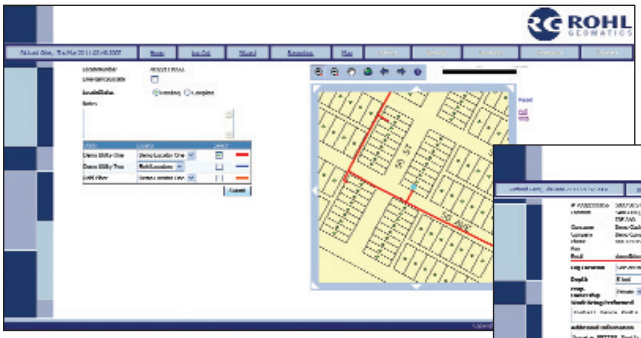
FEATURE

ROHL uses ArcGIS Server as backbone for Canada One Call solution

Alberta's ROHL Geomatics has been providing outside plant services (OSP), design, and drafting to the telecommunications industry since 1988. ROHL's initial service offerings have expanded over the years and now include project management, engineering, and design, GPS data collection, buried facility screening, locating and contract inspection, and GIS solutions for utility companies, municipalities, and larger urban centers. Their customers include Shaw Cable, Telus, Bell, Persona, and Alberta SuperNet.

The construction side of the company provides installation of both utility and fiber lines and wireless engineering and design. In addition, they have established their own fiber optic network spanning from Edmonton, Alberta to Fort St. John, British Columbia.



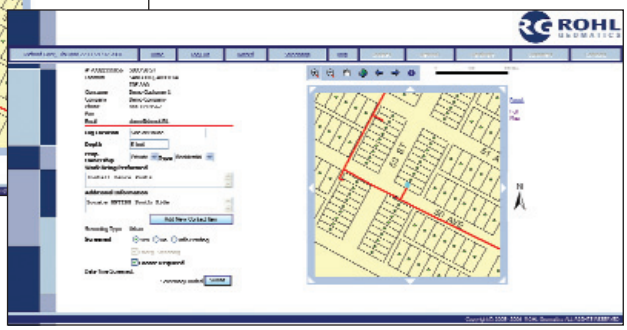
Step 1 - This is a online web form for the call center or consumer to enter pertinent information as it relates to a "Call Before You Dig" request and begin the utility screening and locate processes.

When the fiber optic network was established, ROHL began creating and maintaining detailed paper maps of the network and then moved to generating and storing this information using CAD. Prompted by the limitations of the CAD/database approach to maintaining and disseminating key network information it became evident to ROHL that they should look at applying geospatial technology as a solution to address their ability to manage data, map their network, disseminate information, and improve workflow.

After an extensive search, they selected ArcGIS Server to store, integrate, and manage key assets. With ArcGIS Server they were able to produce GIS maps and better communicate key asset information by having the maps built from a common geodatabase rather than shapefiles and then presented via the web. Also, by building the maps from the geodatabase, it offered them direct access to the map data, which in turn allowed them to provide near real-time updates to their maps from any web-enabled device. The end result was current data to all users of the system both in mobile and local use of the program.

One of the benefits that the spatial characteristics of GIS afforded ROHL was the ability to import various types of information to support the decision-making process. For example, under user license agreements they acquired a provincial cadastral dataset from the Government of Alberta and a postal code dataset from Canada Post and combined these to create address points for all land parcels within the province.

Using ArcGIS Server, ROHL was able to address their workflow concerns and were able to successfully develop a solution called Canada One Call. Canada One Call is an intelligent, secure, permissions-based web solution built on ArcGIS Server that they initially designed to improve their workflow internally by incorporating GIS. The solution includes a mobile interface that provides field users (on-site line locators, installation crews, maintenance crews, and just about any authorized remote user) with the means to view maps of a specific area of interest, wiring and splicing diagrams, line location, and more, through a secure web browser without having to go back to the office.



Step 2 - This screen makes a provision for the call center operator to contact the customer and enter additional key information while looking at a map. This is a required step in order to confirm that a locate is required and start the service desk generated ticket process.

The Canada One Call solution integrates reporting, analysis, and information delivery capabilities into a single user-friendly presentation layer that supports the dynamic and rapidly changing process flows, both inside and outside of the business. The presentation layers bring all the gathered GIS data in real-time into a geocoded map that provides a visual and comprehensive geographical view of the network which in turn, supports the decision-making process.

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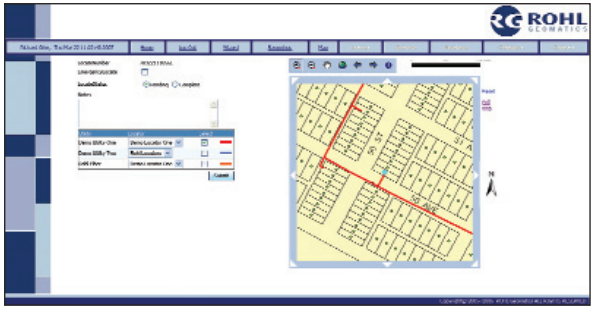
Richard Grier, Vice President, ROHL Geomatics Inc.

