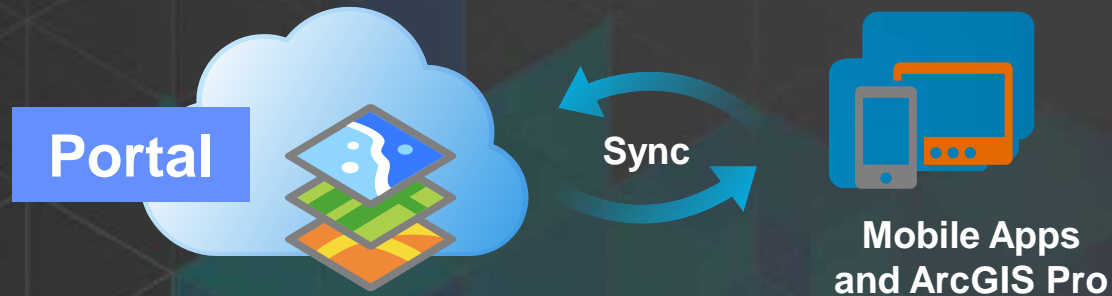
- New **Utility Network** for the next 10-15 years
 - Electric, gas, water, storm water, sewer, telco, etc.



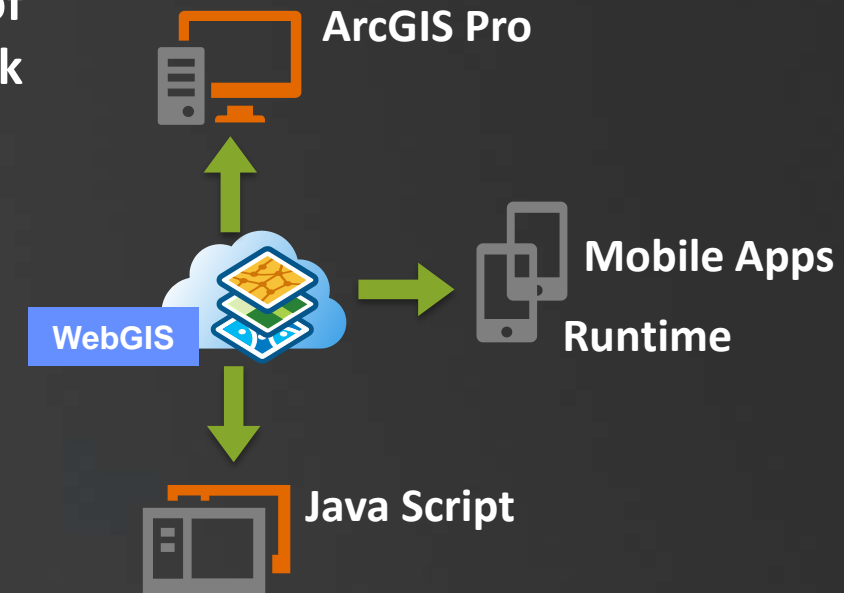
Network Management Project

Vision statement

- Provide utility customers the ability to **model, edit, and analyse** complex networks leveraging the entire *Esri* platform
- Enable modeling concepts to better support true representations of what is on the ground, while fostering an easy exchange of network information with other mission critical systems
- Provide a highly responsive editing and analysis environment



Utility Network capabilities everywhere



Keys to Network Management

- ***Increasing your ROI***

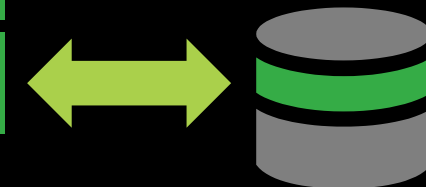
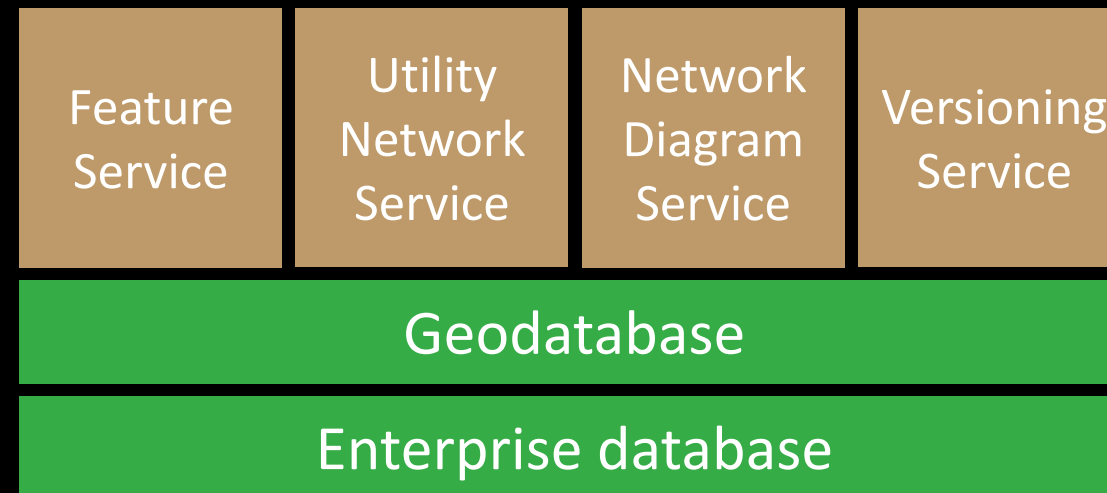
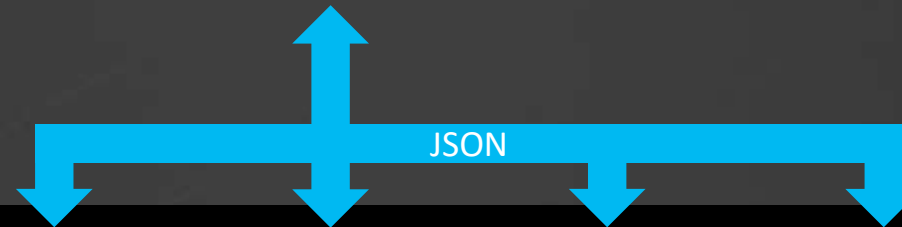
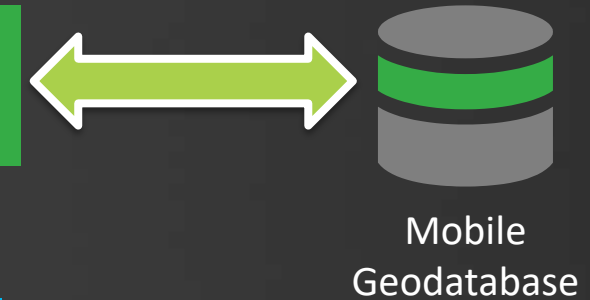
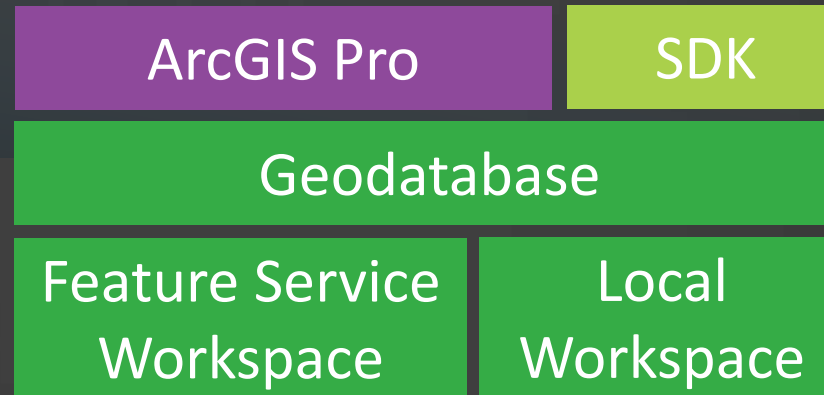
- Services based architecture for enabling the platform
- Ensuring data quality and correctness
- Real world representation of what is on the ground
- Sophisticated analysis
- Subnetwork management
- Improved mapping and visualisation techniques
- Expanded data exchange capabilities
- Increased performance
- A strong foundation for *customers* and *partners* to leverage

