GEOMEDIA® WEBMAP 2018

PRODUCT DESCRIPTION

GeoMedia® WebMap is a visualization and analysis server product that lets you publish high-performance web maps with a simple mouse click. From easily creating standards-compliant web services to providing sophisticated visualization and analysis within interactive web mapping applications, GeoMedia WebMap enables you to build powerful solutions for worldwide sharing and use of rich geospatial data.

GeoMedia WebMap supports a broad range of industry users who need to visualize and examine geographic data on the web. It provides real-time access to the user's own geospatial data or to the geospatial data from any organization that makes it available through industry-standard methods.

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FEATURES VS TIERS COMPARISON CHART

GEOMEDIA® WEBMAP ESSENTIALS

GEOMEDIA® WEBMAP ADVANTAGE

GEOMEDIA® WEBMAP PROFESSIONAL

FEATURES VS TIERS COMPARISON CHART

CAPABILITY	GEOMEDIA WEBMAP ESSENTIALS	GEOMEDIA WEBMAP ADVANTAGE	GEOMEDIA WEBMAP PROFESSIONAL
ACCESS AND PUBLISH VOLUMES OF STRUCTURED GEOSPATIAL VECTOR AND RASTER DATA			
Build and deploy basic OGC® web services (WMS, WMTS, WFS, WFS-G, WCTS, WPS-CT)	•	•	•
Transform database information into highly differentiated features displayed on a map	•	•	•
Real-time access to enterprise geospatial data	•	•	•
View, query, and analyze geospatial data from many formats (without any pre-translation)	•	•	•
Leverage powerful APIs to create your own web applications	•	•	•
Pre-configured, harmonized thin client included	•	•	•
Administer GeoMedia WebMap sites and services on the web server using the Administration Console	•	•	•
Use GeoMedia desktop as a publishing platform to create high-performance web applications with the click of a mouse	•	•	•
Build and deploy an OGC OpenLS (Open Location Service) to perform address geocoding (and reverse)	•	•	•
Display vector and raster data in 3D with advanced myVR technology	•	•	•
DATA EDITING AND ADVANCED CLIENT FUNCTIONALITY			
Advanced, harmonized thin client including GeoRSS, ERDAS APOLLO connections, WFS (on client side), WFS-T (Transactional), Vector data display in 3D		•	•
Capture spatial data in accordance with a central data model and write directly to Microsoft Access®, SQL Server®, Oracle® or Postgre SQL with PostGIS		•	•
Create and update attribute data, with help from drop-down lists and integrity checks during data capture		•	•

Build and deploy an OGC WFS-T over SQL Server or Oracle		•	•
Create and run pre-defined business workflows and integrate attribute-based enterprise processes with map operations		•	•
HIGH-END ANALYSIS FUNCTIONS			
Build and deploy an LUWS (Location Utility Web Service) to perform address geocoding and routing			•
Conduct dynamic segmentation and linear analysis quickly over the web			•

CLICK ON A LINK BELOW FOR QUICK NAVIGATION

GEOMEDIA® WEBMAP ESSENTIALS

With GeoMedia WebMap Essentials, organizations can stand up a fully scalable server solution in the form of web services and thin client applications to provide extended GIS functionality, including real-time enterprise data access, sophisticated geospatial analysis, and map generation. It enables data publishing and subsequent end-user access to volumes of structured vector and raster data through basic Open Geospatial Consortium (OGC) services. A preconfigured thin client application – GeoMedia WebMap Publisher Portal - is bundled with the product. An API is also available to create your own custom web applications.

NOTE: See Geospatial Portal 2018 product documentation for detailed information on GeoMedia WebMap Publisher Portal features.

For rapid image delivery into client applications, GeoMedia WebMap can be integrated with ERDAS APOLLO Essentials. Easy administration of client application and services is available in a harmonized web-based Administration Console.

KEY FEATURES

Web services

As a server product, GeoMedia WebMap supports publishing of geospatial data through a wide variety of web services. All web services offered with GeoMedia WebMap Essentials are compliant with International Organization for Standardization (ISO) and OGC specifications. Direct support for publishing, view, download, and transformation services specified by the European INSPIRE Directive regulations is also included.

