

Adaptive Network Security™ Platform

## NETWORK SENTRY™ FAMILY

The Bradford Network Sentry™ family greatly enhances security and automates IT operations, enabling organizations to effectively manage security policies and secure critical IT assets.



Based upon Bradford's Adaptive Network Security platform architecture, the Network Sentry™ family integrates with IT infrastructure and correlates network, security, endpoint device, and user information to provide total visibility and control over every user and device on the network.

Easily integrated into existing network environments, the Network Sentry family's out-of-band architecture leverages the inherent security capabilities of existing network equipment along with authentication and authorization technologies such as 802.1X, RADIUS, and Active Directory for identity management. By leveraging existing technology investments, organizations can quickly add advanced visibility and security capabilities to their current networks and avoid the need for expensive forklift upgrades or the scalability and management challenges of adding in-line equipment.

Through an easy-to-use web interface, the Network Sentry family provides powerful administrative tools for managing network and security operations. Its inherent flexibility lets IT organizations gracefully evolve their security projects from initial trials to pilot roll-outs to full deployments to ensure effective security policy implementations with minimal impact on user experience.

### FOUNDATION

The Network Sentry Foundation is the intelligent base of the Network Sentry family, and consists of a set of appliances with built-in software capabilities.

### SOLUTIONS

Solutions are licensed feature sets that address specific business needs.

- Access Manager
- Guest Manager
- Shared Access Tracker
- Device Tracker

### EXTENSIONS

Extensions are add-on feature sets that extend the functionality of Solutions.

- Endpoint Compliance
- Device Profiler
- Integration Suite

## WHAT IT DOES

Based upon Bradford’s Adaptive Network Security architecture, the Network Sentry family leverages existing investments in desktop software, network infrastructure and third-party security systems – bringing all the pieces together to elevate security and operational efficiency to new levels.

### INTEGRATE

Extensive integration with desktop security software, directories, network infrastructure and third-party security systems provides unparalleled visibility and control across the network environment. The Network Sentry family integrates with:

Network Infrastructure	3Com, Alcatel, Allied Telesis, Apple, Aruba, APC, Avaya, Cisco, Dell, Digital Networks, Enterasys, Extreme, Fortinet, Foundry Networks, HP, Juniper, Meru Networks, NetScreen, Nortel, Proxim, Signamax, SMC, Trapeze Networks
Security Infrastructure	Enterasys Dragon, Fortinet, Internet Security Systems, Lancope, McAfee IntruShield, NitroSecurity, Packeteer, SourceFire, Stonesoft, TippingPoint, TrendMicro
Authentication & Directory Services	RADIUS - Microsoft IAS, Cisco ACS, Juniper Funk, OSC Radiator, Free RADIUS  LDAP - Microsoft Active Directory, Novell eDirectory, Sun ONE, OpenLDAP
Operating Systems	Microsoft, Apple, Linux
Endpoint Security Applications	Anti-virus - Avast, Avira, Bullguard, CA, Dr. Web, ESET, F-Prot, F-Secure, G Data, Grisoft AVG, Kaspersky, McAfee, Microsoft, MicroWorld, Norman, Norton, Panda, PC Tools, Rising, Softwin, Sophos, Symantec, Trend Micro, ZoneAlarm  Anti-spyware - Enigma, Kaspersky, Javacool, Lavasoft, McAfee, Norton, PC Tools, Sophos, Spyware Bot, Sunbelt, Trend-Micro, Webroot SpySweeper

### CORRELATE

Correlation of data including identity of users and devices, security posture of endpoint devices, time of day, physical location, and other information produces a comprehensive view of the entire network. The Network Sentry family correlates information pertaining to:

Users	First & Last Name, ID/Username, E-mail, Physical address, Phone, Group/Role, etc.
Hosts (Endpoints)	IP, MAC, Network Location, HostName, OS, Media Type, Applications, Processes, etc.
Network Infrastructure	Network Topology Information, Device and Port State, Physical Location
Third-Party Security Infrastructure	Security Alerts, Anomalies, Vulnerabilities, Viruses/Malware, Attacks (information gathered through integration with third-party systems)
IT Resources/ Applications	Application Server (Name or IP Address), Web URL, TCP/UDP Port

## AUTOMATE

Automation of security and IT operations duties – such as identifying and classifying everything on the network, validating compliance of users and devices with pre-defined security policies, and enforcing network access policies – ensures network-wide security, while alleviating IT staff from having to perform many manual tasks. Automated logging of historical network activity provides a wealth of data for security management and reporting. The Network Sentry family automates functions including:

Network Monitoring	Ongoing monitoring of network activity, logging of events, collection of historical data
Identity / Classification	Identifying all users and classifying all devices attempting to access network resources
Alerts / Notification	SNMP traps, syslog messages, e-mail messages, dialog boxes and other automated notifications
Policy Enforcement	Dynamic policy actions, such as disabling or isolating a network port in response to prohibited activity
Remediation	Automated methods for fixing security vulnerabilities without requiring intervention by IT staff

## HARDWARE APPLIANCES

The Network Sentry Foundation is available via a number of hardware appliances, including the NS500, NS1200/8200, and NS2200/9200 appliances tailored to the network environment in which they will be deployed.