Keys to Network Management

- **Services based architecture for enabling the platform**
 - **Desktop capabilities**
 - Visualise and query – mapping both geographic space and diagram
 - Editing – Advanced tools and templates
 - Analysis – complex processing with geoprocessing with reporting

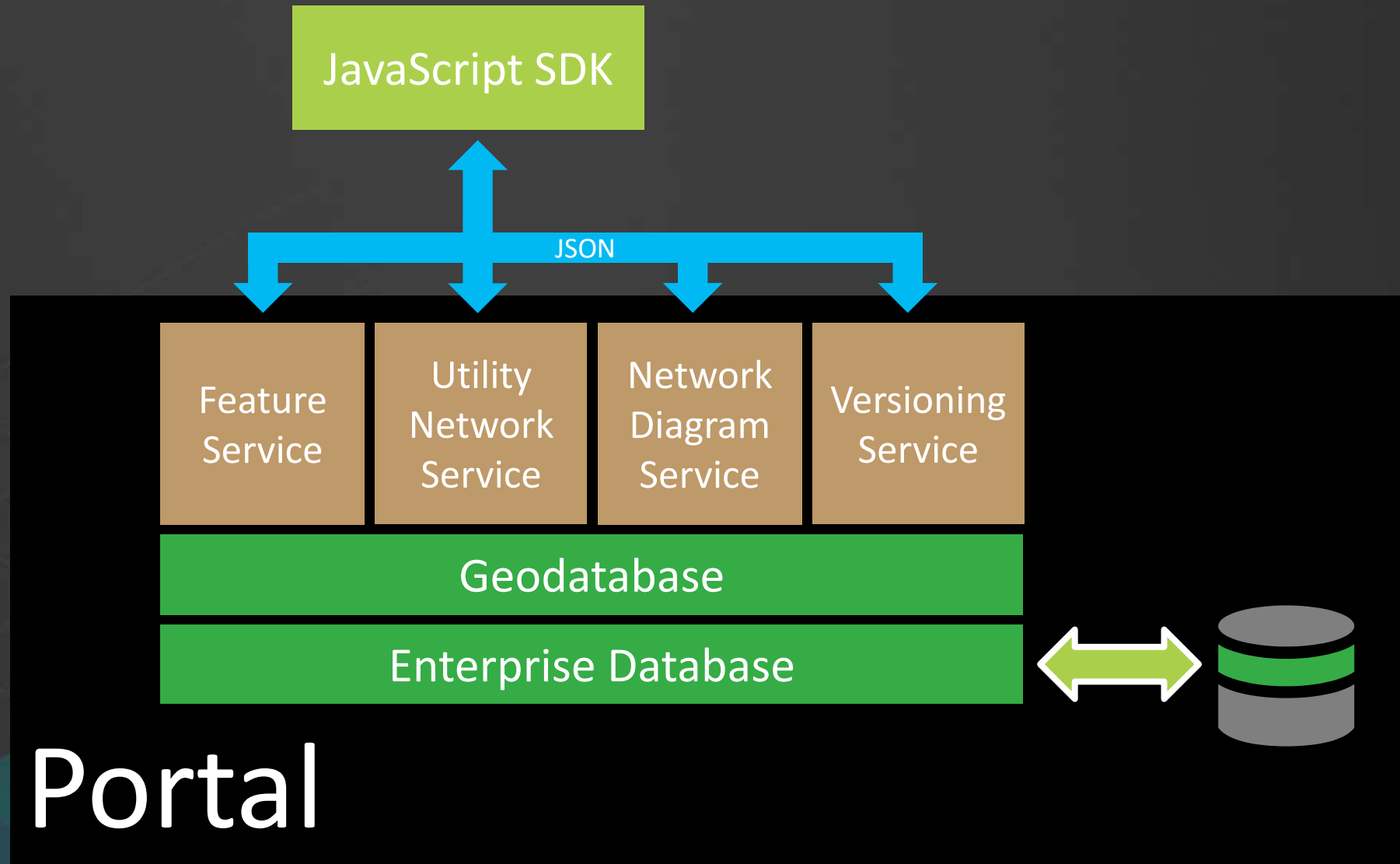


Architecture services



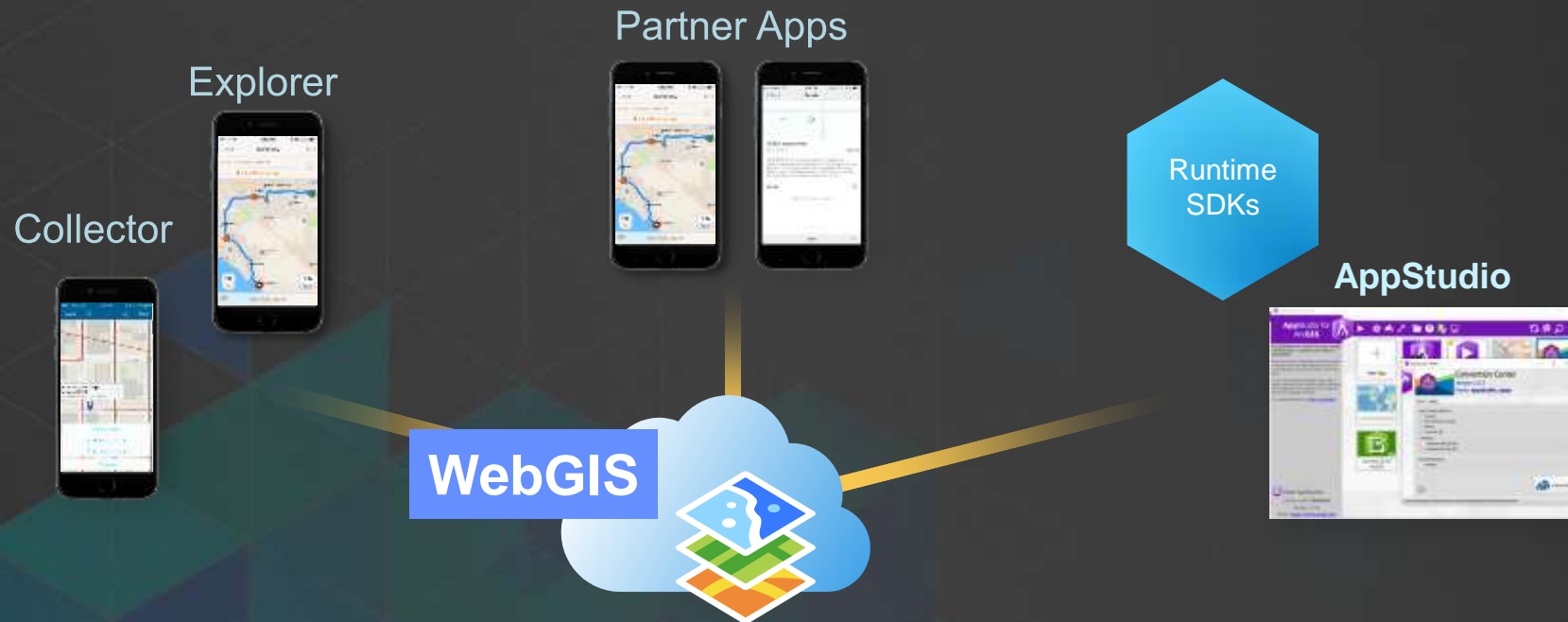
Portal

Architecture services – web apps



Network Management Project

- **Services based architecture for enabling the platform**
 - **Runtime and Offline capabilities**
 - Visualize and query – mapping both geographic space and diagrams
 - Edit – perform edits in the field from inspections to simple design
 - Analyze – determine upstream device or valves to turn for an isolation while in the field



