



# Getting Started with the Utility Network

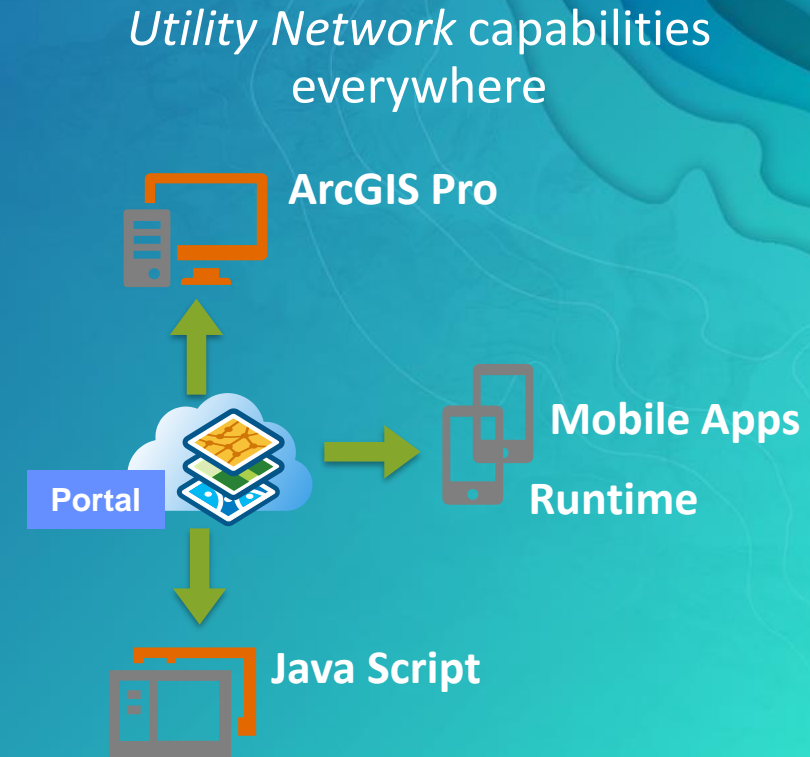
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# The Network Management Project

## 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

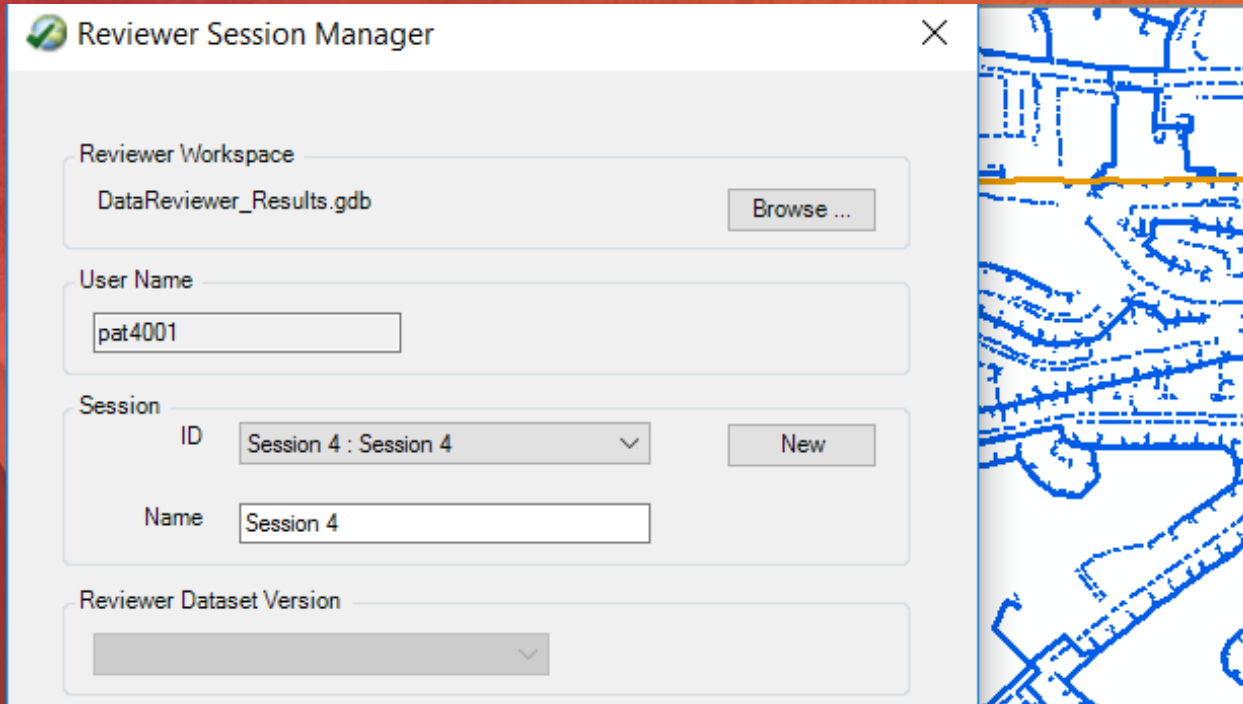
Overlapping  
Conductors

## Tracing Integrity

Phasing Connectivity

Voltage Connectivity

Feature Connectivity



The image shows a software window titled "Reviewer Session Manager" with a close button (X) in the top right corner. The window contains several input fields and buttons:

- Reviewer Workspace:** A text field containing "DataReviewer\_Results.gdb" and a "Browse ..." button to its right.
- User Name:** A text field containing "pat4001".
- Session:** A section containing:
  - ID:** A dropdown menu showing "Session 4 : Session 4" with a downward arrow, and a "New" button to its right.
  - Name:** A text field containing "Session 4".
- Reviewer Dataset Version:** A dropdown menu with a downward arrow.

