GISNet Quick Reference

Version 4.0.8

Syntax:

GISNet [-flag] [control_file]

Purpose:

1. Converts an ArcView shapefile of links to TRANSIMS node, link, and shape files.
2. Converts an ArcView shapefile of nodes to a TRANSIMS node file.
3. Provides the option to manipulate or map the data fields in the GIS link file to create or synthesize data fields in the TRANSIMS link file.
4. Provides the option to smooth the shape points on the link to avoid sharp angles and short distances that often distort lane, side or bandwidth offsets.
5. Enables the modeler to edit the link centerline generated by ArcNet using ArcGIS or other software, and then convert the changes back to TRANSIMS files.

Required Keys

GIS_LINK_FILE (1)	[project_directory]*filename.shp*
NEW_NODE_TABLE	[new_directory]*filename*
NEW_LINK_TABLE	[new_directory]*filename*

Optional Keys

TITLE	Text
REPORT_FILE	*Filename*
REPORT_FLAG	FALSE {true/false/yes/no/1/0}
MAX_WARNING_MESSAGES	100,000
MAX_WARNING_EXIT_FLAG	TRUE {true/false/yes/no/1/0}
PROJECT_DIRECTORY	*Pathname*
DEFAULT_FILE_FORMAT	VERSION3 {(2)}
GIS_NODE_FILE (1)	[project_directory]*filename.shp*
NEW_DIRECTORY	*Pathname*
NEW_SHAPE_TABLE	[new_directory]*filename*
CONVERSION_SCRIPT (3)	[project_directory]*filename*
FIRST_LINK_NUMBER (4)	1 {>= 1}
FIRST_NODE_NUMBER (4)	1 {>= 1}
MAXIMUM_SHAPE_ANGLE	45 degrees {0, 5..120}
MINIMUM_SHAPE_LENGTH	5 meters (0..50}
NEW_DEFAULT_FORMAT	[default_file_format] {(2)}
NEW_NODE_FORMAT	[new_default_format] {(2)}
NEW_LINK_FORMAT	[new_default_format] {(2)}
NEW_SHAPE_FORMAT	[new_default_format] {(2)}

INPUT_COORDINATE_SYSTEM	System, Code, Units (5)
INPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (6)
OUTPUT_COORDINATE_SYSTEM	System, Code, Units (5)
OUTPUT_ADJUSTMENT_FACTORS	X offset, Y offset, X factor, Y factor (6)
OUTPUT_XYZ_SHAPES	FALSE {true/false/yes/no/1/0}
OUTPUT_XYM_SHAPES	FALSE {true/false/yes/no/1/0}

Reports

GISNET_REPORT_#	CONVERSION_SCRIPT
	CONVERSION_STACK

Notes

1	If a GIS node file is provided, the node coordinates will be extracted from the shapefile point location. If a GIS node file is not provided, the node coordinates will be extracted from the first and last points in the GIS link file.
2	{VERSION3, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, LANL, SQLITE3}
3	By default the data field names found in the GIS link file are copied to the corresponding name in the TRANSIMS link file. If the GIS link file was created using ArcNet, this means the data from the GIS file will automatically be copied to the TRANSIMS fields (provided the input and output files are in the same general file structure (i.e., Version3 vs. Version4)). If the GIS link file includes different field names or different units of measure, a conversion script is typically used to manipulate the data or map the input field names to the output field names. The input GIS link fields are referenced as "GIS.*field*" and the TRANSIMS link fields are referenced as "NEW_LINK.*field*".
4	If after copying the field name and applying the conversion script, the link and/or node numbers are not defined, the program will automatically create link and/or node numbers starting from the specified first values.
5	System options include: UTM, STATEPLAN, and LATLONG Code is the FIPS code number for the system (e.g., Oregon North = 3601) Unit options include: FEET, METERS, MILES, KILOMETERS, DEGREES, and MILLION_DEGREES.
6	X and Y offsets are added to the coordinate values X and Y factors are multiply the coordinate values