Network Management Project

- **Services based architecture for enabling the platform**
 - **Web capabilities**
 - Dashboard capabilities for executives
 - Thin client applications on the desk of everyone in the organization
 - Provide simple outage maps to consumers
 - **Online capabilities**
 - Reducing administration and cost of ownership, etc.

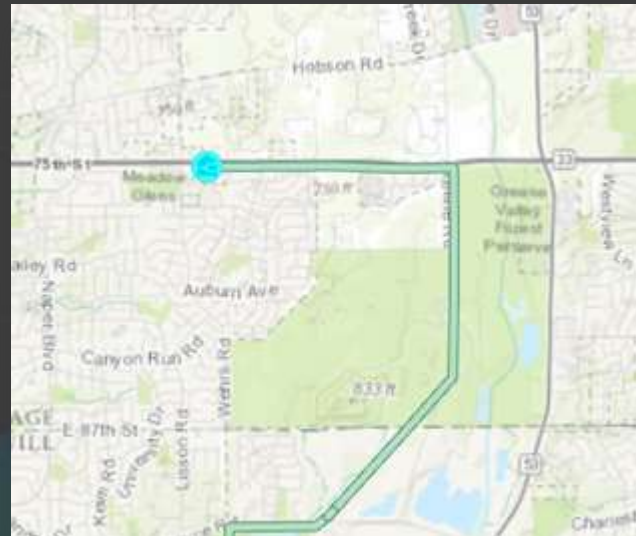
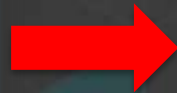


Keys to Network Management

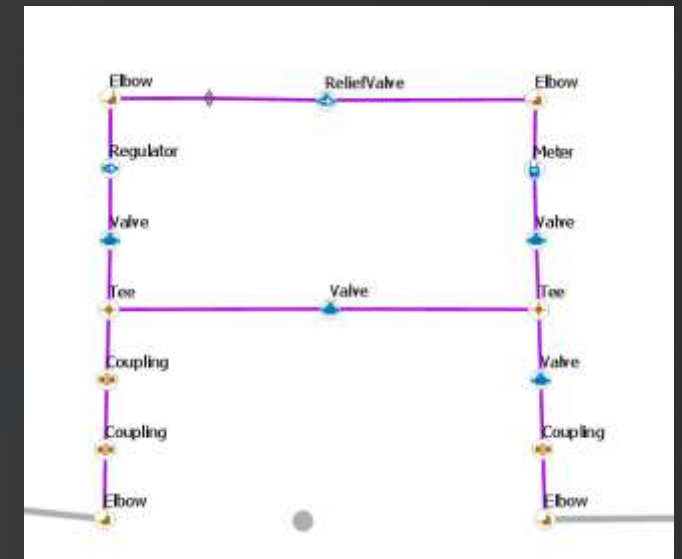
- Real world representation of what is on the ground
 - Accurately representing assets for enhancing analysis and modeling and for simplifying data export for other systems
 - Device Assembly – A container for multiple devices...



