Finland's Premier Communications Provider Leveraging New 3G Technology

Elisa turns to Cisco to deploy an enterprise-class 3G Wireless WAN solution.

EXECUTIVE SUMMARY

Customer: Elisa Corporation

- Telecommunications service provider
- Helsinki, Finland
- 2.2 million mobile subscriptions (over 50 percent of market share in 3G service bundles) and 1.3 million fixed subscriptions (market leader in broadband subscriptions)

Business Challenge

- Offer 3G access where no wired infrastructure exists
- Leverage 3G network to provide additional IP/MPLS corporate services
- Enhance managed service differentiation

Network Solution

Cisco 3G Wireless High-speed WAN Interface Card in Cisco Integrated Services Routers

Business Results

- Provides cost-effective, redundant high-availability wireless broadband
- Connects branch offices to their corporate networks in a fraction of the time typically required
- Affords business network subscription services with 3G access

Business Challenge

Elisa Corporation is a leading Finnish communications service provider offering corporate and residential customers a broad range of voice and data solutions. Elisa is at the industry forefront in providing new mobile and content services. The first commercial Global System for Mobile Communications (GSM) call in the world was made through Elisa's network.

Elisa's executive team wanted to further advance the company's innovative edge with wireless services that would fulfill three primary objectives:

- Offer wireless broadband as a backup to wireline data connections should those lines be disabled by cable cuts, weather, or local access outages.
- Provide communications access to remote or temporary sites for which wireline is impractical or impossible.
- Provide businesses with 3G access as the primary connection between the customer site and Elisa's core IP network.

"There are many possibilities for the kind of solutions we wanted to provide," says Markku Lempinen, Elisa's head of corporate network solutions. "For example, construction sites, where the customer needs the connection for only a couple of weeks or months and there's no sense in building a fixed connection. Other possibilities are rural areas or remote islands where it just isn't practical to provide fixed network connections.

"In all these types of situations, we wanted to be able to provide the customer with managed services, where we can take responsibility all the way to the customer premises equipment."

Network Solution

Elisa is now providing wireless solutions to its customers using the Cisco® 3G Wireless High-speed WAN Interface Card (HWIC) incorporated into Cisco's Integrated Services Routers.

> **"I think we're only limited by our imagination in how we can find new applications for a solution like this."**
>
> **—Markku Lempinen, head of corporate network solutions, Elisa**

The 3G HWIC is the industry's first enterprise-class 3G wireless WAN. It's a true multipath WAN backup solution that offers Elisa an alternative to traditional wireline backup solutions like ISDN. This new Cisco solution cost-effectively provides higher performance capabilities and faster speeds in a fraction of the time that it normally takes to establish wireline connectivity to remote sites. Because the 3G HWICs are independent of the wireline infrastructure, they offer true business resiliency and disaster-recovery preparedness.

Elisa can now offer its customers the ability to cut costs associated with branch IT operations and to maintain the availability of their IT systems should their wired connection become compromised.

The 3G HWIC is one of a unique set of high-speed WAN interface cards and network modules that can be incorporated into Cisco's Integrated Services Routers. In the past, many of the wireless interface capabilities were not integrated into the device on the premises. This solution integrates the wireless HWIC directly into the Integrated Services Router to take advantage of the routing protocols and Quality of Service (QoS) capabilities that are inherent to Cisco's routing technologies.

Lempinen says that the Cisco-based solutions that Elisa is today offering its customers provide multiple benefits, most particularly, a rapidly deployable and portable solution that delivers high performance.

In the past, businesses have waited for weeks or even months to get wired data circuits installed at new locations. Elisa is now able to meet the needs of those customers with remote or frequently relocated sites that cannot wait weeks for data circuits to be installed.

With data usage on the rise and the proliferation of Web-based applications at branch offices and remote sites, there is an increasing need for high-speed data connections to run mission-critical applications at these sites. 3G Wireless WAN services offer low-latency links at broadband speeds, allowing enterprises to send and receive more mission-critical data across the WAN.

Equally important, though, is the low cost of deployment. As a one-box solution, Lempinen says the Cisco 3G solution is easier and less expensive to deploy, manage, and maintain over the long run.

Reliability is another very strong selling point: Wireless provides an additional layer of redundancy. Should lines go down due to inclement weather, this interface is most likely still active.

Redundant services benefit Elisa customers in, for example, the retail business, in which the processing of credit and debit card transactions is a business-critical issue. By equipping the Elisa managed router at the customer premises with a 3G card and a fixed-access card, Elisa is capable of protecting businesses against faults on the fixed-access network.

"We find that it's an excellent way of combining mobile and fixed networks on the data communications side," says Lempinen.

The subscription services that Elisa now offers prove to be a more practical solution to wireline not only in situations where speed of deployment is important or where there is no fixed-access available, but also for seasonal businesses such as holiday resorts.

Business Results

“Elisa has both IP/MPLS [Multiprotocol Label Switching] and 3G core networks, and we are among the leading providers in both these markets,” Lempinen says. “We are, therefore, very pleased that Cisco has products that enable us to combine the strengths of these two infrastructures. Our managed services free the end customer from the complexity of network design, and the customer will get new services as an easily deployed solution, a ready-made packet.

“Finland has been an early adopter in both IP and 3G technologies, and Elisa is looking forward to further developing new services that are based on the convergence of different technologies.

“Elisa has also been a worldwide early adapter in high-speed downlink access in the 3G network. Now we can provide full-speed backup connections.”

Lempinen says that although the deployment of this 3G technology was originally intended as a backup solution, “It just gives us so many opportunities; in the fast-deployment scenario, for example. Normal installation time in such locations can easily be four to six weeks. But with this 3G connection, we can provide connectivity very fast. In fact, connectivity can be established within hours of the customer receiving the equipment.”

Elisa is today able to help its customers stay better connected, with business applications that are consistently available anywhere within the organization. Its solutions drive home the value of true service integration, delivering smooth service interoperability, operational efficiencies, and investment protection.

PRODUCT LIST

Routing and Switching

Cisco 1841 Integrated Services Router

Wireless

Cisco 3G Wireless High-speed WAN Interface Card

As for tomorrow, says Lempinen: “We have been early adapters of many Cisco-based solutions, and I believe that we will continue doing so into the future.”

“I believe that this new solution gives a very good platform for future improvements and enhancements. I think we’re only limited by our imagination in how we can find new applications for a solution like this.”

For More Information

To find out more about the Cisco 3G Wireless High-speed WAN Interface Card, go to http://www.cisco.com/go/3g

To find out more about the Cisco Integrated Services Routers, go to http://www.cisco.com/go/isr

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