- Web Map Service (WMS)
    - Generate a map from one or more data sources
    - Configure hierarchical legends and watermarks
    - Publish WMS version 1.3.0
        - ISO 19128: 2005 Geographic information -- Web map server interface
        - OGC 06-042 OpenGIS® Web Map Server Implementation Specification
        - INSPIRE Technical Guidance View Services Version 2.12
    - Publish WMS version 1.1.1
        - OGC 01-068r3 Web Map Service Implementation Specification
- Web Feature Service (WFS)
    - Get or manipulate one or more features
    - Publish WFS version 2.0.0
        - ISO 19142: 2010 Geographic information -- Web Feature Service

- INSPIRE Draft Technical Guidance Download Services Version 2.0
- Publish WFS version 1.1.0
  - OGC 04-094 Web Feature Service Implementation Specification
- Export vector data to GeoRSS, KML, CSV, and GeoJSON

- Geocoding
  - Find the coordinates of a given location
  - OGC 03-006r3 OpenGIS® Location Services (OpenLS): Core Services, Part - 3

- Reverse geocoding
  - Find the location (address) of a given set of coordinates
  - OGC 03-006r3   OpenGIS® Location Services (OpenLS): Core Services, Part - 3

- Web Map Tile Service (WMTS)
  - Serve tiled data with high performance
  - Publish WMTS version 1.0.0:
    - OGC 07-057r7 OpenGIS® Web Map Tile Service Implementation Standard

- Gazetteer service
  - Enable querying by place name
  - Publish Gazetteer based on the standard Web Feature Service (WFS) interface, version 1.1.0
    - OGC 11-122r1 Gazetteer Service - Application Profile of the Web Feature Service Best Practice

- Transformation
  - Convert coordinates on the fly
  - Publish WPS-CT, version 1.0.0:
    - OGC 05-007r7 OpenGIS® Web Processing Service, version 1.0.0
    - Draft Technical Guidance for INSPIRE Coordinate Transformation Services z 15.03.2010 r
  - Publish WCTS, version 0.3.0 (deprecated)
    - OGC 05-013 Web Coordinate Transformation Service (WCTS) draft Implementation Specification

GeoMedia WebMap Publisher Service

GeoMedia WebMap Publisher Service (WMPS) is a custom web service that enables publishing multiple legends (map compositions) in both raster and vector formats. WMPS combines standard WMS and WFS capabilities, making geographical data display, analysis, and querying more powerful.

- Multiple map compositions offered in one service
- Cross compositions predefined queries

- Multi-dataset analyses

GeoMedia WebMap Publisher Portal

Using GeoMedia® as a visual authoring environment, GeoMedia WebMap allows you to publish high-performance web applications with a simple click of a mouse. The preconfigured thin client application - GeoMedia WebMap Publisher Portal - provides a GUI to view, query, and analyze data that is available through the above-mentioned web services. GeoMedia WebMap Publisher Portal allows use of GeoMedia as the visual-authoring environment.

- Create an application based on a GeoMedia GeoWorkspace

- Consume imagery from ERDAS APOLLO Essentials for extremely fast imagery streaming and rendering

- Display base map and raster data in 3D

GeoMedia WebMap Publisher Portal is a preconfigured layout in Geospatial Portal. See the Geospatial Portal 2018 product documentation for details about available features.

Map tools and high-fidelity rendering

GeoMedia WebMap lets you generate both raster and vector maps, rendering maps on the web using native browser functionality.

Simplified publishing workflows for GeoMedia WebMap reduce the service and portal publishing process to a single page in GeoMedia WebMap Publisher Administrator. Appropriate instances are created automatically in the Administration Console – no additional configuration needed.

Publishing GeoMedia GeoWorkspaces with dynamic labelling configurations results in automatic LRF file creation, further reducing the time to set up GeoMedia WebMap's services and portals.

Remote Service Publishing **–** using the new GeoMedia WebMap Publisher capabilities, the Administrator can easily create fully operational services (WMS and WFS), as well as WebMap Publisher Portals on remote server machines. The enhanced Wizard performs all the necessary actions: the creation of the Service Source, the Service (or Portal) Instance and then binds them together, so that all that's left is publishing the data.