Multiple Devices



Single Device Assembly on the map

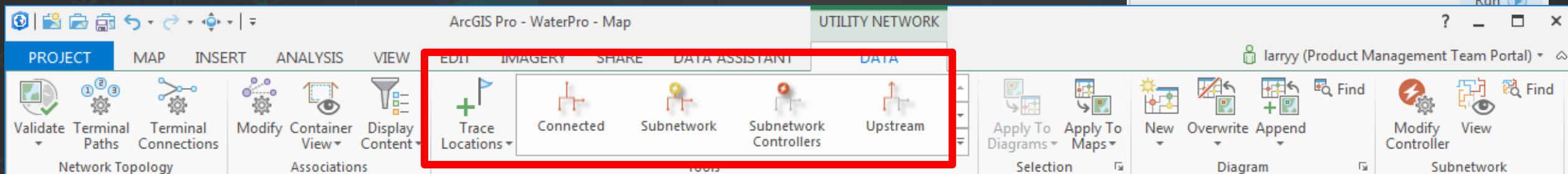
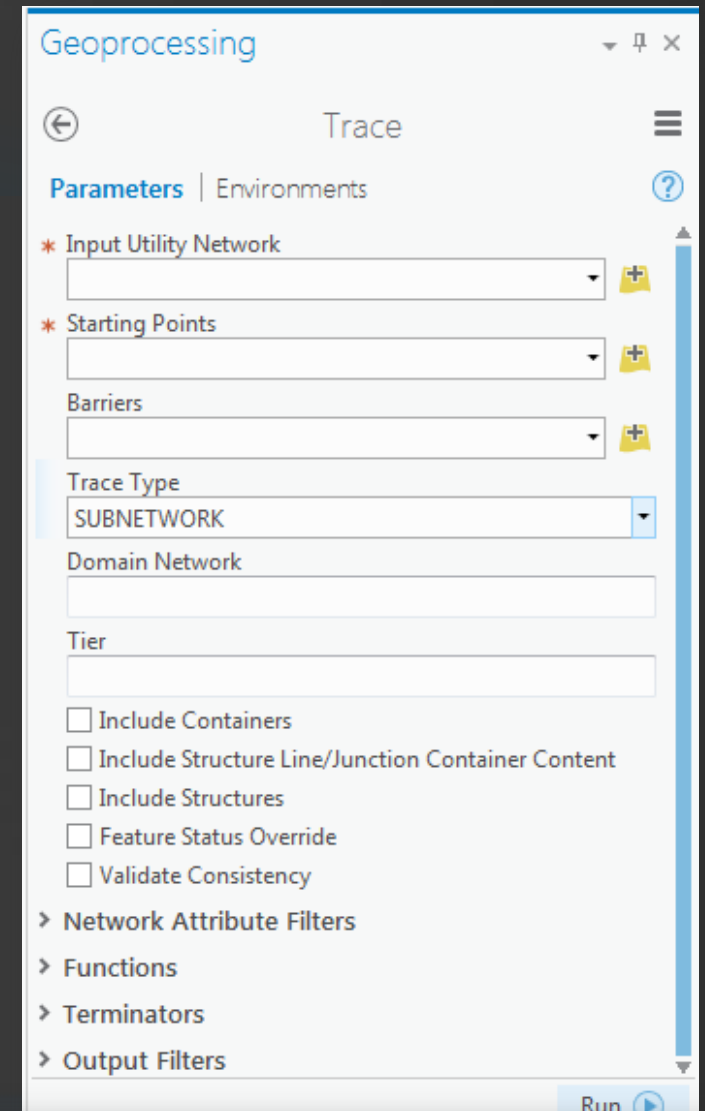


