HEXAGON
GEOSPATIAL

MINISTRY OF ECONOMIC AFFAIRS LEVERAGES AN IMAGERY SERVICE

The agricultural policy in the European Union (EU) involves one of the biggest financial transactions in the annual budget. This calls for a careful and precise registration of those farmers eligible to receive subsidies, plus the amount they are entitled to. In order to make this registration work smoothly, a Land Parcel Identification System (LPIS) has been designed. Each country in the European Union manages and operates their own LPIS. For the Netherlands, this is done by the Ministry of Economic Affairs, which includes the former Ministry of Agriculture.

Each year, all current 70,000 farmers in the Netherlands must log into the system to declare which parcels they have used, what they've grown and, if needed, modify their parcel boundaries.

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The declaration period is constrained to six weeks, and many farmers wait until the last weekend to submit their data. This results in peak usage in these final days. In order to properly respond to this surge, the application must be fast and reliable at all times. The system supporting LPIS in the Netherlands was initially conceived in 2008, and involved a complex architecture of federated databases and geospatial servers. Keeping up performance and reliability was a challenge, especially at peak times, with a large part of the load coming from the underlying imagery data. This is why the Ministry approached Imagem, the Benelux distributor for Hexagon Geospatial.

ERDAS APOLLO IMAGERY SERVICE OPERATIONAL IN 1.5 HOURS

Putting in place a powerful imagery service based on ERDAS APOLLO was something Imagem has done on many occasions. In this case, the additional challenge was to implement within an existing architecture based on Esri technology. With no room to modify front end or back end architecture, the solution needed to slide neatly into place, and it needed to be done fast. When the order came in, there was a mere four weeks until the start of the submission period.

Upon arriving onsite, the base system was made operational within 1.5 hours. The ability for ERDAS APOLLO to deploy a native Esri Geoservices protocol meant the front-end could directly take in the new service, without recoding.

Furthermore, testing could begin almost immediately after installation. After implementation, the imagery appeared on screen faster than the vectors, which had never been the case before.

PERFORMING UNDER PRESSURE

When the system went into production and farmers began submitting, the solution proved not only to be very fast, but also much more stable than the previous architecture. Even at peak times, with over 8 million page views and 100 GB of data being requested each hour, CPU's would not exceed even 25 percent of their maximum load.

Furthermore, the data was now coming from a few large ECW mosaics, which replaced the previous, less-efficient solution that delivered original, full-size imagery from a database. This meant that on top of the gain in speed and stability, data management was significantly reduced, as well as the amount of storage space required.

In conclusion, the Ministry is very satisfied with the solution and the ease with which it was implemented. Furthermore, this successful LPIS implementation paves the way to make use of this architecture for other systems as well.

It also proves that adopting a combined, 'best of breed' approach to your system architecture many times yields a better return on investment than standardizing on a single platform.

ABOUT POWER PORTFOLIO

The Power Portfolio from Hexagon Geospatial combines the best photogrammetry, remote sensing, GIS and cartography technologies available. Flowing seamlessly from the desktop to server-based solutions, these technologies specialize in data organization, automated geoprocessing, spatial data infrastructure, workflow optimization, web editing, and web mapping.

The Provider Suite enables you to comprehensively manage and deliver volumes of geospatial and business data.

ABOUT HEXAGON GEOSPATIAL

Hexagon Geospatial helps you make sense of the dynamically changing world. Known globally as a maker of leading-edge technology, we enable our customers to easily transform their data into actionable information, shortening the lifecycle from the moment of change to action. Hexagon Geospatial provides the software products and platforms to a large variety of customers through direct sales, channel partners, and Hexagon businesses. For more information, visit www.hexagongeospatial.com or contact us at marketing@hexagongeospatial.com.

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