ArcGIS Data Reviewer: Leveraging Geoprocessing For Data Validation

Mohamed Albashir
Demo Theater Overview
Extending the Validation Framework

- What is Data Reviewer?
- Automated Validation
- Data Reviewer Components
- Demo: Leverage Data Reviewer Geoprocessing Tools
- Demo: Leverage ArcGIS Geoprocessing tools
What is ArcGIS Data Reviewer?
Data Quality Management for ArcGIS

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

• **For individuals and enterprise**
  - Saves time/money
  - Less rework

• **For multiple domains**
  - Configurable
  - Extendable
What is ArcGIS Data Reviewer?
Data quality management in the ArcGIS platform

• **Data Reviewer for Desktop**
  - ArcGIS Pro
  - ArcMap

• **Data Reviewer for Server**
  - ArcGIS Server (standard or higher)

• **Data Reviewer API**
  - JavaScript
  - ArcGIS Pro SDK for Microsoft .NET

• **Web AppBuilder for ArcGIS**
Automated Review Methods
Different Type of Issues in GIS Data

- Attribution
- Feature Integrity
- Metadata
- Spatial Relationships
Data Reviewer Components

• Reviewer Results
• Reviewer Sessions
• Reviewer Batch jobs
Demo
Out the box Data Reviewer
Geoprocessing tools
Leverage Data Reviewer GP Tool to perform data validation

**Business rule:** Site Address Point must have a related Address Entrance Point
Overview of the Geoprocessing tools

Different Geoprocessing tools used in this Demo:

• Enable Data Reviewer

• Create Reviewer Session

• Execute Reviewer Batch Job
Data Validation Steps

1. Enable Data Reviewer
2. Create Reviewer Session
3. Execute Reviewer Batch Job
Questions ?
Demo
Data Reviewer Geoprocessing tools + Platform Geoprocessing tools
Leverage platform GP tools to perform data validation

Business rule: Single family parcels must not contain more than one address

Single Family Home

Apartment Complex

Single Family Home
Model

- **Create Reviewer Session**: Creates a new Reviewer Session.
- **Spatial Join**: Performs spatial join between parcels and address points.
- **Select**: Selects single family parcels that have more than one address.
- **Write to Reviewer Table**: Writes single family parcels that have more than one address.

Diagram:
- Create Reviewer Session
- Spatial Join → Select → Write to Reviewer Table
- Database icon with checkmark
Summary

- Data Reviewer extension
- Automated validation
- ArcGIS Data Reviewer GP tools
- Using Data Reviewer and Platform GP tools for Data Validation
Questions ?
See Us Here
## See Us Here

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Location</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ArcGIS Data Reviewer: An Introduction</td>
<td>• Room 31A</td>
<td>• Tuesday 8:30 – 9:30</td>
</tr>
<tr>
<td>• ArcGIS Data Reviewer: Deploying Data Quality Web Services</td>
<td>• Demo Theater 5</td>
<td>• Tuesday 11:15 – 12:00</td>
</tr>
<tr>
<td>• ArcGIS Data Reviewer: An Introduction (Offering #2)</td>
<td>• Room 31A</td>
<td>• Tuesday 4:00 – 5:00</td>
</tr>
<tr>
<td>• ArcGIS Data Reviewer: Leveraging Geoprocessing for data validation</td>
<td>• Demo Theater 3</td>
<td>• Wednesday 10:00 – 10:45</td>
</tr>
<tr>
<td>• ArcGIS Data Reviewer: Advanced Data Validation</td>
<td>• Room 30E</td>
<td>• Wednesday 2:30 – 3:30</td>
</tr>
</tbody>
</table>
Please Take Our Survey on the App

Download the Esri Events app and find your event.

Select the session you attended.

Scroll down to find the feedback section.

Complete answers and select “Submit.”