

MANAGED SERVICES SOLUTIONS FOR DISTRIBUTED ENTERPRISES

Secure Junos Operating System-Based Network Easy to Deploy and Manage for Fast Time to Revenue

Challenge

Managed service providers need to address the challenge their customers are facing with the enterprise becoming more distributed and applications getting centralized. They need to deliver reliable, consistent and scalable solutions that provide their customers the best possible user experience.

Solution

Juniper Networks SRX Series Services Gateways for the branch offer MSPs exceptional value—industry-leading technology, maximum stability and scalability, lowest total cost of ownership—enabling MSPs to meet the business needs of their distributed enterprise customers.

Benefits

- Best-in-class performance ensures increased productivity and customer satisfaction, allows license-based activation of new applications, and accelerates time to market for new services.
- Best-in-class single platform design consolidates delivery of fast, highly available services.
- Dynamic services architecture and proven operating system deliver unmatched consistency and ease of management.

Like their colleagues at headquarters, branch-office employees are involved in mission-critical activities that have a direct impact on their company's bottom line and require them to have comparable access to voice, data, and video applications and services. Nearly 90 percent of organizations have at least one or more branch locations, according to a 2008 Nemertes Research report. And as branches multiply at an average year-to-year rate of 11 percent, enterprises' data services networks are becoming increasingly critical and complex.

Instead of trying to do it all themselves with expensive resources, more and more enterprises are asking managed service providers (MSPs) for help so they can stay focused on growing their core business. For MSPs, this represents a golden opportunity to gain market share and generate additional revenue by providing value-added managed services that take the burden off enterprise IT departments.

The Challenge

As more and more enterprises become distributed locally, regionally, or globally, their data services networks and the benefits they provide are becoming increasingly critical to their growth. To remain focused on their core business, these enterprises are turning their networks over to the care of managed service providers rather than adding or maintaining expensive IT support personnel to their staffs. Therefore, distributed enterprise locations with the need for connectivity, security, and applications present MSPs with a golden opportunity to create new sources of revenue.

In recent years, the managed services market has shifted from basic connectivity to security, and is currently moving towards a model in which experience is becoming the critical differentiating factor. However, most managed services vendors remain focused on delivering unintegrated point products that require constant upgrades and are lacking in key features as well as stability, scalability, and manageability.

To meet the current and ongoing needs of their distributed enterprise customers, MSPs require a single, integrated, branch office services platform that offers them the lowest total cost of ownership (TCO), the highest possible stability, and maximum scalability. MSPs that deploy a single platform solution with these characteristics are able to meet the infrastructure needs of all of their distributed enterprise customers seamlessly and at the right price point.

Additionally, MSPs must run multiple mission-critical services and networks better—and at a lower cost—than their customers could run them. Using manual processes to manage hundreds of thousands of devices remotely is not a viable option in today's environment of dynamic service requirements and limited maintenance windows.

With the right solution in place, MSPs can drastically reduce both CapEx and OpEx by leveraging the flexibility to create new revenue streams with their installed base, and streamlining their associated operations. The right platform and management system enables MSPs to deliver value-added managed services for remote enterprise locations that are capable of scaling to meet the current as well as future needs of their enterprise customers.

The Juniper Networks SRX Series Services Gateways for the Branch

Juniper Networks® SRX Series Services Gateways for the branch are designed to deliver a variety of features that include a wide range of WAN connectivity (from DSL to metro Ethernet), security, and experience based on application performance. Integrated into a single platform, SRX Series for the branch products, features, and capabilities consolidate the delivery of fast, highly available managed services for networking, security, and applications—all of which run on Juniper Networks Junos® operating system.

The branch SRX Series dynamic services architecture delivers key capabilities for MSPs and their customers including:

- Protection of assets, identity, and privacy
- Connection via ubiquitous access
- Optimization through centralized applications
- Communication across the enterprise
- Acceleration of service delivery and development

These capabilities meet the MSP's business requirements by ensuring customer satisfaction and retention. They also increase productivity, and they help accelerate the creation and delivery of new services and applications to market while simultaneously lowering risk, cost, and complexity for both MSPs and their distributed enterprise customers.

Features and Benefits

Juniper Networks branch SRX Series offers MSPs integrated best-in-class technologies. SRX Series for the branch provides MSPs with flexible products that work together to meet the critical needs of any type of branch office location—from retail storefront, to service center, to the large design center.

The key attributes of Juniper Networks Managed Services Solutions for the distributed enterprise include:

- High performance and scalability
- Optimal reliability and flexibility
- Advanced security
- Operational simplicity

Performance and Scalability

SRX Series for the branch offers built-in routing and switching and full unified threat management (UTM) capabilities. This platform enables MSPs to accommodate the needs of all distributed enterprise locations using a comprehensive solution set of design templates that are easy to deploy, yet readily customizable.

