

Case Study:

**Cable & Wireless Chooses Nokia for Managed
Firewall and VPN Services**

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Summary

Cable & Wireless, a major worldwide global telecommunications company, is ranked one of the top five global Internet service providers and operates one of the largest Internet backbones in the world. To deliver fully on the Internet promise, the company partners with world-leading technology providers that enable Cable & Wireless to offer complete "go-to-market" IP-based solutions to its multinational customers. For managed firewall and virtual private network (VPN) services, Cable & Wireless chose Nokia Internet Communications as its strategic partner.

With Nokia, Cable & Wireless got just what the company wanted: "one stop shopping" for a single platform that could be deployed as a managed firewall service or as a "one box" firewall-based VPN solution. But even with its selection of a single-source partner, the breadth and depth of the Nokia IP Series of network security appliances allows Cable & Wireless to offer a solution tailored to the unique needs of each and every customer. The Nokia approach offers best-of-breed, state-of-the-art security applications operating on a purpose-built and specially hardened appliance. The Nokia solution delivers industry-leading performance with a wide choice of different models and configurations. And the Nokia platform is reliable for dependable, mission-critical operation. Nokia even provides support for both the IP Series appliances and the best-of-breed applications that come fully certified and pre-installed.

Cable & Wireless now offers managed firewall and IP-VPN solutions in 30 countries, and has plans to offer these same services in another 50 countries soon. A world-class solution with worldwide support is just what Cable & Wireless wanted, and just what it got—all from a single security partner: Nokia.

Customer Profile

Organization:	Cable & Wireless
Location:	Global presence with headquarters in London
Industry:	Telecommunications and Internet Service Provider
Nokia Solution:	Nokia Network Security Appliances

Cable and Wireless

Cable & Wireless (www.cw.com) is a major global telecommunications business with revenue of over £8 billion (US\$11 billion) and customers in 70 countries. Cable & Wireless' focus for future growth is on IP and data services, and solutions for business customers. The company is developing advanced IP networks and value-added services in the US, Europe and the Asia-Pacific region in support of this strategy. With the capability of its global IP infrastructure and its strength in key markets, Cable & Wireless holds a unique position in terms of market coverage and services to business customers.

Cable & Wireless is transforming itself in pursuit of four strategic priorities: focus on business customers, pursuit of growth based on IP and data services, operations globally, and investment and expansion aggressively in the US, Europe and Japan. In other words, Cable & Wireless aims to be the leading provider of IP and data services to multinational business customers in the most technologically advanced regions of the world. The company has recently restructured its business to become the first telecommunications provider to serve its key markets through a single seamless organization, giving Cable & Wireless a unique and powerful opportunity to deliver world-class customer service. Today, Cable & Wireless is one of the top five global Internet service providers (ISPs) operating one of the largest Internet backbones in the world.

Fulfilling the Internet Promise

"Cable & Wireless is rapidly emerging as a leading global Internet services company in one of the most significant transformation stories of the industry," commented Brian Clark, global product manager for managed firewall and IP-VPN services at Cable & Wireless. "We remain committed to fulfilling the Internet promise: to maximize business performance and minimize costs through the provision of fast, secure and reliable communications solutions, in any form, anywhere in the world."

The Internet promise, according to Cable & Wireless, will transform the business landscape by making larger companies more flexible and responsive, and enabling smaller businesses to operate globally. The Internet can cut costs, expand reach, improve flexibility, enhance internal and

external communications, reduce time-to-market for new business opportunities, and open new market channels.

To deliver fully on the Internet promise, the company adopted a strategy of establishing partnerships with world-leading technology providers that enable Cable & Wireless to implement complete "go-to-market" IP-based solutions for its global customers. Two of the most fundamental such solutions are managed firewall and VPN services. So Cable & Wireless set out to find a strategic partner with both a world-class product and a worldwide presence.

Finding a World-class Firewall/VPN Partner

Cable & Wireless wanted "one stop shopping" with a single solution that could be deployed either as a managed firewall or as a "one box" firewall-based VPN. Both solutions would need to share several features. Each would need to be easy to deploy at the customer premises. The form factor itself would need to be inherently secure and physically compact. The design would need to be quite dependable for handling mission-critical applications. And each solution would need to be remotely manageable from the Cable & Wireless Internet Network Operations Center (iNOC) in Cary, North Carolina.

The company established two additional requirements for the managed firewall solution. First, it would need to provide robust, state-of-the-art security with stateful inspection at all communication layers. And it would need to be compatible with all enterprise network topologies to maximize market appeal.

Cable & Wireless also had two specific requirements for the VPN solution. First, it would need to be fully compliant with IP Security standards for packet encryption and authentication, and offer a choice of standard key management techniques. And it would need to support both the site-to-site and remote access needs of enterprise intranets and multi-party extranets.

Together, the firewall and VPN would need to provide secure, any-to-any connectivity for the company's enterprise customers around the globe. But Cable & Wireless felt it was vitally important to avoid having a forced-fit, inflexible and uncompetitive service offering. So the

solution would need to be versatile, scalable and affordable enough to meet the unique and varied needs of any company, from the small and medium-sized business to the multinational corporation.

