Getting Started with the Utility Network

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Vision Statement

- Esri’s model for the next 10-15 years
- Services based architecture provides the ability to *model, edit,* and *analyze* complex networks across the *entire* Esri platform
- Rules enforce modeling concepts to better support *true* representations of assets in greater detail allowing for greater analysis
- Easy exchange of network information with other mission critical systems like DMS, WMS, network analysis…
- Simplified data models provides increased performance and a highly responsive editing and analysis environment
Getting Started

1. Setup Portal
2. Learn ArcGIS Pro
3. Assess data
Data Assessment
Common errors on utility networks

- Overlaying lines
- Missing relationships
- Connectivity
Challenges in Data Assessment

- Limited procedures
- Inconsistent procedures
- Not measurable
- How to clean up
Organizing the Data Assessment

**Basic Integrity**
- Attributes
  - Null Values
  - Relationship Class
  - Unique ID
- Geometry
  - Invalid Geometry
  - Multipart Lines
  - Short Segments

**Spatial Integrity**
- Duplicate Devices
- Device Connectivity
- Overlapping Conductors

**Tracing Integrity**
- Phasing Connectivity
- Voltage Connectivity
- Feature Connectivity
Automated Validation
Supporting Text
Automated Validation

Batch Job Manager

Reviewer Batch Job

Batch Validate
Reviewer Batch Job
Supporting Text
Validation Results

Reviewer Workspace
Geodatabase Sessions

Reviewer Table
Grouping Error Tracking
ArcGIS Data Reviewer

Quality Control Extension

Automated Checks
Manual Review
Data Inspection

Results in Central Location

Reporting
Data Reviewer Tools.tbx
- Create Reviewer Session
- Delete Reviewer Session
- Enable Data Reviewer
- Execute Reviewer Batch Job
- Geodatabase Schema Compare
- Write to Reviewer Table

Additional QC Tools
Supporting Text
Lessons Learned

How to address Limited procedures

*Basic, Spatial, and Tracing Integrity checks*

How to address Inconsistent procedures

*Batch Jobs*

How to measure data quality

*Reporting Tools*
Resources
http://solutions.arcgis.com/

Data Reviewer Templates

Electric Utilities
Gas Utilities
Addresses
Basemaps
Tax Parcels
Water Utilities

Increase Quality of Utility Data
Data Reviewer for Electric Utilities is a preconfigured set of jobs for performing quality control on electric distribution data.

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