Juniper Networks SRX Series Services Gateways deliver consistent performance and throughput with a variety of services—including firewalls, intrusion prevention system (IPS), VPNs, and network access control (NAC). This allows enterprises to roll out new applications without dedicated IT personnel or expensive upgrades to their networks.

MSPs that employ SRX Series for the branch managed service solutions can offer their enterprise customers improved performance and response times from five to 10 times for IP-based applications, while also increasing WAN bandwidth capacity by four to 50 times.

Juniper's application acceleration platforms also optimize application delivery with quality of service (QoS) and bandwidth management capabilities, while providing full visibility into the WAN, the device, and application performance.

Reliability and Flexibility

The branch SRX Series delivers proven reliability with support for a variety of options that ensure high availability (HA), including active/passive, active/active, and active/active full-mesh solutions. The platform also supports stateful failover for both firewalls and VPNs.

Administrators benefit from a wide range of connectivity options, such as onboard gigabit Ethernet ports, expandable WAN and LAN ports, highly available virtual chassis for LAN switches, and a voice-enabled backplane for third-party voice modules and interfaces. Juniper's open and standard-based SRX Series for the branch can be deployed on any network. This enables a flexible deployment strategy that meets the needs of growing businesses, and enables them to maximize any investments they make in their existing infrastructures.

Advanced Security

Juniper Networks SRX Series Services Gateways for the branch integrate proven security and WAN connectivity to deliver consistent performance and throughput for multiple WAN connection interface types. They protect data traveling to and from remote enterprise locations at all vulnerable points with a variety of services that include firewalls, IPS, VPN, and NAC. This in turn allows enterprises to roll out new applications without the need for dedicated IT personnel or expensive upgrades to their networks. In addition, integrated security appliances act as enforcement points when enterprises decide to deploy NAC solutions for granular policy enforcement.

Operational Simplicity

Juniper Networks SRX Series Services Gateways for the branch offer rapid deployment capabilities that do not require a skilled resource at the enterprise for installation. They also provide real-time monitoring capabilities along with role-based administration for complete flexibility in access control and rights management. In addition, the solution's best-in-class centralized management tools deliver easy and centralized configuration, as well as management and monitoring capabilities that reduce management complexity and costs.

Additionally, Juniper's automated customer premises equipment (CPE) management solution extends these benefits across a heterogeneous network environment, enabling service providers to provision and deliver managed services accurately, enforce network-wide policy compliance, and meet stringent service-level agreements (SLAs) while avoiding costly mistakes. This is the most comprehensive, scalable, intelligent, and interoperable carrier class solution available to MSPs today, supporting devices for a complete range of services.

Connectivity Options

A remote location can connect with either IPsec VPN, or MPLS. SRX Series for the branch supports the capabilities for both of these options.

Solution Components

Today, enterprise employees require connectivity at any time, from any place, and using any device. But different enterprises have different architectures with different needs across the LAN and WAN. This is another reason why an integrated, flexible managed branch-office solution is critical for MSPs.

All of Juniper Networks managed branch office solutions provide MSPs with important core requirements and features tailored to maximize the performance and security of the data services networks serving each branch-office type. These core requirements include:

- Lower TCO and complexity
- Flexible, modular services architecture
- High performance and scalability enabled by modular, multi-core processing power and built-in switching and routing capability
- Turnkey, easy to use and manage, including end-to-end reporting with Juniper Networks STRM Series Security Threat Response Managers
- Best-in-class security features

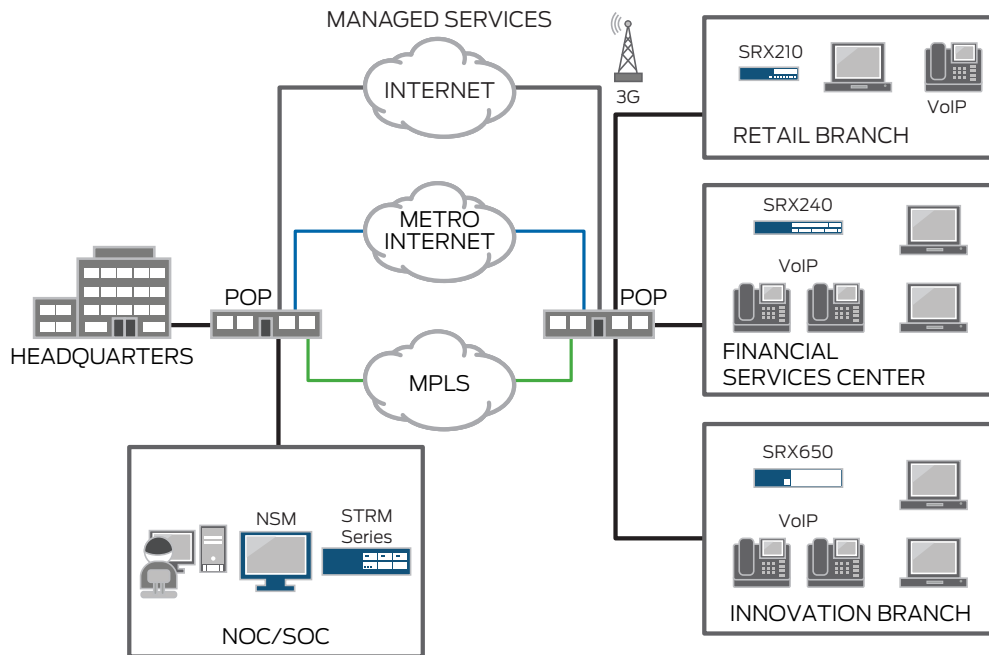


Figure 1: Juniper Networks Managed Services Solutions for the distributed enterprise locations

