Getting Ready for the Utility Network

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ArcGIS Utility Network Management Extension

Vision Statement

- Esri’s model for the next 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 provide increased performance and a highly responsive editing and analysis environment
Where to Start
Three Step Program

1. Set-up Portal
2. Learn ArcGIS Pro
3. Data Readiness
ArcGIS Enterprise
Make Progress Not Excuses

High Level Deployment
- Install ArcGIS Server & Web Adaptor
- Install Portal for ArcGIS & Web Adaptor
- Install Datastore
- Federate ArcGIS Server with Portal
- Set Hosting Server
- Configure Organization Structure
  - Set Identity Store (Built-in, Active Directory, SAML
  - Define & Configure Groups
- Establish Data Stores (Enterprise Geodatabase Access)
- Publish Content

Need Help?
- Esri Jumpstart Packages
- Business Partners
Where to Start

1. Set-up Portal
2. Learn ArcGIS Pro
3. Data Readiness
Learning ArcGIS Pro
In Order to be a Pro, You Have to Go Pro - Use Pro

- **Use Cases for Now**
  - **WebGIS**: Premier client for authoring and publishing to Portal
  - **Geoprocessing Framework**: Faster multi-threaded 64bit processing and run multiple instances
  - **GeoAnalytics**: Premium client for GeoAnalytics with exclusive tools
  - **Vector Tiles**: Create high resolution tiles supported in Collector and ArcGIS Explorer
  - **3D**: Premier app for viewing, creating and editing 3D
  - **Solutions**: Add-in for easy deployment of Esri solution templates
  - **Utility network**: Beta / Pre-release testing

- **Training**
  - **Instructor Led**
    - Migrating from ArcMap to ArcGIS Pro
    - Extending ArcGIS Pro with Add-ins
    - ArcGIS Pro: Essential Workflows
  - **E-learning (70+ offerings)**
    - Videos
    - Web Courses
    - Training Seminars
    - Tutorials
    - MOOC
Where to Start

1. Set-up Portal
2. Learn ArcGIS Pro
3. Data Readiness
Data Readiness
Assess the Mess

- Empty attributes
- Legacy fields
- Overlapping lines
- Missing relationships
- Connectivity
Data Readiness
Similar to Spring Cleaning

- Organize the process
- Measure progress
- Set priorities
ArcGIS Data Reviewer
Data Quality Management for ArcGIS

- **Provides**
  - Rule-based validation
  - Interactive tools
  - Track errors

- **ArcGIS Platform**
  - ArcMap extension
  - ArcGIS Pro extension
  - ArcGIS Server extension (Standard or higher)
  - Web AppBuilder for ArcGIS

- **For multiple domains**
  - Configurable
  - Extendable
Organizing the Data Assessment

**Basic Integrity**
- **Attributes**
  - Null Values (existing required fields)
  - Relationship Class
  - Unique ID
  - Subtype Checks
  - Domain Check

- **Geometry**
  - Invalid Geometry
  - Multipart Lines
  - Short Segments
  - Self Intersecting Lines

**Spatial Integrity**
- **Geometry**
  - Duplicate Lines & Devices
  - Overlapping Lines
  - Disconnected Lines & Devices
  - Features outside service area

**Tracing Integrity**
- **Connectivity**
  - Disconnected Lines & Devices
  - Missing Devices
    - Transformer
    - Regulator
    - Pumps
Data Validation

ArcGIS Data Reviewer
Data Readiness
Additional Spring Cleaning Chores

Unit Records

Relationships & Global ID
Summary
Utility Network Data Readiness

Organize the process
Measure progress
Set priorities

Basic Integrity
- Attributes
  - Null Values, missing required fields
  - Relationship Class
  - Unique ID
  - Subtype Checks
  - Domain Check
- Geometry
  - Invalid Geometry
  - Multi-part Lines
  - Short Segments
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- Geometry
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Resources
The Future Starts Now

http://ramtech-corp.com/gready/

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

Download
Learn More

http://solutions.arcgis.com
ArcGIS Solutions Lab
Questions?