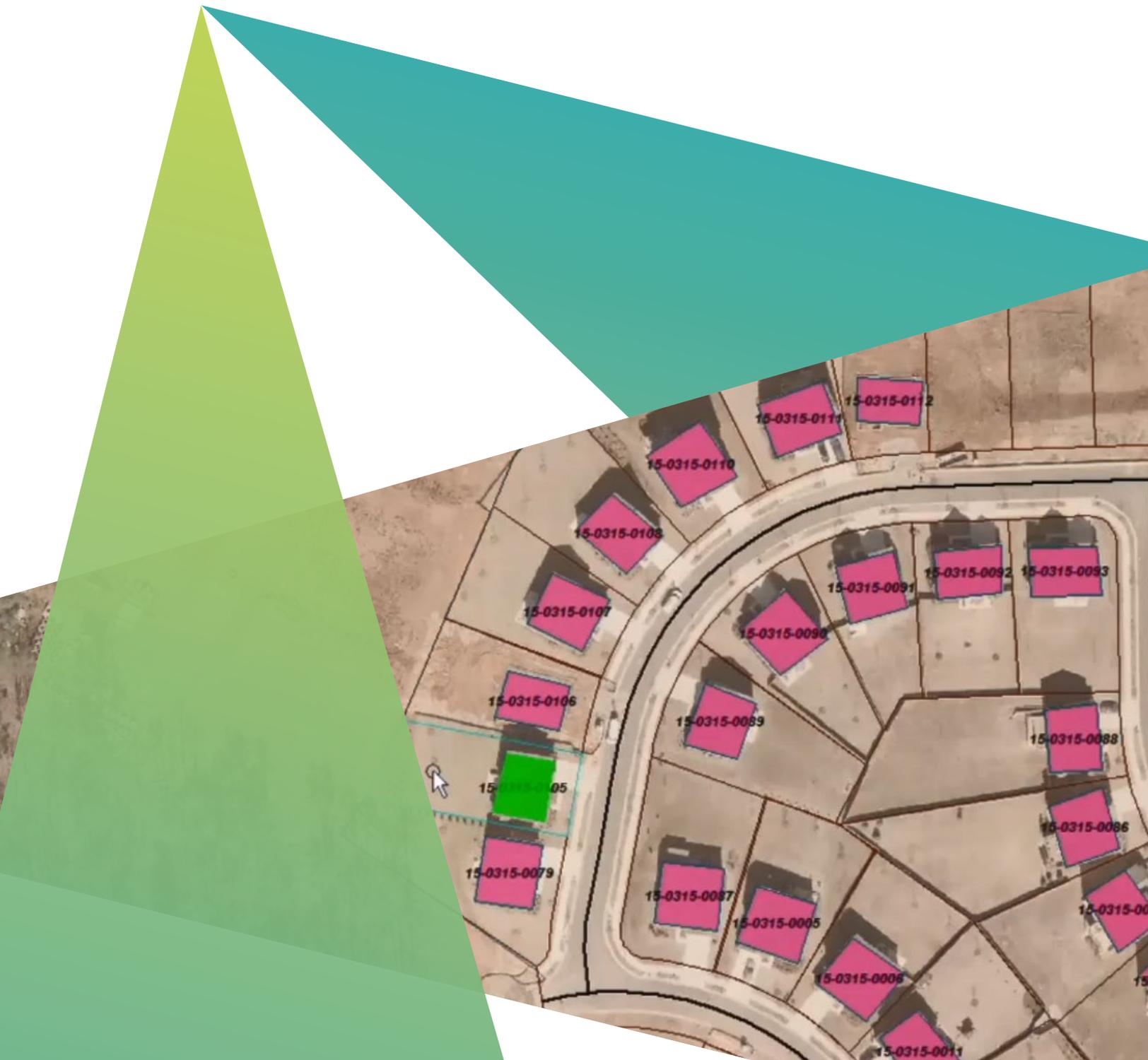


# GeoMedia

Flexible and dynamic GIS management



## GeoMedia

Maps present data visually, allowing you to visualize location and gain useful insights from your data. Making the information-gathering process easier — creating a good map — requires powerful analytical tools and clear symbolization. Whether updating land and tax records, analyzing traffic flow and accidents or determining the best locations for evacuation centers, you can use GeoMedia to combine tabular and geographic data to produce actionable information.