A typical example of ROHL's workflow begins with the gathering of various and different pieces of information. First, the central call center receives a "Dig Request" from a consumer or dig contractor. The central call center gathers all the necessary information from the consumer or dig contractor and generates a service request commonly referred to as a "Service Desk Ticket" or simply a "Ticket". The "Ticket" is then forwarded to the "Network Operations Center" commonly referred to as the "NOC". From the "NOC", it is moved forward to the "Network Maintenance Group" who, after confirming the type of request, sends it on to the "Field Locator Group" for on-site evaluation and marking. The "Field Locator" then returns with a hand drawn sketch of his findings to ultimately find its way back to the "NOC" where the "Ticket" is closed and the process is complete. A significant advantage of building maps from the geodatabase is that they can quickly, and with a high

degree of accuracy, find locations based on the GIS data. Before the program was implemented it took ROHL employees approximately 2 hours to turn-around a single ticket. Using the new program the same process takes less than 5 minutes.

"With a server-based solution we are able to receive different file types, visualize locations, utility lines, and work seamlessly with our stakeholders," said Richard Grier, Vice President, ROHL Geomatics Inc. "As a result we have experienced a paradigm shift in how we do business. Rather than us having to go through multiple files to collect all the required data we now have a one-stop GIS solution that is accessible on demand by each of our stakeholders."

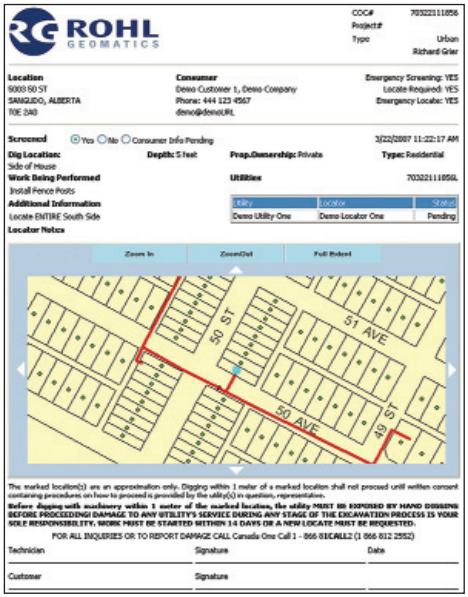


Step 3 - With this screen the call center screener can visually identify and select which of the utilities are at risk, and once verified forward on to the corresponding locator for a site visit and verification.

By using Canada One Call internally, ROHL realized a dramatic increase in productivity, and data integrity. With a server-based solution, ROHL was able to save on individual licensing costs of $8000 per user for their call centre staff, field operations staff, and utility line locators. Other benefits and associated cost savings have been realized by using a mobile module to enable quick and accurate data capture in the field, and with the ability to easily customize reports. In addition, the ease of use has allowed ROHL to reduce staff training time to less than half an hour.

Following their success in using Canada One Call internally, ROHL began offering its maintenance services to Axia Net Media, the current operator of the fiber network used by the Alberta SuperNet. Commissioned by the Government of Alberta, the Alberta SuperNet is a high-speed, high-capacity broadband network linking government offices, schools, healthcare facilities, and libraries, including approximately 4,200 connections in 429 communities in Alberta. To effectively communicate, maintain, and respond quickly to issues affecting Alberta SuperNet's infrastructure, ROHL set up a call centre and applied their Canada One Call solution to help them effectively maintain the vast Alberta SuperNet. The call centre provides additional telephone support to any resident in Alberta who is looking for clarification on identifying where a dig is to take place in relation to the fiber networks. It further provides ROHL's employees with a single point of lookup for all issues related to the location of the network. Canada One Call is also able to support the newly introduced "311" initiative, Alberta One Call, and B.C. One Call's "Call Before You Dig" program.

ROHL's future plans include market expansion both into the USA as well as internationally with Canada One Call. They also have plans to add modules such as AVL (Automated Vehicle Location), RFID (Radio Frequency Identification), expanding their work order management, and the development of another application focused on agriculture.


ROHL GEOMATICS

Location
9003 50 ST
SANGUDO, ALBERTA
T0E 2A0

Consumer
Demo Customer 1, Demo Company
Phone: 444 123 4567
demo@demoURL

Emergency Screening: YES
Locate Required: YES
Emergency Locate: YES

Screened: Yes / No / Consumer Info Pending
Dig Location: Side of House
Depth: 5 feet
Prop.Ownership: Private
Type: Residential
Work Being Performed: Install Fence Posts
Additional Information: Locate ENTIRE South Side
Locator Notes:

Utilities: 70322111856L

Utility	Locator	Status
Demo Utility One	Demo Locator One	Pending

Zoom In | ZoomOut | Full Extent

50 ST | 51 AVE | 50 AVE | 49 ST

The marked location(s) are an approximation only. Digging within 1 meter of a marked location shall not proceed until written consent containing procedures on how to proceed is provided by the utility(s) in question, representative.
Before digging with machinery within 1 meter of the marked location, the utility MUST BE EXPOSED BY HAND DIGGING BEFORE PROCEEDING! DAMAGE TO ANY UTILITY'S SERVICE DURING ANY STAGE OF THE EXCAVATION PROCESS IS YOUR SOLE RESPONSIBILITY. WORK MUST BE STARTED WITHIN 14 DAYS OR A NEW LOCATE MUST BE REQUESTED.
FOR ALL INQUIRIES OR TO REPORT DAMAGE CALL Canada One Call 1 - 866-811CALL2 (1 866 812 2552)

Technician | Signature | Date
Customer | Signature

Step 4 - A Canada One Call service desk generated ticket work order for on-site field personnel and customer sign-off.

ROHL Geomatics
www.rohlgeomatics.com