ArcGIS Data Reviewer: Leveraging Geoprocessing for Data Validation

CHANDAN BANERJEE
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
ArcGIS Data Reviewer
Automate, Simplify, and Improve your Quality Control Process

- Extension to ArcGIS for Desktop and Server
- Supports complete QC process
- Provides
  - Rule based workflows
  - Interactive tools
  - Track errors
- Enables increased efficiencies
- Relevant to multiple domains
Data Reviewer GP Tools

At ArcGIS Pro 2.0, Data Reviewer has 5 GP Tools:

- Enable Data Reviewer
- Create Reviewer Session
- Execute Reviewer Batch Job
- Delete Reviewer Session
- Write to Reviewer Table
Leverage GP model to perform data validation
Leverage GP model to perform data validation

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

![Single Family Home](image1)

![Apartment Complex](image2)

![Single Family Home](image3)
Model

- Create Reviewer Session
- Performs spatial join between parcels and address points
- Select single family parcels that have more than one address
- Writes single family parcels that have more than one address

Create Reviewer Session → Spatial Join → Select → Write to Reviewer Table → Reviewer Database
Leverage GP model to perform data validation
Summary

- Data Reviewer extension
- ArcGIS Data Reviewer GP tools
- Write to Reviewer Table GP tool can be used to enhance data QC beyond the standard checks
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<thead>
<tr>
<th>Day and Description</th>
<th>Type</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td><strong>Tuesday, July 11</strong></td>
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<tr>
<td>ArcGIS Data Reviewer: An Introduction</td>
<td>Technical Workshop</td>
<td>10:15 – 11:30am</td>
<td>Room 31B</td>
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<tr>
<td><strong>Wednesday, July 12</strong></td>
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<tr>
<td>ArcGIS Data Reviewer: An Introduction</td>
<td>Technical Workshop</td>
<td>3:15 – 4:30pm</td>
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<tr>
<td>ArcGIS Data Reviewer: Integrating Data Validation Capabilities into Web Applications</td>
<td>Demo Theater</td>
<td>3:30 – 4:15pm</td>
<td>Demo Theater 8 Enterprise</td>
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<td>ArcGIS Data Reviewer: Web</td>
<td>Implementing Data Quality Reporting in Clients</td>
<td>Demo Theater</td>
<td>4:30 – 5:15pm</td>
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<td><strong>Thursday, July 13</strong></td>
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<tr>
<td>ArcGIS Data Reviewer: Advanced Data Validation</td>
<td>Technical Workshop</td>
<td>8:30 – 9:45am</td>
<td>Room 31A</td>
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<td>ArcGIS Data Reviewer: Leveraging Geoprocessing for Data Validation</td>
<td>Demo Theater</td>
<td>9:30 – 10:15am</td>
<td>Demo Theater 6 Spatial Data Mgmt</td>
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<tr>
<td>ArcGIS Data Reviewer: Validating Linear-Referenced Events</td>
<td>Demo Theater</td>
<td>10:30 – 11:15am</td>
<td>Demo Theater 6 Spatial Data Mgmt</td>
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Want to learn more?

- Product information
  www.esri.com/datarReviewer

Ensure the Quality of Your Data

Whether managing resources for a nation or facility assets for a local community, you want to make sure that your data is free of errors. With ArcGIS Data Reviewer, you can make data quality a component of your overall data management strategy.

“We can now perform consistent QA/QC tasks and keep our data in top shape after we have done the initial time investment.”

Daniel Jones, GIS Specialist, City of Woodland
Want to learn more?

- Documentation
  - Desktop (desktop.arcgis.com)
Want to learn more?

- Documentation
- Desktop
- Server (server.arcgis.com)
Want to learn more?

- Documentation
  - Desktop
  - Server

- Training *(training.esri.com)*
  - Assessing Data Quality using ArcGIS Data Reviewer *(Seminar)*
  - Evaluating Positional Accuracy Using ArcGIS Data Reviewer for Desktop *(Seminar)*
  - Data QC with ArcGIS: Automating Validation *(Web Course)*
  - Data QC with ArcGIS: Visual Review *(Web Course)*
  - Quality Control Using ArcGIS Data Reviewer for Desktop *(Instructor-Led)*
Want to learn more?

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• Training
  - Assessing Data Quality using ArcGIS Data Reviewer
  - Evaluating Positional Accuracy Using ArcGIS Data Reviewer for Desktop
  - Data QC with ArcGIS: Automating Validation
  - Data QC with ArcGIS: Visual Review
  - Quality Control Using ArcGIS Data Reviewer for Desktop

• GeoNet (geonet.esri.com)
  - Data Reviewer place
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