

## 10. Additional Tools

MAADgis provides a number of additional routines and functions that builds on the many powerful Geographic Information System (GIS) features of MapInfo. These additional routines and functions converts MapInfo Professional into a sophisticated and easy-to-use tool for managing, manipulating and displaying any dataset.

Additional tools provided are classified into 3 broad sections;

- Analysis Tools
- CAD Tools
- Table Utility Tools.

This guide only briefly describes the available tools, please consult the application help for full description of functionality.

### 10.1 Analysis Tools

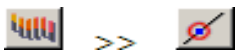
#### 10.1.1 Calculate bearing and distance between 2 points



This function determines the compass bearing and distance of a line drawn on a mapper window.

The bearing angle is in degrees, from 0-360, where zero is facing true north.

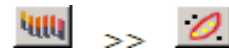
#### 10.1.2 Locate a distance (along polyline) along a polyline



This function locates a point on a polyline at a specified distance from its starting node.

Works only on the first segment of a polyline. Steps through polyline nodes sequentially or binary to locate interval between nodes where it falls on the polyline.

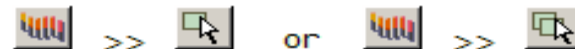
#### 10.1.3 Proximity Search - Locate surrounding objects



This function creates a buffer area (by distance) around selected objects and returns objects from a user selected table that fall within/intersects the buffer area.

The results are returned in a table called 'results.tab'

#### 10.1.4 Query Polygon or Region for object info

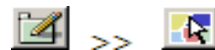


This function returns area calculation and table attributes for a selected polygon.

This function only works on a MapInfo Table's region object.

### 10.2 CAD Tools

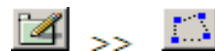
#### 10.2.1 COLOUR Map Objects by a column



This function enables the colouring of all map objects quickly and easily. Just select the column to colour the map objects by, and then graphically select the symbology for all points, lines and polygon objects through a single interface.

Handles multiple object symbology within a table.

#### 10.2.2 Connect the points to form shapes



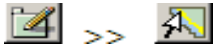
This MapBasic application lets you connect sequential points to form polyline or region objects

### 10.2.3 Draw line by bearing and distance



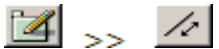
This MapBasic application lets you draw a line of a specific length, at a specific angle.

### 10.2.4 Select objects by graphical styles



This application lets you select all the objects from within a MapInfo table according to their display style.

### 10.2.5 Change Line Direction



Reverse Direction is a utility that allows you to change the direction of a line or a polyline.

### 10.2.6 Extract Nodes from Selected Objects

[ accessible from dropdown menu only ]

This function extracts all the nodes that make up an object, and saves them as points to the cosmetic layer.

### 10.2.7 Select Objects Using Window Extents

[ accessible from dropdown menu only ]

This function extracts all the objects from window the map window for a specific layer to a temporary table called TempQuery.

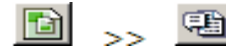
## 10.3 Table Utility Tools

### 10.3.1 Combine Map Layers into One Table

[ accessible from dropdown menu only ]

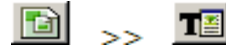
Combines similar structured tables into one map layer.

### 10.3.2 Display a Tables Structure



This utility output a ASCII file with a table's structure (column name, structure) and runs Notepad with it.

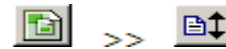
### 10.3.3 Text Search and Replace



This function replaces characters within a text string from a selected column.

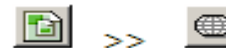
This function only works with columns classified as characters.

### 10.3.4 Sort a Table by Column Value(s)



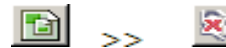
This utility sorts a tables records with a column either in the ascending or descending direction.

### 10.3.5 Query Map Layer's Base Projection



This function displays a selected table's base projection.

### 10.3.6 Update XY Coordinates



This function updates new or existing columns with the current map projection's coordinate for all objects centroids within a table.

### 10.3.7 Update Column Blanks

[ accessible from dropdown menu only ]

Update column blank values with the previous record's value. Works sequentially down the rows.