GeoMedia is a powerful, flexible GIS management platform that lets you aggregate data from a variety of sources and analyze it in unison to extract clear, actionable information. It provides simultaneous access to geospatial data in almost any form and displays it in a single unified map view for efficient processing, analysis, presentation and sharing. GeoMedia's functionality makes it ideal for extracting information from an array of dynamically changing data to support informed, smarter decision-making.

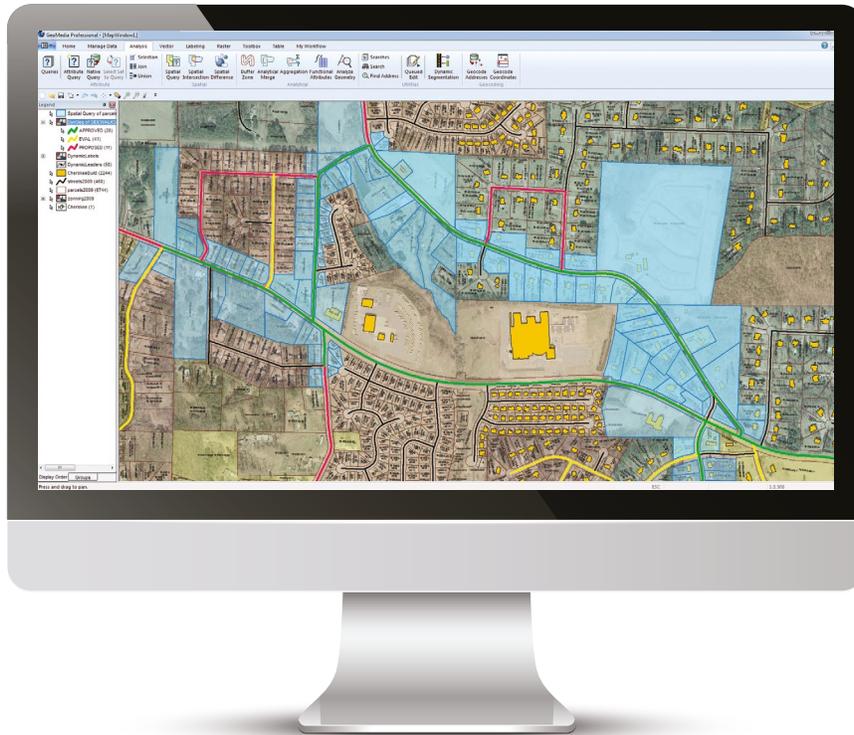
## Superior data access

GeoMedia gives you the freedom to spend less time trying to connect to your data so you can focus on what you want to achieve with it. GeoMedia is a leading GIS choice among users who want to connect directly to the spatially enabled databases they already use — such as Oracle, Microsoft SQL Server and PostGIS — without using importers or converters.

Additionally, GeoMedia can access many common geospatial file formats, most computer-aided design (CAD) formats (MicroStation and AutoCAD), ArcView and File GeoDatabase from Esri, OGC GeoPackage, KML, simple text files and OGC web services such as WMS, WMTS and WFS. Access to third-party basemap information and 3D data provides context to the other geospatial information inside GeoMedia.

GeoMedia also includes an ERDAS APOLLO Catalog Explorer to spatially search, find and display image data directly in the map window.





As information changes in your data sources, so does the analysis in your GeoMedia GeoWorkspace. Simply refresh and all the analysis is dynamically updated. No need to go back and redo the work.

## Data visualization and quality assurance

GeoMedia offers a multitude of options for ensuring the data you add to your GIS is high quality and it remains that way during its lifespan.

GeoMedia streamlines the addition of large volumes of data to your enterprise database, ensures the data meets your standards for completeness (attributes are populated and geometry is valid) and matches the data model your organization uses. GeoMedia ingests and integrates multiple data sources with differing schemas into a single, high-quality source.

