GeoMedia and GeoMedia WebMap Update

Peter Sonea
October 1, 2008
Conference Centre
Mississauga, ON
Agenda

- Product Overviews
- Current and New Functionality
  - GeoMedia
  - GeoMedia WebMap
- Intergraph Geospatial Product Vision

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GeoMedia – An Overview

Access various, common data sources and formats using GeoMedia’s data server technology.
GeoMedia – An Overview

- **Visualization of features and queries** within the GeoMedia environment to exact style or symbology specifications.
- **Styles** can be named, stored and shared within the enterprise.

- Point, line, area and text styles
- Any line style can be used for area boundaries
- Line and area patterns
- Complex and custom gap-dash sequencing
- End-cap and mid-line join control
- Translucency
- Attribute-based symbology
- Thematic maps
- UNICODE and Rich-Text Support
GeoMedia – An Overview

- Analyze data and perform complex what-if analysis
  - Buffer zone
  - Analytical Merge, Aggregation
  - Spatial Difference, Spatial Intersection, Spatial Query
  - Ad-hoc search
  - Address Geocoding, Find address

Analytical Merge of points by attribute, storm_name, to create polyline geometry(s).
GeoMedia – An Overview

Precisely capture and edit feature graphics and attributes with extensive commands

- Point, line and area placement
  - Point to point digitizing
  - Placement by circle and arc
  - Oriented to related features
  - Maintain coincidence
  - Break at intersections
  - Raster snaps

- Precise location and size using precision key-in or construction aids such as:
  - Delta X, Delta Y
  - Perpendicular To
  - Distance and Direction

- Perform Undo and Redo

- Easily populate feature attributes using a variety of methods
  - Bulk attribute update
  - Calculate area, length, perimeter
  - Copy attributes
  - Picklists
  - Update attributes from nearby text

- View and edit attributes in “spreadsheet style” using Data Window
Image data is geospatial data as well. Integrate raster and images with vector feature data for more effective workflows

- Multitude of image and raster formats are supported
- Use as backdrop for feature placement and editing
- TerraShare data server
- Support for Oracle Georaster
GeoMedia – An Overview

- GeoMedia’s Layout Window is the environment for map composition and printing
  - Define map content
  - Generate and compose legend and margin information
  - Use Batch Plotting for bulk plotting jobs and map books
  - Build reference grids and cartographic grids
  - Import and export layout templates for standardized printed products
GeoMedia – An Overview

- **Export data to the most common or standard formats** for sharing with other applications within the enterprise
  - GeoTIFF
  - AutoCAD DXF and DWG
  - Microstation DGN
  - MapInfo MIF
  - ESRI Shapefile

GeoMedia Export Services

GeoMedia
GeoMedia WebMap – An Overview

- **Analyze data** and perform complex what-if analysis using GeoMedia’s query and pipe technology in a thin client browser application
  - Buffer zone
  - Analytical Merge, Aggregation
  - Spatial Difference, Spatial Intersection, Spatial Query
  - Functional attributes and expressions
  - Union, Join
  - Address Geocoding (and reverse)
  - Routing
  - Dynamic Segmentation
GeoMedia WebMap – An Overview

GeoMedia WebMap lets you easily create websites, using GeoMedia as “visual authoring” tool.
Create and configure "out of the box" web services with GeoMedia WebMap Publisher

- Follow industry standards:
  - Geospatial – OGC, XML, GML
  - IT / W3C – XML, SOAP, WSDL, SVG
- Generate Map (WMS)
- Manipulate Feature (WFS)
- Catalogue (CSW)
- Address Geocoding (OpenLS)
- Generate Route (OpenLS) (Pro only)
GeoMedia WebMap – An Overview

GeoMedia WebMap Services can be consumed by standard OGC clients
GeoMedia & WebMap Product Roadmap

**Current**

**Features and Benefits**
- Microsoft Vista and 64-bit H/W support for advancing enterprises
- Interoperate with G/Tech, I/CAD product families for analysis and mapping
- Share GeoMedia configuration throughout the enterprise
- Customize GeoMedia with the latest development tools
- New search command, map window tooltips and streamlined capture and editing tools increase productivity
- Consistent visual display
- Google Maps and Microsoft Virtual Earth “mash-ups”
- Additional web services

**Planned**

**Features and Benefits**
- INSPIRE and OGC enhancements provides access to more data providers
- Faster display and refresh during windowing operations
- Single sign-on allows you to use your centralized security systems for user access and privileges
- More enterprise-oriented tools
- Improved label placement and dynamic labeling
- Advanced SDI web services
- SDI Portal programming tools

**Vision**

**Features and Benefits**
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**Strategic Initiatives:**
- New Industry specific applications as well as adding business intelligence applications for decision support
- Greater integration of geospatial applications with corporate systems by embracing SOA and bus communication structures such as BizTalk
- Visual orchestration to solve daily business problems
- Advanced Visualization for Geospatial data with the addition of 3D views, and integrated video display
GeoMedia 6.1 – Vista and 64-bit H/W
Keeping up with advances in hardware and operating systems
GeoMedia 6.1 – Style Animation

Animate styles to draw attention to critical features or situations as attribute values change.
Quickly select the exact data to analyze.

