



GIS on BlackBerry® Enhances Data Collection Speed and Accuracy for Nova Scotia Power, Inc.

“Two hours saved per day for each of the 14 collectors, translates into nearly \$200,000 worth of labor savings.”

- Brian Shannon, GIS Connectivity Project Manager



Freeance™ Mobile software on BlackBerry smartphones proves accurate, time-efficient and durable in a field environment dominated by laptops and ruggedized devices.

Company Description: Nova Scotia Power, Inc. is an electrical distribution utility managing \$3.5 billion worth of generation, transmission and distribution assets across the province of Nova Scotia. The 15,500-mile electrical system provides electricity to nearly half-a-million residential, commercial and industrial customers.

Challenge

Nova Scotia Power Inc. (NSPI) identified the need to improve the accuracy of their electric distribution system model. This requires field personnel to traverse the 15,500-mile system on foot and by vehicle to gather asset location and connectivity data. Called the GIS Connectivity Project, the large-scale data collection was approved with an aggressive three-year timeline. There was just one problem. It would be impossible to complete the work on time using the ruggedized mobile devices NSPI had in mind. Those devices required data collectors to travel to NSPI offices at the end of each day in order to upload the collected data to local computer terminals.

In order to meet the Project timeline, NSPI needed a mobile GIS solution that enabled easy, straightforward data collection and provided remote data transfer directly to NSPI's ArcGIS® Server software. Without data updates from the field to the server in virtual real-time, the Project would not meet the target timeline.

Solution

Already using the BlackBerry solution for executive-level communications, NSPI had the communications backbone in place to move forward swiftly. NSPI's Project team investigated

Freeance Mobile software for BlackBerry, and it quickly emerged as the right solution.

NSPI used Freeance Mobile to build customized data collection forms, configured with required fields and predefined values, for the data collection project. The easy-to-use form minimizes the chances of error during data collection. Using these custom-built forms on GPS-enabled BlackBerry Storm smartphones, collectors efficiently enter precise geo-coded data about customer connectivity and distribution system features, such as transformers and disconnect switches, across the province. Collected data is transferred from their Blackberry Storms to Nova Scotia Power's ArcGIS Server software in virtual real-time.

Results

Approaching \$200,000 in labor savings
“Freeance Mobile on BlackBerry allowed us to avoid the need for collectors to travel to local utility depots for data uploads each day. Two hours saved per day for each of the 14 collectors, translates into nearly \$200,000 worth of labor savings,” says Brian Shannon, GIS Connectivity Project Manager.

Increased accuracy of data improves operational efficiency
Previously, field personnel would manually record their findings on paper diagrams and submit to office personnel for manual updates to the model. Now, field personnel simply fill out the GPS Collector form in Freeance Mobile. The integrated BlackBerry GPS records the location automatically, resulting in fewer errors and less manual involvement at the data center.

Technology Profile

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| Freeance Software | Freeance Mobile 2.0 - Pro Edition |
| BlackBerry Solution | BlackBerry Enterprise Server v. 4.1.6 25 BlackBerry Storm smartphones |
| ESRI Software | ArcGIS Server 9.3.1 |
| Wireless Carrier(s) | Bell Canada |
| Database Software | Oracle 10g - 64bit |

For a more detailed explanation of the Freeance Mobile solution in place at NSPI, request the complete Case Study Article at http://www.freeance.com/product_mobile_info.php