



NETWORK AND SECURITY MANAGER APPLIANCES (NSMXPRESS AND NSM3000)

Product Overview

Now more than ever, network operators need the ability to easily manage security policies and to have visibility into potential security concerns in the network. At the same time, they need to invest their time in monitoring and operating secure networks. Juniper Networks NSM3000 and NSMXpress enable IT departments not only to control the entire device life cycle with a single, centralized solution, but also provides visibility with a complete set of investigative and reporting tools.

Product Description

Juniper Networks® NSMXpress and NSM3000 are purpose built security hardened appliance versions of Juniper Networks Network and Security Manager (NSM) optimized towards providing a single centralized management solution to effectively manage Juniper Networks family of devices including routers, switches, and firewalls.

While the NSMXpress is primarily geared towards small to mid market, the NSM3000 scales to the requirements of large enterprise customers with the capability to manage up to 1,500 devices. These appliances, which install in minutes with high availability (HA) support, not only simplify the complexity of device administration by providing a single integrated management interface that controls every device parameter, but also eliminate the need to have dedicated resources for maintaining the management solution.

NSM3000 and NSMXpress have the following features:

- Provides an appliance version of NSM with a security hardened OS
- Offers centralized, end-to-end device life cycle management for granular control of configuration, network settings and security policies
- Allows for delegation of administrative roles, which provides relevant access to those who need it
- Offers easy installation with operational efficiency that delivers lower total cost of ownership (TCO)
- Provides dedicated HA support