Quickly find the features you need to edit or update.

Display key information while hovering over features.
GeoMedia 6.1 – Customization

Tailor your work environment to meet your needs

Develop your own placement commands

Add your own functions for use in expressions

Customize the map window tooltip
GeoMedia 6.1 – Application Development

Develop GeoMedia commands using latest development tools

- Visual Basic 6.0
- Visual Basic .Net
- C#
- Visual Studio 2003
- Visual Studio 2005
- .NET 2.0 & 3.0
- More events
- More objects
- More interfaces
GeoMedia 6.1-Enterprise Configurations

Share GeoMedia configurations across the enterprise with other users

- Catalog Connections
- Queries
- Legends
- Styles
- Warehouse Connections
- Spatial Filters
- Categories
- Searches
What’s new in GeoMedia WebMap 6.1

- WebPub-generated application can be a “mashup”
  - Microsoft Virtual Earth
  - Google Maps
- “mashup” integration / aggregation
  - integrate the “world” of Google or Microsoft data as a background
  - overlay **your** geospatial assets
  - take advantage of GeoMedia spatial analysis
    - the answers to the questions you can ask with your data
- GM or VE AJAX user experience
- Performance enhancements
  - tiling and caching data server-side
  - caching client-side
- **very** easy to create a “mashup” *with no programming*
  - no mashup API learning curve
What’s new in GeoMedia WebMap 6.1

Easily create “mashup” interactive sites

Must comply with terms and conditions of Microsoft VE or Google Maps license agreement
What’s new in GeoMedia WebMap 6.1

- Use of new GeoMedia display system

- Provide greater display fidelity between GeoMedia WebMap and
  - GeoMedia desktop
  - G/Tech desktop

- Preserve customer investment in display representations across enterprise
  - Attribute-based symbology
  - Translucency
    - all raster data.
    - area colorfill.
  - Additional Thematics
  - Area Hatching (full raster, limited vector)
  - Text / Symbol masking with a halo
  - Support the ability to display symbols and text as a single legend entry (road shields etc.)
  - Endcap support
What’s new in GeoMedia Webmap 6.1

- Continue building on web services foundation laid in 6.0 by enhancing existing web services and adding new ones:
  - Coverage – OGC WCS
  - Reverse Geocode
- Data server enhancements
- Support of Oracle GeoRaster
And New in WebMap Professional 6.1

- Enhanced routing web service to provide:
  - Best order routing (traveling salesperson)
  - Find closest routing (proximity analysis)
  - Allow use of NAVTEQ data
  - Allow use of Tele Atlas data

- Dynamic Segmentation web service
- Linear Referencing web services
- GeoMedia Grid raster engine
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GeoMedia 6.1 Minor Releases

Access to more data sources and open, standard formats
GeoMedia 6.1 Minor Releases

Publish to de-facto standards and formats both geometry and style information

New Projections & Datums

Google Earth
GeoMedia 6.1 Minor Releases

Address geocoding enhancements for support of regional models, reverse geocoding
GeoMedia 6.1 Minor Releases

Focus on Spatial Data Infrastructure & INSPIRE initiatives

- ISO metadata catalog; GML 3.2
- New OGC interfaces, WFS-T, WCS, WCTS, WFS-G, CSW, WMS GetFeatureInfo

6.1.4 & 6.1.5
SDI = Spatial Data Infrastructure
GeoMedia WebMap 6.1.4

- Maintenance release ("hot fix")
- KML publish and data server
- WCS (coverage) data server
Provide a number of server-side enhancements (primarily support of optional parameters, additional EPSG codes, etc.) to the existing web services in GWM, primarily:

– Web Map Service (WMS)
– Web Feature Service (WFS)
GeoMedia WebMap 6.1.5 “SDI Pro”

- Transactional WFS (WFS-T)
- Gazetteer Service (WFS-G)
- Secured WMS (sWMS)
- Secured WFS (sWFS)
- Coordination Transformation Service (WCTS)
  - or WPS with a coordinate transformation profile
- Catalogue Service (ISO-compliant CSW)
GeoMedia WebMap 6.1.5 SDI Portals

- Toolbox of portal components for the creation of secure, robust SDI portals
- Components that act as consumers/clients of:
  - WMS (web map)
  - WFS (feature)
  - WCS (coverage)
  - WFS-T (transactional)
  - WFS-G (gazetteer)
  - WCTS (coordinate transformation)
  - CSW (catalogue)
  - OpenLS (location – geocoding, routing)
  - WMC (context)

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Questions?

Thank you!

Peter Sonea
Senior Application Consultant
Intergraph Canada
Ottawa, ON
Peter.Sonea@intergraph.com