Feature Line Split

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Description

This scripting tool will take an input feature line, and split its line features into the number of target segments or target distance specified by the target specified by the input integer or input field. Each line feature will be split into the number of segments specified. This version of the script will carry over any of the fields of the original feature class using cursors, it will only split the geometry into equal length segments for a number of segments for each line equal to the target count.

Usage

The goal of this script was to split target line features into (such as routes or paths) for all the line features in a feature layer, into segments of a target length or split equally into a target segment count similar to many of the proportional editing tools. The intended uses for this are:

- Aid in the creation of study segments to summarize data on for networks.
- Aid in the creation of animations for routes by allowing the creation equal length converging line segments whose ends can be converted to points.
- Provide a tool for batch editing and segmentation of polylines.

Syntax

FeatureLineSplit (Input_Feature_Line, Segmentation_Number, {Segmentation_Field}, Split_Method, Best_Fit_Line, Output_Feature_Line)

Parameter	Explanation	Data Type
Input_Feature_Line	Dialog Reference This is the input feature class whose individual geometry features will be broken into the number of desired target segments and put into a new feature class. The input can only be a polyline for this tool, because it uses Polyline specific methods. Python Reference This tool depends on the segmentAlongLine method in ArcGIS 10.3.	Feature Layer
Segmentation_Number	Dialog Reference This is either the target number of segments for the output lines or the target length in the units of the current projection of the segments for the output lines depending on the split method. There is no python reference for this parameter.	Long

Segmentation_Field (Optional)	Dialog Reference This is a field that denotes the target number of segments for the output lines or the target length in the units of the current projection of the segments for the output lines depending on the split method. If a field is chosen it will override the segmentation number parameter. There is no python reference for this parameter.	Field
Split_Method	Dialog Reference This parameter denotes how the input lines will be split. Length will use the current projection's linear units and the chosen segmentation field or value to split the input lines into segments of the chosen length (or close to the chosen length if Best Fit is True). Segment Count will break the lines into segments of equal length based on the segment count. There is no python reference for this parameter.	String
Best_Fit_Line	Dialog Reference If True and Length is the split method, the lines will be split into segments of length closest to the target determined by the value or field while not creating short end segments. It will result in lines closest to the target length but maintain lines of equal length in the output. There is no python reference for this parameter.	Boolean
Output_Feature_Line	Dialog Reference This is the output polyline feature class that will be created by this tool. It should have the fields of the original feature class derived by an insert cursor. Python Reference Uses insert cursors to get the desired "copy" of the segmented feature class.	Feature Class

Code Samples

There are no code samples for this tool.

Tags

Proportional, Line, Split, Editing, Batch, Animations, Preserve Fields

Credits

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Use limitations

There are no access and use limitations for this item.

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