Device Assembly containing devices

Keys to Network Management

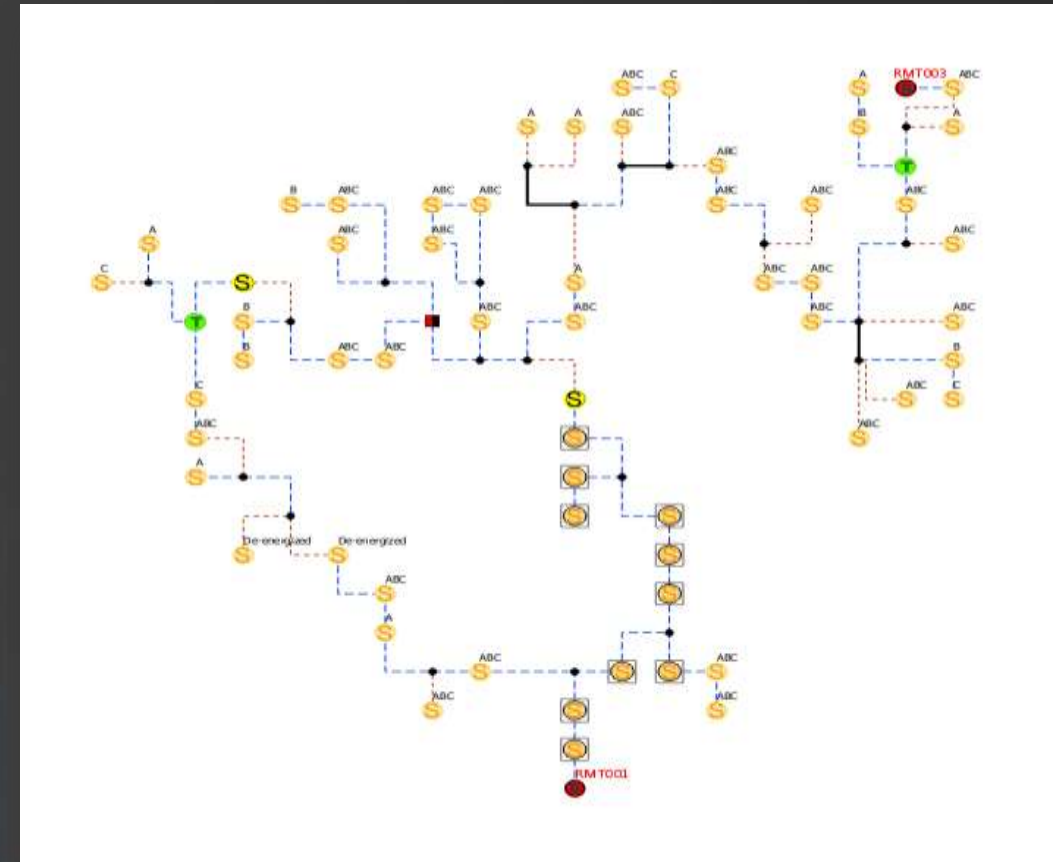
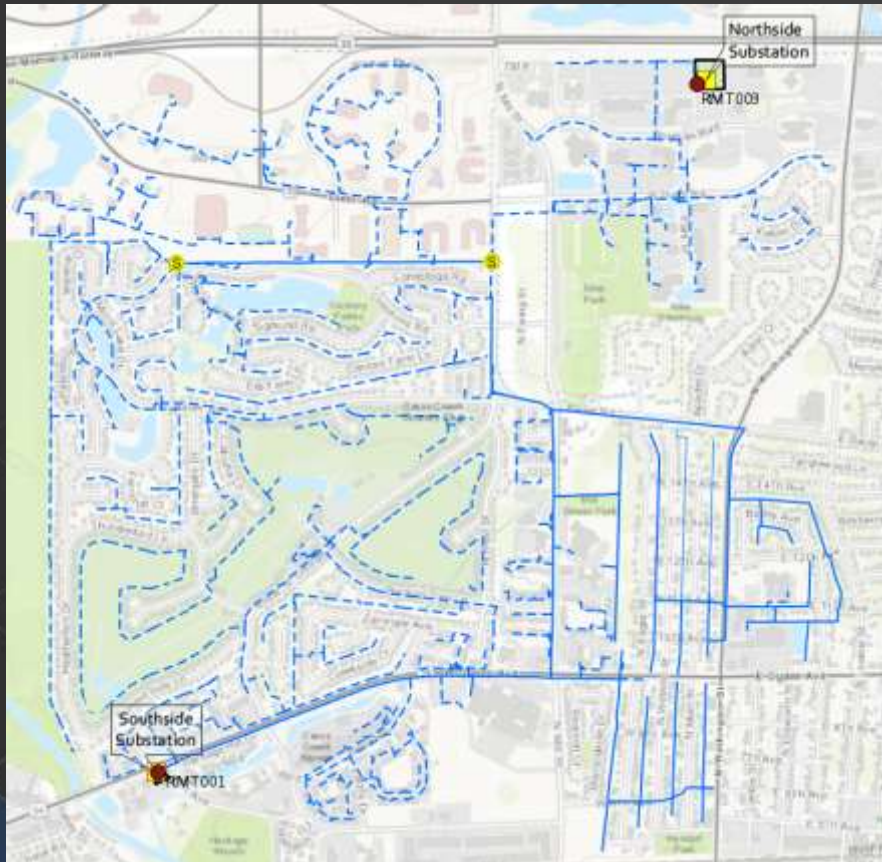
- **Sophisticated analysis**

- ArcGIS Pro provides basic pre-configured tools in the gallery
 - Connected
 - Subnetwork, Subnetwork Sources
 - Upstream, Downstream
 - Loops
- Partners and users can modify the gallery
 - Adding and removing pre-configured tools



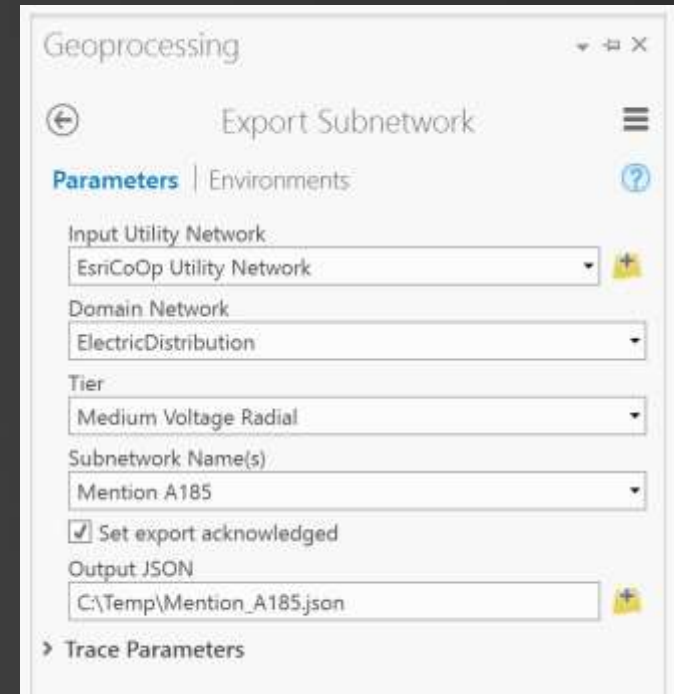
Keys to Network Management

- Improved mapping and visualization techniques
 - Diagram capabilities integrated directly with the *Utility Network*



Keys to Network Management

- **Expanded data exchange capabilities**
 - Expanded core capabilities mean more opportunities to do modeling and high end analysis inside the GIS.
 - Many workflows will still require moving data outside the GIS to other mission critical systems.
 - *Esri* will support these options for exporting data...
 - Export to Well Known Text
 - Export to CIM format (connectivity information only)
 - Export to connectivity table
 - Export to Geodatabase feature classes
 - Export to Json



Keys to Network Management

- A strong foundation for our *Customers and Partners*
 - Better core framework means better starting point for partner solutions

