Combining four legacy utility systems into one network model

Key facts:

Company:
Alectra Utilities

Industry:
Power & Utilities

Country: Canada

Octave products used:
NetWorks *(HxGN NetWorks)*

Alectra Utilities is the second largest municipally owned electric utility company in North America. It serves more than 1 million customers across 17 communities and nearly 2,000 square kilometers (about 742 square miles) in the Greater Toronto area.

The company was formed from the merger of Enersource, Horizon Utilities, PowerStream and Brampton Hydro and inherited four separate GIS-based utility network management solutions, as well as other legacy enterprise systems. Following the amalgamation, the company decided to combine its data and systems to avoid disjointed business practices, inefficiencies and inconsistent data.

The importance of implementing a quick and user-friendly solution was evident, so the company adopted a guiding principle of "consolidation first and optimization second." Since three of the four companies from the merger were already using NetWorks, Octave's geospatial asset management system, Alectra leveraged this solution to simplify project implementation, reduce risk and minimize scope creep.

Consolidating systems for resiliency

Following the merger, the siloed systems made it difficult for Alectra's internal users to access all the GIS maps. For example, if a user needed to gather information about how many transformers, poles or kilometers of cable Alectra manages, he or she needed to access this data from multiple systems – some of which were legacy and inaccessible. Additionally, data was ultimately incompatible since it was recorded differently in each system.

"When we were operating four independent systems, we couldn't support the needs of our (internal) customers," said Jim Butler, P. Eng., MBA, vice president of centralized operations at Alectra Utilities. "We didn't have the resiliency needed to let them do what they needed to do to meet the requirements and commitments of the merger business case. Therefore, we really needed to get to one system so we could support our customers."

The multi-year convergence project resulted in the consolidation of the four GIS systems into one single source of location-based information that gives users real-time, streamlined data access across the enterprise and established a collaborative workflow between groups. In a nod to company unity, the consolidated NetWorks system incorporated bits of each of the four original GIS systems' symbology and color schemes.

Even though three of the companies that were merged to form Alectra were already using NetWorks, each was implementing it differently. After merging business practices and processes, and with a single, unified companywide implementation of NetWorks, Alectra's network data is now clean, consistent and easily accessible to all stakeholders.

Optimizing for performance

With implementation complete, the company worked to further optimize its system and processes. Alectra established a governance committee to prioritize the plethora of requests received from internal users. With its framework and web services capabilities, NetWorks created a solid foundation for these optimizations, such as delivering a single web-based enterprise network viewer.

NetWorks provides the merged utility company with a flexible, scalable platform to support network planning, design, construction, operations and maintenance as Alectra grows. Based on the success of this high-profile project, including being on time and within budget, Alectra is now bringing a fifth utility into the network model.

"You're always better off dealing with one solution and vendor, so there's less

licensing, less support issues and less training issues," said Butler. "We thought NetWorks was an excellent solution; we thought all the way around it was the best option for us. It gave us a lot of advantages. By going with a single vendor and single solution, it decreased the overall project risk."

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property, and assets– for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency, and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.