

GeoTools

Polyline Tools

Join

GT_3DJ	Join 3D Polylines
GT_PLJOIN	Automated Join - 2D polylines

Change 2d3d2d

GT_CH2D3D	2D-to-3D
GT_CH3D2D	3D-to-2D

Vertex Management

GT_FIXCLOSED	Add / Remove redundant closing vertex in polylines
GT_DELSVP	Delete single vertex polylines

Optimization/Cleanup

GT_DENSIFY	Densify vertices
GT_DISTANGWEED	Weed (remove) vertices based on distance and angle
GT_REM_LINVERTS	Weed (remove) collinear vertices from polyline

Identify

GT_INTERSECT	Mark intersection points along lines, polylines, arcs..
GT_JUNCTION	Mark junction points in a network of linear objects
GT_PL_0	Identify Zero elevation Vertex ^C CGT_PL_0;
GT_VXDROP	Highlight elevation differences in polylines

Process

GT_PL_INTER	Assign Interpolated Z values to vertices
GT_MERGEPOLY	Merge adjacent closed polylines
GT_GT_INOUTOFFSET	Offset closed polylines INwards/OUTwards
GT_POLYINSVX	Polyline 'Insert Vertex' Tool

Inquiry & Statistics

GT_PL_STAT	Compute detailed polyline statistics
GT_LAYERAREA	Compute summed polyline areas from selected layers
GT_LENGTH	Compute lengths
GT_BULGE	Display info. about polyline bulge (arc segments)

More editing

GT_GT_MPEDIT	Multiple Pedit
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GT_CHW Change Widths
GT_XP_WPL Explode Polylines with width

Direction Control

GT_FLIP Flip (Reverse) direction
GT_PLARCMIRROR Flip (mirror) arc segments of polylines
GT_PL_DIR Find out direction of polyline vertices

Create/Edit

GT_AUTOPAN Draw 2d/3d polylines with auto-edge panning
GT_LINPOLY Draw linear polylines from arced polylines
GT_XV Express Pedit
GT_SEGLENSET Specify segment lengths in polylines

Presentation

GT_PL_PLACE Place Points/Blocks along vertices

Fillet

GT_FILLETPOLY Enhanced fillet command
GT_MFILLET Fillet multiple polylines

Others

GT_XPSPL Explode Splined
GT_FLOW_LT Control polyline linetypes
GT_ZPOLY Zoom to Polyline
GT_FIXUCS Fix line/polylines with different UCS

Conversion

GT_PLARC2PL Convert Arc Polylines to linear segment polyline
GT_PL23DFACE Convert polylines to 3dface
GT_BLKSH2P Convert Blocks/Shapes/Text/Circle to Points
GT_P2BLKSHP Convert Points/Text/Circles to Blocks/Shapes
GT_SPL2PL Convert Splines to polylines
GT_0LEN2PNT Convert 0 Lengths to POINTs
GT_3DF2PL 3DFaces to polylines
GT_PFACE2PL Polyface mesh to polylines
GT_LINE2PL Convert lines and arcs to polylines
GT_SCALE_Z Scale Z values
GT_ASN_PROP Assign Properties
GT_ASS_EL Automatically Assign contour elevations
GT_ASS_EL_TEXT Assign contour elevations from text objects
GT_FLATTEN Flatten - Convert to 0.0 elevation
GT_ATT2XD Attributes to Xdata
GT_CH_H2L Heavy-Weight to Light-Weight

GT_CH_L2H Light-Weight to Heavy-Weight

Export

GT_IMPEX Import/Export points and lines
GT_VIEWLINKED View handles-linked ASCII data
GT_READDEM Import(read) ARC ASCII DEM files
GT_WRITEDEM Export (write) ARC ASCII DEM files
GT_MULTEXPORT Multiple drawing export in various formats
GT_NIKON2DWG Import NIKON survey raw data
GT_IMPORTSDR Import Sokkia SDR raw data format

