

SRX SERIES SERVICES GATEWAYS: DELIVERING A SCALABLE, SECURE SOLUTION FOR NETWORK-BASED MANAGED SERVICE PROVIDERS

Challenge

Globalization and increasing collaboration cause enterprise customers to exert constant pressure on MSPs to offer innovative, value-added services. The enterprise also seeks solutions will enable scalable growth according to ever-changing market conditions, while providing security and reliability.

Solution

Juniper Networks SRX Series Services Gateways is a revolutionary services delivery platform for MSPs. The SRX Series is based on a completely new architecture that offers extremely flexible processing and input/output (I/O) capabilities to add features without incurring additional equipment and rack charges. By allowing MSPs to turn integrated features on or off at the operating system level, the SRX Series maximizes return on investment (ROI) while ensuring superior network scalability.

Benefits

The SRX Series accelerates service model innovation to drive network profitability while containing costs. With the SRX Series, MSPs can easily scale infrastructure without the delay and cost associated with new hardware installations, reducing capital expenses.

Globalization and increasing workplace collaboration are driving a need for networking solutions that allow businesses to grow bandwidth as needed. Faced with implementing and maintaining multi-functional networks in a climate of increased competition and higher operating costs, enterprise customers are looking to managed service providers (MSPs) for customized, cost-effective networking solutions. To take advantage of this new potential revenue stream, MSPs must differentiate themselves from competitors by offering value-added services customers need to remain competitive in today's dynamic business environment.

In order to do this, MSPs must continually add additional hardware at considerable cost. What they need is an entirely new, network-based approach to provide their customers with scalable, extensible, and secure solutions they can depend on long term. Network-based solutions offer a variety of cost-effective benefits for both MSPs and their enterprise customers, including MSP-site-based maintenance that eliminates truck rolls, efficient software/hardware upgradeability, and vastly improved availability and reliability.

Juniper Networks®, a leader in high-performance networking, remains at the pinnacle of network-based infrastructure with its next-generation security platform, the SRX Series Services Gateways. The SRX Series is the first service delivery platform to feature a truly integrated architecture that delivers the flexibility required to add new services on the fly, and the scalability to accommodate the exponential growth of managed services—all within a secure operating environment.

The Challenge

Inflexible security infrastructures prevent MSPs from helping customers quickly scale their networks. The only solution is adding more expensive hardware, which also triggers costly, time-consuming installation. In addition, adding capabilities on a security appliance often leads to performance degradation. To offset this loss, some appliances require dedicated add-on equipment. Designed to implement or accelerate specific features, the installed products typically cannot be reused for other functionality and often sit idle as customer requirements fluctuate. The need for additional rack space and customized management features to accommodate new equipment also negatively impacts the bottom line.

Many current appliances also have limited processing flexibility and I/O capacities. Created to provide a sound balance between processing and I/O, these products inevitably fail to deliver on both counts, prompting MSPs to install new hardware that may not be fully utilized. To address scalability concerns, some products now offer blade solutions to minimize installation costs. Although sharing the same hardware chassis reduces the need for additional rack space, any savings realized is negated by the lack of true integration between disparate blades, which often increases MSP overhead by complicating overall network management.

The Juniper Networks SRX Series Services Gateways

Juniper addresses these challenges by offering the high performance SRX Series, delivering the flexibility MSPs need to add new services on-the-fly, and the scalability customers need to grow their business.

Features and Benefits

Meeting Market Demands for Scalability

The SRX Series helps MSPs offer customers the ability to scale in terms of processing capability and throughput. To increase processing capability, MSPs can simply add additional service processing cards (SPCs) to the SRX Series Services Gateways. The number of all-purpose SPCs supported by the flexible appliance chassis is limited only by the number of slots. Since cards are not dedicated to accelerate a specific function, adding processing power for intrusion detection prevention (IDP), firewall or any other feature simply requires additional SPCs. The use of customizable SPCs provides the highest return on investment, since they can be utilized regardless of enabled features that can rapidly change based on market and customer requirements.

Instead of purchasing hardware dedicated to a specific function, MSPs utilizing the SRX Series can reduce operational complexity by quickly and easily segmenting the existing network according to customers' unique demands, directly from the MSP network operations center (NOC). An MSP could, for example, increase a customer's firewall coverage for an additional 100 business units by adding an extra blade with multiple ports, expanding I/O interfaces independent of the unit's processing capabilities.

