

# IP convergence that knows no boundaries

Sprint seamlessly merges wireless and wired networks with IP/MPLS, enabling users to stay in constant touch and enterprises to quickly respond to changing requirements.

**M**obility is all but a given in today's IT environments, as end users have come to expect to be able to get at the data and voice resources they need no matter where they may be. That means IT has to be able to deliver personal mobility over a mix of wired and wireless networks, a task that still remains complex given the varying end user requirements and integration requirements to make it all happen.

What enterprise customers want is straightforward: a network that supports all the applications they need, over a mix of wired and wireless networks, both locally and in the wide-area. And of course it all has to be fast, secure, reliable and easy to manage.

Too often, however, organizations face one or more of the following problems:

- Separate voice and data networks
- Wireless for voice only
- Remote access is wireline only, with limited bandwidth
- Data access is wireline only
- Separate intranet and extranet platforms
- Primary and backup data paths are both wireline

The solution is a network that delivers the ultimate in convergence: a seamlessly combined wireless and wireline network for both voice and data that enables enterprise mobility along with the flexibility to address changing business needs. Such a solution starts with an all-IP core, a platform that can support a wide range of application types, whether data, voice or video. It also employs a mix of wired and wireless access options, enabling users to employ the type of access that best suits them at any given time, whether in the office or on the road. Users should also have a number of managed offerings to choose from, including IP telephony and mobility services.

This type of converged solution delivers real mobility that benefits end users individually as well as the enterprise as a whole. From the user perspective, they want to work when and where they want, using myriad wireless devices, including mobile phones, laptops and PDAs. From the enterprise perspective, a converged, mobile infrastructure enables the company to respond rapidly to changing business needs. Such companies can quickly and easily support new and increasingly dynamic business applications, at virtually any location.

## The Sprint Solution

Sprint is delivering on this vision of ultimate convergence. The company envisions an evolution of today's multiple, traditional wireline networks to a new ecosystem based on the convergence of IP, wireless and wireline access. All the while, Sprint recognizes customer requirements for network simplification.

Sprint's vision is based on three key principles:

1. The convergence of all types of business applications (voice, data, video) to a common, flexible IP core that supports real-time, any-to-any access to people and information.
2. The integration of wireless and wireline access methods to meet the varying needs of sites and applications across the business enterprise:
  - Traditional wireline access for large, high-volume locations.
  - Combination of wireline and wireless access for sites that need rapid implementation, move frequently, or need diverse redundancy for increased survivability.
  - Economical wireless alternatives to traditional sub-T-1 circuits.
  - Wireless, mobile broadband for mobile workers.
3. An increased focus on managed services to help businesses make the graceful migration to these new IP based services.

## Customer Benefits

Sprint's IP/wireless convergence services offer customers significant benefits over today's legacy wireline services.

It starts with increased value, from more efficient and cost effective bandwidth. IP services like MPLS offer customers more bandwidth and flexibility at the same cost as legacy services. This additional bandwidth enables the deployment of new IP applications like VoIP and video.

With a converged infrastructure, companies also gain greater flexibility to deploy new applications, thanks to the any-to-any connectivity and flexible class-of-service (COS) features that Sprint IP services provide. The fact that Sprint does not charge for different classes of service allows businesses to deploy new applications without the fear of increasing COS charges.



Additionally, Sprint's IP services support greater survivability and disaster recovery. With both wired and wireless access methods to choose from, your network is better prepared to ensure business continuity in the event of an outage.

Sprint customers also benefit from numerous advanced capabilities, including:

- End-to-end service level agreements for IP/MPLS services that offer "real world" performance monitoring and service guarantees
- "Private IP" options that leverage Sprint's Peerless IP network to provide increased security
- Multicast capabilities that come standard and support efficient enterprise-wide communication services.
- A common IP platform across wireline and wireless networks enables advanced access options that provide faster deployments, greater flexibility and survivability.
- Migration to IP services provides "future proofing" and improved ROI on network expenditures.