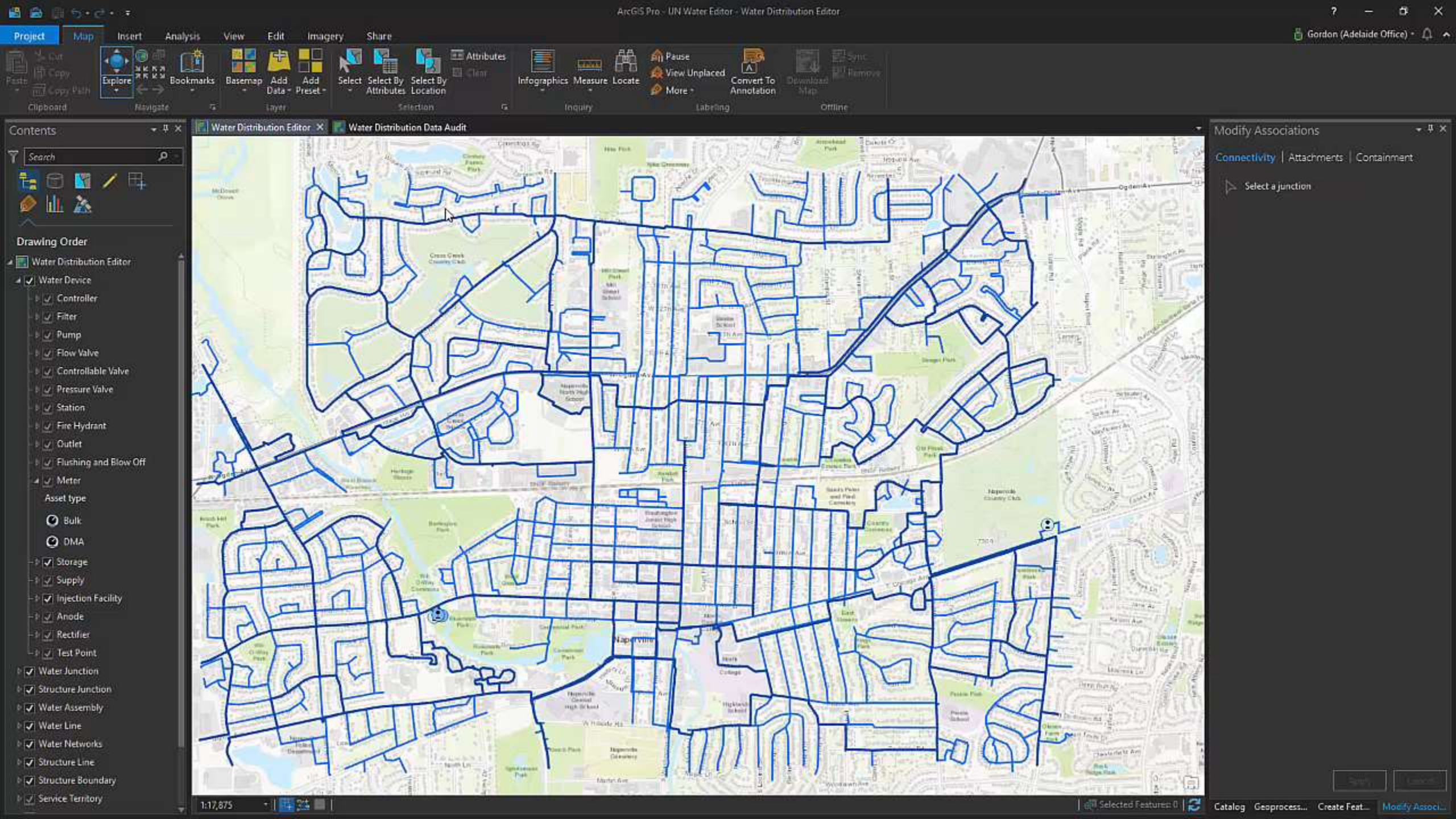
Utility and Telco Solutions

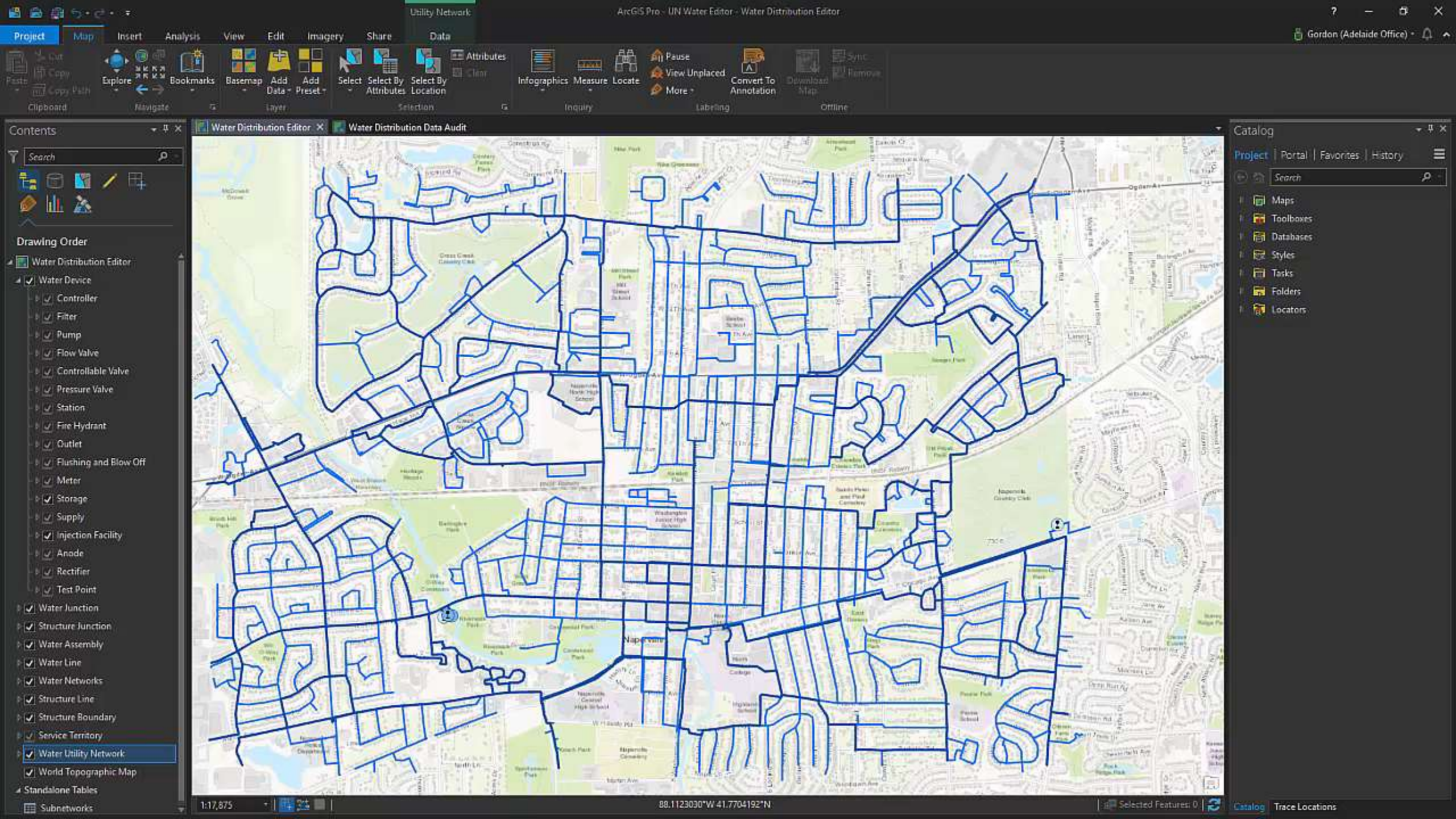
Partner Solutions

Esri Solution Templates (starter capabilities)

