

SIMPLY CONNECTED—THE NEW CAMPUS NETWORK

Mobility Changes Everything

Simply Connected Vision

The challenge of the new business network is expectations: Expectations of solving long-standing challenges, expectations of greater profitability and productivity, and expectations that interactions across the ecosystem of your business will be digital and accessible from anywhere on the device of my choice.

Mobility is dramatically changing user behavior and expectations of digital interactions. While business leaders and cube dwellers alike push for the freedom to adopt new applications and devices, IT must control access to applications, corporate data, and the economics of supporting new and legacy systems.

From an IT strategy perspective, mobility could be viewed as yet another layer of complexity that IT must attempt to handle. Alternatively, could the onslaught of mobile devices, multiple user groups, and a network designed to connect employee PCs present an opportunity to simplify and future proof the infrastructure?

At Juniper, we believe users can have the freedom the business needs to innovate and survive in the next-generation workplace, while technology leaders can have the control and economics they demand. We believe this evolution is possible because our customers are already safely managing personal devices on their networks, simplifying the network infrastructure, and using wireless as their primary network access method.

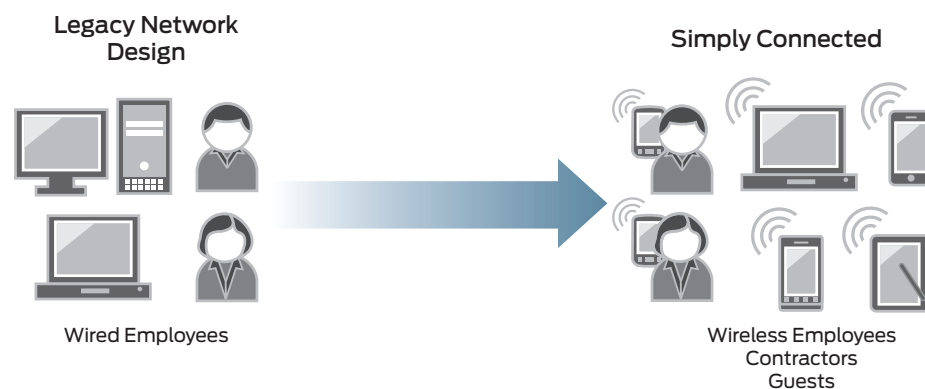
Challenges

Are you on a path to the Simply Connected enterprise? What can your network deliver to employees, customers, and partners—not only today, but into the future?

Five Questions for the New Business Network:

1. Is your network ready to deliver new rich media experiences to employees, customers, and other audiences?
2. Is your network and mobile security strategy prepared for a world filled with many different kinds of personal and corporate wireless devices?
3. Does your network lock you into collaborative applications, or are you able to easily exploit the next decade of on-premises and cloud-based innovation? Do you have networks dedicated to particular applications like voice or video?
4. Will the next five changes you make to your network make it simpler or more complex?
5. Where are your applications hosted today, and can your network support a migration to other locations? On campus? In a centralized data center? In an outsourced data center? Into multiple cloud services?

Demands and expectations for mobile connectivity are only going to increase during the next decade. Solving your network challenges today is critical to achieving long-term cost control and user satisfaction.



Trends—Control Users and Applications, not Devices and Networks

The proliferation of network connected end user devices hungry for content-rich applications is a trend far from hitting the top of its curve. Attempting to manage and control security on multiple user devices running a range of operating systems and security protocols is a path to increased complexity, end user noncompliance, more risks, and higher costs for the enterprise.

The new network requires a comprehensive security solution managed and delivered at the connection level, capable of remote data wiping, access rights management, and full enforcement of security policies on any device, anywhere, anytime.

Getting to Simply Connected

In a world where most people will use their portable devices first and their wired devices second, the business premises network needs to be ready to support this shift. This doesn't mean an end to the wired network; it means that a rebalancing of wired and wireless infrastructure is needed. So how do you evolve your business network to take advantage of new mobile devices and the applications that they offer? We believe there are five strategic efforts you can begin today:

1. Evolve to a single, general-purpose, and application-agnostic network
2. Provide secure, device-agnostic connections everywhere
3. Assume that the primary means of connection is wireless
4. Simplify the wired network
5. Enable robust site to site and Internet connectivity

Application-Agnostic Network

In the same way that your business might consider migrating from a packaged software application to the cloud or software as a service (SaaS), your voice and video applications may not be far behind. Since it is not possible to predict what new and useful applications will enter the business network, it is prudent to build a network which supports anything the business might want to adopt. Using standards-based infrastructure is the right place to start. A high-performance network ensures that it will last longer and can enable the business to do more over the network's lifetime.

Juniper's Commitment to Standards and High-Performance Networks Maximize Your Flexibility

From grandparent video calls with grandchildren over Skype or Google Video chat, to insurance agents sending video assessments of storm damage, to intercontinental board of director meetings over Polycom telepresence, to free calling across the enterprise with Microsoft Lync—the innovation underway in voice, video, and other collaborative applications is staggering. A Juniper network supports the standards needed to run anyone's collaborative tools (including any of our competitors) with the performance and architectural flexibility needed to safely adopt the applications most likely to accelerate your business.

