Trican Increases Field Worker Productivity with Mobility XE®

Trican Well Service Ltd., headquartered in Calgary, Alberta, provides a comprehensive array of products, equipment, and services utilized by oil and gas exploration and production companies. With business operations across Canada, the United States, Russia, and Kazakhstan, Trican's 1,500+ field workers find themselves in many wireless communication-challenged environments.

Objective

Trican's objective was to launch a work process initiative focused on increasing the productivity of central and field office staff. Through their initiative, field workers could send real-time streaming 'oil well fracturing data' to staff in their corporate offices. The initiative also included launching a new billing / ticketing system that would reduce overall invoice cycle times. To accomplish their objectives, field workers needed to connect to a variety of wireless and wired networks including cellular data, Wi-Fi, satellite, and dial-up.

Challenges

The challenges faced by Sheri Roth, Information Technology Manager, and her team were to accomplish their objectives in a secure and manageable fashion without compromising corporate policy or network security.

In order to launch their work process initiative successfully, the IT Management team developed the following mobile strategy requirements:

> " **Mobility XE has been integral to the wireless solution that has reduced invoice cycle time from 45+ days to less than one week.**
>
> – Sheri Roth,
>   IT Manager "

- Secure all data traffic to and from mobile devices using industry standard encryption technology.
- Extend corporate network policy to enforce the same web and e-mail restrictions on mobile devices as the wired desktop environment.
- Provide access to internal network resources over a variety of available networks including 1xEVDO, wireless LAN, satellite, and dial-up.
- Increase the functionality of lower bandwidth and intermittent network connections in remote locations.
- Simplify IT diagnostics for remote PC devices.

Trican's mobile deployment was comprised of both ruggedized laptops and truck-mounted desktop computers. As Roth explained, "Mobile devices were deployed to field service crews to use an electronic field ticketing software developed internally by Trican. This application replaced the traditionally paper-based work

ORGANIZATION
Trican Well Service, Ltd.

INDUSTRY
Oil & Gas

OBJECTIVES
- Provide secure Internet and corporate network access for transmission of electronic field tickets, real-time oil well data, and corporate applications
- Enforce corporate security policies on all mobile devices
- Provide remote diagnostic capability to centrally manage a distributed workforce

SOLUTION
- Mobility XE® Mobile VPN

RESULTS
- Secured data across all IP networks with FIPS 140-2 validated AES encryption
- Controlled VPN usage by IT rather than end user, ensuring data traffic passes through corporate network and security infrastructure
- Required zero application integration for deployment
- Centralized IT administration and management of mobile devices, applications and data traffic
- Spared end users frustration of repeated network log-ins and security authentications while enjoying increased network and application performance

processes for billing, scheduling, and asset tracking. Using this system, critical data could be transmitted electronically to corporate offices which substantially reduced billing and invoice cycle time."

The truck-mounted desktop component of their mobile deployment allowed mobile workers in vans to collect real-time data at oil well sites. Reliable wireless connectivity was required to transmit information to field offices so that customers and management could make real-time decisions regarding the status of an oil well.

"Our top priority and challenge," Roth continues, "was the requirement to secure and stabilize the communication channel. Field workers are frequently in remote locations and we needed to ensure that they could connect securely to our corporate offices to stay productive even when only intermittent network coverage was available."

Roth adds, "In all circumstances, it was also our intent to impose the same web browsing and e-mail policies on the mobile devices as were in place for the internal wired infrastructure. So we needed a way to create rules that would allow us to control and manage the remote devices."

Lastly, with devices spread around the world, Roth's team required central management tools to monitor and remotely administer devices to support maintenance and troubleshooting activities.

Solution

Roth's team chose NetMotion Wireless' Mobility XE® Mobile VPN to address both the demanding security and functionality requirements specified by Trican.

Mobility XE offered FIPS 140-2 validated AES encryption which ensured that data in motion was protected. In addition, Mobility XE's policy management capabilities let the IT team push out existing network policies to mobile devices as though they were wired directly in the office. This allowed them to control application and network access as well as restricted web browsing to accepted sites.

Mobility XE's session persistence capabilities allowed applications sensitive to lost network connectivity to survive through intermittent wireless network coverage common in remote environments. Trican's field workers were no longer frustrated by repeated network logins and security authentications as Mobility XE was able to maintain applications even through lost connectivity.

Lastly, Trican's field crews were able to send and receive data faster – even across lower-bandwidth 1xEVDO wide area cellular data connections. Using Mobility XE's data compression and link optimizations, wide area wireless network connections were effectively sped up by compressing data and removing the excessive chattiness of transport protocols.

Implementation Details

Here is a snapshot of the Mobility XE and Policy Management configuration at Trican:

- System launches at Windows login ensuring a VPN session is established automatically whenever any network connection becomes available.
- Mobile policies divide users into groups dependent on their user profile and wireless requirements.
- All traffic entering the corporate network is passed though the same security infrastructure as the internal devices including a Microsoft® ISA server with surf control to restrict web browsing to accepted sites.
- System detects when the user is connected to a trusted internal network and automatically bypasses the VPN tunnel accordingly.

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"Without NetMotion, our mobile deployment would not have been possible."
                    – Sheri Roth,
                        IT Manager