Product Fact Sheet - Cadcorp SIS Map Editor

Map Editor is the tool of choice for GIS data custodians – the people who create, edit and update spatial and attribute data. It has strong editing, CAD and topology creation tools.

Data formats:

Map Editor can read in:

File Formats:

ArcInfo Export (*.e00)
ArcView Shape (*.shp)
AutoCAD Drawing (*.dxf, *.dwg)
Autodesk Drawing Web Format (*.dwf)
Black and white TIFF with anti-aliasing (*.tif, *.tiff)
Base dataset (*.bds - proprietary cadcorp format)
Enhanced Compression Wavelet (*ecw)
Euronav (*.gfx)
Great Britain Ordnance Survey (*.ntf)
GDS AIF (*.aif)
GDS BIF (*.bif)
GDS Things (*.thf)
MapInfo Interchange (*.mif)
MicroGDS File (*.man)
MicroStation Design File (*.dgn)
MrSID (*.sid)
Ordnance Survey ADDRESS-POINT (*.ap, *.csv)
Ordnance Survey NI (*.ntf)
Post Office Address File (*.paf)
Raster formats (*.bmp,*.jpg, *.jpeg, *.png,*.rlc,*.tif,*.tiff, Cities Revealed)
SIS Export Data Set (*.sed - proprietary SIS format)
MapInfo TAB
TIGER/Line 95 (*.bwl)
USGS DEM (1 degree, *.dem)
USGS DLG3 (*.opt)
Windows Metafile (*.wmf)

Server Data:

Blobs (Binary Large Objects)
Oracle Spatial Cartridge
Oracle 8i
Oracle 8i Spatial
OpenGIS SQL92 Datasets
Point data sets (x,y pairs)

Databases:

HTML (*.htm, *.html)
Lotus 1-2-3 (*.wk*)
Microsoft Access (*.mdb)
Microsoft Excel (*.xls)
Microsoft FoxPro 3.0 (*.dbc)
ODBC data sources - many ODBC drivers are available for products like Oracle, Sybase, etc.

Map Editor can write out:

ArcView Shape (*.shp)
AutoCAD Drawing (*.dxf, *.dwg)
Base dataset (*.bds - proprietary cadcorp format)
Bitmap (*.bmp)
Enhanced Compression Wavelet (*ecw)
Euronav (*.gfx)
JPEG (*.jpg, *.jpeg)
MapInfo Interchange (*.mif)
PNG bitmap (*.png)
SIS Export Data Set (*.sed - proprietary SIS format)
TIFF Group 4 Fax (*.tif)
TIFF No-compression (*.tif)
GeoTIFF (*.tif)
VRML file (*.wrl)
Windows Metafile (*.wmf)
OpenGIS SQL92
Blob

Newly supported data formats are being added all the time. Please contact Cadcorp for the latest details.

Projections:

Map Editor supports over 250 projections and coordinate systems. Data from a variety of projections can be brought together, on the fly, into a single projection. New data files can be written out in a user selected projections as needed.

Viewing Data:

Map Editor has tools to zoom in and out and pan around maps. Views of interest can be saved and recalled. The Roamer magnifies the area just under the mouse to examine details with ease.

Querying and Linking Data:

MapTips present database information as the mouse passes over a map feature. The user can set which item is presented. Map Manager can also measure distances and angles, and calculate areas.

Map Manager supports both spatial and database queries. Spatial queries focus on finding features with certain relationships to others: within a distance of, adjacent, contained within, and so on. Table queries allow a query of the tabular data to find graphics of interest. A Construct Query dialog makes this easy. Graphics and attributes that are not yet linked together can be joined either many at a time, using a common column value, or one-by-one, by pointing to the record of interest and then to its related graphical item.

Presenting Data:

Layers of data are referred to as overlays. Each one may have a “scale dependence,” meaning that it will draw only at designated scales, leaving the map less cluttered. Overlays organize symbology by setting pens, brushes, symbols and labeling. The user has total control over how these are applied and can easily create new pens and brushes. Labels can include formulae based on values in the tables. Using a formula in this way causes automatic updates of the map labels as changes are made in the underlying data.

Filters allow the user to restrict, on-the-fly, certain features or areas from display. There is no need to create a new data set to show only a subset of interest.

Printing Data:

Print wizards take you through setting the scale of the map, adding a title bar, key map, legend, scale bar, north arrow, and graticules.

Adding and Editing New Graphics and Attributes:

Map Editor allows the creation of new graphics using 2D tools. Users can create lines, polylines, and freehand lines. Area tools include areas, multi-areas (groups of areas that act as one unit), ellipses, circles, and rectangles. Point tools include points, multi-points (groups of points that act as one), and shapes (symbols). Points, lines and area items can be combined into multi-geometry items. Map Editor integrates familiar CAD –like precision tools such as snap and coordinate key-in, and the use of relative position.

Graphics designated as "editable" can be deleted, moved, edited, copied, rotated, and transformed (mirror, rotate and/or scale). Lines are assigned a directionality as they are created. If the lines represent flow, such as streets or pipes, and are to be used in a network analysis, the direction can be updated as needed.

Images may be moved and transformed, though the latter takes considerable computer resources.

Map Editor allows the user to add new attributes to the graphics or edit those already present as long as the data is designated as editable.

Creating and Editing Topology

Map Editor has tools to take simple geometry to the next level: topology. Lines can be grown into links and nodes, highlighting connectivity. Links can be combined into chains which describe webs of links that work together, such as road or sewer systems. And, lines, points and areas can be grown into intelligent topological polygons – complete with shared boundaries and full "inside and outside" query access. The process of moving from geometry to topology may take advantage of the included data clean-up tools such as deleting small links, "cracking or breaking" spaghetti linework or interactively locating polygon label points.

Thematic Mapping

Map Editor can present data in several ways including using symbols, shading, graduated colors, dot density and labels. To show comparison of more than one variable on the map, Map Editor can use bar charts and pie charts.

Spatial Analysis

Because of its advanced topology tools, Map Editor offers enhanced spatial analysis tools. Buffers can be created around all types of objects: points, line, polygons. Enhanced spatial testing via defined spatial queries called Loci are possible. These allow exploration of many spatial relationships such as contain, cross, cross by, intersect, overlap, and touch. With a topological network, Map Editor can measure the distance between two points on a route and find a route between two points. It will follow flow direction and obey turning rules if these are assigned.