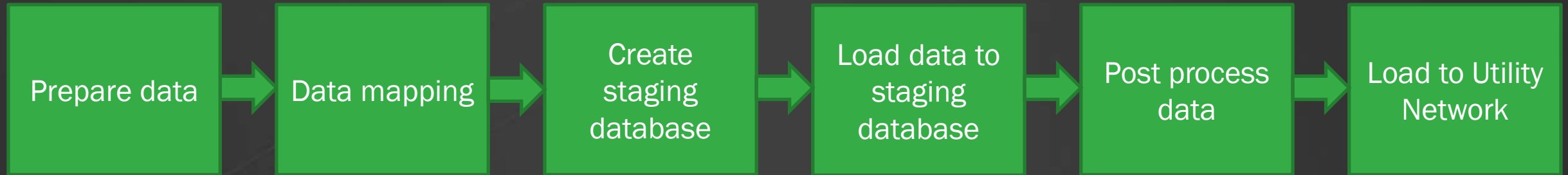
Network Management Framework

ArcGIS Platform



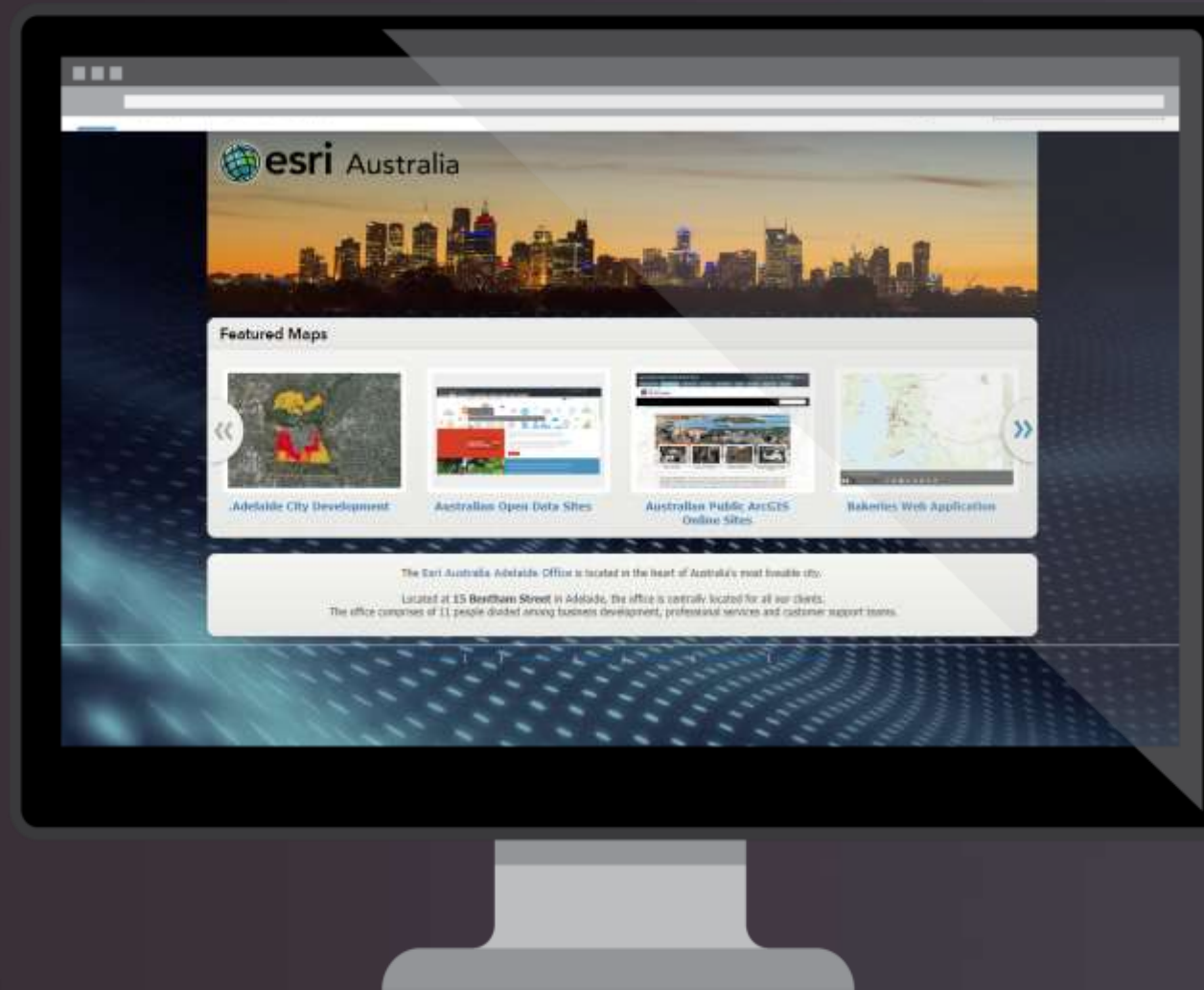


Migrating to the Utility Network



Create the Destination and Provision Your Users

Configure your Web GIS portal – using Online or your own ArcGIS Server



Use Maps to Tell Relevant Stories

Illustrating the mission and key performance indicators of your organization

Performance

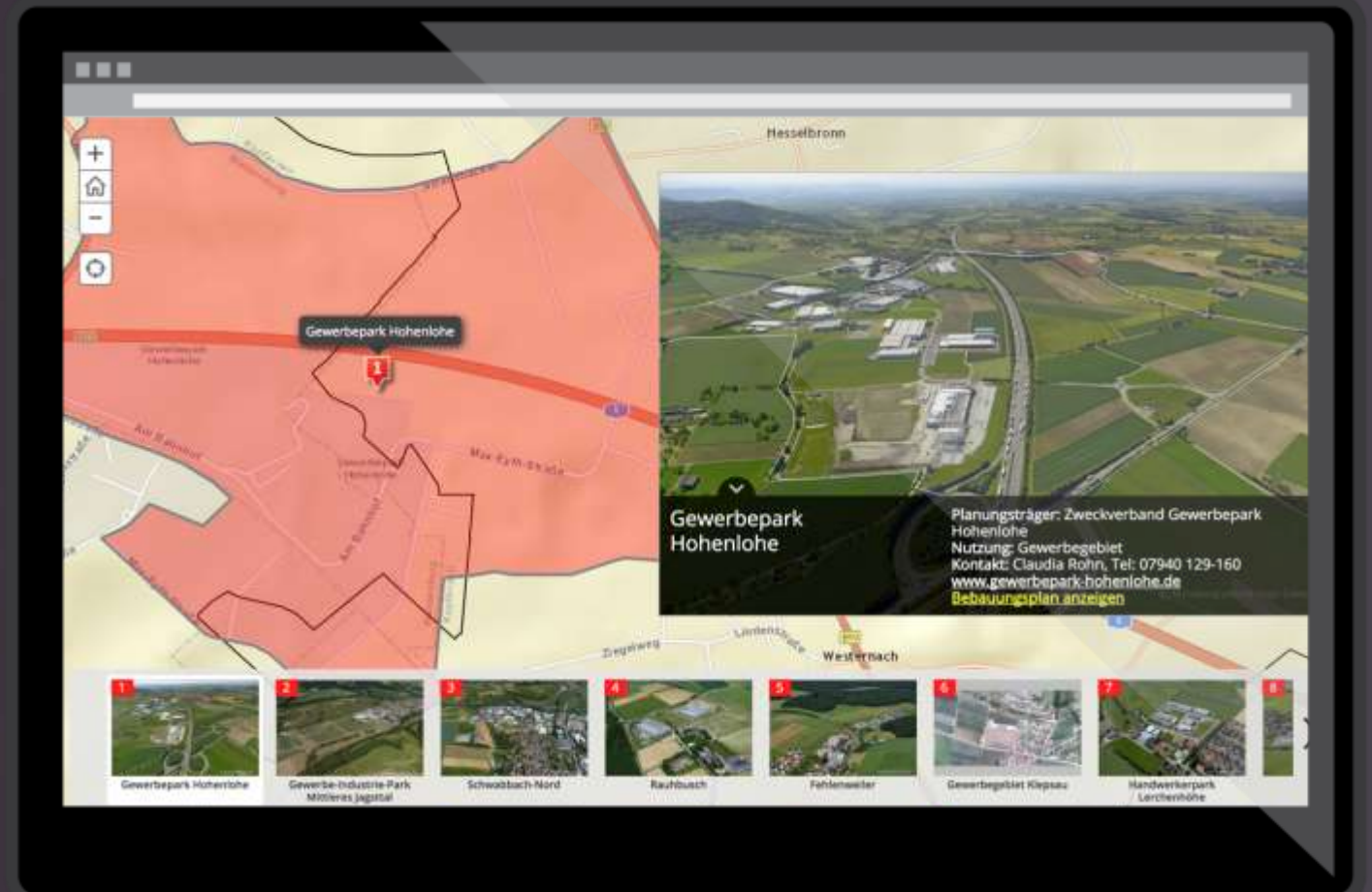
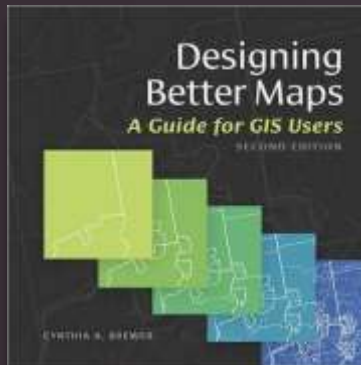
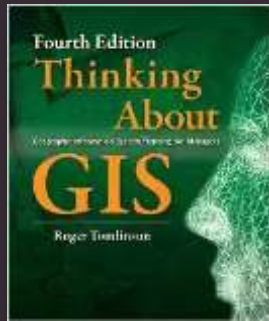
Forecasts

Status

Exceptions

Change

Alternatives



Empower People With Apps

Use and Share the ArcGIS Apps with Your Users

Field

Navigator



Workforce



Collector



Survey123



Mobile
(Connected & Disconnected)

Office

ArcGIS for
AutoCAD



Maps for Office



Explorer



ArcGIS Earth



Dashboard



Public

Open Data



Story Maps



Photo Survey



Crowdsourcing



Empower Your Organisation

Put authoritative maps and geographic insight into the hands of everyone



Thank you

Questions?



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