Once data has been incorporated, GeoMedia can monitor and control changes, allowing you to see specific changes made by users and establish a quality assurance checkpoint before the database is updated. It also facilitates resolution of any conflicting or ambiguous changes.

GeoMedia provides smart feature modeling capabilities that recognize the relationships between features that represent real-world objects in a network, such as sewer, water, electric or gas assets. By recognizing those relationships during the editing process, GeoMedia increases operator productivity and helps ensure edits are consistent with real-world business rules, so the network is always represented correctly within your GIS. It also provides temporal query and visualization capabilities that let you pinpoint network changes that have occurred over time and analyze the possible causes and real-world implications.



3D data provides context to the other geospatial information inside GeoMedia.

## Sophisticated, dynamic analysis

GeoMedia gives you the power to perform sophisticated analysis to extract information from data stored in multiple databases on different platforms and a variety of different files, all at once. It also enables you to create queries of unlimited intricacy and concatenate queries together so the results of queries feed dynamically into one another.

As the data changes, GeoMedia updates the results for you automatically, giving you a living picture of the real-life situations portrayed by your data. This capability can also be used to conduct powerful “what-if” analyses for strategic planning.

While competing GIS platforms may allow the same type of analytical concatenation as GeoMedia, they may also rely on the creation of intermediate files to accomplish the same result. In this case, as one query is executed, the results are stored in a temporary file, and the data in that file is used for the following query. If the original data changes, the GIS cannot automatically reflect those changes in the results it gives you. With this static approach, you would have to rerun the entire analysis to obtain results that reflect the current state of the data.

Due to these unique analysis advantages, GeoMedia is the ideal platform to manage linear networks that are the

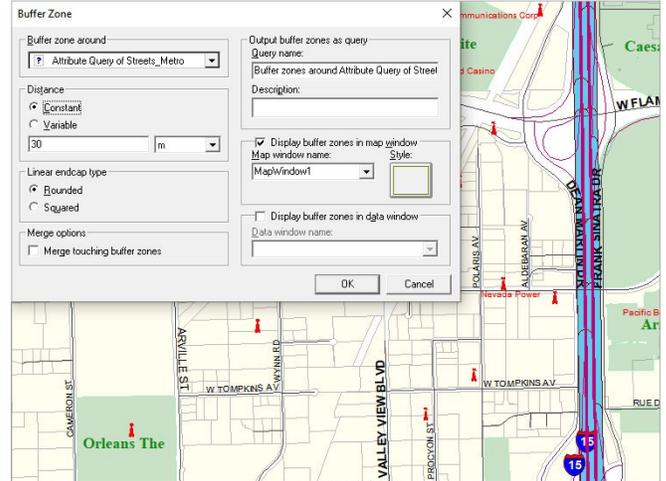
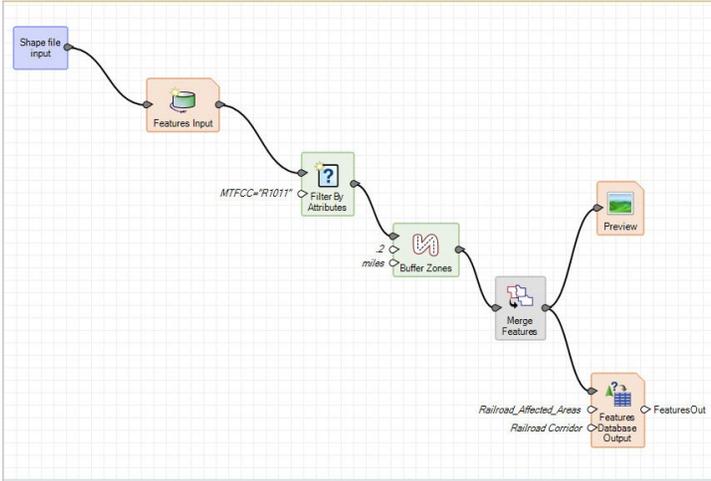
mainstay of agencies that operate and maintain roads, railroads, transit, pipelines or waterways.

These analysis capabilities allow you to track information about your network and perform specialized analyses to help make better decisions about public safety, maintenance priorities and the expenditure of funds.

