

TeliaSonera

Case Study – Enterprise Mobility

COLUMBITECH

SUMMARY

TeliaSonera, the largest telecommunications company in the Nordic and Baltic countries, has rolled out Columbitech Mobile VPN to 5,600 of its employees in the region. This standards-based mobile VPN provides persistent, seamless, and secure remote access to the corporate network over both 3G and Wi-Fi networks, dramatically increasing the productivity of all TeliaSonera mobile users.

THE CHALLENGE

- Lost connections
- Lack of support for session persistence and
- No network roaming
- Slow performance over wireless networks
- Increasing number of help desk calls

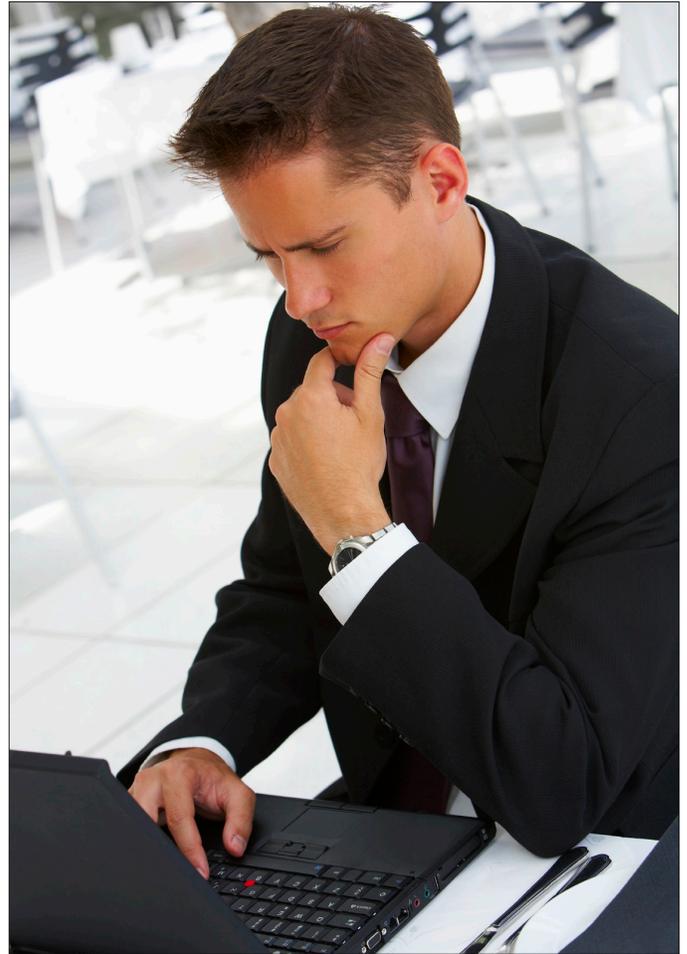
TeliaSonera was using an IPSec-based VPN from Cisco for remote access. Users included the company's executives, sales representatives, and product management team, who spent a lot of time on the road. The IPSec VPN lacked support for session resume and did not work well for mobile users connecting via wireless networks. With more users accessing the network via 3G and Wi-Fi instead of LAN connections, the IPSec VPN had a negative impact on productivity. Every time a user changed network, moved out of coverage, or hibernated to save battery, the VPN session was terminated and had to be reestablished. It was time-consuming and cumbersome for users to log in and reauthenticate multiple times during the day.

Connectivity issues resulted in an increasing number of phone calls to TeliaSonera's internal help desk. Additionally, applications ran slowly over the wireless connection and unstable coverage would interrupt file transfers and sometimes cause data loss.

THE EVALUATION CRITERIA

TeliaSonera evaluated three main criteria in searching for a solution that could address the issues of the current IPSec VPN.

1. The new solution had to be based on a standard security protocol.
2. It had to support seamless roaming with a persistent connection.
3. The VPN had to be easy to use and cost-efficient to support.



THE SOLUTION

TeliaSonera teamed up with Columbitech to address the need for a VPN that worked well in a wireless environment. Columbitech Mobile VPN is based on the standard security protocol TLS, which is FIPS 140-2 certified and built to meet the requirements of wireless networks and mobile devices. It provides a persistent connection and seamless roaming as users move between different network types. Furthermore, it has a small memory footprint and requires less processing power than other VPN solutions.

TeliaSonera started to deploy the Columbitech Mobile VPN in 2003, and today 5,600 employees use the Columbitech solution to connect remotely. Most of the users have laptop clients with XP, but there are also some employees who use Vista. Additionally, TeliaSonera has successfully introduced the mobile VPN to some of its smartphone users.

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Berit von Bell, project manager of TeliaSonera

“The Columbitech Mobile VPN has become a critical tool for our employees. It provides remote access to email, Internet, and other applications on our corporate network, allowing our associates to be more productive on the road,” explains Berit von Bell, project manager at TeliaSonera. “Today we have users from all parts of the company, and the combination of 3G speed and session persistence allows our users to really benefit from the VPN access. It provides access to systems used by support and help desk as well as to our CRM system.”

The mobile VPN client monitors LAN and Wi-Fi connections, seamlessly handles dial-up to 3G and GPRS, and automatically logs on to Wi-Fi hotspots. The best connection is selected based on availability, speed, and user-specific policies that have been defined by TeliaSonera. It eliminates the need for users to keep track of network availability, remember different passwords, or manually configure laptops when transferring between networks. Additionally, if users are connecting to a trusted network, such as the LAN or Wi-Fi office network, the VPN detects it and does not encrypt data. TeliaSonera uses this feature only for its office LAN, allowing users to quickly switch between the public office Wi-Fi network and the LAN without re-establishing the VPN tunnel.

“Thanks to the Columbitech solution, users only need to log in once per day and the VPN automatically selects and logs on to the best available connection. Unlike the old IPSec solution, the Columbitech Mobile VPN provides a persistent connection as users move between different networks,” says Berit von Bell.

Columbitech’s VPN uses advanced data compression before the data is encrypted, which provides up to 100 percent better throughput than other VPN solutions. This feature is especially

valuable for wireless connections with limited bandwidth and can also help reduce the data fees.

IMPLEMENTATION

The Columbitech Mobile VPN is software based and consists of a VPN client, VPN server, and an optional gatekeeper. TeliaSonera runs the VPN server software on Windows 2003 servers that are hosted on their corporate LAN, and the gatekeeper authenticates all incoming traffic outside the firewall while providing load balancing and failover functionality. The VPN client runs on laptops with Windows XP or Vista operating systems as well as on Windows Mobile 6 smartphones. The servers are managed through the Windows Server standard tools, and client software updates can be handled by using Columbitech’s tool for remote update over the wireless connection.

The scalability of the Columbitech Mobile VPN has allowed TeliaSonera to gradually add more users with no negative impact on performance. The Columbitech solution supports up to 100,000 clients with multiple VPN servers.

Based on its internal success with Columbitech Mobile VPN, TeliaSonera has launched the solution to its own enterprise customers under the name of Telia Connect Pro.

THE ROI

- Increases productivity for all mobile users.
- Enables employees to work from the road and supports telecommuting.
- Reduces help desk calls.

