



## GeoMedia Grid

The job of the GIS professional is to solve problems using maps and spatial data. The emphasis is on solutions that can analyze the spatial component of business information to support informed decision-making in a wide range of GIS-related projects. The tools for performing this analysis generally are based on either vector or raster (grid) data models. In many cases, the question is not which model to use but how to incorporate both for the most effective solution.

### Use powerful tools to solve problems.

GeoMedia Grid combines the strengths of vector GIS with the power of grid analysis tools to allow users to seamlessly apply grid workflows from within GeoMedia and GeoMedia Professional. Developed cooperatively with Keigan Systems, GeoMedia Grid enables solutions for various industry applications, such as forestry management, landscape architecture, biological modeling, transportation management, environmental studies, utility management, statistical modeling, remote sensing, and demographics. GeoMedia Grid's powerful tools allow the professional to create, import, export, edit, display, and analyze grid-based terrain and spatial data from DEM, DTED, GeoTIFF, SDTS, and Keigan Grid .mfm.

GeoMedia Grid offers key features such as:

- Grid-to-feature-class conversion (raster to vector)
- Feature-class-to-grid conversion (vector to raster)
- Grid reprojection (support for all GeoMedia projections and datums)
- Grid-layer-to-warehouse attribute connectivity
- 3D visualization (including free-fly and flight-path modes)
- Grid layer Map Algebra through a map calculator
- Interpolation tools including Thin Plate Spline
- Support for Intergraph grid files from products such as MGE Grid Analyst (MGGA) and MGE Terrain Analyst (MTA)

### Work in a single GIS environment.

GeoMedia Grid enables advanced grid analysis within a single GIS environment. Move seamlessly from vector to raster and back to

vector while performing tasks such as surface analysis, density mapping, and Map Algebra. All grid functions are native GeoMedia commands so you remain in the familiar, intuitive GeoMedia environment.

### Create customized applications.

Featuring a fully exposed API, GeoMedia Grid supports custom development to meet your organization's special requirements. A series of Microsoft® component object model (COM)-compliant development objects placed directly within GeoMedia 5.0 is available for developing custom applications. Developers create custom commands using nonproprietary languages such as Microsoft Visual Basic® and Microsoft Visual C++®, allowing grid processes to be effectively and tightly integrated into day-to-day operations.

### Meet a variety of challenges.

GeoMedia Grid assists analysts, planners, and researchers with activities such as environmental analysis, least cost routing, viewshed modeling, hydrological modeling, surface creation and analysis, and hot spot analysis. For example, environmental scientists can identify habitat characteristics for a particular plant species by studying measurable attributes such as slope or aspect of the local area. Then they can easily locate other probable habitat locations and protect those areas from development.

In an entirely different application, police departments can use GeoMedia Grid as a crime analysis tool. As police departments look increasingly to computer-based mapping and spatial analysis, automated pin maps are used to focus on crime cluster or hot spot identification. This includes mapping incidents across time as well as space, correlating incident locations with other data such as property recovery locations or suspect residences, and analyzing connections between crime locations and demographic factors.

### Bridge the gap between technology and productivity.

Providing a comprehensive set of services for the open computing environment, Intergraph Mapping and Geospatial Solutions helps you get the most from your investment. Intergraph's experienced staff and consultants deliver professional services that include system integration, consulting, project services, and implementation.