GeoMedia supports the maintenance and analysis of both single and multilevel linear referenced and routing networks. Its multilevel linear referenced system (MLRS) supports multiple geometric representations of a network synchronized with event data and other information to ensure valid analyses.

Whenever you need to find a location or address as part of your analysis, GeoMedia’s address geocoding and matching is fast and accurate and works with your data regardless of where you are in the world. GeoMedia lets you properly identify a location within your street network using both rooftop and centerline models.

Supporting a wide range of coordinate reference systems from around the world, GeoMedia seamlessly performs on-the-fly transformation of both vector and raster data into the coordinate reference system you choose for your map.



Execute 64-bit spatial models within GeoMedia using the Run Spatial Model command. Rerun the same model from the Explorer Window to refresh your results.

## Spatial Modeler in GeoMedia

Hexagon’s ERDAS IMAGINE Spatial Modeler, used for visually authoring simple-to-complex workflows via raster and feature operations, is also included with GeoMedia. Many capabilities, some only available using GeoMedia or GeoMedia Image commands, can now be used with Spatial Modeler to process files, data or other information that previously required programming or building GeoMedia custom commands.

## Enterprise productivity

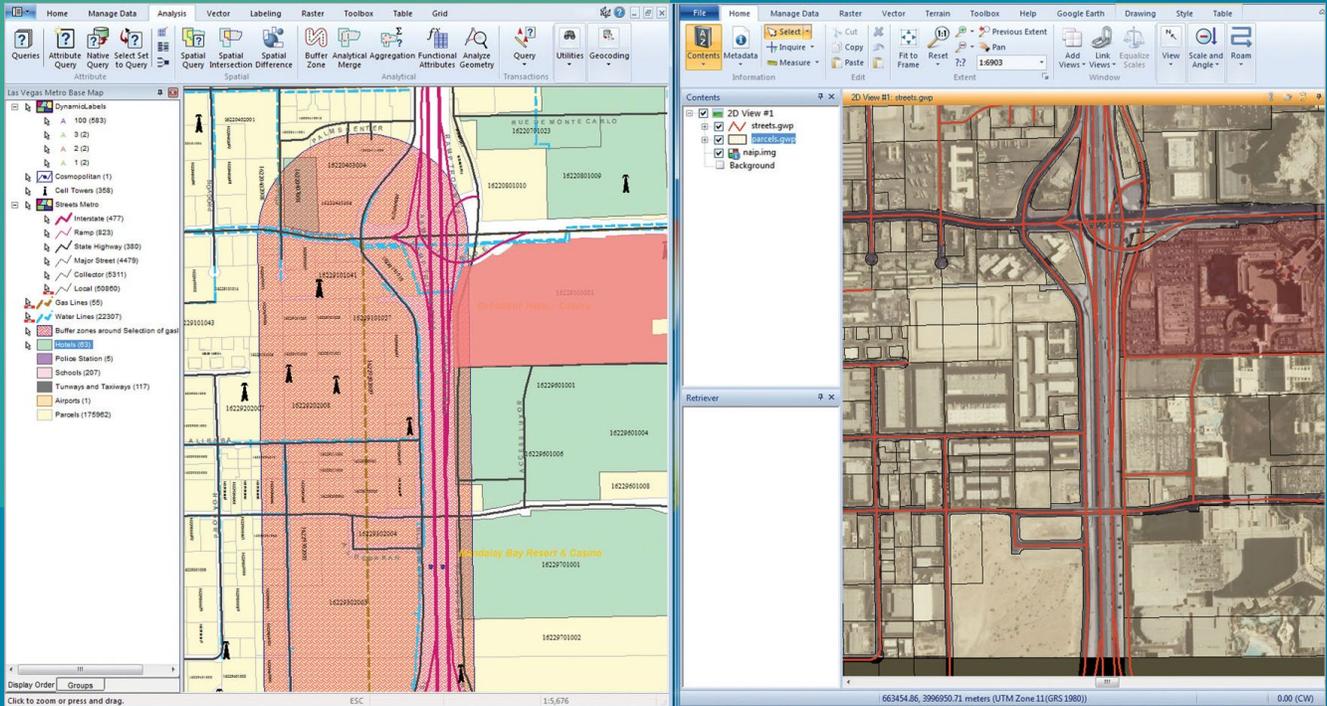
Productivity and accuracy are essential aspects of vector feature capture and editing for enterprise geospatial databases. GeoMedia provides focused functionality for the creation, manipulation and maintenance of geospatial information. It supports the essential, day-to-day operations required to maintain map information.

GeoMedia makes it easy for organizations with lots of users to work with data productively. You can easily share geospatial content inside a department or enterprise. If your department has standards for styling, text properties or structured analysis and queries, a supervisor can ensure consistency throughout the group by specifying those standards and queries, centralizing and sharing them.

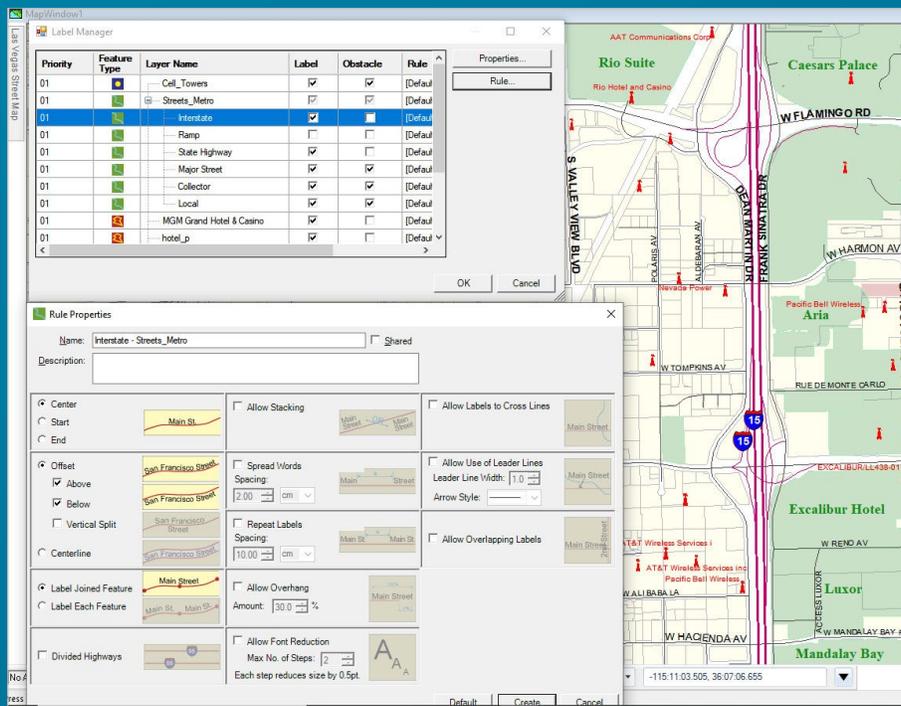
## Customizable

GeoMedia’s easy-to-use graphical user interface is well organized and streamlined to minimize mouse movement and button clicks, increasing productivity and reducing costs.

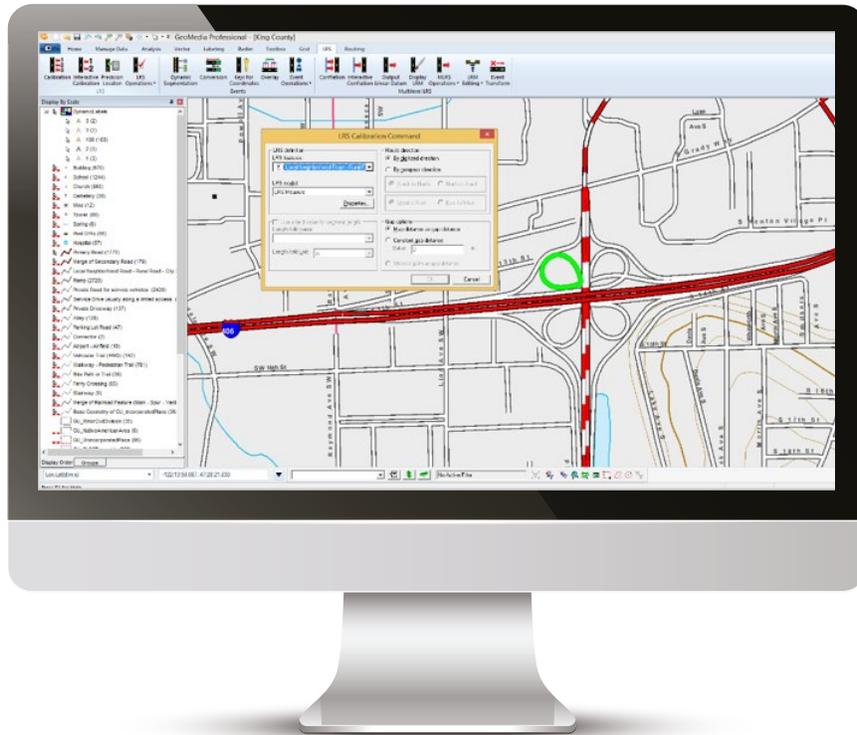
GeoMedia lets you modify and customize aspects of the interface, which makes it easier to optimize specific workflows. Individuals can also tailor the user interface to their particular needs and purposes. You can also hide parts of the interface, uncluttering the viewable work area and enabling faster recognition and access to work functions and tools.



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With GeoMedia it is easy to manage the placement and appearance of labels using a variety of rules in either a static or dynamic format.



The LRS/MLRS capabilities within GeoMedia Transportation Manager let you join, merge and create location information from many different source references but all managed in one database and within one feature set.

## Flexible offering

GeoMedia is available in three product tiers so you can acquire the specific functionality you need. Tiers make it easy for you to adjust the scope of the software to match your GIS management needs, analysis requirements and budget.

### GeoMedia Essentials

Query and analyze a wide variety of geospatial data sources and formats with GeoMedia Essentials for dynamic, ad hoc analysis and high-fidelity rendering of vector feature data.

### GeoMedia Advantage

Building on all the functionality of GeoMedia Essentials, GeoMedia Advantage is excellent for data collection and editing and for processing and analyzing elevation and terrain data, including LiDAR. It includes data validation and sophisticated raster analysis tools, such as Insert Area by Face, Insert Interactive Area by Face, Dimensions and Insert Dimensions.

### GeoMedia Professional

GeoMedia Professional includes all the features of the Essentials and Advantage tiers plus enterprisewide, multi-user data management and analysis. Manage linear networks, produce professional cartographic maps, conduct advanced feature editing, manage parcel holdings, conduct utility network analysis, monitor and control changes, integrate data from multiple sources, design and use spatial models and assure overall data quality with GeoMedia Professional.

**GeoMedia lets you modify and customize aspects of the interface, which makes it easier to optimize specific workflows.**

## One connected solution

GeoMedia connects the entire geospatial Power Portfolio of products for a seamless, complete solution to geo-enable your enterprise.

### Product and interaction

Work on photogrammetry projects directly in GeoMedia with ImageStation Stereo for GeoMedia, ImageStation DTM for GeoMedia, ImageStation OrthoPro and ImageStation PixelQue.

Link to a GeoMedia environment from the ERDAS IMAGINE interface to synchronize navigation and Area of Interest.

Enhance imagery in ERDAS IMAGINE before bringing it into GeoMedia.

Share spatial models between ERDAS IMAGINE and GeoMedia.

Move data easily between the different remote sensing and GIS packages.

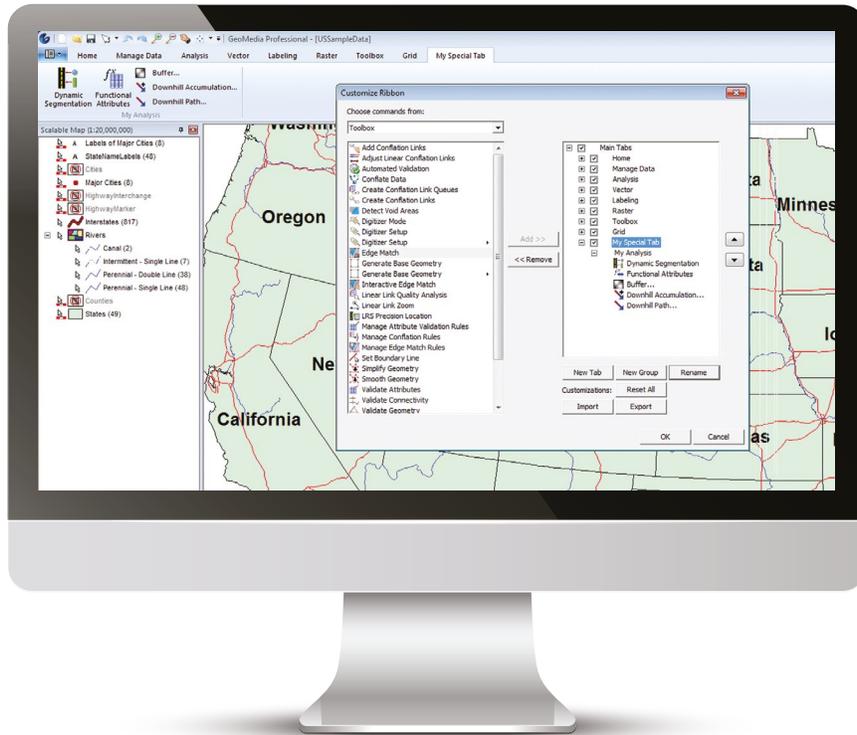
Use the Catalog Explorer in GeoMedia or ERDAS IMAGINE to search, discover and view data from ERDAS APOLLO directly in the map window.

Use GeoMedia as a publishing platform to create high-performance web applications in GeoMedia WebMap.

Use GeoMedia for initial setup of GeoMedia Smart Client projects.

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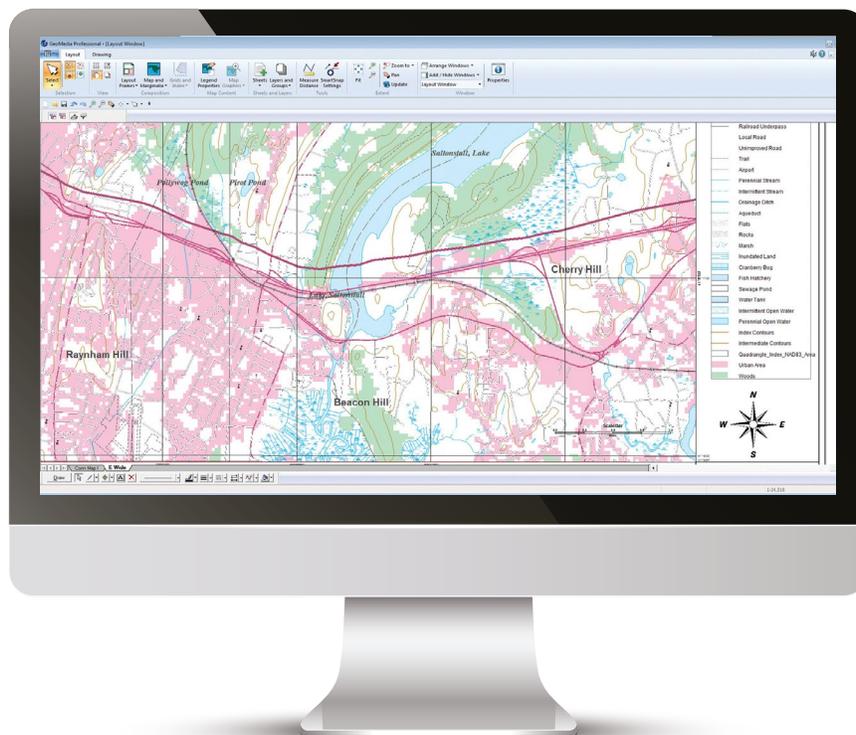
GeoMedia's ribbon interface can be customized to make it easier to define and share specific workflows.

## GeoMedia add-ons

Hexagon offers additional products to expand the core capabilities of the GeoMedia tiers.

- **GeoMedia Transportation Manager** provides tools to help professionals in municipalities, airports, seaports, departments of transportation (DOTs), rail companies, waterway agencies or pipeline operations efficiently analyze their transportation infrastructure. This includes capabilities for tracking network information and performing specialized analyses. In addition, users can build a linear network model supporting both multilevel linear referencing system (MLRS) and vehicle routing applications.
- **GeoMedia Mapping Manager** enables enhanced cartographic capabilities and GIS mapping automation to produce map series products and construct cartographically accurate map products.
- **GeoMedia 3D** provides additional 3D visualization and analytics to the GeoMedia core products. It augments the 3D capabilities of GeoMedia Essentials, Advantage and Professional. GeoMedia 3D addresses the increasing demand for realistic three-dimensional views of geospatial data. The 3D map window allows a user to visualize, navigate, analyze and interact with 3D data in GeoMedia. The 3D map window blends seamlessly into the GeoMedia interface, permitting complete and simultaneous access to all GeoMedia's standard 2D analysis capabilities.
- **GeoMedia Motion Video Analyst Professional** integrates full motion video into the geospatial environment by dynamically projecting video over GIS data.
- **GeoMedia Image** provides advanced image enhancement, registration, extract and save capabilities.
- **GeoMedia Image Professional** provides a superset of GeoMedia Image, including many additional commands and an integrated high-performance electronic light table application.
- **Incident Analyst** is a tool for producing maps that display when and where incidents have occurred. Temporal and positional characteristics help officials understand trends and proactively decide how best to use resources, saving time and money while making environments safer.
- **GeoMedia Advanced Collection** is a set of productivity tools that support data collection and map production workflows used by international mapping agencies, enhancing productivity when collecting and validating vector feature data.

- **GeoMedia GI Toolkit** is a set of productivity tools designed to extend the capabilities of GeoMedia Professional. It supports data and map production workflows, including data collection, data integration and management and data dissemination by meeting industry-specific specifications.
- **GeoMedia PDF** allows users to create highly intelligent georeferenced PDF files from map sheets in the layout window of a GeoMedia GeoWorkspace. Users can control characteristics such as order of layers, included attributes, CMYK/RGB output color model and number of exported map sheets to PDF files.
- **GeoMedia VPF** provides a production environment for the generation of digital map products and utilizes various data sources, including reusable, multi-product vector data from the user's foundation feature database. GeoMedia VPF includes capabilities to support VPF digital product generation workflows and provides a robust suite of data validation and editing tools, an interface to the Related Attribute Table (RAT) and export capabilities for several vector data products.
- **ImageStation Stereo for GeoMedia** enhances the feature collection capabilities of GeoMedia by providing a stereo map window for the display of imagery and 3D feature data with smooth roam, dynamic zoom and on-the-fly image enhancement.
- **ImageStation DTM for GeoMedia** provides a set of tools to collect and edit terrain data to generate surface files for photogrammetric, mapping and engineering workflows.
- **ImageStation OrthoPro** provides a high-throughput ortho production system that includes ortho project planning, orthorectification, tone balancing, mosaicking, true ortho capability, automatic seam line generation and quality assessment.
- **ImageStation PixelQue** provides tools for checking and enhancing the quality of orthophotos and mosaics. It allows users to systematically review and mark up errors, fix errors and to perform image enhancements on an individual or project basis.



Mapping professionals can easily make beautiful maps with the cartographic-style toolsets available in GeoMedia.

## Seamless GIS integration

GeoMedia helps you easily unlock and understand the dynamic stream of real-world geospatial information that flows through your organization. It lets you conduct a variety of analyses, from the very simple to the very sophisticated, on data from disparate sources. It connects directly to the spatially enabled databases already in use by your organization.

GeoMedia allows deep analysis and dynamically updates results. Its flexible tier and add-on structure let you tailor the system to your specific business requirements. GeoMedia empowers you to create intelligent, intuitive maps and unleash the information locked in your data, making it easier to make informed, smarter decisions.

**GeoMedia enables you to create intelligent, intuitive maps, unleashing the information locked in your data, making it easier to make informed, smarter decisions.**





Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, utilities, defense, transportation and government. Learn more at [hexagon.com](https://www.hexagon.com) and follow us [@HexagonAB](https://twitter.com/HexagonAB).