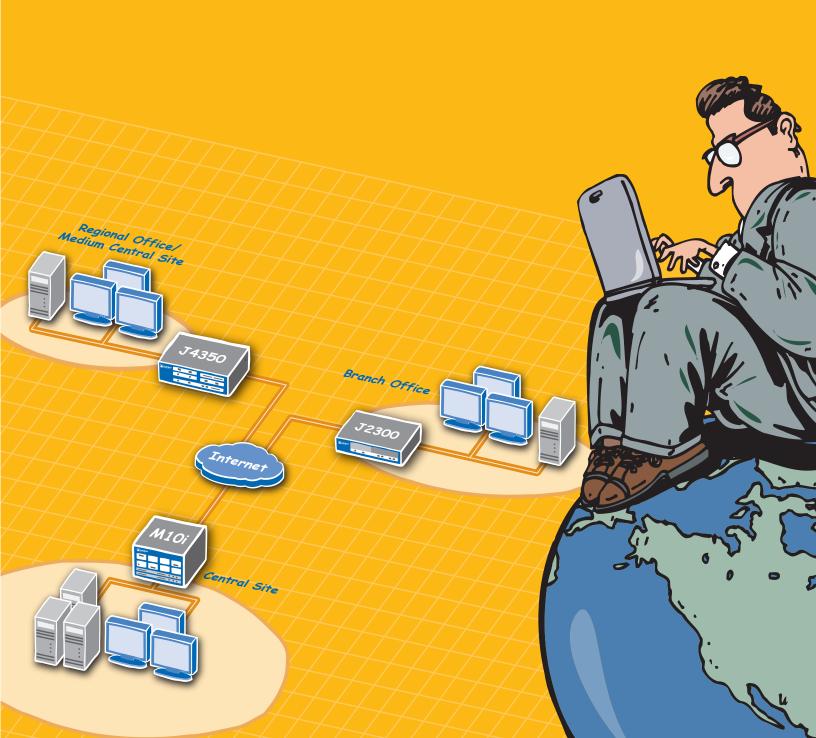


# **Juniper Networks Enterprise Router Solutions**

Juniper M-series and J-series Routers





Juniner Networks 12300



Juniper Networks J4350



Juniner Networks 16350



Juniper Networks M7i



Juniper Networks M10i



Juniper Networks M120

# Juniper Networks enterprise routers add new levels of security, uptime, performance, and operations flexibility to today's changing networks

Today's business environment is becoming more dynamic and competitive as information technology increases the pace of change and fundamentally alters business models. IT departments are being asked to support a more distributed enterprise, enable new business processes to improve employee efficiency, comply with new government regulations, and lower infrastructure costs. Networks and applications are also being consolidated by moving to a converged Internet protocol (IP) infrastructure for both cost and operation efficiency reasons. Juniper Networks enterprise router solutions help businesses meet these challenges with new levels of security, uptime, performance, and operational simplicity. With products to connect remote, branch, regional offices, central sites, and data centers, Juniper Networks router solutions provide unmatched flexibility and value for the enterprise. Highlights include:

- Predictable gigabit and greater performance for branch offices, central sites, and data centers
- Breadth of enterprise routing portfolio, interface options, and performance levels to suit the diverse needs of today's businesses
- Comprehensive QoS functions classify, prioritize, and schedule traffic for applications such as VoIP
- High levels of security with a modular system architecture and dedicated resources to defend against infrastructure attacks by fully protecting the processing resources and ensuring complete router control
- Modular software design to ensure that minor problems cannot turn into full system crashes, maintaining uptime and continuity of operations
- One common JUNOS code base to streamline deployment, patches, and software upgrades; with multiple tools for platform implementation and management
- Support for advanced services, such as MPLS, IPv6, QoS, multicast, security services and accounting to securely deliver and manage mission-critical data and applications

The Juniper Networks next generation routing architecture provides the solid, reliable, high performance foundation upon which today's real-time, critical networking applications can be delivered. Juniper Networks offers a comprehensive enterprise routing portfolio consisting of the J-series services routers and the M-series multiservice routers. The J-series routers are typically deployed at remote offices or branch locations and include the J2300 for smaller offices, the J4350 for medium sized branches, and the J6350 for large branches or regional offices.

The M-series enterprise routers, including the M7i, M10i and M120, are typically deployed in head office locations where high performance packet processing is required such as Internet access gateways, WAN aggregation devices, data center routers or backbone routers. Both the J-series and M-series routers run the same proven JUNOS modular operating system, designed to run multiple functions in parallel on assigned processing resources and delivering high stability with the flexibility to enable advanced, next-generation routing services.

