

Improved Productivity and Efficiency for WorkSafe BC Field Service

WorkSafeBC (Workers' Compensation Board of B.C.) is a provincial agency dedicated to promoting workplace health and safety for the workers and employers of British Columbia, Canada. They consult with and educate employers and workers alike and monitor compliance with the Occupational Health and Safety Regulations across the province. In the event of work-related injuries or diseases, WorkSafeBC works with the affected parties to provide return-to-work rehabilitation, compensation, healthcare benefits, and a range of other services.

Each year the prevention officers complete over 20,000 inspections of businesses, organizations and job sites to ensure safe work environments. For each inspection, the prevention officer must fill out site inspection documents which are uploaded to their regional system for reporting purposes. The officers lacked remote wireless access on their mobile devices so the reports were stored locally, in a Microsoft® Access database and later uploaded at the office into a corporate DB2 database. To complete the inspection report process, other WorkSafeBC office staff would review the uploaded data to ensure accuracy.

OBJECTIVE

WorkSafeBC's goal was to improve the productivity and efficiency of their prevention officers by simplifying work flow. Currently their process limited the number of sites an officer could visit in a day. "We put together a business case," explains Marc Nielsen, WorkSafeBC's Systems Business Analyst, "that showed us that, with a new application and wireless solution in place, we could claw back an hour from the document workflow time – effectively boosting efficiency by 25 percent on every inspection document done." To achieve this goal the WorkSafeBC IT team built a Microsoft-based platform called WorkSafe Mobility using Visual Studio® development system and SQL Server™. The officers received Windows® XP Tablet PCs fitted with their inspection report applications for use in the field.

CHALLENGES

But there were wireless networking challenges WorkSafeBC's team needed to solve for their mobile productivity gains to be realized. First and foremost, their officers spent much of their time in remote locations across the roughly 364,000 square miles of the Canadian province. This meant wireless connectivity might not always be present or only available intermittently. Their wireless solution needed to be robust enough to insulate their applications from lost network connectivity which would cause the applications to crash and might require their tablet PCs be completely restarted – end result frustrated mobile users and lost productivity. From WorkSafeBC's perspective they viewed their tablet PCs as tools for their officers to accomplish work more efficiently. Unfortunately the vagaries of wireless networking might compromise this vision.

Remote locations also meant that wireless signal strength could be very limited. Network applications can require consistent data transmission speeds in order to function properly and frequent drops in signal strength could again result in frustrated workers who would find using mobile devices a detriment as opposed to an advantage. Thus, their mobile solution needed to also incorporate ways to boost data transmission speeds to ensure that their overall mobile solution reaps the benefits that their business case indicated was achievable.

Finally, as with any wireless deployment, security is tantamount to a successful solution. WorkSafeBC's security team mandated that their mobile users have a VPN that provided equivalent security to their wired Checkpoint VPN.


WORK SAFE BC

WORKING TO MAKE A DIFFERENCE

Organization
WorkSafe BC

Industry
Field Service

Challenges

- Applications crashed when devices lost network connectivity
- Provide end-to-end security across the wireless network

Solution

- Mobility XE VPN solution

Results

- Applications were kept alive through wireless coverage gaps
- Mobility XE's speed optimizations increased data throughput across wide area networks
- Mobility XE VPN secured wireless data with AES encryption

SOLUTION

“We looked at a number of products to solve our wireless concerns,” explains Stephen Landon, Manager, IT Security for WorkSafeBC. “We brought NetMotion Wireless’ Mobility XE and one other product in house for testing,” continues Landon. “Mobility XE is used in a number of locations here in B.C., so it is pretty easy to talk with other people that are using it and see it in use productively. The other product we brought in-house was difficult to get up and running easily.” Landon concluded that, “the IT team is not only the evaluators, but long term, will be supporting whatever product they choose. They wanted something easy to support and manage.” In the end, they chose Mobility XE to resolve the wireless challenges their mobile officers would face.

Following extensive testing, WorkSafeBC’s IT team was ready to install Mobility XE. In their testing, Mobility XE was able to maintain application sessions even when the network dropped away which previously caused mobile workers’ applications and devices to fail. With Mobility XE installed, applications persisted through lost connectivity, picking up exactly where they left off when a network became present. Mobility XE’s wide area network optimizations enhanced their data transmission speeds even in fringe coverage areas. “NetMotion excels at cellular data optimizations,” adds Bob Hawk, WorkSafeBC’s senior security specialist, “for anyone using cellular data, NetMotion is the only way to go.” Lastly, WorkSafeBC could comfortably check the box on security with Mobility XE’s standard 128-bit AES encryption providing a secure VPN tunnel for their wireless data traffic.

“In essence, both ends of our solution were launched at the same time in parallel, Mobility XE and our reporting application,” explains Hawk. “As long as NetMotion worked properly, the SQL server reporting application would function securely over wireless,” he adds. “When we deployed,” Hawk continues, “we wanted to ensure everything went smoothly. We had three extra support people at the ready and had a training session prior to help with the rollout. We expected that there might be some initial user challenges but we didn’t have a single call into the support center related to the deployment for three days and in total we had maybe seven calls for a rollout of initially 100 devices. In short, we had wide acceptance, the tablets just worked and Mobility XE did exactly what it was supposed to,” Hawk concludes.

From WorkSafeBC’s senior leadership, the mobile solution has been beneficial to increase their productivity. CIO Brian Cooper comments that, “we’re untethering the officers from their desktops and getting them information about companies right away.” Executive director for Prevention Services, Betty Pirs adds, “the new solution removes many of the administrative ‘headaches’ officers experience with the old system, improving both productivity and officer morale.”

The measurable benefits are also significant, in short, reduced operating costs. Now officers can access data whenever and wherever they need. They process reports via their Tablet PCs wirelessly – no longer required to coordinate their day around regular stops to WorkSafeBC offices to upload data. “We project that by using this mobile solution,” explains Nielsen, “we can improve our productivity by the equivalent of at least 13 full-time employees. We aren’t reducing staff – rather, we’re helping our existing staff to do far more inspections. This will bring us back to the productivity levels we need.”

NEXT STEPS

“We’ve gone from 100 mobile users to 225, and soon we’ll hit 300,” adds Landon. “Our officers login using RSA secure login and Mobility XE picks up in the background. It’s very simple for the officers and now their tablet PCs are really tools that work the way we want them to and let our users get their jobs done more efficiently,” concludes Landon.

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Betty Pirs
Executive Director for Prevention Services

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