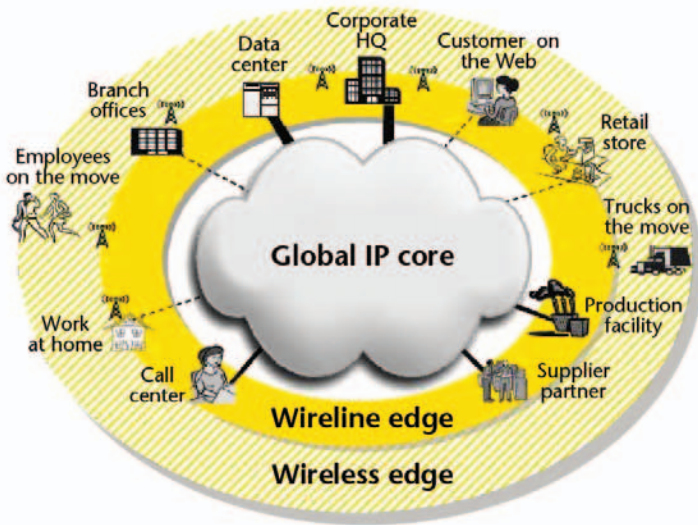
## Retailer Gets a Wireless Boost

One of Sprint's customers, a specialty retailer with more than 1,500 stores across the U.S., provides an example of the power of Sprint's converged wired and wireless voice and data network. The retailer had wired T-1 connections to its stores to support applications including POS sales data, service activations and customer support. But it needed a backup plan to keep those services operational for its customers in the event of a primary network failure.

Sprint supplied a solution in the form of the Cisco 3G High-speed WAN Interface Card (HWIC) to provide basic wireless connectivity in the event of a failure. This high-speed 3G wireless wide-area data solution utilizes EV-DO Rev A technology with average download speeds of 600K bps to 1.4M bps and an

# Vision Of The Future

## The Convergence of IP and Wireless



- Common, flexible IP core supporting all types of business applications
- Wireline and wireless access options to meet unique needs across the business enterprise
- Managed services where you need them
  - Network Mgmt & Security
  - IP Telephony
  - Mobility

### The Power to Make Just About Anyplace A Workplace

average upload speed of 350K to 500K bps. Used with a Cisco Integrated Services Routers (ISRs), the HWIC is able to back up the primary T-1 network at a fraction of the cost of a dedicated backup solution. In fact, EV-DO access can be more than 50% cheaper than wired connections such as frame relay.

The configuration proved so cost-effective that the retailer also opted to use it to support its network of 20 kiosks that provide customer self-service features. The kiosks are used during peak hours at retail stores or at temporary locations, such as in shopping malls during high-traffic times of the year. This solution has proven to be much simpler and faster to install than the wired broadband solution it replaced.

Now the retailer is considering various other uses for Sprint converged wireless solutions, such as providing primary connectivity to smaller administrative or sales offices that currently employ DSL. Additionally, the retailer expects to be able to use Sprint services to support event sponsorship by providing connectivity to mobile units, such as at sporting events. Another potential use is for disaster recovery, to provide voice and data services to temporary locations in the event of a flood, fire or other catastrophe.

#### Sprint has all it takes

Most any organization can garner the same sorts of benefits by using the mix of Sprint offerings that best fit their needs. Choosing from the Sprint Business Solutions Portfolio, which includes IP, VoIP and Fixed Mobile

Convergence and Managed Service offerings, businesses can use mobility solutions to extend the workplace, giving them the power to make just about any place a workplace. Sprint's industry-leading solutions and powerful networks — including a nationwide mobile broadband network, the largest voice calling area and the world's largest and fastest push-to-talk network — help businesses work more productively and efficiently, resulting in improved ROI.

Sprint is also the leading wireless provider of GPS solutions, with a variety of business-grade applications available on most smart devices and rugged phones. Choose from mobile applications such as location and navigation, field force management and sales force automation, plus numerous vertical industry solutions delivered by Sprint and its partners. Wireless e-mail and PIM are available for a range of smart devices, including BlackBerry, Palm and Windows Mobile devices. Sprint also offers an array of mobile broadband products and services, including Mobile Broadband devices, embedded laptops and wireless access routers. Sprint is continuing to invest to upgrade both its wireline and wireless networks to provide the flexibility that convergence offers.

No matter if they use wireless or dedicated wireline access, customers also benefit from Sprint's array of IP Networking offerings, including the MPLS VPN service that allows organizations to access a mix of voice and data services over a single connection. Sprint MPLS VPN is a complete

networking solution, with a mix of Basic and Enhanced service options to fit any situation. They include any-to-any voice and data connectivity, a step up from the hub and spoke configuration of frame relay networks. With its flexible access options, Sprint MPLS VPN provides cost-effective options for secure Internet and intranet access, even for smaller locations.

In many instances, companies will find wireless plays a starring role even in fixed locations. Wireless can serve as a primary access option for mobile environments and for sites with limited bandwidth requirements, or as a sound backup option for wired sites to ensure business continuity in the event of outages.

#### Conclusion

Converged IP solutions with wired/wireline integration offer the best of both the wired and wireless worlds. Sprint solutions enable organizations to garner benefits including improved productivity, increased flexibility and lower costs — all while reducing the complexity inherent in maintaining separate wired and wireless infrastructures. Ultimately, Sprint can help you knock down barriers to where your network can take you, helping you achieve a competitive advantage.

Learn more about what Sprint can do for your business. Visit: [www.sprint.com/business](http://www.sprint.com/business)