High Reliability and Enhanced Performance

Running on Juniper Networks Junos® operating system—Juniper's globally tested and proven operating system—SRX Series Services Gateways enable MSPs to quickly and cost effectively "turn on" new capabilities as dedicated or multiple services tightly integrated into the operating system. In addition to meeting customers' needs quickly, the ability to rapidly configure new services on existing equipment helps MSPs create new revenue immediately, without the cost and time required to install and maintain additional hardware. The SRX Series also positions MSPs and their customers for long-term growth through the Junos OS's capacity to easily accommodate new capabilities. As a single-versioned operating system, Junos OS also simplifies network management and reduces overhead.

JUNOS OS—FOUNDATION FOR SERVICES

- Flexible design to support new capabilities
- Proven track record in integrating new services
- Expanding to support security and other services

Reduced Footprint

Instead of adding extra equipment to meet customers' networking demands, the SRX Series accommodates growth with the addition of blades. As MSPs add services, the SRX Series footprint remains the same. In addition to conserving rack space, adding blades does not require additional cooling or maintenance, saving time and reducing costs.

High Firewall Performance

Performing almost an order of magnitude faster than other market offerings, the SRX Series firewall outperforms all other devices to ensure advanced applications incorporating data, voice and video are delivered securely. This high performance helps MSPs deliver more products and support to many more customers.

Carrier-Grade Reliability

True, carrier-grade reliability ensures that MSPs deliver a proven level of quality to justify reliability-based service levels, delivering expected resiliency in case of outages.

Common Management Solution

Juniper Networks Network and Security Manager (NSM) delivers streamlined provisioning and monitoring with a unique, single management server that manages a wide range of security and networking products, decreasing required IT resources and reducing operational expenses. Juniper Networks STRM Series Security Threat Response Managers simplify threat identification and correlation, and provides MSPs with a holistic view of network-wide security.

Performance-Enabling Service and Support

Customized to meet the unique requirements of enterprise and MSP environments, Juniper's comprehensive service levels range from basic support to advanced consulting to accommodate any point in the network lifecycle.

Industry Leading Partnerships

Juniper's partnerships with industry leaders like Symantec and Kaspersky help MSPs expand product and service portfolios with reputable, proven security solutions.

Advanced Security Features

Advanced SRX Series security features automatically detect and mitigate threats while routing features intelligently prioritize and accelerate traffic. These features protect and distribute advanced services and applications to support millions of subscribers or multiple enterprise departments across the network.

SRX Series Solution Components

The SRX Series includes the following integrated components:

- Firewall
- IPS
- IPsec
- Denial of service (DoS) and distributed denial of service (DDoS) protection
- Quality of service (QoS)
- Network Address Translation (NAT)
- Routing and switching

The Juniper Networks SRX Series Services Gateways scale in performance and capacity based on the number of cards installed. All modules for the Juniper Networks SRX3000 line are shared between the SRX3400 and SRX3600, including power supplies. All modules for the Juniper Networks SRX5000 line are shared between the SRX5600 and SRX5800. Modules for the SRX3000 line are not interchangeable with the SRX5000 line and vice versa. Models include the following:

- SRX3400—supporting up to 20 Gbps firewall throughput, 6 Gbps IPsec VPN throughput, or 6 Gbps IPS throughput
- SRX3600—supporting up to 30 Gbps firewall throughput, 10 Gbps IPsec VPN throughput, or 10 Gbps IPS throughput
- SRX5600—supporting in excess of 60 Gbps firewall throughput or 15 Gbps IPS throughput
- SRX5800—supporting in excess of 120 Gbps firewall throughput or 30 Gbps IPS throughput

