Intergraph®'s Digital Product Generation application, based on our GeoMedia® Digital Cartographer product, gives map and geospatial data-producing organizations the productivity tools needed to generate accurate digital products from a variety of data sources. GeoMedia Digital Cartographer meets the needs of the National Geospatial-Intelligence Agency (NGA), Multinational Geospatial Co-production Program (MGCP) member nations, and their contractors, as well as other mapping organizations with specific requirements. Our application supports MGCP and Vector Product Format (VPF) digital product generation workflows and provides a robust suite of data validation tools, editing tools, and export capabilities for these vector data products.

Digital Product Generation is a component of Intergraph's Geospatial Intelligence Production solution (GIPS). GIPS is an enterprisewide solution for feature data collection, creation and maintenance of geospatial data warehouses, and digital or hard copy production of geospatial intelligence products suitable to support local, regional, national, and multinational activities, including emergency response.

MGCP TECHNICAL REQUIREMENTS
GeoMedia Digital Cartographer enables organizations to meet the MGCP technical requirements for uploading digital map data to the MGCP International Geospatial Warehouse (IGW). A user-friendly interface guides you through the process of preparing geospatial data for validation testing, methodically working through detected errors, generating the MGCP cells in ISO-compliant XML format, and adding the required cell metadata.

GeoMedia Digital Cartographer includes an interface to the Geospatial Analysis Integrity Tool (GAIT) validation software. This geospatial intelligence data review tool is the key validation check for MGCP member nations who are uploading cells to the IGW. The GAIT review tool improves the accuracy of digital products by ensuring the integrity of feature and elevation data. Finished cells must pass GAIT inspection before uploading. GeoMedia Digital Cartographer contains custom commands to accommodate MGCP shapefile export requirements to support GAIT validation. To supplement this process, the product provides a robust review environment to ensure that spatial and geometric errors are quickly and thoroughly corrected. The results of the GAIT validation process are ingested into the Digital Cartographer environment for analysis and correction, guided by Intergraph’s GeoMedia Fusion Queued Edit functionality. GeoMedia Digital Cartographer also provides the cell and subregion metadata information as defined by the MGCP Metadata Specification. In addition to GAIT validation, GeoMedia Fusion offers tools to implement additional custom validation checks, if required.

VECTOR PRODUCT FORMAT DATA
GeoMedia Digital Cartographer supports the generation of VPF data and includes a VPF Validator tool to verify file integrity.

FEATURES AND BENEFITS
• Generate the MGCP-compliant XML dataset representing an MGCP cell.
• Generate the shapefiles currently required for MGCP cell generation.
• Interface to the GAIT validation software to provide required quality-assurance testing for MGCP cells prior to uploading to the IGW.
• Resolve errors efficiently by automatically initiating a
GeoMedia Fusion Queued Edit session that methodically guides you through the errors detected by the GAIT validation test.

APPLICATION COMPONENTS

- GeoMedia Professional
- GeoMedia Gi ToolKit
- GeoMedia Digital Cartographer
- GeoMedia Fusion

Digital Cartographer sends MGCP-prepared files to the Geospatial Analysis Integrity Tool (GAIT) for validation.

You can direct detected anomalies from the GAIT validation check to GeoMedia Fusion’s Queued Edit to guide you through corrections. You can also use GeoMedia Fusion to check for additional defects to ensure optimal data quality.

You can select the default settings for MGCP or GeoMedia, or create custom settings.