

In [1]: `import arcpy`

Buffer Data

(already imported to my current project, so no need to call it via notebooks)

In [2]: `help(arcpy.analysis.Buffer)`

Help on function Buffer in module arcpy.analysis:

Buffer(in_features=None, out_feature_class=None, buffer_distance_or_field=None, line_side=None, line_end_type=None, dissolve_option=None, dissolve_field=None, method=None)

Buffer_analysis(in_features, out_feature_class, buffer_distance_or_field, {line_side}, {line_end_type}, {dissolve_option}, {dissolve_field;dissolve_field...}, {method})

Creates buffer polygons around input features to a specified distance.

INPUTS:

in_features (Feature Layer):
The input point, line, or polygon features to be buffered.

buffer_distance_or_field (Linear Unit / Field):
The distance around the input features that will be buffered. Distances can be provided as either a value representing a linear distance or as a field from the input features that contains the distance to buffer each feature.If linear units are not specified or are entered as Unknown, the linear unit of the input features' spatial reference is used.When specifying a distance, if the desired linear unit has two words, such as Decimal Degrees, combine the two words into one (for example, 20 DecimalDegrees).

line_side {String}:
Specifies the sides of the input features that will be buffered.

* FULL-For line input features, buffers will be generated on both sides of the line. For polygon input features, buffers will be generated around the polygon and will contain and overlap the area of the input features. For point input features, buffers will be generated around the point. This is the default.

* LEFT-For line input features, buffers will be generated on the topological left of the line. This option is not valid for polygon input features.

* RIGHT-For line input features, buffers will be generated on the topological right of the line. This option is not valid for polygon input features.

* OUTSIDE_ONLY-For polygon input features, buffers will be generated outside the input polygon only (the area inside the input polygon will be erased from the output buffer). This option is not valid for line input features.
This optional parameter is not available with a Desktop Basic or Desktop Standard license.

line_end_type {String}:
Specifies the shape of the buffer at the end of line input features. This parameter is not valid for polygon input features.

* ROUND-The ends of the buffer will be round, in the shape of a half circle. This is the default.

* FLAT-The ends of the buffer will be flat, or squared, and will end at the endpoint of the input line feature.
This optional parameter is not available with a Desktop Basic or Desktop Standard license.

dissolve_option {String}:
Specifies the type of dissolve to be performed to remove buffer overlap.

* NONE-An individual buffer for each feature is maintained, regardless of overlap. This is the default.

* ALL-All buffers are dissolved together into a single feature, removing any overlap.

* LIST-Any buffers sharing attribute values in the listed fields (carried over from the input features) are dissolved.

dissolve_field {Field}:
The list of fields from the input features on which to dissolve the output buffers. Any buffers sharing attribute values in the listed fields (carried over from the input features) are dissolved.

method {String}:
Specifies the method to use, planar or geodesic, to create the buffer.

* PLANAR-If the input features are in a projected coordinate system, Euclidean buffers are created. If the input features are in a geographic coordinate system and the buffer distance is in linear units (meters, feet, and so forth, as opposed to angular units such as degrees), geodesic buffers are created. This is the default. You can use the Output Coordinate System environment setting to specify the coordinate system to use. For example, if your input features are in a projected coordinate system, you can set the environment to a geographic coordinate system to create geodesic buffers.

* GEODESIC-All buffers are created using a shape-preserving geodesic buffer method, regardless of the input coordinate system.

OUTPUTS:

out_feature_class (Feature Class):
The feature class containing the output buffers.

In [3]: `#conviently copied python code from my history within ArcPro
arcpy.analysis.Buffer(
 "state_park_trails_roads",
 r"C:\Users\runac\Downloads\Fall_2021\ArcGIS1\Labs\Lab00_basics\Lab00_basics.gdb\Buffer_by_ArcNote",
 "5 Meters",
 "FULL",
 "ROUND",
 "NONE",
 None,
 "PLANAR")`

Out[3]:

Output

C:\Users\runac\Downloads\Fall_2021\ArcGIS1\Labs\Lab00_basics\Lab00_basics.gdb\Buffer_by_ArcNote

Messages

Start Time: Friday, September 17, 2021 11:47:59 AM
Succeeded at Friday, September 17, 2021 11:48:30 AM (Elapsed Time: 31.16 seconds)

Automatically appears in my ArcPro Map

In []: