GeoMedia Mapping Manager

High-quality cartographic map production

GeoMedia Mapping Manager combines GeoMedia Map Publisher and GeoMedia Feature Cartographer to offer enhanced cartographic capabilities for constructing and producing series map products.

GeoMedia Mapping Manager provides tools for local, regional, national and multinational agencies to meet the demands of hard-copy map production for transportation, defence, intelligence, security and emergency response.

GeoMedia Map Publisher is a cartographic publishing tool that provides enhanced cartographic capabilities and high levels of automation for production of map series products and ad hoc hard-copy maps. You can simplify your workflow, improve map quality and increase productivity. GeoMedia Map Publisher manages cartographic data separately from the source data, which is important in enterprise environments where other departments own the source and the cartographic group has read-only access. There is no need to copy and manage multiple versions of the source data for map production. Instead, the source data are linked with the cartographic data so that when changes are made to the source data, GeoMedia Map Publisher automatically determines which cartographic data changes are needed to publish new editions of the mapping products, creating a much simpler, more streamlined revision workflow. Multiple users can work simultaneously on

individual mapping products or within a cartographic database. You can also review and retrieve edits from other users.

GeoMedia Feature Cartographer includes pre-defined information for producing a number of standardised map products to enable a process that is quick and efficient, and yields high-quality results. This customised approach to hard-copy production streamlines your workflow by minimising steps, driving down labor costs, and automating many of the tasks required to produce final map products. Included are a complete set of rules based on stringent industry specifications for the production of Topographic Line Maps (TLM), Joint Operations Graphic - Aeronautical (JOG-A) and Multinational Geospatial Co-production Program (MGCP) Derived Graphics (MDG) maps.

Key features

Elevation artifact processing

GeoMedia Feature Cartographer reduces the number of steps required to implement a craft-based technique to achieve high-quality contours. Optimised tools for hill shading, tint band and spot height generation and a tool to calculate the minimum and maximum elevation for a selected map footprint are also available.

Cartographic processing

GeoMedia Feature Cartographer processes the source schema and assigns the appropriate map symbology using a highly automated process driven by preset information.

Conflict detection and resolution

GeoMedia Map Publisher detects feature overprints or feature styles within a user-specified tolerance and resolves the conflicts automatically, allowing you to:

- Perform displacing automatically (valid for point features only)

- Orient conflicting points to related linear features

- Suppress the style display on less significant features or segments of features

Instance-based cartographic edits

GeoMedia Map Publisher lets you perform geometry edits, such as linear displacement, and maintain those edits in a cartographic database. Feature-style editing is enabled for:

- Editing individual line-pattern components where overprints may exist

- Editing components of point symbols

- Adjusting the size, spacing, or offsets of dash-gap sequences in line styles to achieve cartographic intersections

- Adjusting area patterns on individual features

- Overriding style parameters for individual feature instances without affecting feature instances of the same class

Automated map sheet generation

Based on the selected specification, map size, and other user-defined criteria, GeoMedia Feature Cartographer automatically generates a complete map sheet and populates it with sheet-specific information. It also generates adjoining sheet diagrams, along with cartographic grids and graticules, and adds an Elevation Guide Box (EGB) for TLM specifications or Maximum Elevation Figure (MEF) for JOG-A specifications.
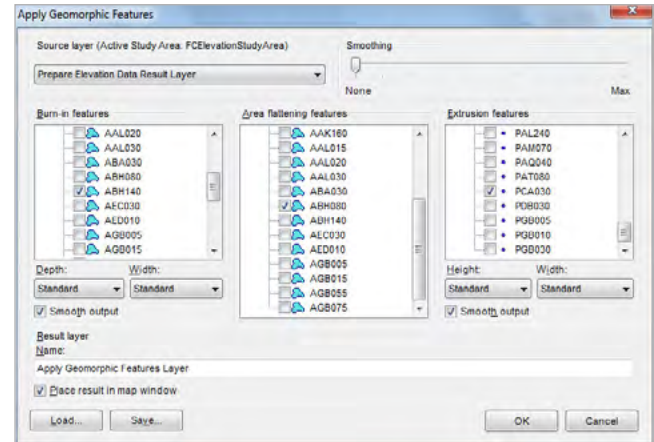
Apply Geomorphic Features prepares the digital elevation model for cartographic-quality contour generation.