Device-Agnostic, End to End Security

How will you safely enable iPads today? What about the next hot device? As devices and services change, the business network should be able to offer the same, easy method of secure access. A simple single client which works on all types of devices will provide a fast and secure method for enabling new devices with no extra work. In addition you will need to manage security and access controls by user, regardless of how many devices and what network they use to connect to interact with your company.

Juniper Networks® Junos® Pulse allows IT to manage security without having to control the device, while Juniper Networks Unified Access Control and SRX Series Services Gateways deliver end to end security across the enterprise.

Junos Pulse is an integrated, multiservice network client that provides dynamic connectivity, security, and application acceleration through mobile or non-mobile devices, with a user experience that requires little or no user interaction. It is identity- and location-aware, and seamlessly migrates from one access method to another based on device location. It provides a centralized way for IT to apply mobile policies by user type, regardless of device type:

- **Secure access**—based on user identity and role
- **Reduced cost and time**—same process for every device
- **Standards-based**—uses Trusted Network Connect (TNC) specifications

In addition, SRX Series Services Gateways deliver a full suite of security and networking services to deliver visibility and enforcement in a wide range of hardware platforms for facilities of any size.

Wireless Access Becomes Primary On-Ramp

The Wi-Fi networks deployed in buildings today were meant for casual wireless use, but they are now becoming the main on-ramp to the business network. Employees and guests expect the same experience on wireless as they have experienced with wired Ethernet. As more devices and people rely on this network, the expectations and need for the wireless network to perform in order to deliver a solid application experience continue to rise.

Juniper Wireless LAN Provides Nonstop Performance

Juniper Networks WLA Series Wireless LAN Access Points provide indoor or outdoor 802.11a/b/g/n connectivity for a variety of situations and installation sizes. All WLA Series products provide the bandwidth controls and performance to service demanding mobility applications, such as voice and video over wireless:

- **Reliable**—it doesn't go down.
- **Scalable**—you can add more capability easily.
- **Seamless roaming**—service is continuous, no need to reconnect as you move about the campus.

Simplified Wired Network

As you migrate to a mostly wireless network, the wireless network is the tip of the wired network iceberg, where the bulk of both capital and operating cost reside. The best way to ensure this network is future proofed for reliability, performance, and security is to simplify the architecture and software stack of the network. This shift presents an opportunity to streamline and simplify your wired network, transitioning it to what Juniper calls “the wired-less network.” This migration combines an appropriate mix of wireless and wired access with a reduction in the complexity and footprint of the wired network to improve performance and reduce operational cost and risk.

EX Series Simplifies the Wired Network

Juniper Networks EX Series Ethernet Switches with unique Virtual Chassis technology simplify the network by creating a single managed entity. At each layer of the network, Juniper can streamline and consolidate legacy architecture into a simpler form:

- Fewer devices to manage using Virtual Chassis
- Improved uplink throughput with fewer connections
- Elimination of looping protocols

Juniper Networks is the leader in performance-enabling services and support, which are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to bring revenue-generating capabilities online faster so you can realize bigger productivity gains and faster rollouts of new business models and ventures. At the same time, Juniper Networks ensures operational excellence by optimizing your network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services.

Robust Site to Site Connectivity: Applications in Motion and the Campus Internet Connection

Perhaps servers hosting your most important applications are still located on your campus. In many cases, these applications may have already migrated to centralized data centers. For some applications, your traffic may have to flow across the Internet to data centers owned by a variety of different application and infrastructure service providers. New wide area network services and new demands on the corporate Internet connection are telling you that it may be time to consider ways to streamline and enhance the infrastructure and connections between campuses, branch locations, and across the Internet.

The Universal WAN

The Juniper Networks Universal WAN solution connects all enterprise locations from the largest data centers to the smallest branch locations, in a fully scalable and flexible architecture. This architecture enables WAN simplification as new services become locally available.

- High performance with powerful controls to simplify WAN services for performance and cost optimization
- Flexibility and scalability ready for branch, data center to campus, and campus to cloud connectivity

Summary—A Simply Connected Solution for the New Campus Network

It is time to recognize that mobility has changed everything. It is time to stop adding layers of complexity to an outdated network. It is time for a simple, secure, and mobile network that gives users device freedom and network performance along with the control, economics, and simplification IT needs. Only Juniper can deliver this vision.

In short, it is time to be Simply Connected.

The Juniper Networks vision for the new campus network is the only comprehensive network architecture that provides all of the accessibility, security, and simplicity required by the new era of mobility in one open and scalable package.

For more information, contact your local Juniper representative or visit www.juniper.net/solutions.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at [**www.juniper.net**](http://www.juniper.net).

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