To the right of the dialog box, a portion of a blue line map is visible, showing a network of lines and a yellow horizontal line.

# Automated Validation

Supporting Text

# Automated Validation



Batch Job  
Manager

Reviewer  
Batch Job

Batch  
Validate



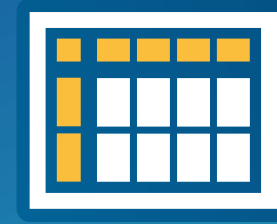


# Validation Results



## Reviewer Workspace

Geodatabase  
Sessions



## Reviewer Table

Grouping  
Error Tracking

General					
Drag a column header here to group by that column.					
	Check Title	Check Notes	Severity	Description	Created On
▶	PriOH Conductor and Conductor Info Relationship Check - Orphaned records	PriOH Conductor should have a related record in the Conductor Info table and vi...	2	Origin key is Orphan	Wednesday, J 5, 2017 2:39:1 PM
	PriOH Conductor and Conductor Info Relationship Check - Orphaned records	PriOH Conductor should have a related record in the Conductor Info table and vi...	2	Origin key is Orphan	Wednesday, J 5, 2017 2:39:1 PM

# Reviewer Workspace

Supporting Text



# 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.

[Download](#)

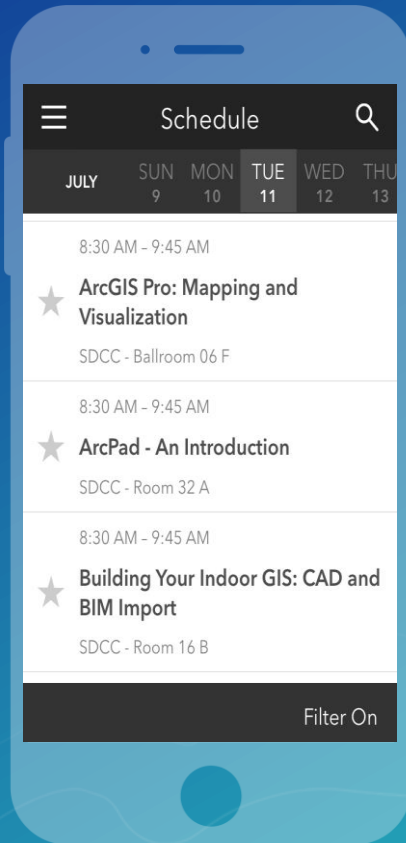
[Learn More](#)

# Please Take Our Survey on the Esri Events App!

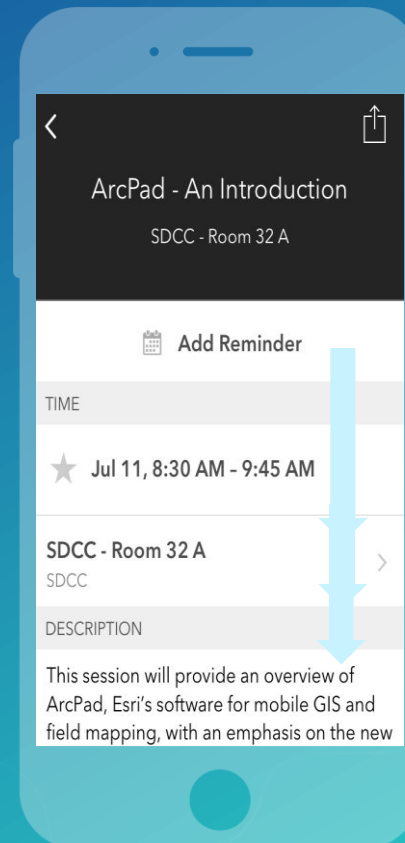
**Download the Esri Events app and find your event**



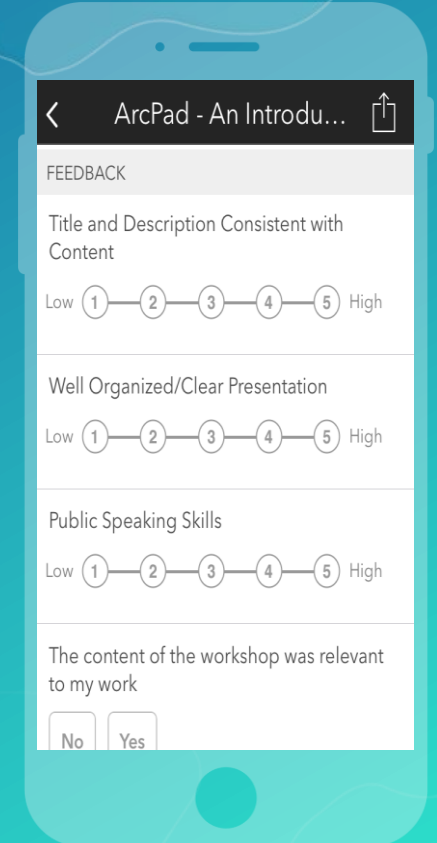
**Select the session you attended**



**Scroll down to find the survey**



**Complete Answers and Select "Submit"**







esri

THE  
SCIENCE  
OF  
WHERE