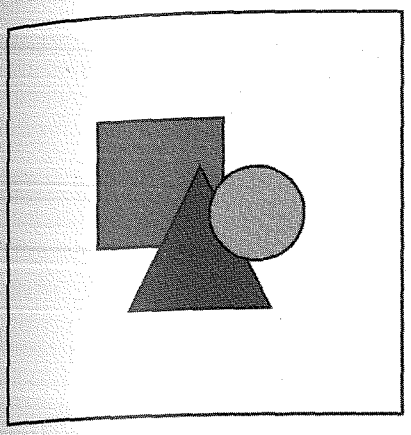


ate information about that park on the City of Buffalo WWW site, for example. More sophisticated functions include identify and add information to the map and database.

Identify is a simple function which allows a user to get the name of a building owner or the address by clicking on the lot of interest on the map. A related function allows the site user to find a lot or building owner. Future development of the site will include additional categories of information, such as building violations, and tax status.

A comment function allows users to comment on a lot or building. These comments are then posted to the WWW page. This feature was incorporated as neighborhood residents wanted a way of compiling information on problem houses and lots - including simple violations (such as junk in the yard) or bigger problems such as abandonment and drug activity. There are, obviously, some problematic issues raised by such anonymous, public postings of alleged housing problems. However, these are the types of issues that will have to be confronted as such publicly accessible WWW-based GIS and mapping sites become available. An elaboration on the comment function is even more problematic: users of the WWW site can actually change the database, which is linked, to the neighborhood map.

The ability to change the database behind the map could be restricted to 'master users' such as a community planner, who could sift through information from the comments page and select appropriate changes to the database. The planner could also add any new or changed information from the city. However, the prospects of an 'open database' are being discussed. Such an open database would serve to collect 'local knowledge' and information about the neighborhood. Obviously, there are some benefits to this type of data collection, and some big disbenefits.

In sum, the interactive mapping and GIS site designed as a prototype reveals that WWW-based mapping is certainly possible given adequate resources. The software for creating such maps is mostly reasonable, except for the Internet Map Server component (although many educational institutions have access to the IMS software). The student who programmed the site did not know Map Objects but had a moderate knowledge of Visual Basic and object oriented programming, and it took him approximately 250 hours to create the site (including digitizing the neighborhood maps). Creating such a site also requires a NT server, and it is extremely useful to have the server devoted to development of Map Objects applications. My general assessment is that many of the technological problems of providing interactive mapping and GIS via the WWW have been solved, although a reasonable investment in money and time is required to get such applications working. The real issues concern the impact of such applications: the general public having access to more sophisticated mapping and GIS tools, and the problems and possibilities of 'open databases.' It is these more academic questions which will occupy our attention in the near future.

software news

MAPublisher Version 3.5 for Windows/Mac Freehand 8.0 and Version 3.5 for Windows/Mac Illustrator 8 from Avenza

MAPublisher is a suite of GIS and cartographic plug-in tools that allows the import of top GIS and CAD file formats into high-end graphics and illustration environments with all the attribute databases intact and ready to use.

- Improved file import that more effectively imports common GIS file formats (ARC / INFO Generate, ArcView Shapefile, MapInfo MID / MIF, AutoCAD DXF, and USGS DLG and SDTS formats) into the vector graphics environment with all database attributes intact.
- Table management tools that allow the import of external database tables for merging and linking to existing map layers as well as creation, editing and deletion of separate data tables.
- Automated raster image registration.
- Automated labeling based upon attribute data.
- Export to MapInfo MID / MIF and ArcView Shapefile formats.
- Map projection and scale transformations (over 100 projections and 40 ellipsoids available).
- Automated grid and scale bar generation.
- Export to intelligent, data-rich pdfPLUS containing searchable and queriable data tables.
- Search, query and select by data attribute.
- Joining of vectors based on simple or attribute values.
- Automated legend creation based upon attribute data that enables automated legend value assignment for multiple legend

elements based on either unique values or a user-controlled value range.
- Automated scale conversion from native co-ordinate system to various traditional scales.
- JAMBuddy export replaced with new pdfPLUS export.
- Correction of several legacy problems with previous versions.

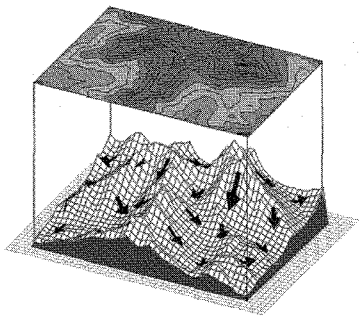
For further information please contact Avenza at (905) 639-3330, info@avenza.com or visit the company's website at http://www.avenza.com

Surfer® Version 7
Golden Software, Inc.

Golden Software, Inc. announces the release of Surfer(r) version 7, a contouring and 3D mapping software package with variogram modeling capabilities. Surfer is a 32-bit program and operates under Windows 95/98, NT 4.0, or higher. It accurately transforms XYZ data into contour, wireframe, vector, image, shaded relief, base, and post maps.

Vector maps are a new map type in Surfer. They instantly show the orientation and inclination of a slope with scaled vectors. Referring to the seven map types available in Surfer, combined with the ability to overlay different map types, Patrick Madison, the President of Golden Software, says that Surfer "has proven to be very versatile in the customization of data presentation."

New, sophisticated gridding filters in Surfer allow the user to accurately grid XYZ data and to easily exclude unwanted or duplicate data when creating grid files. Variogram modeling has been added to help spatially assess the data and to choose the most accurate gridding method for the specific data. A report of gridding parameters and statistics is automatically generated when data are gridded.



Create and overlay any number of maps in Surfer. In this example, a vector map is overlaid on a 3D wireframe map with a contour map.

Surfer 7 supports more file formats. The list of export options in Surfer now includes SHP, PNG, and 3D DXF file formats. Use USGS SDTS DEM and DLG files in their native formats in Surfer. SDTS DEM files are treated as any other grid file and any grid operation can be performed on the SDTS DEM file.

The new macro system makes the automation of repetitive tasks easier and more versatile in Surfer. Use Visual Basic, C++, Perl, or any ActiveX Automation compatible language to write scripts. Other improvements to the user interface include an object manager, tabbed dialog boxes, and floating toolbars.

A free, full working demo is available on the web page. Contact Golden Software for more information on Surfer version 7.

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NACIS news

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