Generalisation

GeoMedia Map Publisher aggregates buildings into city outlines using streets and major roads as constraints for the aggregation process. It stores generalisation results as cartographic edits, separately from the originating source, and calculates the attributes of the resulting generalised features. The calculated attributes are then stored in the cartographic edits database separately from the source feature attributes. There are also interactive commands for area aggregation and boundary extension.

Cartographic database

GeoMedia Mapping Manager:

- Maintains feature and style edits made for the purpose of cartographic presentation in a separate database from cartographic source (source data or digital landscape model)

- Links cartographic edits back to their cartographic source feature in support of map product revision workflows

- Displays cartographic source data in context of cartographic edits for quality control and assurance

Spatial modeling

GeoMedia Mapping Manager now provides several spatial operators for generalisation and data collection. Users can now automate many of the map production capabilities, available through individual commands within GeoMedia Map Publisher using spatial models. Visually build sophisticated generalisation processes using Spatial Modeler Editor and execute the models using GeoMedia Professional's Run Spatial Model command.
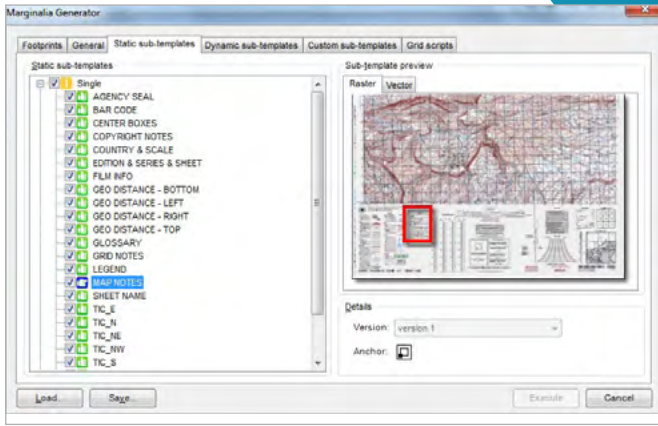
The Marginalia Generator in GeoMedia Feature Cartographer automatically generates the required marginalia for the Map Sheet based on the selected specification, operator settings and map size.

Key benefits

- Create high-volume, optimised processes for production of hard-copy maps to specification

- Increase productivity by reducing the number of steps in the map production process

- Accelerate many of the process steps, which reduces labor costs

- Automate schema conversion and symbology assignment

- Implement an optimised, craft-based technique to achieve high-quality contours

- Automatically generate all required map sheet information for supported maps

- Support process color separation (CMYK) or special printing colors (SPC) for hard-copy output

- Generate geospatial PDF files for digital distribution

- Includes support for these products:

  - Topographic Line Map (TLM) – 1:50,000 scale

  - Joint Operations Graphic - Aeronautical (JOG-A) – 1:250,000 scale

  - MGCP Derived Graphics (MDG) – 1:50,000 scale

  - Can be customised to support additional specification-based hard-copy map products

- Provides the cartographic tools you need to produce mapping products without compromising map specifications or quality

- Allows you to create smaller-scale mapping products from large-scale sources with generalisation functionality for aggregating areas and extending area boundaries

- Reduces the number of manual adjustments needed with automated processing, which in turn reduces the amount of time required to produce mapping products and make them available

- Simplifies map production revision workflows by enabling the maintenance of cartographic edits in a separate database from cartographic source data; allows you to easily identify source features that have been added, deleted or modified – so you can provide new editions of map products with minimal effort

- Allows you to perform cartographic editing on individual features within the GeoMedia environment, using workflows familiar to cartographers

- Reduces manual editing, shortening overall map production time with automated conflict detection, resolution strategies, and queues that bring attention to conflict areas

- Enables you to link cartographic databases back to cartographic source data for map product revision workflows

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Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

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