Architecture and Key Components

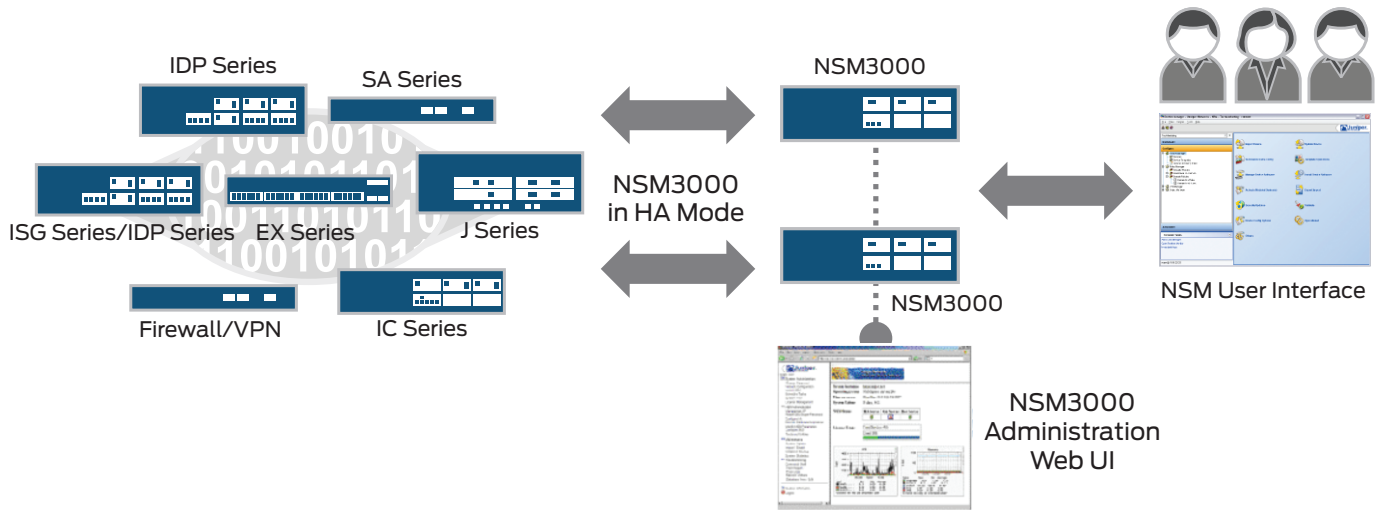


Figure 1: Managed Juniper Networks devices

Features and Benefits

| Features | Feature Description | Benefits |
|---------------------------------|--|---|
| Hardened OS | Juniper Networks security team monitors and maintains the OS, which is optimized for performance and security. | Users don't have to worry about security vulnerabilities, support or patch management for the OS. |
| Multi-user Web-based management | Intuitive Web UI for managing and maintaining the appliance, with multi-user, role-based access control. | Allows multiple role-based users to configure common appliance-specific parameters and tasks like network settings, scheduling updates, troubleshooting, utilities and backups via a Web interface. NSM appliance administrators can be assigned specific predefined roles with an option of RADIUS-based authentication. |
| Recovery option | Menu-driven recovery option allows users to revert back to factory defaults or restore to the last configuration. | Users can easily reset the box to its original state or quickly restore lost data. |
| Scheduled database backups | Supports both local and remote backups. By default it will perform nightly back-ups locally. | Users can set up an automatic task for backing up their data either locally or remotely. |
| Status monitoring | The system monitors the status of the NSM appliance and sends daily emails to the administrator regarding the health of the appliance. | Users can monitor and maintain the health of the appliance. |
| Server role option | Ability exists to choose the role of the appliance to be either a regional server or central manager. | User will get a chance to change the role of the server if needed. This is a one-time switch. |
| Central update | Updates are available in one place. NSM appliance can perform either automatic or manual updates. | It can download the latest OS upgrades and update NSM attack DB through proxy settings. |
| One stop support | Juniper Technical Assistance Center (JTAC) supports all aspects of NSM appliance. | Users don't have to go to several places to get support. |

Juniper Networks Device Support

| Device Type | NSMXpress Device Support | NSM3000 Device Support |
|--|--------------------------|------------------------|
| Firewall/VPN (SSG5, SSG20, SRX100, SRX110, SRX210, SRX220, SRX240, SRX550, and SRX650) | 300 | 1500 |
| IDP Series | 25 | 50 |
| High-end firewall/VPN (SRX1400, SRX3400, SRX3600, SRX5600, and SRX5800) | 25 | 100 |
| M Series/MX Series | 25 | 100 |
| SA Series | 30 | 50 |
| IC Series | 30 | 50 |
| EX Series | 300 | 1500 |
| North Bound Interface (NBI) clients | 5 | 5 |
| NSM GUI clients | 10 | 10 |



Specifications

| | NSMXpress | NSM3000 |
|-----------------------------|--|--|
| Dimensions and Power | | |
| Dimensions (W x H x D) | 17.26 x 3.5 x 17.72 in (43.84 x 8.8 x 45 cm) | 17.26 x 3.5 x 17.72 in (43.8 x 8.8 x 45 cm) |
| Weight | 26 lb 6 oz | 27 lb 10 oz with 1 power supply 30 lb with 2 power supplies |
| Rack mountable | Yes, 19 in rack, front and rear or mid-mount, flush or recessed mounting | Yes, 19 in rack, front and rear or mid-mount |
| A/C power supply | 90 V to 264 V 250 W AC power module · Efficiency 80 PLUS certified · Peak inrush current is: - 40 A max. at 115 VAC and 25 C - 80 A max. at 240 VAC and 25 C | 90 V to 264 V hot swap dual redundant 250 W AC power module, 90 V to 264 V hot swap · Efficiency 80 PLUS certified · Peak inrush current is: - 40 A max. at 115 VAC and 25 C - 80 A max. at 240 VAC and 25 C |
| DC power supply | Supports hot swap dual redundant 560 W DC power module -38 V to -72 V DC power supply; peak inrush is <60 A · Power module max efficiency: - 80 PLUS, 560 W AC - 80 PLUS, 560 W DC | Supports hot swap dual redundant 560 W DC power module -38 V to -72 V DC power supply; peak inrush is <60 A · Power module max efficiency: - 80 PLUS, 560 W AC - 80 PLUS, 560 W DC |
| System battery | CR2032 3V lithium coin cell | CR2032 3V lithium coin cell |
| Efficiency | 65 percent minimum, at full load | 80 PLUS Certified |
| MTBF | 103,000 hours (1x power supply), 152,000 hours (2x power supply) | 71,000 hours (1x power supply), 91,000 hours (2x power supply) |
| Material | 18 gauge (.048 in) cold-rolled steel | 18 gauge (.048 in) cold-rolled steel |
| Fans | Two externally accessible, hot-swappable ball-bearing fans | 2x80 mm hot swap |
| Panel display | · LEDs: power, HD activity, hardware alert · HD activity and fail LED on drive tray | · LEDs: power, hardware alert · HD activity and fail LED on drive tray |
| Ports | 1 RJ45 serial console, 2x RJ45 10/100/1000 802.3u/z/ab compliant | 1 RJ45 serial console, 4x RJ45 10/100/1000 802.3u/z/ab compliant |

Environment

| | | |
|-------------------------------|------------------------------------|------------------------------------|
| Operating temp | 41° F to 104° F (5° C to 40° C) | 41° F to 104° F (5° C to 40° C) |
| Storage temp | -40° F to 158° F (-40° C to 70° C) | -40° F to 158° F (-40° C to 70° C) |
| Relative humidity (operating) | 8% to 90% noncondensing | 8% to 90% noncondensing |
| Relative humidity (storage) | 5% to 95% noncondensing | 5% to 95% noncondensing |
| Altitude (operating) | 10,000 ft (3,000 m) maximum | 10,000 ft (3,000 m) maximum |
| Altitude (storage) | 40,000 ft (12,192 m) maximum | 40,000 ft (12,192 m) maximum |