#### **Connecting Remote Offices**

Juniper Networks J4350 and J6350 routers provide up to Gigabit Ethernet performance for enterprise remote, branch and regional offices. They are voice ready and run modular JUNOS software which offers many advanced services (MPLS, IPv6, QoS, multicast, etc) and security (stateful firewall and IPSec VPN) at no additional charge. J-series routers are forward-looking platforms with modular flexibility, performance headroom and extensible memory to meet future demands, providing unmatched reliability, investment protection, and value for the enterprise

When businesses require an integrated routing and security appliance that offers full Unified Threat Management, Stateful firewall, IPS, Antivirus (Anti-Spyware, Anti-Phishing, Anti-Adware), Anti-Spam, and Web Filtering, the Juniper Networks Secure Services Gateway 500 Series (SSG 500 Series) is the answer. These purpose-built, high performance platforms blend LAN security and routing from ScreenOS with WAN routing hardware and encapsulations from the Juniper Networks J-series routers and JUNOS. The result is a powerhouse that delivers WAN connectivity, plus the muscle to protect the high speed LAN against internal network and application-level attacks.

The SSG 500 Series can be deployed as an integrated security and routing platform for regional/branch offices or medium businesses that wish to consolidate devices. Whether deployed as a firewall or as a combined security and routing device, the SSG 500 can stop worms, Spyware, Trojans, malware and other emerging attacks from penetrating and proliferating across the network.

#### J2300

- Up to 2xT1/E1 performance
- T1, E1, Serial, or G.SHDSL WAN Interfaces
- Two fixed FE LAN ports, and optional integrated ISDN BRI backup

#### J4350

- Up to 1 Gbps+ performance
- T1, E1, FE, Serial, ISDN BRI, ADSL/2/2+, G.SHDSL, DS3, E3, GE Interfaces
- 4 fixed GE LAN ports, 4 PIM slots and 2 EPIM/PIM slots

#### J6350

- · Up to 2 Gbps+ performance
- T1, E1, FE, Serial, ISDN BRI, ADSL/2/2+, G.SHDSL, DS3, E3, GE Interfaces
- 4 fixed GE LAN ports, 2 PIM slots and 4 EPIM/PIM slots
- Optional redundant power supplies

#### M7i

- Up to 1Gigabit Ethernet /OC-12 WAN Performance
- 4 PIC Slots and built in 2xFE or GigE links
- Forwarding Engine Board with built-in Services Module

#### M10i

- Complete redundancy with dual routing engines, dual forwarding engine and dual power supplies; Redundancy provided with GRES (Graceful Routing Engine Switchover)
- Up to OC-48/STM-16 WAN Performance
- 8 PIC Slots for a variety of LAN, WAN and Services PICs

#### M120

- 120 Gigabit throughput in compact form factor; Supports 10Gig links at line rate
- Complete in-box redundancy with dual routing engines, 1:1 and N:1 redundancy of forwarding engines, dual switch fabrics and dual power supplies
- 2 slots for 10GE or 0C192; 16 PIC Slots for a variety of LAN, WAN and Service PICs

## **Connecting the Central Office, Data Center and Enterprise Backbone**

The Juniper Networks M7i, M10i and M120 platforms are ideal enterprise routing solutions for head offices, campuses and corporate backbones needing reliable, secure and high performance IP WAN connectivity, Internet access, and services. The hardware based architecture and the JUNOS operating system ensure rich packet processing with uncompromising forwarding performance to support latency sensitive applications such as voice, video, and mission critical applications. The M7i, M10i and M120 routers are the choice for consolidating multiple services onto a single IP/MPLS network and delivering performance, reliability, and security to the enterprise environment. The modular architecture enables high performance and carrier class stability even when services are turned on these platforms.

#### **The Benefits of Deploying Juniper Networks Enterprise Routers**

Modern IP applications require a smart network that can meet the diverse set of requirements enterprises need without compromise. Deploying Juniper Networks enterprise routers adds new levels of security, uptime, performance and operations flexibility with many systems and tools to assist network administrators.