- A variety of map output types:

  - JPEG image format

  - PNG image format

  - Improved SVG (can be rendered with Adobe SVG Viewer or natively in Web browser)

  - Mechanism for differentiating between features based on single or multiple attribute values

  - Translucency of all raster data and area color fill

- Dynamic label generation with conflict detection

  - Ability to identify different text features as you pan and zoom

- Additional advanced rendering features

  - Text/symbol masking with a halo

  - User-defined area hatching, symbol, and text display in a single legend entry

  - Endcap, and midline joint specification

  - User-defined styles

  - View-independent text and symbols

- Interactive tool tips and hot spots3D globe based on myVR technology

  - Displays 3D Tiles and 3d Objects

  - Displays base map and raster data sources in 3D

Data access and interoperability

- Access geospatial data warehouses of all GeoMedia-supported data formats

- GeoMedia Grid raster engine

- Google Maps, Bing™ Maps

- Oracle Spatial, Microsoft SQL Server, Microsoft Access, PostgreSQL with PostGIS

- Esri File Geodatabase (FGDB)

- ArcView, ArcInfo, MapInfo

- MicroStation, AutoCAD

- MGE, FRAMME, G/Technology™

- Text file, ODBC source

- OGC WMS, WFS, GML

- Bitmap, JPEG, TIFF, GeoTIFF, MrSID, ECW, USGS DOQ, CCITTG4

- Export to AutoCAD, MicroStation, ArcView, MapInfo, Microsoft SQL Server

Analysis

- Attribute query

- Spatial query

- Buffer zoning

- Spatial intersection

- Spatial difference

- Analytical merge

- Aggregation

- Functional attributes

- Join

- Coordinate geocoding

- Address geocoding

- Find address

- Measure length and angle

Real-time GIS analysis
- Query GIS data warehouses and see information described in a map

- Click a map feature to see selected database information about that specific feature

Caching
- Cache on the client

  - Files are maintained automatically

- Server-side geocaching for feature classes which are not frequently updated

Administration Console

The Administration Console provides the means for creating and configuring all aspects of server-side engines, web services, and web applications in one place.

- Web service instances (for any type of service) can be created, configured, and removed

- The following features can be configured:

  - Service metadata (OGC and INSPIRE) for WMS, WMTS, WFS. A dedicated user interface in GeoMedia WebMap Administration Console is available to support editing of service metadata.

  - Logging capabilities for the service to log its performance data into a given storage (can be turned on and off)

  - Source of data for the service (depending on service type)

- Administration Console lets you change GeoMedia WebMap engine parameters and test services being instantiated

  - Configuring server parameters (timeous, thresholds, number of parallel map servers, etc.)

- WebMap logging configuration

- WebMap cache configuration

- Virtual folders configuration

Web application deployment

Deploy Web applications with:

- VMWare ESX

- Amazon EC2

Click on a link below for quick navigation

GEOMEDIA® WEBMAP ADVANTAGE

GeoMedia WebMap Advantage bundles the complete Geospatial Portal, read/write (R/W) data servers for Oracle, Microsoft SQL Server, or PostgreSQL with PostGIS, and the ability to create WFS-T (transactional WFS). In addition, it provides 3D vector data display, including underground features, and 2D vector data extrusion for rapid building of 3D scenes, as well as first person perspective view for 3D scene walkthrough.

NOTE: See Geospatial Portal 2018 product documentation for detailed information on the Geospatial Portal features.

KEY FEATURES

In addition to all the features included in GeoMedia WebMap Essentials, GeoMedia WebMap Advantage offers:

Complete Geospatial Portal bundled

GeoMedia WebMap Advantage includes the full Geospatial Portal product: a configurable and customizable browser-based web portal that can be used for finding, viewing, querying, and analyzing geospatial data published by Hexagon Geospatial products and/or other standards-based web services. Using a modern services-oriented architecture, the Geospatial Portal lets users connect to many data sources at the same time.

