



BROCHURE

Octave GeoMedia 3D





**Add powerful
3D visualization
and analysis to
your Octave
GeoMedia
workflows.**

Octave GeoMedia 3D (formerly GeoMedia 3D) is an add-on to Octave GeoMedia (formerly GeoMedia) that enables integrated 3D visualization, navigation and analysis of geospatial data. It extends GeoMedia with a wide range of 3D capabilities for defence, intelligence, government, transportation, utilities, communications, public safety and security applications.

With GeoMedia 3D, you can visualize, navigate, analyze and interact with 3D data in a fully integrated environment. You can also dynamically integrate surfaces, imagery, vector feature data, rasters and point clouds to provide a 3D view of all data sources in GeoMedia.

Organizations that process elevation data achieve maximum benefit through seamless visualization of 3D surfaces. With the ability to visualize terrain, you can better understand surroundings, leading to informed decisions and 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, Google files and Trimble files mean you can incorporate other readily available 3D files into your projects.

Other products require you to run an analysis in 2D and convert the results to 3D, and analytic workflows that call for frequent iterations consume time, forcing you to trade productivity for 3D functionality. GeoMedia 3D performs both steps interactively, providing an interactive, geospatially synchronized 3D view. You have the choice of working in 3D, 2D or both – switching between them without losing context – for the optimal blend of power, visualization and performance.

GeoMedia 3D is available for all three GeoMedia product tiers: Essentials, Advantage and Professional.

GeoMedia 3D is fully integrated with GeoMedia, enabling you to leverage the power of its core geospatial analysis for 3D.

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 superior performance, productivity and enhanced visualization to meet the emerging challenges of today's geospatial environments. By fusing multiple data sources together into a single georeferenced 3D view, you achieve immediately usable and actionable geospatial information across all industry segments.

GeoMedia 3D is 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.

Benefits



Enhanced decision support

From situational awareness and route planning to sustainability initiatives and force protection, integrating 3D visualization and analysis empowers smarter, faster decisions by allowing you to experience your assets in rich, photorealistic detail – navigate, explore and assess areas of interest from every angle.



Urban modeling

3D models provide clearer insight into how proposed changes may affect the environment, an increasing concern for government agencies and the public.



Community impact projects

3D visualization creates a compelling, real-world connection that helps the public understand projects beyond technical details, making concepts more tangible and building stronger support.



Asset management

Bringing point clouds directly into a 3D environment alongside your GIS data creates new opportunities to precisely locate, update and monitor asset conditions in the field.



Benefit from a photorealistic view of your assets, including the ability to fly through and evaluate areas of interest from all perspectives.

Integrated 3D environment

- Access the same data, symbology and analyses from the 2D view or create new 3D representations
- Easily move between 2D and 3D environments as GeoMedia commands operate in the active window without losing context
- Select the most effective way to work for a particular project – with all the power and precision of GeoMedia also available for a 3D environment
- Leverage any GIS data server supported by GeoMedia
- Work seamlessly with GeoMedia add-ons such as Octave GeoMedia Incident Analyst (formerly Incident Analyst)

3D navigation

- Experience easy-to-learn six degrees of navigational freedom when moving through 3D space
 - Enable co-selection and co-location with the 2D view for orientation and referencing
 - Follow predefined paths for full 360-degree views
 - Detect collisions during navigation
 - Use first-person view navigation mode for a realistic perspective and walk-through of the 3D landscape
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3D visualization

- Display any 3D georeferenced data source, including 3D models, vector feature data, rasters, point clouds, imagery and surfaces – all in the same view
- Leverage environmental condition settings such as rain, snow, fog, wind speed and direction, sky color and texture, cloud coverage, sun and moon positions
- Output high definition (1920 x 1080) video files at 30 frames per second for playback and editing
- Integrate with Skyline TerraBuilder, TerraExplorer and TerraGate servers

By fusing multiple data sources together into a single georeferenced 3D view, you achieve more immediately usable and actionable geospatial information across all industry segments.

3D analysis

- Integrate all spatial analytics directly into the 3D map window, enabling full use of all GeoMedia tools in 3D
- Generate dynamic, real-time shadow casting with compensation for time of day and day of year
- Perform true 3D viewshed analysis for fast, accurate planning of security camera placement, communication towers and other visibility-driven smart city sensor implementations.
- Improve rendering when handling large 3D environments, even at city scale, using 3D mesh layers
- Employ threat dome analysis to create a 3D shape that resembles the top half of a sphere and displays areas viewable from a given point in the 3D view
- Conduct traditional 2D analyses in 3D to achieve more compelling, immersive visual results and deeper understanding



Gain better insights into the impacts of environmental changes, based on a realistic understanding of real-world parameters.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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