ArcGIS[®] Data Reviewer Checks

ATTRIBUTE CHECKS

Domain Finds attribute values that do not comply with coded value or range domains that are associated with an attribute field.	LANDUSE DESCRIPTION 000 UNCLASSIFIED AGR AGRICULTURE SDP PLAN IND INDUSTRIAL NRN IND
Query Attributes Finds records based on a WHERE clause run against row attributes.	
	TYPE = 4
Regular Expression Finds features and rows that contain text values that do not match a defined pattern.	FIELD REGULAR EXPRESSION 1805 YEAR 19/20)\D\D 2005 200A 200A
Relationship Finds rows in feature classes and stand-alone tables that violate cardinality or relationship rules defined in a Relationship class.	CROP 1 CORN 2 RICE 3 WHEAT
Subtype Finds features with improper or null subtype values.	SUBTYPES1HIGHWAYS2MAJOR ROAD3LOCAL STREETS4ALLEY

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FEATURE CLASS 1

7 25

8 18

9 18

SUBTYPE=0

SCALE

20,000

30,000

EVENT CHECKS

Event on Event Finds linear referenced events that overlay other events based on a user-defined relationship.	$\begin{array}{c} & E1 \\ 0 \\ 0 \\ \hline E2 \\ 0 \\ \hline E2 \\ \hline 100 \\ \hline R \\ 100 \\ \hline E3 \\ \hline 0 \\ \hline \end{array}$
R=Route E=Event	15 • 75 E3 is null and E1 is not null and E2 is not null
Find Orphan Events Finds linear referenced events that have no association to a route feature.	R1 R3 E1-R1 E2-R2 E3-R3 E4-R1 E5-R2 E6-R3
R=Route E=Event	
Find Event Gaps Finds linear referenced events with gaps between events of the same category, in the same route or across multiple routes.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
R=Route E=Event	E1 E2 0 25 39 50
Find Event Overlaps Finds linear referenced events that have overlaps with events of the same category, in the same route, or across multiple routes.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
R=Route E=Event	0 35 44 65 R1 R1
Finds linear referenced events that contain invalid measure values in the same route or across multiple routes.	E1 E2 E3 E4 E5 E1 E2 E3 E4 E5 R1 R2 R2
	E1 E2 E3 E4 E5

FEATURE INTEGRITY CHECKS

Check Geometry Finds features whose geometry is empty, nothing, or not simple, as well as features with empty envelopes.	OBJECTID SHAPE 1 POLYLINE 2 POLYLINE 3 NULL
Cutbacks Finds segments where the angle between segments in a polygon or polyline is below a specified minimum value.	ANGLE <25°
Duplicate Vertex Finds vertices from the same feature that are collocated or within a specified tolerance of one another.	
Evaluate Part Count Finds features with a part count that is within a specified value.	1 2 1 PARTS>1
Evaluate Vertex Count Finds polyline or polygon features that have a vertex count within a specified tolerance.	

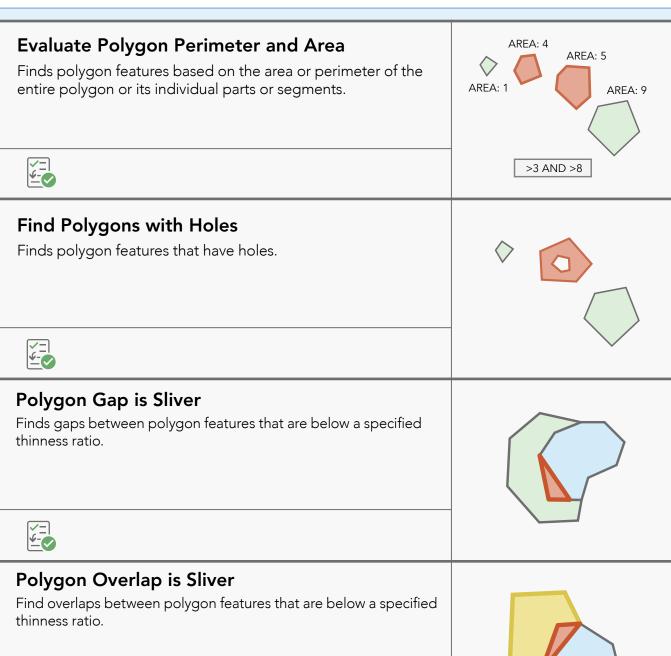
Table to Table Attribute

	FFAT	JRE CLASS	ĺ
Finds features or rows that contain attribute values that meet a relationship you define and compares them to values in another	OID	SCALE	Ì
feature class or stand-alone table.	1	10,000	L
	2	20,000	
	3	10,000	
	4	30,000	

