

Data Reviewer for ArcGIS® Pro Checks

EVENT CHECKS

Event on Event

Finds linear referenced events that overlay other events based on a user-defined relationship.

Invalid Events

Finds linear referenced events that do not have an associated route (orphaned events) or contain invalid measure values. The check also identifies gaps or overlaps between events within the same route or across multiple routes.

POLYGON CHECKS

Evaluate Polygon Perimeter and Area

Searches for polygon, part, ring, or segment features whose area or perimeter is within a specified range

Invalid Hole Feature

Finds features that intersect polygon feature holes

Multipart Polygon

Finds polygon features with more than one part and polygon features with holes

Polygon Overlap/Gap Is Sliver

Returns overlap/gap geometries between polygon features from two feature classes that have a thinness ratio beneath a user-specified threshold; optionally requires that the overlap/gap polygons be beneath a maximum area threshold

Polygon/Ring Closed

Searches for unclosed rings in polygons based on the x-value, y-value, and z-value

Polygon Sliver

Finds polygons below a specified thinness ratio (t) and optionally whose area is within a specified threshold

Unnecessary Polygon Boundaries

Returns border geometries for polygons that share a common boundary and identical attribution

POLYLINE CHECKS

Evaluate Polyline Length

Searches for segment, part/path, and polyline features whose length is within a specified range

Find Dangles

Finds polyline features with nodes that are within a user-defined tolerance but not connected to other polyline or polygon features

Monotonicity

Finds polylines with vertices that are not strictly increasing or decreasing in value or are trending based on specified conditions

Multipart Line

Searches for polyline features with more than one part

Orphan

Finds single polyline features that are not connected in the database topology

Polyline or Path Closes on Self

Finds paths or lines in polyline features that close themselves

Unnecessary Nodes

Finds features that share a node and have identical attributes in editable fields

ATTRIBUTE CHECKS

Domain

Validates coded value and range domains to ensure that all values meet domain constraints

Query Attributes (Execute SQL)

Finds features based on a SQL query WHERE clause

Regular Expression

Finds features with attribute values that violate the regular expression

Subtype

Searches for feature classes with improper or null subtypes

Table to Table Attribute

Returns rows whose attributes match those of a feature class or table and/or comply with a user-defined WHERE clause comparing the attributes between feature classes and/or tables

Unique ID

Checks the values of a set of fields across a set of tables and feature classes for uniqueness within a given workspace

FEATURE INTEGRITY CHECKS

Cutbacks

Identifies segments where the angle between segments in a polygon or polyline is below a specified minimum value

Duplicate Vertex

Searches for vertices in selected polyline or polygon feature classes that are within a specified tolerance of each other

Evaluate Extent

Returns features where the extent properties (x and y) are within specified parameters

Evaluate Part Count

Finds features with a part count that is within a specified range

Evaluate Vertex Count

Searches for features with a vertex count that is within a specified range

Evaluate Z Values

Searches for features whose z-values are within a specified range

Invalid Geometry

Finds features whose geometry is empty, nothing, or not simple, as well as features with empty envelopes

Nonlinear Segment

Searches for nonlinear segments, such as arcs and curves, in line and polygon features

Sampling

Generates a statistical sampling of features or records from one or more layers or tables

GEODATABASE CHECKS

Relationships

Searches for records that are orphans or have improper cardinality in a relationship class

Topology Rules

Returns the geometry of features that violate the topology rules that have been defined for a feature dataset in the geodatabase

SPATIAL RELATIONSHIP CHECKS

Adjacent Vertex Elevation

Finds vertices for polyline or polygon features with elevation (z-value) changes greater than the specified tolerance

Composite

Searches for features that satisfy combined Geometry on Geometry and/or Table to Table Attribute checks by feeding the results of one check into the next check

Different Z or Intersection

Finds two intersecting line features whose z-value difference is within the minimum/maximum specified tolerance values at the point where they intersect

Duplicate Feature

Finds features of the same geometry type that are collocated

Evaluate Intersection Count

Finds vertices for polyline features in one feature class that intersect polyline or polygon features in a second feature class a specified number of times

Feature on Feature (Geometry on Geometry)

Searches for features from two different feature classes or within the same feature class that spatially interact (e.g., intersect) or are within a tolerance of each other

Intersection on Geometry

Returns geometries for features in Feature Class 1 that intersect with the intersections from features from Feature Class 2 and 3

Valency

Searches for points or nodes of linear features that intersect with a specified number of linear features

LEGEND

REVIEWER BATCH JOBS

Reviewer batch jobs contain configured Data Reviewer checks that validate features stored in geodatabase feature classes, stand-alone tables, and shapefiles. Batch jobs are created using tools in ArcMap and are persisted as an .rbj file that can be shared using feature layer templates and packages in ArcGIS Pro.

REVIEWER RULES IN A GEODATABASE

Reviewer geodatabase rules are configured Data Reviewer checks that validate geodatabase feature classes and stand-alone tables. Rules are created using tools in ArcGIS Pro and are stored in a geodatabase that can be shared by exporting to comma-separated values files (.csv) or XML workspace document files (.xml).

REVIEWER RULES IN A MAP

Reviewer map rules are configured Data Reviewer checks that validate feature layers referenced in a map. Rules are created using tools in ArcGIS Pro and are stored in a map that can be shared using project templates and packages, map files and packages, and layer files and packages in ArcGIS Pro.