The NS500 is a single stand-alone appliance. The NS1200/8200 and NS2200/9200 appliances support higher capacities by splitting functionality between two paired appliances – an Application Server and a Control Server – allowing for increased performance and load sharing of hardware functions.

NS1200/8200 appliance pairs are available in both standard configurations and redundant configurations that include RAID 10 and hot-swappable dual power supplies.

The NS2200/9200 pairs include RAID 10 and hot-swappable dual power supplies as part of the standard offering for appliance-level redundancy. All appliances also support optional high-availability hot-failover configurations for environments requiring the highest levels of system uptime.

## APPLIANCE CAPACITIES

Appliance	Type	Target Environment	Capacity
NS500, NS500R	Standalone Appliance; Control/Application Server	Small Environments	Up to 1,000 concurrent connections on the network
NS1200 / NS8200, NS1200R / NS8200R	Standard Appliance Pair; Control Server and Application Server	Medium Environments	Up to 6,000 concurrent connections on the network
NS2200R / NS9200R	High-Performance Appliance Pair; Control Server and Application Server	Large Environments	Up to 12,000 concurrent connections on the network
NS550R	Management Appliance	Multi-site environments with multiple Network Sentry Foundation appliances	Unlimited

Note: Redundant versions are designated with "R" added to the platform name, and include RAID 10 and hot-swappable dual power supplies.

## TECHNICAL SPECIFICATIONS

### STANDARD APPLIANCES

		NS500	NS1200/8200	NS550
<b>SYSTEM</b>	CPU	CORE 2 DUO E8400 3.0 GHZ		
	Memory	4 GB DDR II SDRAM (4 x 1 GB)	ND-LX-A 4 GB DDR II SDRAM (4 x 1 GB)	8 GB DDR II SDRAM (4 x 2 GB)
			ND-LX-C 4 GB DDR II SDRAM (4 x 1 GB)	
	Memory bus clock	1333-MHz FSB		
	Hard disk	1x 160-GB Enterprise SATA drive		
	Network Interface	3 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45	3 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45	2 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45
			2 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45	
	Console Access	1x Fast UART 16550 serial port		
	Form factor	Rack-mountable 1 RU		
	Dimensions	16.8"Wx1.7"Hx22.6"D 426mmx43mmx574mm		
	Weight	26.5lbs (12.0kg)		
	Power supply	300 W AC Power Supply, auto switching 100-240VAC, 50-60Hz, 10A (115V) to 5 A (230V) maximum, 1120 BTUs/hr (for rated output power of 300W)		
	Cooling	3 x 3-pin counter-rotating cooling fans, front/back airflow		
Panel Display	Power, Hard drive activity, 2x Network activity, System Overheat			
<b>ENVIRONMENT</b>	Temperature Operating	10 to 35°C (50° to 95° F)		
	Temperature Non-Operating	-40 to 70°C (-40° to 158° F)		
	Relative Humidity Operating	8-90% non-condensing		
	Relative Humidity Non-Operating	5-95% non-condensing		
<b>CERTIFICATION</b>	Emissions	FCC Part 15, Subpart B, Class A, Canada ICES-003 (2004), Class A, Japan VCCI Class A, EN55022(1998)/CISPR 22(1997) Class A, EN55024 (1998), EN61000-3-2(2000) and EN61000-3-3(1995)+A1(2001)		
	Safety	UL 60950-1 1st Edition, 2006-07-07, CSA 22.2 No. 60950-1-03 1st Edition, 2003-11, IEC 60950-1:2001 1st Edition, EN 60950-1:2001 1st Edition		