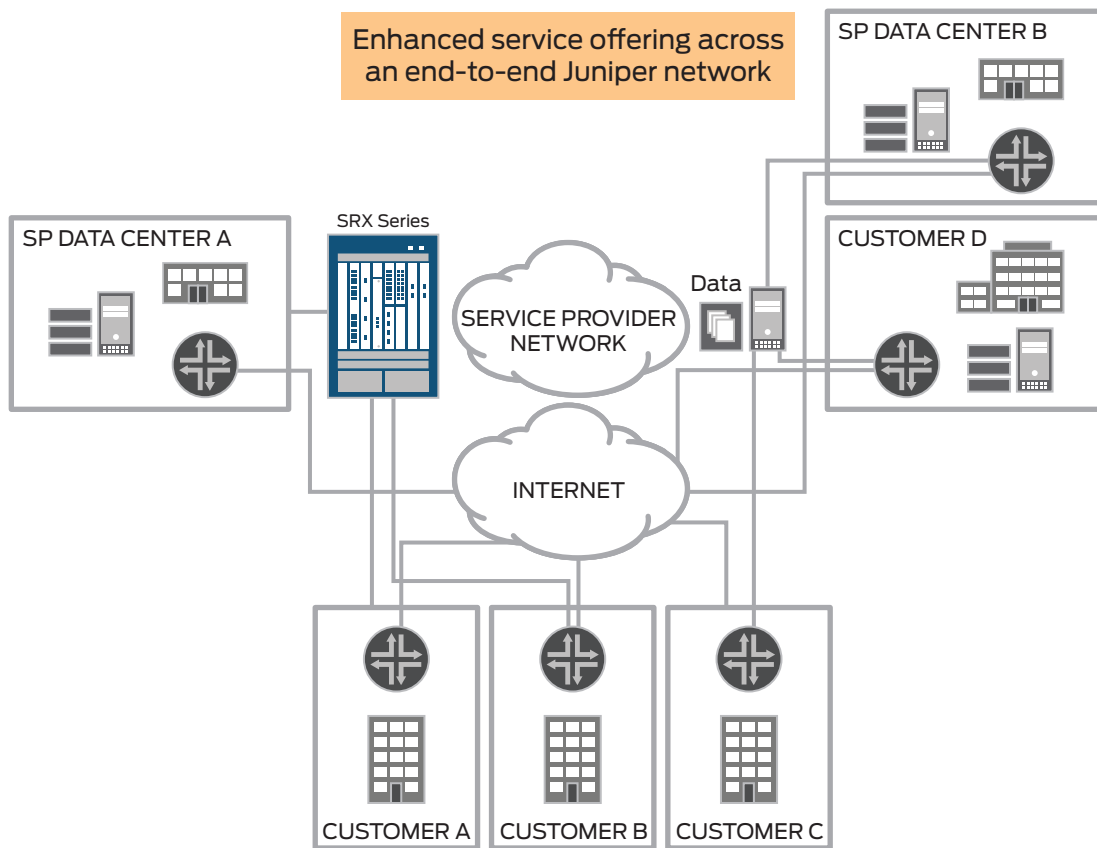


Figure 1: Network-based managed services with Juniper Networks SRX Series platform

SRX Series—Paving the Way for Innovation

Juniper's extensible SRX Series Services Gateways enable MSPs to stay ahead of the competition by quickly and cost-effectively creating innovative service offerings and scalable solutions. The SRX Series provides all of the key benefits of a network-based solution—performance, reliability, security, service and support—MSPs need to meet their customers' dynamic networking needs in today's demanding competitive environment. And with the SRX Series, MSPs can more quickly enjoy the additional revenue that comes with the ever-expanding service offerings enabled through network-based services.

The SRX Series enables MSPs to support hundreds of enterprise customers within a single network-based services gateway by utilizing VPN routing and forwarding (VRF) and security zone features to deliver cost-effective per-customer connectivity, routing and security. Each SRX Series device is seamlessly managed from the MSP network operations center using Network and Security Manager for provisioning and the STRM Series for security monitoring.

Tightly integrated into Junos OS, the SRX Series allows MSPs to easily configure and implement new capabilities as dedicated or multiple services. Junos OS integration also supports enhanced routing and QoS features in a comprehensive service-based management network.

Next Steps

For more information about the SRX Series product suite, visit www.juniper.net/srx-series.

About Juniper Networks

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at www.juniper.net.

Corporate and Sales Headquarters

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or 408.745.2000
Fax: 408.745.2100
www.juniper.net

APAC Headquarters

Juniper Networks (Hong Kong)
26/F, Cityplaza One
1111 King's Road
Taikoo Shing, Hong Kong
Phone: 852.2332.3636
Fax: 852.2574.7803

EMEA Headquarters

Juniper Networks Ireland
Airside Business Park
Swords, County Dublin, Ireland
Phone: 35.31.8903.600
EMEA Sales: 00800.4586.4737
Fax: 35.31.8903.601

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