INTEGRATING GIS AND MAXIMO FOR MORE INTELLIGENT ASSET MANAGEMENT

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INTRODUCTIONS

Jason Dietrich | CoServ
- IT-GIS
- SDE Administration
- ArcGIS Online Administration
- Portal for ArcGIS Administration
- Served as a Geospatial Engineer in the United States Army for 8 years
- At CoServ for 5 years

Amy Tatum | Starboard
- Solutions Director
- Electrical Engineer turned IT Consultant
- Maximo Implementations, Upgrades, and Integrations
- At Starboard 12+ years
- Over 20 years working with Maximo
ABOUT COSERV

LOCATED: North of Dallas-Fort Worth Metroplex - Texas

MAY 1937: Denton County Electric Cooperative is chartered

JANUARY 1998: Denton County Electric begins doing business as CoServ, an abbreviation of “Cooperative Services”

JULY 1998: CoServ Gas established

Electric Meters: Over 250,000
Gas Meters: Over 125,000
Service area growth: Adding roughly 1,500 meters monthly
ABOUT STARBOARD

IBM Gold Partner – IBM Reseller and L1/L2 Support

Dedicated IBM Maximo Consulting Practice

Full-Service provider of assessments, implementations, upgrades, integration, training and support

Focus on Utilities, City and County Governments, Public Works, Airports, Higher Education, Manufacturing Facilities

Based in Longwood, FL, with clients across the U.S.

Recognized implementer of Maximo Spatial and GIS Integrations

Esri Silver Partner
THE PROBLEM:
HISTORICAL LEAK SURVEY TRACKING

- Paper Maps
  - Accuracy of maps?

- Manual entry into LEC compliance database
  - Redundant Steps
  - Increased Margin of Error

- Fragments of data stored in multiple locations
  - No true centralization of data
THE REQUIREMENTS: THE NEED FOR A CHANGE

- **ESRI Leak Survey Suite**
  - Demonstrated by ESRI in 2018
  - Collector
  - Manager
- **Highlighted deficiencies in our workflow**
- **Displayed a more efficient way to collect leaks.**
  - Potential to streamline and more accurately track detected leaks
  - Ability to better oversee progress of survey
  - Better analysis of the data
THE CATCH:  
“DUELING BANJOS”

• Maximo
  • Entering third year of implementation
  • Heavily integrated into our GIS enterprise system
  • Work Management System
  • Preventative Maintenance
  • Asset tracking
THE CATCH: “DUELING BANJOS”

- **Gas Maximo**
  - Project ran concurrent to Leak Survey initiative
  - The logical choice for tracking of leak surveys

- **GIS**
  - The logical choice for capturing the leaks
    - Displays infrastructure related to the leaks
    - Allows technicians to spatially pinpoint the location of the leaks.
THE SOLUTION:
A COLLABORATIVE EFFORT

- Maximo does what it does best
  - Preventive Maintenance
  - Work Orders
  - Asset tracking
- GIS does what it does best
  - Mobile collection
  - Display related gas infrastructure
THE SOLUTION: A COLLABORATIVE EFFORT

**Maximo**
- Stores PM schedules with defined intervals for each pipe material
- Updates PM last complete and next due dates based on inspection work history
- Leak survey work is scheduled and assigned to available inspectors
- Follow up work orders are generated for any leak points discovered so repairs can be made
- Asset maintenance history is created for all work
THE SOLUTION:
A COLLABORATIVE EFFORT

- **GIS**
  - Gas service area is broken up by pressure systems
    - Polygons represent pressure systems
    - Duplicate polygons for steel and poly inspections
  - GIS receives the work order numbers from Maximo into these systems
    - Steel
      - 3 years
    - Poly
      - 5 years
    - Business Districts (BDI)
      - Annually
THE SOLUTION:
A COLLABORATIVE EFFORT

- Preventive Maintenance
- Leak Survey Work Order
- GIS Gas System Work Order
- Portal for ArcGIS Web Application
- Collector Application
- SDE Gas Leak Feature Class
- Leak Repair Work Order
THE PROOF:
DEMO TIME!
THE AFTERMATH: BUSINESS BENEFITS

- **Ease of use**
  - Keeps users in environments they’re comfortable with

- **Data accuracy**
  - Leak collection with spatial accuracy
  - Domained values restrict users to predefined options

- **Data integrity**
  - Data being transmitted between environments reduces human error

- **Data consolidation**
  - Data is managed and maintained in 2 different systems
THE AFTERMATH: MOVING FORWARD

- SPCC transformer inspections
- Recloser inspections
- Feeder audits
- System inventories
QUESTIONS?

Thank You!

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QUESTIONS?