From a broad viewpoint, MSPs require solutions that enable them to serve any of the following locations:

Revenue Gateway

An example of a revenue gateway is a retail store or gas station/convenience store that is processing multiple types of retail transactions with customers simultaneously. Transactions at this type of location flow mostly one way and are usually generated from multiple machines throughout the store such as cash registers, lottery machines, ATMs, gas pumps, car washes, video surveillance cameras, and so on. All of the data traffic from each device is typically transmitted together from the store back to the regional or national headquarters or data center. Employing the branch SRX Series would enable these data streams to be transported via the same connection using different classes of service or virtual circuits for logical separation. Different QoS and security could be applied to each circuit.

Service Center

An example of a service gateway is a large financial center or brokerage firm, tax preparation firm, or retail center that makes trades and provides financial advice. At these locations, client information typically travels both ways between the branch and the headquarters office. Because data streams contain confidential information regarding an enterprise's clients, the data transactions conducted between a service gateway and its headquarters are sensitive and require the highest level of security to meet Payment Card Industry (PCI) compliance requirements. Consequently, the managed service needs to deliver a higher class of service and SLAs.

Innovation Center

These are large remote centers such as research and innovation centers. Although these locations are remote, they have a large number of personnel and hence have a large need for bandwidth and connectivity. The location might be using real time media such as VoIP as well as telepresence to increase productivity and reduce conferencing and travel costs. These centers also support large numbers of people making high availability an important requirement. The design for such locations typically has multiple high-end integrated routers working in HA mode along with a pair of Ethernet switches.

Summary: Making Branch Offices More Productive

With an increasing number of employees working away from company headquarters in branch offices, distributed enterprises need networks that enable them to enhance employee productivity companywide. These networks must deliver industry-leading technology, the highest possible stability, maximum scalability and security, and the lowest total cost of ownership. Enterprises today need to focus on their core businesses rather than on their networks and are looking to MSPs for help.

MSPs interested in taking advantage of this unprecedented opportunity to increase their revenues and market share must choose integrated technologies for offering managed service solutions. Integrated solutions enable MSPs to help their distributed enterprise customers save significant amounts of time and resources that would otherwise have to be devoted to keeping their remote locations online, operational, and productive.

Table 1: Components of Juniper Networks Managed Services Solutions for the Distributed Enterprise

FEATURE	EXPLANATION
License-based feature activation	Service creation and upgrade with simple license activation of integrated features at full performance and without a truck roll
Service innovation	Ability to accelerate service innovation with the flexibility of supporting additional functionality on the same platform
Reduced costs	Improved operational efficiency with Junos OS reducing OpEx and single integrated platform reducing CapEx
Comprehensive security	Integrated security service that delivers better protection than standalone products
Experience-based services	Experience that meets the requirements of the MSP's business users
Hardware acceleration	Hardware designed to accelerate IPsec VPN encryption and intrusion prevention system
Maximum processing power	Modular multi-core processing power that supports all applications at peak load
Customized services	Software Developer Kit (SDK) enables the ability to create specialized services on Junos OS
Ease-of-management	Automated CPE management solution supporting mass provisioning and software upgrades
Improved business viability	For businesses deploying Juniper solution with IBM Global Financing Program

Juniper Networks SRX Series Services Gateways for the branch enable MSPs to save on OpEx and CapEx as they meet the growing needs of their distributed enterprise customers. An easy-to-manage single platform solution, the SRX Series for the branch's simplified provisioning enables faster time to revenue and rapid network deployment for MSPs, along with secure transfer of voice, video, data, multimedia, and media rich content for their enterprise customers. In addition to reducing costs and boosting efficiency for their enterprise customers, MSPs that use the branch SRX Series can enhance their perceived value by delivering value-added services and an improved user experience.

Next Steps

For more information about Juniper's branch office solutions, please contact your Juniper Networks sales representative or visit www.juniper.net/us/en/solutions/service-provider/managed-sp/.

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

To purchase Juniper Networks solutions, please contact your Juniper Networks representative at 1-866-298-6428 or authorized reseller.

Copyright 2010 Juniper Networks, Inc. All rights reserved. Juniper Networks, the Juniper Networks logo, Junos, NetScreen, and ScreenOS are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners. Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.