Drawing Cleanup

GT_ZTREND Analyze and fix polyline elevation trends
GT_OVERLAP Remove overlapping segments from a lines selection
GT_DELDUP Delete Duplicate Objects
GT_NODELINESNAP Linear and Node Snap (MAGNET)
GT_KINK Identify intersecting segments (kinks) in polylines
GT_BREAKX Break crossing objects at ends
GT_INTEX Lineworks Intersections Processor
GT_DANGLECHECK Detect free ends (dangles) of lines, polylines and arcs
GT_HSQUARE Create right angle corners
GT_POINTWEED Weed points based on spacing
GT_ENDELEVCHECK Check for coincident (XY) endpoints with varying Z
GT_SET_Z_PL Set out-of-range elevation values to nearest valid elevation values
GT_PLANARPOLY Make polylines/3dfaces planar

Draw

GT_EASY3DPOINT Easy 3dpoint
GT_EMBHATCH Draw Embankment hatch slopes pattern
GT_VEGLINE Draw vegetation cover symbols
GT_SORTEDPOLY Draw a polyline by joining points in sorted order

Build

GT_ROWMAKER Make Right-of-Way/Pavements/Ramps
GT_CENTLINE Draw Center-Lines from road R-O-W
GT_3DOFFSET Offset 3d polylines
GT_CREATECENT Create centroid marks inside closed polygons
GT_MVMEASURE Multi-Variable Measure
GT_JNE Join nearest ends of lines, polylines
GT_EDGEBUILDER Build common edges along closed, adjacent polygons
GT_PTINTERMANUAL Interpolate point elevation from neighboring polylines - manual pick
GT_PTINTERAUTOMATIC Interpolate point elevation from neighboring polylines - automatic
GT_CCPOLY Create closed polylines from a mass of networked polylines
GT_CONTOUROFFSET Create mathematical offsets between two contour polylines

GT_NETNODES	Place points along linear network
GT_DRAPEPOLY	Drape a 3D polyline across a set of intersecting linear objects

Annotation

GT_VXLABEL	Label polyline vertices
GT_PL_DATAALBL	Label polylines with attached data
GT_SEGLABEL	Label polyline segments
GT_CONTLABEL	Label contour polylines
GT_IDXYZ	Label points
GT_ANNOTPOINTS	Annotate points, based on layer names
GT_LENTEXT	Create/update length annotation
GT_CREATEANNOT	Create annotations at intersections

Blocks

GT_ATTEDIT	Global Attribute Editor
GT_ZOOMTXT	Search and replace text/attributes
GT_ATTTEXT	Extract Block attributes to file
GT_ATTXFER	Transfer Attributes between blocks
GT_TXT2ATT	Transfer Text strings to Block attributes
GT_PROP2ATT	Transfer AutoCAD properties to Blocks Attributes
GT_TAGREN	Rename block attribute tags, prompts and defaults
GT_TAGDEL	Delete block attribute tags from block definition
GT_UPDATEPOINTBLK	Update 'Coordinates Block' attributes

AutoCAD Map Tools

Data Convert/Transfer

GT_XFER_OD_XD	Transfer Object Data / Xdata between two objects
GT_OD2ATT	Transfer Object Table Data to Block Attributes
GT_ATT2OD	Transfer Block Attributes to Object Table Data
GT_DB2OD	Transfer database linked data to object data
GT_PROP2OD	Transfer AutoCAD properties to Object Data
GT_OD2XD	Convert Object Table Data to Xdata

Export

GT_OD_EXTRACT	Export Object Table Data to ASCII files
GT_OD_STRUEXT	Export Object Table Field Structure to ASCII files

Create

GT_AUTOINCROD	Create auto-incrementing object table data
GT_OD_XD_LABEL	Create text labels from Object data / extended entity data

