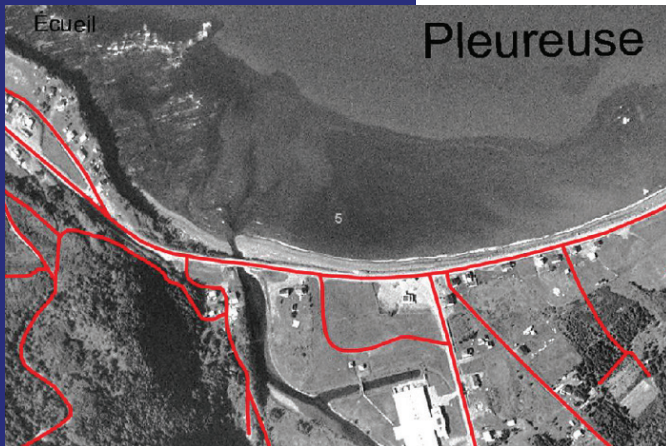# CASE STUDY

Canadian agency uses GeoExpress and Express Server to reduce storage costs, centralize image management and improve distribution and access.

Pictured Below: Image showing L'Anse Pleureuse on the Gaspe Peninsula in eastern Québec with a road network overlay (enhanced here for illustration purposes) – an example of imagery distributed by the Ministry of Sustainable Development, Environment and Parks to its offices throughout the province for viewing in geospatial applications.

ORGANIZATION
Québec Ministry of Sustainable Development, Environment and Parks

LOCATION
Québec City, Québec, Canada

INDUSTRY
Provincial government

PRODUCT
Geospatial imagery

CUSTOMERS
Ministry office and field personnel

IMAGE LIBRARY
1.5 TB of raw image data

WEBSITE
www.mddep.gouv.qc.ca

QUÉBEC MINISTRY OF SUSTAINABLE DEVELOPMENT, ENVIRONMENT AND PARKS

LizardTech Software Reduces Storage and Distribution Costs for Provincial Agency

Background

The Québec Ministry of Sustainable Development, Environment and Parks promotes sustainable development while protecting natural ecosystems. The Ministry annually receives 10,000 aerial images of provincial territory in color and greyscale, which it uses for ecological analyses. The 1.5+ terabytes of image data currently being processed by the Ministry also include satellite imagery that may be gathered monthly or even bi-weekly for some regions.

Image showing L'Anse Pleureuse on the Gaspe Peninsula in eastern Québec with a road network overlay (enhanced here for illustration purposes) – an example of imagery distributed by the Ministry of Sustainable Development, Environment and Parks to its offices throughout the province for viewing in geospatial applications.

Challenges

The Ministry has more than 20 offices spread around the province, some in remote places with low bandwidth. Personnel at the various locations view geospatial imagery both in web applications and as contextual layers within ArcMap and GeoMedia. Multiple offices were purchasing the same data on CD-ROM for their locations – a costly redundancy in terms of both money and storage space. This decentralized image sourcing also created difficulties in managing and updating the imagery.

Using GeoExpress and Express Server reduces our storage costs and enables us to manage images in a central location, which in turn reduces redundancy and increases our efficiency.

Directorate of Information Resources
Québec Ministry of Sustainable
Development, Environment and Parks

The Ministry needed to achieve the following:

- Efficiently manage, update and distribute imagery from a central location

- Make imagery accessible to entire Ministry workforce

- Reduce file sizes of stored images while retaining high image qualityv

- Mosaic and compress data in an efficient workflow

- Support viewing by analysts using WMS-enabled web applications such as ArcMap and GeoMedia

Solution

- GeoExpress for mosaicking and compression to MrSID

- Express Server for efficient distribution to any device over any connection

The Ministry makes a single purchase of image data, then uses LizardTech's GeoExpress software to convert TIFFs to the industry standard MrSID format, simultaneously eliminating 60% of data storage costs and taking advantage of easy-to-use image processing tools such as colorbalancing, mosaicking and reprojection. GeoExpress retains high image quality.

The Ministry then uses LizardTech Express Server to distribute the imagery among its offices and personnel in the field for use as image layers in ArcMap and WMS-enabled web applications. Now, personnel anywhere can quickly view any of the Ministry's image data from one central, easily updated repository.

Benefits

The Québec Ministry of Sustainable Development, Environment and Parks realized the following benefits using LizardTech's GeoExpress and Express Server:

- Reduced storage requirements - Savings of 60% in total file sizes
- Eliminated redudancy - Central storage, processing, updating and distribution
- Retention of image quality - Visually lossless images even at high compression ratios
- Reduced bandwidth requirements - Efficient low-bandwidth delivery of large images
- Easy online viewing - Images accessible via WMS-enabled web applications such as ArcMap
- Workflow efficiency - Combined image manipulation tools and compression capabilities

FOR MORE INFORMATION

For more information about LizardTech products, call LizardTech at (206) 652-5211. In Europe, call LizardTech UK, at 44 (0) 870 922 0239. To access purchasing information or find your local LizardTech sales manager, go to: http://www.lizardtech.com/purchase/purchase/other.php

For more information about LizardTech GeoExpress, visit http://www.lizardtech.com/products/exp/

For more information about the Québec Ministry of Environment, visit: http://www.mddep.gouv.qc.ca

Press contact: Justyna Bednarski, jbednarski@lizardtech.com

LIZARDTECH
Creators of **MrSID** Compression Technology

www.lizardtech.com | 1.866.725.5211 or 206.652.5211 | geosales@lizardtech.com