



Geomatica 2012

AUTOMATION. PERFORMANCE. INNOVATION.

Geomatica is designed to tackle the analytical demands of the most challenging problems confronted in geospatial analysis and our stewardship of the environment. With Geomatica 2012, PCI Geomatics has broken the boundaries of performance to enable geospatial professionals to solve real-world problems faster and more cost effectively than ever before.

Leveraging Modern Hardware for Improved Performance

Geomatica 2012 utilizes the full breadth of a user's computing resources to deliver maximum performance.

- A 64-bit version for Windows and Linux systems delivers robust software built to work with the most-advanced processors available.
- Open MP enabled functions, optimized for multi-core and multi-processor systems, improves performance for the most resource-hogging tasks including: orthorectification, mosaicking, reprojection, and filtering functions.

Industry-Leading Change Detection

- **SAR: Coherent Change Detection (CCD)** – PCI's CCD functionality, second to none in the market, allows users to detect and analyze changes extracted from a user-specified test and reference SAR image pair.
- **Automated Change Detection** – Change detection algorithms can be applied to any imagery in your stack that identify not only the change, but the magnitude of the changes.

New Sensors and Increased Support for Online Data Providers

PCI Geomatics is consistently first to market with new sensor and format support. Geomatica 2012 continues this tradition by not only adding new sensor support, but also adding to the list of online data providers with the ability to access data from ArcGIS Online. With Geomatica 2012, users will be able to use data from ArcGIS Online as a backdrop in Geomatica Focus, and also as a potential GCP source or elevation dataset in OrthoEngine workflows.

THE
WORLD'S BEST
ORTHO/MOSAIC
GETS
BETTER

Improved Manual Mosaicking

Visualize your mosaic prior to actually running the process. Improved masking; including the use of both Local and Global masks, improved colour balancing, and outline editing tool upgrades are included.

New Physical Modeling

A physical sensor model for orthorectification of ADS40/ADS80 level 1 images gives greater accuracy to your results. Also available is the ability to stitch multiple raster components into a single file for ease of

Automated Processing

Automated GCP collection uses a new methodology for Image to Image matching for greatly improved performance.

Platform Support



Geomatica 2012 is available on the following platforms:

Windows

Vendor	Microsoft
Hardware	Intel/AMD x86_64 64bit
Supported Versions	Windows XP/Vista/ Windows 7/Server 2003/Server 2008

Linux

Vendor	Various
Hardware	Intel/AMD x86_64 64bit
Supported Versions	Kernel version 2.6.27, glibc version 2.9, gcc 4.3

Note: Multiple Processors and Hyper-threading

Specific functionality in Geomatica 2012 has been designed specifically to take advantage of multiple processor machines and hyper-threading. For a list of those supported, please contact PCI Geomatics.

Note: Linux Support

Supported versions indicate that the software was either built on (the lowest version listed) or tested on that version. You can install and run software on other versions that are binary-compatible with those listed. The Linux version of the software is built on a SUSE 11.2 system. If your version of Linux is compatible with the listed kernel and glibc versions, you should be able to install and run the software.



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Taking Data Visualization to the Next Level

- Geomatica Focus is now Open-MP enabled, which will revolutionize the performance of every day tasks like the loading, panning and zooming of imagery.
- “On-the-fly” automatic image enhancements. As one roams around large volumes of data, the visual appearance will update to reveal the most information.
- Enhance all images tool – enhance multiple images in a single click.
- Locate image in tree list – Geomatica automatically identifies images being viewed based on visual selection in the view window
- Geomatica Focus allows the visualization of ground control points (GCPs) collected during orthorectification.
- Assignment of class descriptions and thematic color schemas for various Polarimetric processing algorithms.



Digital Surface Model Filtering to Create Digital Terrain Models

DSM raster datasets are created from point sources which include such features as buildings. A good example of such point sources is LIDAR data. Orthorectification requires DTM raster dataset where the elevation represents ground level. PCI Geomatics has developed functional DSM filtering, which can be used to create a DTM for orthorectification.