Object Data

GT_OD_EDIT	Global Object Data Editor
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GT_GT_EASYOD	Multiple-Choice Object data editor
GT_GT_EASYOD_SETUP	Multiple-Choice Object data editor Setup
GT_MERGETBL	Merge two object tables
GT_REM_DUP_RECS	Remove duplicate object data records within objects
GT_REN_OD_FLDS	Rename Object Data Fields
GT_TXT2OD	Transfer text strings to Object Data
GT_OD_LIST	List Object Data
GT_OD_SEARCH	Search and replace Object table data
GT_NODATA	Check for no Xdata / Object Data
GT_OD2ELEV	Assign elevations from object data
GT_AMAPBREAK	Break object but retain object data in both broken parts
GT_COPYODTABDEF	Copy Object Table definition
GT_DEFATTOD	Define Object Table from block attributes
GT_DEFDBOD	Define object table from linked database table

Bricscad / plain AutoCAD compatibility tools

GT_BC_OD2XD	Convert Object Table Data to Xdata (for BricsCAD/plain ACAD use)
GT_BC_OEDIT	Edit object data from AutoCAD Map
GT_BC_XD2OD	Transfer Xdata to Object data (for use after Bricscad / plain AutoCAD editing only)

AutoCAD Map

GT_ADEDEFDATA	Define object data
GT_ADEATTACHDATA	Attach/Detach object data
GT_ADEEDITDATA	Edit object data
GT_QUERYPROC	Format text labels queried with 'Alter properties'
GT_TOPOSELECT	Select Topology objects graphically

Extended Entity Data

GT_REMXD	Remove Xdata
GT_XD_SEARCH	Search and replace extended entity data
GT_SHOWXD	Display extended entity data from picked object
GT_XD_EXTRACT	Extract extended entity data to ASCII files

Civil Tools

GT_TRIANGULATE	Create TIN (Delauney triangulation)
GT_CONTOURBUILDER	Create contours from TIN model
GT_CHAINAGE	Annotate chainages along a route
GT_GT_PROFILE	Draw cross-sectional profile from 3D Polyline
GT_ADJUSTLEVELS	Adjust cross-section elevations
GT_DRAWGRADE	Draw Graded polylines
GT_TRAVADJ	Perform traverse error adjustment
GT_CROSSSECT	Multiple Cross Section Tools
GT_SHEETINS	Create and Place Map Sheet Index Block

GT_ANNGRID	Create Map Grid
GT_BEARINGDIST	Bearing and Distance
GT_BRGROUND	Round off bearings

Geographic Tools

GT_COORDTRAN	Mapping coordinates transformation tools
GT_DWG2KML	Export Google KML file – Interactive version
GT_DWG2KML_BATCH1	Export Google KML file – Single feature batch version
GT_DWG2KML_BATCHM	Export Google KML file – Multiple feature batch version
GT_INSPHOTO	Insert a geo tagged photo

Miscellaneous

Images

GT_GEO_INS	Insert a geo-referenced image
GT_IMAGESCAN	Scan selected image files and build image boundary list
GT_IMAGESEARCH	Insert geo-referenced image corresponding to selected AOI
GT_MINEX2DWG	Import (read) a MINEX coal reserves data file
GT_ROUGHEN	Roughen a Line
GT_SURFAREA	Compute Surface Area of 3DFACES
GT_XP_RETDAT	Explode objects - Retain Object Table and extended entity data
GT_HATCHAREA	Report on areas covered by HATCH objects
GT_CONTBREAK	Break(Split) objects along a polyline
GT_GEO	Enter geographical coordinates-Latitude,Longitude,Height
GT_CONTCCLASS	Classify Elevation Contours
GT_DELETELAYOUTS	Delete paper-space layouts
GT_CONTDIST	Contour Spacing Distance Tool

Selection

GT_PLFILTER	Polylines based on properties
GT_3DFFILTER	3DFaces based on properties
GT_ESELECT	Enhanced Entity Selector
GT_MAKESEL	Build Selection Set
GT_FINDZRNG	Find objects in selected Z range
GT_SL	Select Current Layer
GT_SS	Select Current Style
GT_LASTSEL	Put last GeoTools selection in "previous" sel.set

Inquiry

GT_CGRAV	Compute Center of Gravity
GT_DWG_STAT	Display Drawing Statistics
GT_DXY	Enhanced DIST command