## TECHNICAL SPECIFICATIONS

### REDUNDANT APPLIANCES

		NS500R	NS8200R	NS1200R/NS550R
<b>SYSTEM</b>	CPU	Dual-Core Intel® Xeon 3000 2.66 GHz		
	Memory	4 GB DDR II SDRAM (4 x 1 GB)		8 GB DDR II SDRAM (4 x 2 GB)
	Memory bus clock	1066-MHz FSB		
	Hard disk	4 x 160-GB Enterprise SATA drives, RAID 10		
	Network Interface	3 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45		2 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45
	Media	CD/DVD-ROM		
	Console Access	1x Fast UART 16550 serial port		
	Form factor	Rack-mountable 1 RU		
	Dimensions	17.2"Wx1.7"Hx25.6"D 437mm x 43mm x 650mm		
	Weight	40 lbs (18.1 kg)		
	Power supply	Two (2) 450W redundant, hot swappable AC power supplies, 1+1 redundancy w/ PFC, 100-240VAC, 50-60Hz, 8A (115V) to 4A (230V) maximum, 2192 BTUs/hr (for rated output power of 450W)		
	Cooling	Three (3) 40mm heavy-duty counter-rotating fans, front/back airflow		
	Panel Display	Power, Hard drive activity, 2x Network activity, System Overheat		
<b>ENVIRONMENT</b>	Temperature Operating	10 to 35°C (50° to 95° F)		
	Temperature Non-Operating	-40 to 70°C (-40° to 158° F)		
	Relative Humidity Operating	8-90% non-condensing		
	Relative Humidity Non-Operating	5-95% non-condensing		
<b>CERTIFICATION</b>	Emissions	FCC Part 15, Subpart B, Class A, Canada ICES-003 (2004), Class A, Japan VCCI Class A, EN55022(1998)/CISPR 22(1997) Class A, EN55024 (1998), EN61000-3-2(2000) and EN61000-3-3(1995)+A1(2001)		
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## TECHNICAL SPECIFICATIONS

### HIGH-PERFORMANCE APPLIANCES

		NS9200R	NS2200R
<b>SYSTEM</b>	CPU	2 x Dual-Core Xeon 5150 2.66 GHz	
	Memory	8 GB DDR II SDRAM (4 x 2 GB))	
	Memory bus clock	1333-MHz FSB	
		4 x 160-GB Enterprise SATA drives. RAID 10	
	Hard disk	2 x 10/100/1000 Ethernet, Auto-negotiation, RJ-45	
	Media	CD/DVD-ROM	
	Console Access	1x Fast UART 16550 serial port	
	Form factor	Rack-mountable 1 RU	
	Dimensions	17.2"Wx1.7"Hx25.6"D 437mm x 43mm x 650mm	
	Weight	41 lbs (18.6 kg)	
	Power supply	Two (2) 650W redundant, hot swappable AC power supplies, 1+1 redundancy w/ PFC, 100-240VAC, 50-60Hz, 10A (115V) to 5 A (230V) maximum 3186 BTUs/hr (for rated output power of 650W)	
	Cooling	Four (4) 40mm heavy-duty counter-rotating fans, front/back airflow	
	Panel Display	Power, Hard drive activity, 2x Network activity, System Overheat	
<b>ENVIRONMENT</b>	Temperature Operating	10 to 35°C (50° to 95° F)	
	Temperature Non-Operating	-40 to 70°C (-40° to 158° F)	
	Relative Humidity Operating	8-90% non-condensing	
	Relative Humidity Non-Operating	5-95% non-condensing	
<b>CERTIFICATION</b>	Emissions	FCC Part 15, Subpart B, Class A, Canada ICES-003 (2004), Class A, Japan VCCI Class A, EN55022(1998)/CISPR 22(1997) Class A, EN55024 (1998), EN61000-3-2(2000) and EN61000-3-3(1995)+A1(2001)	
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## A PROVEN LEADER IN SECURING TODAY'S HETEROGENEOUS NETWORKS

Bradford's powerful and innovative security solutions are based on years of expertise in network security. Since the company's founding in 1999, hundreds of customers and millions of users have come to rely on our technology to secure critical IT assets and automate IT security operations. With solutions that dynamically adapt to changing network conditions and continually combat network threats, Bradford addresses the security needs of a wide variety of organizations in markets including education, financial services, state and local government, healthcare, energy, retail and many others.

Bradford sells its solutions worldwide through a network of authorized Channel Partners. Our Certified Delivery Partners and Bradford's own highly-skilled Services and Support organization provide the information, tools, expertise and resources needed to ensure successful implementation and integration of Bradford solutions in your environment. 7x24x365 support capabilities and an extensive set of professional services are available to meet your organization's needs.

Bradford's innovative, award-winning products and solutions are widely recognized by industry analysts including Forrester and Gartner, as well as leading publications including SC Magazine, CRN, and others.

Learn more by visiting us at [www.bradfordnetworks.com](http://www.bradfordnetworks.com)



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