

ArcGIS Server as an Enterprise Data Solution

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Background

- APS is a large public electric company, comprising many different lines of business, servicing a wide portion of the state of Arizona, encompassing both rural and urban customers
- APS has been utilizing GIS as a mapping and asset solution since 1999, and is currently operating with ArcGIS 9.3.1sp2 and Telvent ArcFM 9.3.1sp2

Problem

- It is critical for APS to provide reliable electric service, and this requires that multiple lines of business and their applications share data effectively
- The diversity of the applications used throughout the company complicates data sharing
 - Different formats
 - Different storage methods
 - Different standards for data capture

Analysis of the Problem

- When examining the problem of data sharing, it became obvious that one component all of these varied data sources had in common was a spatial component
- It was determined that providing some method of viewing data spatially was a good solution for the vast majority of stakeholders

Analysis of the Problem

- Additionally, the solution needed to be:
 - Scalable
 - Provide results in a timely manner
 - Accessible to a wide range of customers
 - Provide near real-time access to data
 - Able to support multiple data formats
 - Simple for the end user to understand and use

Possible Solutions

- Shapefiles, personal geodatabase, filegeodatabase
- ArcIMS
- Spreadsheets
- Paper Maps
- pdfs
- ArcMap
- ArcGIS Server
- ArcGIS Online

Why ArcGIS Server?

- Performance
- Security
- Simple User Interface
- Scalable
- Data is current
- Templates
- “One Size Fits All”

Why ArcGIS Online?

- Simplicity
- Security
- Flexibility
- Business Initiated
- Dynamic

Solution Development (required for ArcGIS Server)

- Define User Community Size
- Determine if Enterprise License Agreement is necessary
- Hardware requirements
 - Diagram of our current set-up

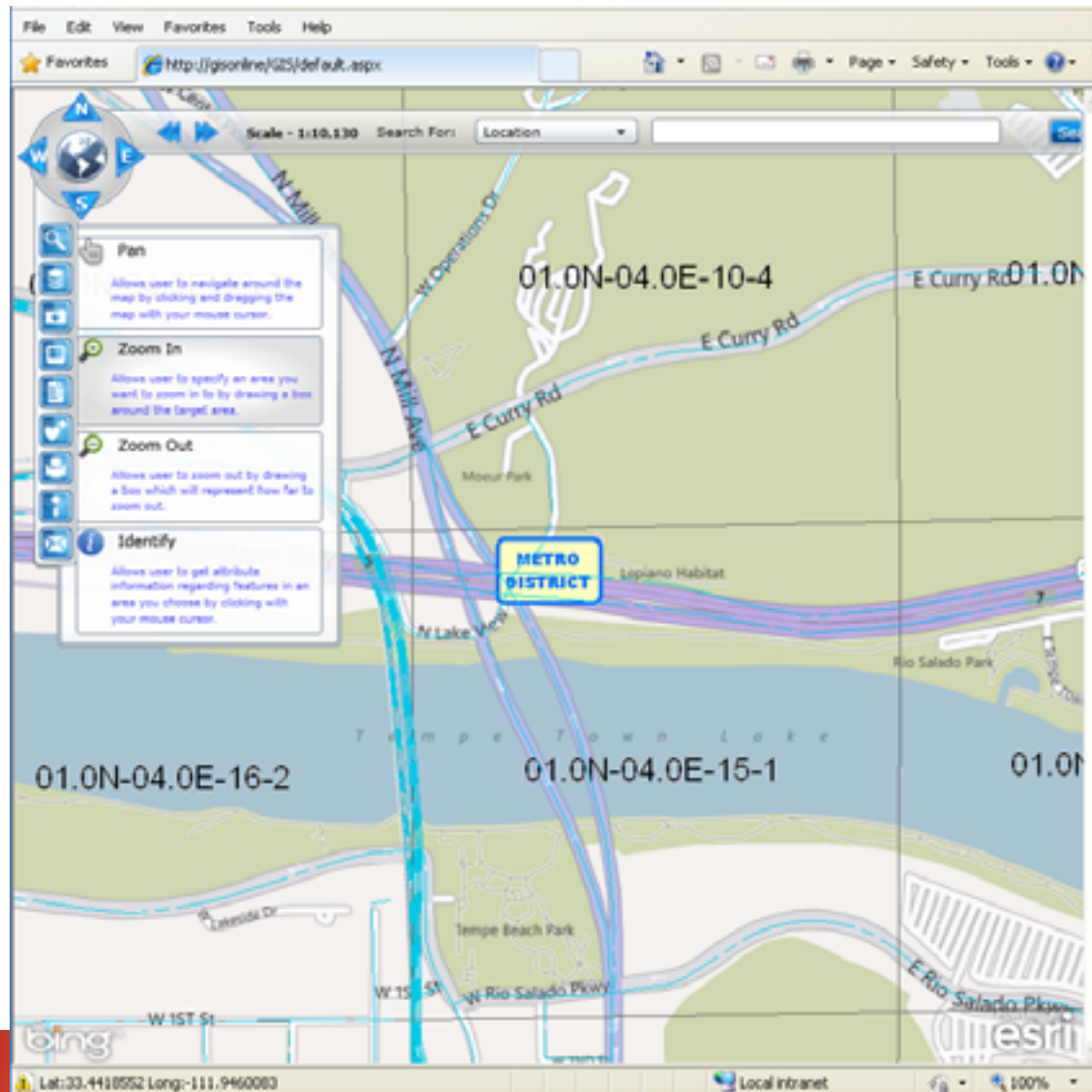
Solution Development (required for ArcGIS Server)

- Software
- Customizations
- Data locations
- Data sources
- Training

Solution Implementation

- Phased implementation
- Publicized the application
 - Brown-bag lunches
 - Corporate communications
 - Real-time use cases
- Additional applications were developed as needed
- Currently, APS has 10 active GISOnline applications

GIS Online



Extended User Community



Lessons Learned

- Never assume what the business needs
- Buy-In
- User Interface is critical
- Manage scope of solution
- Document all work
- Security

Future Plans

- Add more applications as the need arises
- Utilize ArcGIS Online as appropriate
- Ensure APS continues to meet the changing data needs of its customers
 - Distributed Generation
 - Smart Grid
 - Electric Vehicles

Questions?