**CASE STUDY** 



## POWERLINK ASSET INFORMATION HUB



## PROFILE

COMPANY: Powerlink Queensland WEBSITE: https://www.powerlink.com.au DESCRIPTION: Powerlink Queensland is a State Government Owned Corporation, which owns, develops, operates and maintains the high voltage electricity transmission network that extends 1700km from north of Cairns to the New South Wales border. INDUSTRY: Power Utilities COUNTRY: Australia

## PRODUCTS USED

- ERDAS APOLLO®
- GeoMedia<sup>®</sup> Smart Client

## KEY BENEFITS

- Faster service and product delivery times
- Reduced costs
- Increased efficiencies
- Increased stakeholder value proposition



## **EXECUTIVE SUMMARY**

In the past, the use of geospatial data at Powerlink has been limited to simple web mapping and reporting for specific teams in various divisions. This work was carried out by a specialist team.

With regulatory and shareholder-driven expectations for greater stakeholder engagement, as well as strong demand for operational efficiency to put downward pressure on electricity prices, there was growing need within Powerlink for broader access to – and timely use of – geospatial and technical data. Powerlink recognised that technical asset and geospatial data could be better utilised across the business. Further, the combination of that data represents Powerlink's core intellectual property and a significant advantage in an increasingly competitive market.

## THE CHALLENGE

The core challenge for the Spatial Services team was optimizing output in terms of quality and quantity to meet growing and changing business demand. Rather than highly iterative products delivered via labor-intensive processes, the team required a process overhaul to grow capacity, combined with enhanced technical capability, to be delivered through new toolsets. The overarching goal is to promote an enterprise focus on data with defined standards and build a data model that will optimize operational efficiencies and enhance data quality by:

Fixing inconsistencies of naming conventions within the data models

Removing duplic

## THE OPPORTUNITY

A three-pronged strategy was identified to provide Spatial Services with the agility to do more with less:

• Automation to deliver a suite of standardized mapping products quickly and efficiently

• Data analytics and modelling to facilitate better integration of different data sources for use in a wide range of spatial tools

• Spatial toolset selection and implementation to enable self-service and customization of mapping products, using high-quality data.

The business cases for these three streams of activity were all based around a singular premise of using existing data and tools in innovative ways to better exploit their capabilities.

#### DATA INTEGRITY MEANS COMPLIANCE & EFFICIENCY

Geospatial products will only be as good as the data that goes into creating them. Historically, Powerlink has had limited capability to document core metadata about corporate spatial data and it has been difficult to provide raster imagery efficiently to multiple applications. The team researched a solution to optimize current data through better management of licence agreements around its use, cataloguing and loading so it can be accessed via a range of software services. Hexagon Geospatial's ERDAS APOLLO was identified as easily implementable and capable of delivering Powerlink's data management requirements.

The use of ERDAS APOLLO will mitigate potential license breaches, and ensure spatial data is used in line with how it was derived. Applications such as Smart Client and ERDAS IMAGINE will be able to access the web services streamed from ERDAS APOLLO to access imagery easily and efficiently. Other data and imagery services provided by NearMap and Digital Globe can also be easily consumed and fed to multiple spatial applications at Powerlink. The benefit is ready determination of the availability of appropriate datasets for the task specified. The result is faster, more efficient access to spatial data, without the risk of license breaches.

## CREATING A CONSISTENT SPATIAL OFFERING THROUGH SMART CLIENT

Engineering software provider, Hexagon Geospatial was engaged to implement an enterprise geospatial information using Smart Client to ensure the geospatial data can meet Powerlink's ongoing and future requirements, as part of a suite of changes to streamline and improve spatial services capability. Smart Client geospatial solution will allow more people in Powerlink access to self-service using workflows built specifically for individual needs, significantly reducing the time to delivery of customized mapping products.

Smart Client will help in maintaining accurate, quality and timely information services which in turn will enable more informed commercial decisions.

With Smart Client, individuals across Powerlink can create data, maps and reports for their projects. All products are standardized, and fit with the corporate policies and styles for clarity, consistency and professionalism. Previously employees outside the Spatial Team have been unable to create and print their own maps. With Smart Client a selfservice function will be provided to these users, allowing them to access mapping and analysis.

Figure 1 depicts where Smart Client 'fits' in relation to Powerlink's existing geospatial applications. The seven features (seen in bold) in the Smart Client circle that don't overlap with Geo Media web are the new features Powerlink will have access to with the introduction of Smart Client.

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### **GOOGLE EARTH**

Create Feature & Export

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DATA ISOLATION Basic Measuring

#### ENVIRONMENTAL PLAN APPLICATION

Maintenance Environmental Pla

#### LAND INFORMATION SYSTEM

\_and Acquisition Process (NIR & NPD

Data Entry & Editin Redline Reports Viewing Data

#### SPATIAL:

>>Data Management

#### BUSINESS APPS:

>>Business Administratrion, Configuration & Software Administration

# **SMART CLIENT**

Advanced Measuring & Dim Custom Stylized Map Views Heat Maps & Cluster Points Customised Workflows Chart Visalization Offline Printing

### GEOMEDIA

Customized Mapping Products Analysis

Figure 1. Geospatial Application: Smart Client

#### SPATIAL:

>> Business Administration, Configuration & Data Management

BUSINESS APPS: >> Software Administration

#### POWER TO THE PEOPLE: SELF SERVICE SAVES TIME & MONEY

Smart Client will allow users of geotechnical information across Powerlink the ability to customize and create maps and reports to meet their specific needs rather than relying solely on the Spatial Team for support.

## CONCLUSION

Smart Client will result in significant productivity gains and will enhance the way we work; driving increased performance and delivery and allowing better services to internal and external customers. Combined with tools such as FME and ERDAS APOLLO to manage geospatial data integrity and quality will mean a higher standard of

## 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.



## 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 hexagongeospatial.com or contact us at marketing@hexagongeospatial.com.

Geospatial is part of Hexagon, a leading global provider of information technologies that drive productivity and quality across geospatial and industrial enterprise applications. Hexagon's solutions integrate sensors, software, domain knowledge and customer workflows into intelligent information ecosystems that deliver actionable information. They are used in a broad range of vital industries. Hexagon (Nasdaq Stockholm: HEXA B) has more than 16,000 employees in 46 countries and net sales of approximately 3.4bn USD. Learn more at hexagon.com and follow us @HexagonAB.

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