Validating Linear Reference Events

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Validating Linear Reference Events

What is Linear Referencing?
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
Validating Linear Reference Events

Invalid Events

Industries
- Roadway Management
- Pipeline Management

- Orphan Events
- Invalid Events
- Event Gaps
- Event Overlaps

ArcGIS Pro

ArcGIS Desktop
Invalid Events (Error Scenarios)

Orphans

Event does not have an associated route
Invalid Events (Error Scenarios)

Invalid Measures

Event greater than maximum measure
Invalid Events (Error Scenarios)

Gaps

Event 10
Gap between measure 4 to 6

Event 11

(R1 - routeSourceFC, ObjectID - OID)

LEGEND

Route
Events
Error Geometry
Invalid Events
Overlaps

Overlap between measure 5 to 7

(R1 - routeSourceFC, ObjectID – OID, Event OIDs)

Overlap Error Scenarios
Invalid Events - Demo
Available checks to support Linear Referencing

- **Monotonicity**
- Cutbacks
- Geometry and Geometry
- Evaluate Polyline
- Non-Linear Segment
- Duplicate Geometry
- Invalid Geometry
- Multipart Line Check
- Domain
- Execute SQL
Validating Linear Reference Events
– Road Ahead

- **Post ArcGIS Pro 2.0**
  - Support of Object Classes
  - Event on Event Validation
  - Support for Route Dominance (Roadway Management)
Questions ?
Want to learn more?

- Product information
  www.esri.com/datareviewer
Want to learn more?

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

- **Documentation**
  - Desktop
  - Server

- **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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