

Strack Increases Field Crew Productivity

Strack, Incorporated, is one of the largest and most respected utility contractors in Georgia. Since 1948, they've provided water, sanitary sewer and storm sewer installation and services to large land developers and municipalities across the state.

OBJECTIVE

Strack's goal was to increase overall company productivity and efficiency by electronically uploading daily labor, production, and equipment maintenance reports from field crews operating at job sites across Georgia. Traditionally, job site information was faxed from employees' homes to the office each evening. The faxes were then routed to different departments and entered into various systems. Lost faxes and illegible information were common.

For their field reporting initiative, crew superintendents were equipped with rugged laptops, and project managers used existing laptops to access their VPN-based reporting application, Microsoft® Solomon. The benefits of the project were easy to realize: accounting and finance could quickly update payroll and financial reports, management had a better understanding of project completion, and workers in the field could spend more time on the project instead of time filling out and faxing paper reports.

CHALLENGES

Upon deployment, George Vinson, Director of IT for Strack, Inc. discovered first-hand that there were still issues to resolve. "The most serious challenge was network connectivity in the field," Vinson explains "For our VPN-based reporting application (Microsoft Solomon) to function properly, it requires a reliable network connection. Unfortunately, for our crews working in remote areas, the terrain and distance from cell sites worked against us, causing the application to crash whenever we lost signal strength or dropped a cell. This situation seriously impacted our productivity and jeopardized the field reporting project as workers had to manually reconnect, login and restart the application."

"Another challenge," Vinson continues, "that concerned our crew superintendents and project managers was slow response time. We discovered that traditional VPN connections have too much overhead, which when coupled with limited cellular bandwidth, resulted in users retrying application functions over and over. We had incomplete and erroneous reporting of information, further complicating our field reporting efforts.

"Finally, the complexity of changing laptop configurations for office or field use slowed us down," Vinson concludes. "When you moved from office to job site you had to change the device configuration from LAN to wireless WAN. Teaching our project managers how to change their network settings and firewall client configurations were not realistic expectations. Our company is focused on completing construction projects; training superintendents and project managers to modify device network configurations proved almost insurmountable. We had frustrated users and frequent calls to the help desk."

STRACK, INC.

Company

Strack, Inc.

Industry

Construction

Challenges

- Needed remote access to applications & data
- Significant VPN latency over cellular networks
- Network configuration complexities when moving from LAN to WAN

Solution

Mobility XE VPN solution with Policy Management

Results

- Field worker productivity increased – workers could access applications and data remotely from job sites
- Mobility XE VPN kept applications alive withstanding variable network bandwidth and even lost connectivity
- Support call volume dropped from dozens daily to a few per week

SOLUTION

After surveying available options, Vinson looked at NetMotion Wireless' Mobility XE VPN. With the features he was needing to support his mobile workers, Vinson deployed the software on each of their laptops. "We saw an immediate improvement," explains Vinson. "First, our mobile users were no longer challenged with learning confusing configuration settings to connect to the network. They could focus on their work while Mobility XE handled the configurations for them. Project managers and crew superintendents were able to initiate and maintain their wireless sessions to complete and submit their daily reports because the VPN tunnel no longer crashed. Mobility persisted the connection even when they were out of range." Application data entry errors due to dropped connections or slow response were also eliminated, freeing up time for the Accounting and Finance team.

Mobility XE is designed to work in field situations where only intermittent network connectivity is available. Featuring network optimizations to compress data and reduce overhead, Mobility XE increases data throughput for wide area wireless users. As Vinson relates, "the performance benefit realized through NetMotion was significant. We had improved usability of our applications in the field and we had greater acceptance and success of our field reporting initiative."

Strack's successful Mobility XE deployment resulted in requests for more information to be made available via wireless connection including: project plans, project proposals, contracts, as-built data and real-time weather information. With many common wireless deployment obstacles resolved, Strack can mobilize more of their company and further enhance productivity with greater wireless access to additional applications and information.

"Call volume to the Strack Help Desk for connectivity issues has dropped from dozens daily to a few per week," Vinson explained. "Connectivity questions disappeared and were quickly replaced by application 'how-to' questions. In addition, our user's application expertise improved dramatically when training classes could focus on application usage versus laptop configuration and network connectivity."

Strack also employs the Policy Management Module, an additional management tool of Mobility XE that lets network managers control the wireless networks and applications that users can access. "With Policy Management," Vinson says, "we can easily monitor and manage our mobile workers, including what applications and wireless networks they can connect to. Policy Management is an invaluable tool for us."

NEXT STEPS

Strack has been testing Mobility XE on Windows Mobile 5.0 and will soon deploy Smartphones and Pocket PCs company-wide. Strack is very pleased with Mobility support for Windows Mobile 5.0, and anticipates the success they realized in their initial Mobility XE deployment will be duplicated when they deploy Smartphones and Pocket PCs. "We could not be happier with NetMotion Wireless and the Mobility XE product."

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*George Vinson, Director of IT,
Strack, Inc.*