

# Processed imagery @ speed of thought

**Terry Moloney**, COO, PCI Geomatics talks about the increase in demand for processed image data. The rapid information extraction gives PCI Geomatics strength because of the high volume automation it can handle

HOW DO YOU PLAN TO ACCELERATE PCI GEOMATICS' EXPANSION INTO NEW INTERNATIONAL MARKETS? WHICH MARKETS ARE YOU

**TARGETING?** PCI Geomatics is undergoing significant global growth –more specifically, this expansion is happening in China, India and the USA. We are actively providing our expert knowledge, technology and services to the defense, security, intelligence (DSI), environmental, agriculture,

and data processing markets via highly innovative approaches. PCI Geomatics' strength lies in our ability to provide automated leading edge solutions to process large volumes of aerial and satellite imagery.

PCI GEOMATICS HAS BEEN DEVELOPING IMAGE PROCESSING SOFTWARE FOR MORE THAN 27 YEARS. HOW HAVE THE MARKET REQUIREMENTS CHANGED OVER THIS PERIOD? We have seen the market

requirements change as imagery is becoming more readily available. With the onset of more than 280 satellites expected to be launched within the next 10 years, monitoring application and routine processing of large data volumes will become the norm as remotely sensed data becomes more plentiful and less expensive. Efficient processing, storage and dissemination of data is key. With our extensive experience in sensor support and through our high volume automation and image management offerings, PCI Geomatics is well positioned to handle

# HAS THE RECESSION IMPACTED UPON THE DEMAND FOR IMAGE PROCESSING SOFTWARE ACROSS THE PUBLIC AND PRIVATE SECTORS?

these emerging needs.

Despite the economic downturn, PCI Geomatics continues to grow worldwide; our offices in Canada, China, India, the UK and the US, are expanding and include the hiring of new staff. Given that there is an increase in high-resolution satellite and aerial sensors, there will be an increase in the demand for the processed image data and rapid information extraction. Therefore, our focus will continue to be on providing robust technology to companies around the world which need to transform raw satellite imagery into useable information products.

TELL US ABOUT THE STRATEGIC AEROSPACE AND DEFENSE INITIATIVE (SADI) AND THE NEXT-

# GENERATION EARTH OBSERVATION TECHNOLOGIES PCI GEOMATICS IS

**DEVELOPING? SADI** supports strategic industrial research and precompetitive development projects in the aerospace, defence, space and security industries and is managed by the Industrial Technologies Office, a special operating agency of Industry Canada with a mandate to advance leading-edge research and development by Canadian industries. The purpose of the SADI project for PCI was to develop and demonstrate software capabilities that can automatically extract various types of information

# **Highlights**

#### 2009

- Became a member of the ESRI Business Partner Program
- Release of desktop software Geomatica 10.3
- Geolmaging Accelerator (GXL) winning the Geospatial Leadership Award from Geo Tech Media
- Expansion in new markets in BRIC countries

### 2010

- ESRI ArcGIS desktop and server support.
- Working on more accelerated PCI Pluggable Functions (PPFs) including true ortho, DEM extraction, feature extraction and change detection.
- Continue to be the leader in multi-sensor support.
- Lead the development in tools for SAR data handling, processing and information extraction.

from earth observation data in a highly automated and efficient manner over wide geographical areas; it will include University research support.

PCI Geomatics was very pleased to have received funding from SADI in support of our best of breed technology, allowing us to continue to be world leading developers in geo-imaging software and systems, as demonstrated by our awardwinning Geolmaging Accelerator (GXL). The GXL is a high-speed computing framework and software suite that automates the processing of large amounts of raw satellite imagery data faster, and more costefficiently. Performance enhancements are the result of improved data handling, distributed multi-threaded processing, and optimised processors. PCI Geomatics has recognised the need for advanced image processing and increased throughput by the organisations which aim to save time and money without having to sacrifice quality and efficiency.

# HOW THE ROLE OF BUSINESS PARTNER PROGRAM WITH ESRI HAS ENHANCED THE COMPETITIVE POSITION OF PCI GEOMATICS? PCI

Geomatics joined the ESRI Business Partner Program in April 2009. Together with ESRI®, PCI is providing users with optimised desktop and server-based workflows for correcting commercial satellite imagery along with tools for processing and analysing radar imagery. PCI Geomatics will produce software that is integrated

closely with ArcGIS®, allowing both ESRI and PCI users to capitalise on their imagery investments and expand their use of geoimaging and geospatial data. PCI Geomatics is pleased to take part in the Monterey Cross exercise – a joint effort among ESRI and its business partners that demonstrates the value of commercial off-the-shelf software, enterprise services, and standardsbased interoperability to individuals within the DSI sectors. PCI has developed demonstrations on how intelligence users can access, visualise, and analyse synthetic aperture radar (SAR) data for all weather, day/night damage assessment, vessel tracking, and flood assessment. By expanding relationships with new partners, PCI is able to extend the current geospatial offerings.

# GLOBAL WARMING AND NATIONAL SECURITY ARE THE MAJOR CONCERNS AROUND THE WORLD TODAY. IN WHAT WAY CAN PCI GEOMATICS PLAY A ROLE IN THESE AREAS?

PCI Geomatics remains committed to developing technology and services that enable a better understanding of our planet. We offer software and systems that can facilitate critical decision-making for fast, accurate assessments when coordinating disaster management and emergency responses. Our GeoConference software assists organisations in building emergency response applications with near realtime access to rich, spatiallyaccurate satellite image products. It is an innovative way for organisations to share maps and images with distant colleagues and clients in real time. GeoConference is a live geospatial meeting system that operates via the Internet, and allows users to share maps, imagery and data simultaneously and interactively. It has recently been used to assist European agencies in the planning, monitoring

and coordination of land security and environmental activities.

PCI Geomatics has established government and educational relationships whereby we are able to look more closely at research and development initiatives pertaining to global warming and national security concerns, and to work towards applying geospatial solutions that will lend a hand.

# **ERDAS ADE 2010 released**

ERDAS has released ERDAS ADE 2010, an integrated suite of products for real-time editing of spatial and business data via the web, desktop or mobile device. Integrated with the Oracle technology stack, this suite of products includes ERDAS ADE Remote, ERDAS ADE Mobile and ERDAS ADE Enterprise.

"ERDAS ADE is an enterprise-enabled solution providing geospatial access and accurate data capture in a web, desktop or mobile application," said Mladen Stojic, Senior Vice President, Product Management and Marketing, ERDAS. "With an improved workflow, ERDAS ADE 2010 more efficiently handles data and gives users more control of database updates."

ERDAS ADE Remote provides rich, secure and flexible spatial and operational management for field force operations that require the capture and maintenance of location and business data. Users can manage data locally (files on disk), connect directly to Oracle, or connect to ERDAS ADE Enterprise.

Providing connected and disconnected users with a common software platform, ERDAS ADE Mobile offers versatility and flexibility for data collection and validation requirements. ERDAS ADE Mobile is a powerful spatial editor for any Windows Mobile GPS or hand-held device.

ERDAS ADE Enterprise provides the ability to scale in a web based environment as well as real-time spatial data editing. Leveraging the complete Oracle technology stack, ERDAS ADE Enterprise supports editing of all Oracle data types, including spatial, topology features, topology primitives and attribute data.