- Integrates multiple data sources into a single map view

- Easy navigation and interaction

- Supports 3D globe based on myVR technology

  - Displays base map and numerous raster and vector data sources in 3D

    - 3D objects display

    - Vector data display from WFS published by GeoMedia WebMap

  - Extrusion of 2D vector data based on the selected feature attribute values to rapidly build 3D scenes

  - Display of underground features

  - First Person Perspective view

- Connects to ERDAS APOLLO data sources

- Provides ISO/OGC compliance and enables publishing of INSPIRE view, download, and transformation services

- Enables advanced functionality including:

  - GeoRSS

  - Coordinate transformation (CT) capability

- Connections to ERDAS APOLLO and other web services

- Consumption of more web services on the client side

- WFS (on client side), WFS-transactional

Read/write data servers

- Ability to build applications that edit geospatial data

- Capture spatial data in accordance with a central data model and write directly to Microsoft Access, SQL Server, Oracle, or PostgreSQL with PostGIS

Transactional Web Feature Service (WFS-T)

- WFS-T allows you to edit vector data and transact changes directly back to the database

- Build and deploy WFS-T over Microsoft SQL Server, Oracle, or PostgreSQL with PostGIS

3D vector data display

- Use extended 3D WFS service capabilities offered within GeoMedia WebMap Advantage to display vector data on the globe

- Use attribute values to extrude the vector data and provide even more dimension to the enterprise data view

- Display underground features

Support for Business Workflows

When deployed with Hexagon Geospatial's Workflow Manager, GeoMedia WebMap can be used to automate typical business workflows that are run day-by-day in the enterprise environment.

- Construct highly focused attribute-based processes using Workflow Manager

- Run pre-configured workflows with Workflow Manager using Geospatial Portal thin client application provided with GeoMedia WebMap

- Intuitive map operations when necessary for the workflow steps

CLICK ON A LINK BELOW FOR QUICK NAVIGATION

GEOMEDIA® WEBMAP PROFESSIONAL

The Professional tier of GeoMedia WebMap extends the GeoMedia WebMap Essentials and Advantage offerings with advanced linear analysis functions, including routing (OpenLS routing), linear referencing system (LRS) services, and dynamic segmentation. It is the perfect solution when network and network-related information is critical.

KEY FEATURES

In addition to GeoMedia WebMap Essentials and GeoMedia WebMap Advantage features, the Professional tier offers:

Linear referencing system (LRS)

- LRS precision location web service

- All advanced linear analysis web services can be created and configured in one place — the new Administration Console

- Overlay Web Service

Routing

- Determine the best route from one location to one or more other locations

  - Supports best order routing

  - Finds closest routing

  - Handles NAVTEQ and TeleAtlas data without building your own routing network

  - Supports maneuvers

  - Supports Z-elevation

Dynamic segmentation

- Analyze tabular data referenced to linear features on a map

  - Clearly visualize asset inventory

  - Click on a feature to see attribute details

- Web services for both dynamic segmentation and reverse dynamic segmentation allow basic linear referencing

Proximity analysis

- Determine the distance relationship between a selected point and other features

Area allocation

- Site analysis considering a variety of factors to determine facilities location that will service demand points

ABOUT US

Hexagon Geospatial helps you make sense of the dynamically changing world. We enable you to envision, experience and communicate geographic information. Our technology provides you the form to design, develop and deliver solutions that solve complex, real-world challenges. Ultimately, this is realized through our creative software products and platforms.

CUSTOMERS. Globally, a wide variety of organizations rely on our products daily including local, state and national mapping agencies, transportation departments, defense organizations, engineering and utility companies, and businesses serving agriculture and natural resource needs. Our portfolio enables these organizations to holistically understand change and make clear, reliable decisions.

TECHNOLOGY. Our priority is to deliver products, platforms and solutions that make our customers successful. Hexagon Geospatial is focused on developing technology that displays and interprets information in a personalized, meaningful way. We enable you to transform location-based content into dynamic and useable business information that creatively conveys the answers you need.

PARTNERS. As an organization, we are partner-focused, working alongside our channel to ensure we succeed together. We provide the right platforms, products, and support to our business partners so that they may successfully deliver sophisticated solutions for their customers. We recognize that we greatly extend our reach and influence by cultivating channel partner relationships both inside and outside of Hexagon.

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HEXAGON. Hexagon's solutions integrate sensors, software, domain knowledge and customer workflows into intelligent information ecosystems that deliver actionable information. They are used in a broad range of vital industries.

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