Unique Field Value

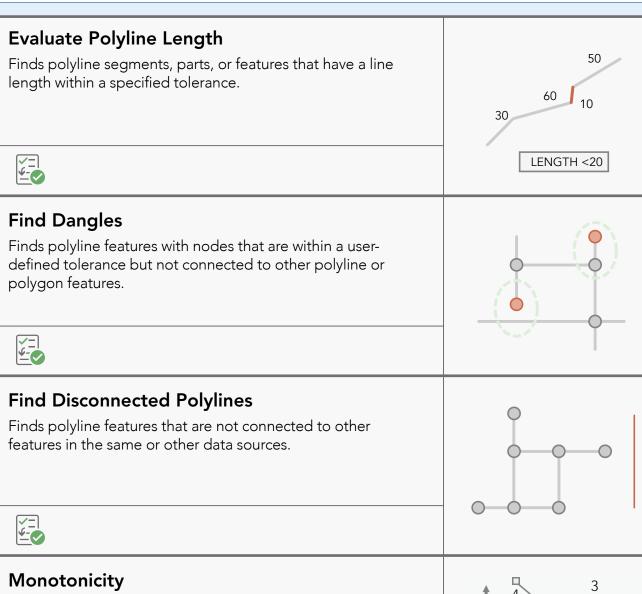
Finds rows in feature classes and stand-alone tables that contain nonunique values in a field or a list of fields that are editable.

POLYGON CHECKS



E1 E2 E3 E4 E5 R=Route E=Event

POLYLINE CHECKS



Finds vertices in z-enabled or m-enabled polylines that are not strictly increasing or decreasing in value or are trending based on specified conditions.

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.

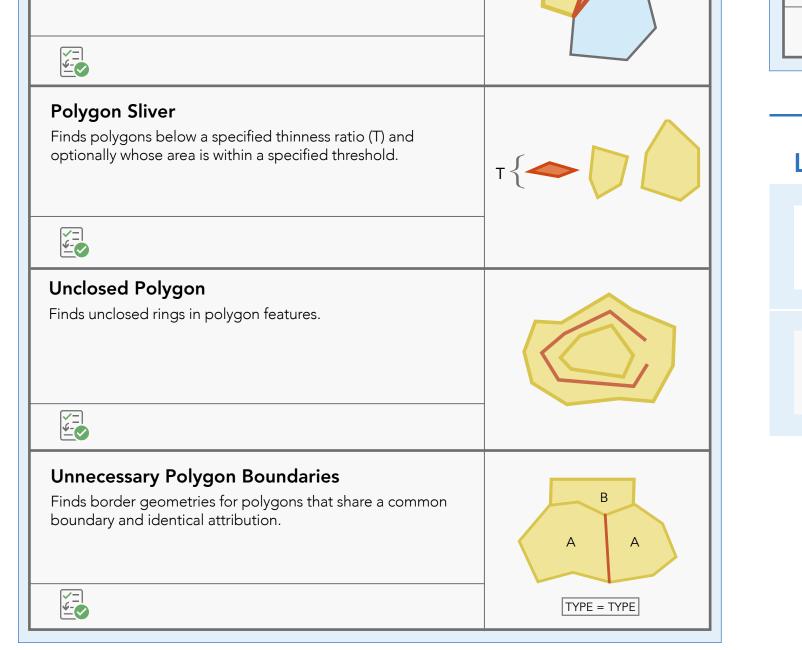
	NUMBER OF VERTICES>2 AND<5
Nonlinear Segment Finds polyline or polygon features that contain nonlinear segments such as arcs and curves.	

SPATIAL RELATIONSHIP CHECKS

✓<u>−</u> ✓<u>−</u>

Composite Finds features or rows based on the result from multiple Data Reviewer checks.	FEATURE ON FEATURE 1 FEATURE 2
Duplicate Feature Finds features that contain duplicate geometry and attribute values.	
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.	INTERSECTION>3
Feature on Feature Finds features that have a specific relationship either from two feature layers or within the same feature layer.	

Z-VALUE CHECKS



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	A
	TYPE = TYPE

1 2 1 4 5

М

p2

p

LEGEND



REVIEWER RULES IN A GEODATABASE Reviewer geodatabase rules are configured ArcGIS® Data Reviewer checks that evaluate the quality of features and rows stored in a geodatabase. Rules are created using tools in ArcGIS Pro[®] and support both constraint attribute rule and validation attribute rule workflows. Rules are stored in a geodatabase that can be shared by exporting as a CSV or XML workspace document file.

RUN DATA CHECKS

Data Reviewer checks enabled with the Run Data Checks tool, can run a brief assesment of the quality of the feature using the Run Data Checks tool in ArcGIS Pro. A summary of these results are stored in a history pane to identify features that failed or passed validation.



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Adjacent Vertex Elevation Change Finds vertices for polyline or polygon features with elevation (z-value) changes greater than the specified tolerance.	Z<400' 630' 450'
	- 160' 360' 180'
Different Z at Intersection Finds two intersecting line features whose z-value difference is within the minimum/maximum specified range at the point where they intersect.	Lower bound: 5' Upper bound: 30' $ Z \Delta =29'$ $ Z \Delta =29'$ $ Z \Delta =10'$
	2' _8'
Evaluate Z Values	
Finds features whose z values are within a specified range.	° ° Z
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