One-stop Shopping from Nokia

Cable & Wireless found everything it wanted—and more—in the IP Series network security platform from Nokia Internet Communications. Nokia integrates a full suite of best-of-breed applications across its entire family of purpose-built, specially-hardened appliances to provide a complete and secure hardware/software solution. With one-stop shopping, Cable & Wireless gets the industry-leading FireWall-1 and VPN-1 applications from Check Point Software Technologies, Ltd. pre-installed and pre-configured on each Nokia appliance.

With the applications pre-installed for plug-and-play deployment, Cable & Wireless achieved the "go-to-market" solution it wanted. "Nokia's approach allowed us to quickly and cost-effectively roll out end-to-end IP-based VPN and managed firewall services," Brian noted. "These services give our customers quick and easy access to world-class network security, which helps meet their needs to run IP-based applications over the Internet." Nokia even installs and maintains the appliances at customer sites, giving Cable & Wireless a virtual "hands off" solution.

While Cable & Wireless got the one-stop shopping it wanted, the company was not forced to settle for a "one size fits all" solution. In fact, Cable & Wireless offers a choice of cost-effective models that each delivers maximum value to its customers. The IP330 is designed for small- and medium-scale applications with three built-in 10/100 Ethernet ports and a single option slot that consumes only a single unit of rack space. To meet larger enterprise subscriber requirements for flexibility and scalability, the IP440 combines a powerful processor with four option slots. The IP650 delivers carrier-class performance and dependability with redundant components and five configurable option slots for high-density 10/100 Ethernet, ATM, HSSI, T1/E1 or V.35/X.21 interfaces. Featuring front panel access to facilitate hot-swapping, the rack-mountable IP650 is still only two units high.

"By choosing Nokia appliances, which are specially designed for easy, low-cost installation and management, Cable & Wireless is able to offer high quality security services to its customers without dramatically increasing our overhead costs," Brian continued. "These services give Cable & Wireless customers unparalleled Internet security and complete flexibility to connect branch offices, remote workers and business-to-business extranet partners via the Internet."

Nokia network management tools centralize and substantially simplify network security administration to reduce operational time and costs. Nokia even helps manage the software licenses by issuing quarterly reports for Check Point's FireWall-1 and VPN-1 applications. "Administering the Check Point licensing schemes can be quite cumbersome and resource intensive," Brian commented. "The strong partnership between Nokia and Check Point has fostered a level of trust that permits Nokia to administer Check Point software for our customers."

As a global provider of Internet services—with a one-hop backbone connecting Europe, the US and Japan—Cable & Wireless needed a global solution. And here too Nokia delivers with its worldwide presence and First Call—Final Resolution support service. Unique in the industry, First Call—Final Resolution means that Nokia provides a single point of first contact for help desk support, not only for the Nokia appliances, but also for the third-party security applications that come pre-installed. This service gives Cable & Wireless customers' worldwide, world-class support.

"The Cable & Wireless managed firewall and IP-VPN solutions solve the challenges many businesses face with guarantees of secure business communications and the protection of internal networks," Brian observed. "The Nokia offering has allowed Cable & Wireless to develop a set of customizable solutions that deliver on the availability, performance and scalability requirements unique to each business, as well as 24x7 management of a customer equipment. With managed firewall and IP-VPN services, our customers can leverage the power and reach of the Internet with complete confidence to compete more successfully in today's global economy."

The Nokia Advantage: Fast, Secure & Reliable

Cable & Wireless now offers managed firewall and IP-VPN solutions in 30 countries, and expects to deliver these services in an additional 50 countries in the near-term future. Indeed, these services have become an integral part of the company's strategy to deliver on the Internet promise of fast, secure and reliable communications. The Nokia solution leads the industry in performance with a choice of models, throughput enhancement options and built-in Firewall Flows optimization, jointly developed with Check Point. The Nokia approach is secure with best-of-breed, state-of-the-art security applications operating on a purpose-built and specially hardened appliance. And the Nokia solution is reliable with automatic failover and hot-swap capabilities for dependable, mission-critical operation.

"Combined with Cable & Wireless Internet Access and Global Dial products, the managed firewall and IP-VPN offering provides a very powerful set of services," Brian concluded. "These solutions are completely customizable and fully managed end-to-end services that include both the equipment and dedicated access to the Cable & Wireless global IP backbone, as well as continuing support. Cable & Wireless IP-VPN provides the latest advances in fast, reliable and secure networking that ensure the privacy of business communications and protect the integrity of internal network resources."

The strategic partnership between Cable & Wireless and Nokia expanded even further when the companies announced a joint effort to create the industry's first global wireless Internet and hosted applications solution. Combining Nokia wireless technology with the Cable & Wireless network and data center infrastructure, the offering will provide fully managed wireless Internet services to mobile network operators, application service providers and multinational corporations.

About Nokia

Nokia is the leading mobile phone supplier and a leading supplier of mobile, fixed and IP networks, related services as well as multimedia terminals. In 1999, Nokia's net sales totaled EUR 19.8 billion (USD 19.9 billion). Headquartered in Finland, Nokia is listed on the New York (NOK), Helsinki, Stockholm, London, Frankfurt and Paris stock exchanges and employs more than 55,000 people.

Nokia Internet Communications, headquartered in Mountain View, California, provides world class Network Security and Virtual Private Network solutions that ensure the security and reliability of corporate enterprise and managed service provider networks. Nokia is committed to enhancing the end user experience by bringing a new level of security and reliability to the network, enabling an Internet transaction that is personal and trusted -- each and every time. For more information, please visit <http://www.nokia.com/> and click on Secure Network Solutions.

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