Juniper Networks Advantages	Key Differentiators
Strong Security	<ul> <li>Modular system architecture defends against attacks by protecting processing resources</li> <li>Access to the router is always available – even while under attack</li> <li>Additional integrated security services include Network Address Translation (NAT), Access Control Lists (ACLs), stateful inspection firewall, and IPSec Encryption</li> </ul>
High Uptime	<ul> <li>Network outages minimized by separating software functions into modular components</li> <li>Minor problems cannot proliferate to full system crashes</li> <li>Next generation CLI designed to help prevent operational errors, maintaining uptime</li> <li>Platforms available with redundant WAN components</li> </ul>
Predictable High Performance	<ul> <li>Gigabit and greater performance for branch offices, central sites, and data centers</li> <li>Comprehensive, real-time granular control over network traffic, especially important during periods of high congestion</li> <li>QoS mechanisms to classify, prioritize and schedule traffic to deliver predictable performance</li> <li>Consistent WAN throughput rates when advanced services are enabled</li> </ul>
Operations Simplicity	<ul> <li>One software code base across all routing platforms eases operations with straightforward software updates and upgrades</li> <li>Fast certification of releases and full interoperability between products</li> <li>Features for small and regional remote offices help lower the operations costs for installing, managing, monitoring and maintaining equipment</li> </ul>
Centralized Management	<ul> <li>Automated control of a large number of enterprise routers, eliminating the need to manage individual routers</li> <li>Multiple functions such as configuration management, inventory management and system administration</li> <li>Leverages automated and integrated set of management applications</li> </ul>
Breadth of Portfolio	<ul> <li>Spectrum of products to connect various enterprise locations, including, remote, branch, and regional offices, as well as central offices, data centers and enterprise backbones</li> <li>WAN performance from broadband to OC-192/STM- 64, 10GE</li> <li>Wide variety of WAN interface options including T1, E1, E3, DS3, FE, Serial, ISDN BRI, ADSL/2/2+, G.SHDSL, Gigabit Ethernet, SONET/SDH, Channelized IQ, and ATM2 IQ</li> </ul>

#### **Juniper Networks JUNOS Operating System in Your Network**

Juniper Networks routing platforms ensure resource availability through a system architecture that cleanly separates the three independent components – the Routing Engine, Forwarding Engine, and Services Engine. Each has its own protected processing and memory resources so that processing conflicts are never an issue.

Complementing the protected processing resources is the modular architecture of the JUNOS operating system. The JUNOS operating system is a completely modular software platform enabling a functional division of labor for seamless development and operation of many advanced features and capabilities. By partitioning the software system, tasks are broken into manageable subsets that interact infrequently. Loading of one does not affect the other, eliminating a common failure mode of legacy routers.

JUNOS extends its modern design beyond system architecture with advanced administrative features. The intelligent, hierarchical organization of the JUNOS CLI is well suited to operations tasks, with a number of innovative features built-in to ease overall network deployment, configuration and restoration.

Juniper Networks follows a rigorous, well-defined development release process with a single code base across its routing platforms. Under strict development standards, features are added, supported, tested and reliably carried forward, with major releases four times a year and minor updates available monthly, quickly introducing new capabilities required by customers. As a modular software platform, many developers can create new features for JUNOS simultaneously without impacting each others' work.

#### **Juniper Networks Consulting Services**

Juniper Networks Professional Services consultants and the experts of authorized Juniper Networks partners are recognized throughout the industry as knowledgeable networking specialists. They are uniquely qualified to assist in planning and implementing a secure and reliable network.

The Customer Support Center provides responsive assistance and software upgrades, security updates, and online knowledge tools to ensure maximum reliability of Juniper Networks products. The professional instructors of Juniper Networks Educational Services help customers keep pace with rapidly evolving technologies by sharing the company's expertise on operating stable, secure networks.

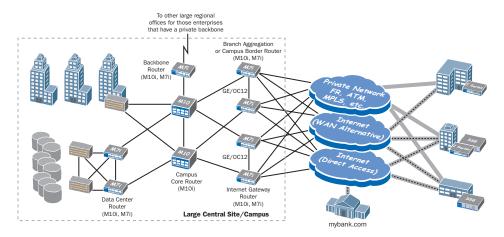


Figure 1- Typical Juniper Enterprise Router Deployments

#### **Next Steps**

For more information on Juniper Networks Enterprise Router Solutions, please contact your Account Manager or visit www. juniper.net.

#### **About Juniper Networks**

Juniper Networks develops purpose-built, high performance IP platforms that enable customers to support many different services and applications at scale. Service providers, enterprises, governments and research and education institutions rely on Juniper to deliver a portfolio of proven networking, security and application acceleration solutions that solve highly complex, fast-changing problems in the world's most demanding networks. Additional information can be found at www.juniper.net.

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