Power Consumption

| | | |
|---------------------|--|--|
| Thermal dissipation | 416 BTU/hr (typical) 470 BTU/hr (max single power supply) 559 BTU/hr (max dual power supply) | Single power supply: · 89 W, 304 BTU/hr (typical) · 154 W, 526 BTU/hr (max) Dual power supplies: · 96 W, 327 BTU/hr (typical) · 162 W, 552 BTU/hr (max) |
| Peak inrush current | 50 A max @ 115 VAC, 80A max @ 230 VAC | 40 A max @ 115 VAC, 80A max @ 240 VAC |

Certifications

| | | |
|-----------------------|--|--|
| Safety certifications | <ul style="list-style-type: none"> · CSA 60950-1 (2003) Safety of Information Technology Equipment · UL 60950-1 (2003) Safety of Information Technology Equipment · EN 60950-1 (2001) Safety of Information Technology Equipment · IEC 60950-1 (2001) Safety of Information Technology Equipment (with country deviations) · EN 60825-1 +A1+A2 (1994) Safety of Laser Products - Part 1: Equipment Classification · EN 60825-2 (2000) Safety of Laser Products - Part 2: Safety of Optical Fiber Comm. Systems | <ul style="list-style-type: none"> · CSA 60950-1 (2003) Safety of Information Technology Equipment · UL 60950-1 (2003) Safety of Information Technology Equipment · EN 60950-1 (2001) Safety of Information Technology Equipment · IEC 60950-1 (2001) Safety of Information Technology Equipment (with country deviations) · EN 60825-1 +A1+A2 (1994) Safety of Laser Products - Part 1: Equipment Classification · EN 60825-2 (2000) Safety of Laser Products - Part 2: Safety of Optical Fiber Comm. Systems |
| EMC | <ul style="list-style-type: none"> · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements | <ul style="list-style-type: none"> · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements |

| | NSMXpress | NSM3000 |
|----------|--|--|
| EMI | <ul style="list-style-type: none"> • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions | <ul style="list-style-type: none"> • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions |
| Immunity | <ul style="list-style-type: none"> • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags | <ul style="list-style-type: none"> • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags |

Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services that are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value for your network. Juniper Networks ensures operational excellence by optimizing the network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services.

Ordering Information

| Model Number | Description |
|----------------|--|
| NS-SM-A2-BSE | NSMXpress, 25 devices |
| NS-SM-XL-A-BSE | NSM3000, 25 devices |
| NS-SM-S-BSE | Network and Security Manager, 25 devices |
| NS-SM-ADD-25D | Network and Security Manager, additional 25 devices |
| NS-SM-ADD-50D | Network and Security Manager, additional 50 devices |
| NS-SM-ADD-100D | Network and Security Manager, additional 100 devices |
| NS-SM-ADD-500D | Network and Security Manager, additional 500 devices |
| NS-SM-ADD-1KD | Network and Security Manager, additional 1,000 devices |

Spare SKU

| | |
|-------------------------|---|
| UNIV-MR2U-B-FAN | Replacement fan for NSMXpress II, NSM3000, and JA1500 |
| UNIV-250G-35-SATA-B-HDD | Replacement HDD for NSMXpress II |
| UNIV-1TB-SAS-HDD | Replacement 1 TB hard drive for NSM3000 and JA1500 |
| UNIV-250W-PS-AC | AC power supply (250 W) for NSMXpress II, NSM3000, and JA1500 |
| UNIV-2U-RAILKIT | Rail kit for NSM3000 |
| UNIV-560W-PS-DC | Replacement DC power supply for NSMXpress II, NSM3000, and JA1500 |

Juniper Networks Device and Software Support

- **EX Series Ethernet Switches**
- **IC Series Unified Access Control Appliances**
IC Series version 2.2 and above
- **ISG Series Integrated Security Gateways**
- **IDP Series Intrusion Detection and Prevention Appliances**
IDP Series version 4.0 and above
- **J Series Services Routers**
- **M Series Multiservice Edge Routers**
- **MX Series 3D Universal Edge Routers**
- **SRX Series Services Gateways**
- **NetScreen Series Security Systems**
ScreenOS version 5.0.0 and above
- **SA Series SSL VPN Appliances**
SA Series version 6.3 and above
- **SSG Series Secure Services Gateways**
- **Junos® Operating System Support**
Junos OS version 9.0 and above; forward support for Junos OS 9.6 software through schema update

Note: For more information on Network and Security Manager, please refer to the datasheet.

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.

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1000204-007-EN Apr 2014