



GEOMEDIA® 3D

Enabling GeoMedia Functionality in a 3D Environment

OVERVIEW

GeoMedia® 3D is the latest addition to the Intergraph® GeoMedia product suite, a set of well-integrated applications that give you a wide range of geospatial processing capabilities for defense, intelligence, government, transportation, utilities, communications, public safety, and security applications.

GeoMedia 3D is a GeoMedia add-on product that extends the functionality of Intergraph's geospatial solutions through an integrated 3D visualization and analysis environment. You can visualize, navigate, analyze, and interact with 3D data natively in GeoMedia. In addition, you can dynamically integrate surfaces, imagery, feature data, and vector data to provide a 3D view of all data sources in a GeoMedia 3D map window. Intergraph's GeoMedia 3D addresses the growing demand for realistic 3D views of geospatial data and enables the GeoMedia community to work in a 3D environment.

3D visualization fully integrated into GeoMedia raises the bar for organizations that want to exploit the precision and power of their geospatial data, leading to quicker, more confident decision-making and visual communication in support of location-centric tasks.

Organizations that collect and process elevation data achieve maximum benefit through seamless visualization of the surfaces they can produce in a realistic 3D view. The ability to understand the surroundings and visualize the terrain assists you in making better environment-based decisions and performing more effective real-world assessments. With GeoMedia 3D, you can extrude features based on elevation or selected attributes, providing a rich set of options for graphical depiction of feature characteristics. Import capabilities for pre-built city models and Google files give you the ability to incorporate other readily available 3D files into your 3D projects.

One of the barriers to adoption for 3D geospatial solutions has been the hybrid workflow created by using a separate visualization application. To visualize the 3D effect of an edit or analytic operation, you have had to perform the edit in the standard 2D view, then convert to 3D for visualizing. Analytic workflows that call for frequent iterations consume time, forcing you to trade productivity for 3D functionality. GeoMedia 3D breaks through this barrier with technology that enables an interactive, geospatially synchronized 3D view natively in a GeoMedia map window. You have the choice of working in 3D, 2D, or both views to get the best blend of power, visualization, and performance.

GeoMedia 3D is fully integrated with GeoMedia, enabling you to leverage the power of Intergraph's core geospatial solutions. With GeoMedia 3D, you have access to 3D capabilities for visualization, manipulation, analysis, navigation, and data integration with your existing geospatial data. This level of integration provides you with superior performance, productivity, and enhanced visualization to enable you to meet the emerging challenges of today's geospatial environment. By seamlessly integrating 3D technology from Skyline software with GeoMedia and fusing multiple data sources together into a single geo-referenced 3D view, Intergraph delivers more immediately usable and actionable geospatial information across all industry segments. It provides you a valuable tool to visually enhance your workflows in infrastructure management, land information management, geospatial intelligence exploitation and production, cartographic production, security, and reporting and analysis.

BUSINESS BENEFITS

- **Enhanced decision support** – Whether it's situational awareness, road planning, green initiatives, or force protection, incorporating 3D visualization and analysis into the workflow enables better decision-making based on a more realistic

understanding of real-world parameters. You benefit from the photo-realistic view of your assets, including the ability to fly-through and evaluate areas of interest.

- **Urban modeling** – 3D models provide better understanding and insight into the impact of change on the environment, an increasing concern for government agencies and the public.
- **Community impact projects** – 3D makes a visual connection with the public to give a better sense of a project beyond the technical details and can assist in gaining public support.

INTEGRATED 3D ENVIRONMENT

GeoMedia 3D integrates with your existing data and surface models to provide dynamic integration for any data GeoMedia currently accesses. You can:

- Access the same data, symbology, and analyses as in the 2D view or create new 3D representations.
- Easily move between 2D and 3D as GeoMedia commands operate on the active window. GeoMedia 3D maintains the proper 2D and 3D representations as you transport from one environment to the other.
- Select the most effective way to work for a particular project – with all the power and precision of GeoMedia now available for a 3D environment.

3D NAVIGATION

- Easy-to-learn 3D navigational graphical user interface (Figure 1)
- Co-selection and co-location with the 2D view as desired for orientation and referencing

3D VISUALIZATION

- Displays any 3D geo-referenced data source, including feature data, vectors, imagery, and surfaces – all in the same view (Figure 2)
- Enables you to dynamically add data to the 3D view,

providing a flexible visualization environment for a wide range of workflows

- Integrates GeoMedia Grid, GeoMedia Terrain, and Skyline TerraBuilder terrain models.

3D ANALYSIS

- You can display spatial analysis results from GeoMedia Grid in the 3D map window and manage the data like any other available source. This enables you to use the wide range of GeoMedia capabilities in 3D.

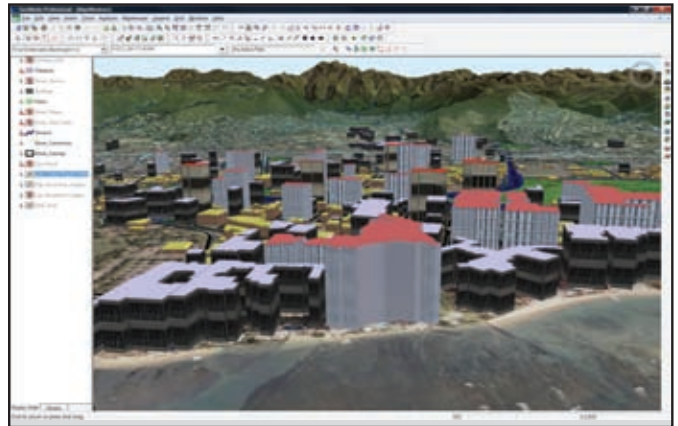


Figure 1: You can easily navigate through the GeoMedia 3D map window with full three-dimensional navigation freedom.

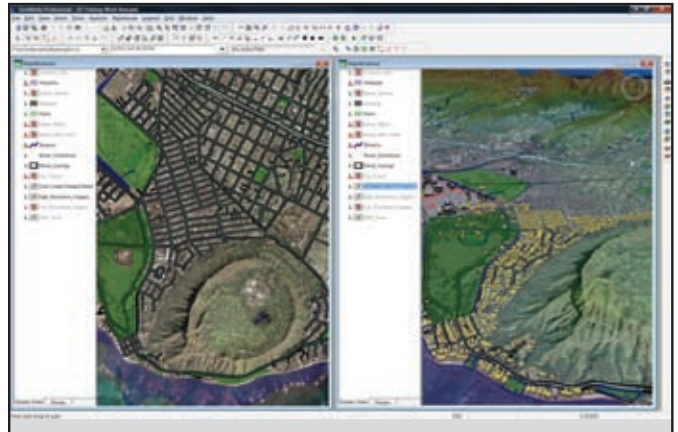


Figure 2: You can visualize the classical 2D, top-down view (left) next to the 3D view.

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph

PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit www.intergraph.com.

