

For Business Customers, Sprint Removes Complexity and Delivers Converged Services, Easily and Cost-Effectively

EXECUTIVE SUMMARY

CUSTOMER

Sprint

INDUSTRY

Telecommunications

BUSINESS CHALLENGE

- Help customers transition to new services and increase adoption of Managed Security Services
- Accelerate deployment and provisioning of new services while reducing deployment costs
- Maximize customer satisfaction and a competitive advantage

NETWORK SOLUTION

- Cisco integrated services routers, including the Cisco 800, 1800, 2800, and 3800 series integrated services routers
- Cisco 7500 and 12000 series routers

BUSINESS VALUE

- Ability to easily differentiate a range of managed connectivity, security, and voice services
- Ability to take full advantage of its IP/MPLS network core for extending connectivity and manageability benefits to the customer premises without changing customer premises equipment
- Rapid growth of managed services business and enhanced service profitability

ABSTRACT

Sprint is capitalizing on opportunities to deliver integrated services with a range of Managed Network Services and Managed Security Services. Sprint removes the burden of implementing complex network solutions from customers, providing them with rich, advanced features enabled by Sprint's IP/MPLS global network based on technology from Cisco Systems and the new Cisco Integrated Services Router as its CPE platform of choice.

BUSINESS CHALLENGE

With more than US\$27 billion in annual revenues in 2004, Sprint serves approximately 12,000 business customers. Sprint built the United States' first all-digital, fiber-optic network, as well as a Tier 1 Internet backbone, and one of the largest 100-percent digital wireless networks in the U.S. Today, the company provides an extensive range of innovative communication products and solutions, including global IP, wireless, local and multi-product bundles, to customers all over the world. As a result, Sprint understands the complexity that its business customers face when making decisions about networked data, voice, video, and security capabilities.



Many enterprise customers have arrived at a point where they recognize the value of converging data, voice, video, and wireless technologies over a single IP network. They like the flexibility that a managed IP/Multiprotocol Label Switching (MPLS) service can deliver. For example, MPLS enables the service provider to support virtual private network (VPN) services that separate packets from one enterprise from those of others over the same backbone. This ability provides a degree of inherent security when, combined with other security features, can provide a higher degree of security, more cost-effectively, than the enterprise could engineer into its own network. Organizations increasingly need

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enhanced security capabilities to comply with regulatory requirements, such as those outlined in Sarbanes-Oxley, Gramm-Leach-Bliley, and the Health Insurance Portability and Accountability Act (HIPAA). However, the cost and complexity of acquiring, deploying, integrating, managing, staffing, and upgrading network capabilities to achieve all of these objectives has increased exponentially.

Managed services that rely on an IP/MPLS network backbone can also easily enable customers to transport traffic from applications that run over existing ATM and Frame Relay networks with similar security and manageability benefits to IP traffic.

For these reasons, many businesses are turning to managed services offered by providers such as Sprint—and their numbers are growing rapidly. According to John Montross, vice president of Managed Network Operations for Sprint, customer demand for data services in 2005 is exceeding forecasts.

“If customers need to install new hardware, why would they install anything but the Cisco Integrated Services Router? The most important benefit of the Cisco Integrated Services Router is that it supports converged services and gives customers more functionality at a lower price than they could obtain by implementing their own IP/MPLS networks. They’re satisfied, they remain loyal customers, and we profit as well. Everyone wins.”

—John Montross, Vice President, Managed Network Operations, Sprint

“In 2002, as we saw voice, data, and security technologies converging, we decided to pull those services into one internal organization and develop offerings that meet these needs,” explains Montross. “Our Managed Security ServicesSM offerings bundle a transport service, network-based security features, and customer premises equipment (CPE)—configured in several ways to meet the needs of customers ranging from small businesses to multinational enterprises.”

Cisco Systems[®] and Sprint have been long-time partners in advancing the adoption of IP communication technologies. Sprint was the first global communication provider to achieve the Cisco Powered Network Quality-of-Service (QoS) certification. While Sprint has managed almost every Cisco series of CPE routers, as it considered its options for the next generation of CPE routers, the company had several critical requirements.

“The new routers had to be easily upgradable and allow us to migrate a customer from basic WAN connectivity and add security, and later, voice features,” says Montross. “It also had to be cost-effective so that we could offer customers a compelling reason to move to a managed service or upgrade the features they were already receiving from Sprint.”

Sprint also wanted to maintain the ease-of-integration advantages that its customers enjoy from Cisco CPE equipment and extend the range of benefits that they can receive from the Spring IP/MPLS network backbone.

“We’re hearing from customers that their primary driver in networking decisions is MPLS,” explains Montross. “Customers want the any-to-any connectivity and manageability features of IP/MPLS, however, obtaining that extra functionality requires more complexity in the underlying network. For most of our customers, purchasing a managed service means that they receive better service, at less cost than they could by implementing an IP/MPLS network themselves, and hold us accountable for quality.” Other customers with installed networks view managed services as an excellent way to affordably evolve their security capabilities and gain future flexibility.

