Supported Vector Formats

Abbreviation	Data Type	Extension
AVC	ArcInfo Binary Coverage	*.*
DGN	Microstation DGN	*.dgn
GML	Geography Markup Language	*.gml
MIF	MapInfo MIF/MID	*.mif
NTF	Ordnance Survey NTF	*.ntf
S57	IHO S-57	*.000
SDTS	USGS SDTS VTP	*.ddf
SHP	ESRI Shape File	*.shp
TAB	MapInfo TAB	*.tab
TGR	Census TIGER/Line	*.rt1

ArcInfo Binary Coverage File Format (AVC) is the format used by ESRI (www.esri.com) Arc/Info software. Version 7 and early is currently supported. The label, arc, polygon, centroid, region and text sections of a coverage are all supported as layers. Attributes of objects are extracted. When available the projection information is used. The layer files are named as follows: a label layer (polygon labels, or free standing points) is named LAB if present, a centroid layer (polygon centroids) is named CNT if present, an arc (line) layer is named ARC if present, a polygon layer is named PAL if present.

Microstation Design File Format (DGN) is the internal format used by Bentley Systems Inc.'s MicroStation, a CAD program. It is well documented and standardized, so it may also be used as a transfer standard (http://dgnlib.maptools.org/dl/ref18.pdf).

Geography Markup Language File Format (GML) is an XML based encoding standard for geographic information developed by the OGC - OpenGIS Consortium (www.opengis.org). The main purpose of GML is to provide a standard means of representing information about geospatial features-their geometric properties, non-geometric properties, interrelationships, etc.

MapInfo Interchange File Format (MIF/MID) is a versatile format, which allows generic data to be attached to a variety of graphical items. It is an ASCII format, so it is editable, relatively easy to generate, and works on all platforms supported by MapInfo. Mapinfo data is in two files - the graphical data resides in a .MIF file and textual data is contained in a .MID file. The textual data is delimited data, with one row per record and either Carriage Return, Carriage Return plus Line Feed, or Line Feed between lines. The MIF file has two areas - the file header area and the data section. Information on how to create MapInfo tables is in the header; the graphical object definitions are in the data section. MapInfo Professional Interchange File Format description is available at
http://www.mapinfo.com/common/library/interchange_file.pdf

National Transfer File Format (NTF) is a vector interchange format used to distribute digital map products from the Ordnance Survey (http://www.ordnancesurvey.co.uk/).

IHO S-57 File Format (S57) is a vector interchange format used for maritime charts. The only currently common profile is known as ENC (Electronic Nautical Chart). The format is promulgated by the IHO - International Hydrographic Organization (http://www.iho.shom.fr/).

Spatial Data Transfer Standard (SDTS) is a primary DLG data from the USGS (http://mcmcweb.er.usgs.gov/sdts/index.html). Topological Vector Profile (TVP) and Point Profile datasets are supported currently.

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ESRI Shape File Format (SHP) is a digital vector (non-topological) storage format for storing geometric location and associated attribute information. The Shapefile format is created by ArcView and can be used by ArcView, ARC/INFO, ArcGIS and other widely used GIS software. A Shapefile stores map (geographic) features and attribute data as a collection of files having the same prefix and the following file extensions: .shp - the file that stores the feature geometry, .shx - the file that stores the index of the feature geometry, .dbf - the dBASE file that stores the attribute information of features. ESRI Shapefile Technical Description is available at http://www.esri.com/library/whitepapers/pdfs/shapefile.pdf

MapInfo Table File Format (TAB) is the native file format of MapInfo (www.mapinfo.com). TAB files store both feature geometry and attributes. A logical MapInfo TAB file consists of several physical files, having the following file name extensions: .tab - the main file for a MapInfo table, it is associated with the appropriate DAT, MAP, ID, and IND files; .dat - tabular data for a table in MapInfo's native format; .id - an index to a MapInfo graphical objects (MAP) file; .map - contains geographic information describing map objects; .ind - an index to a MapInfo tabular (DAT) file. http://mitab.maptools.org/

Census TIGER/Line File Format (TGR) is a digital database of geographic features, such as roads, railroads, rivers, lakes, political boundaries, census statistical boundaries, etc. covering the entire United States. The data base contains information about these features such as their location in latitude and longitude, the name, the type of feature, address ranges for most streets, the geographic relationship to other features, and other related information. They are the public product created from the Census Bureau's TIGER (Topologically Integrated Geographic Encoding and Referencing) data base of geographic information. TIGER was developed at the Census Bureau to support the mapping and related geographic activities required by the decennial census and sample survey programs.More information on the TIGER/Line file format, and data product can be found on this U.S. Census web page http://www.census.gov/geo/www/tiger/.