NETWORK SOLUTION

Sprint chose Cisco® integrated services routers as its next-generation CPE platform. The Cisco 3800, 2800, 1800, and 800 Series integrated services routers transparently integrate advanced technologies, adaptive services, and secure enterprise communications into a single, resilient system. Cisco integrated services routers are optimized for wire-speed delivery of secure data-access applications over a range of connectivity technologies. Sprint can deploy a single routing solution for businesses that require support for multiple functions—such as DSL broadband access with integrated redundant links, routing, and LAN switching—reducing the number of devices required, accelerating deployment, and significantly simplifying management. These factors translate to being able to provide a highly cost-effective bundled service and a compelling reason for customers to subscribe.

Cisco integrated services routers also support Dynamic Multipoint VPN (DMVPN), a capability that enables customers to directly connect multiple sites through a single interface, instead of having to configure connectivity from each remote site through a main hub site. The Cisco DMVPN feature also enables automatic IPSec encryption for point-to-point connections, simplifying the application of security policies across a network. The DMVPN capability also extends Sprint's MPLS network to support dynamically addressed CPE equipment and allow zero-touch provisioning for adding new spokes to a DMVPN. While Sprint already offered a DMVPN type of service using other Cisco CPE routers, the new Cisco integrated services routers allow DMVPN customers to continue to rely on this advanced secure connectivity capability while migrating to a new solution that enables them to add security, voice, and wireless services from the same chassis.

The same integrated services routers also include advanced security services management capabilities, such as IP Security (IPSec) virtual private networks (VPNs) that feature Advanced Encryption Standard (AES), triple Data Encryption Standard (3DES), and DES protection; hardware encryption acceleration; firewall protection, inline intrusion prevention (IPS), Network Admission Control (NAC), and support for URL filtering. This comprehensive range of security features play an integral role in Sprint Managed Security Services, including its new Sprint Perimeter Defense SM offering.

Customers can also implement comprehensive IP Communications solutions—from basic telephony to rich call processing and messaging services. Cisco integrated services routers support QoS features required for high-quality voice over IP (VoIP) deployments. Whether customers want to activate IP Communications features upon deployment or in the future as their plans permit, the same Cisco Integrated Services Router can deliver the capabilities they need, as quickly as they need them. Customers can also deploy wireless LAN coverage from the same routing chassis.



Sprint's managed services are delivered over a 100-percent Cisco-based MPLS network, which enables Montross and his team to manage customers' services end-to-end. Customers' CPE routers are terminated at the Sprint network edge on Cisco 7500 Series or 12000 Series routers. High-performance Cisco 7500 Series routers provide advanced support for a range of LAN/WAN services, including packet switching and distributed IP network services. Sprint employs Cisco 12000 Series routers at its network edge and in the IP/MPLS core for long-haul and regional transport, peering, optical private line aggregation, and ATM/Frame Relay transport. Highly scalable, the Cisco 12000 Series allow Sprint to prioritize data, voice, and video services to meet customers' wide range of needs.

BUSINESS RESULTS

"If customers need to install new hardware, why would they install anything but the Cisco Integrated Services Router?" asks Montross. "The most important benefit of the Cisco Integrated Services Router is that it supports converged services and gives customers more functionality at a lower price than they could obtain by implementing their own IP/MPLS networks. They're satisfied, they remain loyal customers, and we profit as well. Everyone wins."

Sprint Managed Services offer multiple levels of features. Its Managed Network Service offering provides managed connectivity with the option to support managed IPsec VPN connectivity for customers with multiple 'off-net' locations. Managed Security Services, adds firewall functionality and optional intrusion prevention (IPS) features—either passive or active—configured to meet the customer's specific needs.

The new Sprint Perimeter Defense service is a customizable multilayered approach. The network-based bundle is designed to protect a customer's network edge and consists of MPLS VPN, network-based firewalls, and Sprint Email Protection ServicesSM that filter viruses and spam on the Sprint network, reducing threats and mitigating attacks before they reach the enterprise.

The CPE-based integrated bundle uses the new Cisco Integrated Services Router and includes IPsec VPN, firewalls, and IPS capabilities to enhance total security. Customers can also purchase a service bundle or a specific Sprint Managed Security Service along with the CPE. The managed security bundle uses Sprint's team of security professionals to protect against threats. It guards enterprise data and voice networks to minimize disruptions to critical network connections and applications, so companies can focus on their core business while also adhering to regulatory requirements.

"The Cisco Integrated Services Router gives customers so many options when they want new products and services," says Montross. "It cost-effectively meets their needs today, allows them to gradually add capabilities, or deploy a full complement of advanced services. The Cisco Integrated Services Router is a triple slam dunk."

NEXT STEPS

Sprint and Cisco are teaming to introduce new functionality and support for the managed integrated services router including URL filtering, integrated wireless capabilities and IP Communication services.

Sprint's strong services focus is also its primary competitive advantage. For customers who already subscribe to Sprint's IP/MPLS WAN services and need assistance with additional capabilities, such as voice, today, Sprint is seeing rapid adoption of its Managed Network Services. For customers who only need WAN connectivity today but plan for voice or security features in the next two or three years, the Cisco Integrated Services Router is an ideal solution.

FOR MORE INFORMATION

To learn more about Cisco routing solutions, visit: <http://www.cisco.com/go/routing>

To learn more about Cisco security solutions, visit: <http://www.cisco.com/go/security>

To learn more about Sprint visit: <http://www.sprint.com>

This customer story is based on information provided by Sprint and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

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Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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