FIREEYE NETWORK SECURITY

NETWORK SECURITY THAT COMBATS WEB-BASED CYBER ATTACKS

NX 2400, NX 4420, NX 7420, NX 10000 (not pictured: NX 1400, NX 4400, NX 7400, NX 10550)

OVERVIEW

The FireEye® Network Security identifies and blocks zero-day exploits, droppers (binaries), and multi-protocol callbacks to help organizations scale their advanced threat defenses across a range of deployments, from the multi-gigabit headquarters down to remote, branch and home offices. FireEye Network Security with FireEye Intrusion Prevention System (IPS) technology further optimizes spend, substantially reduces false positives and enables compliance while driving security across known and unknown threats.

Cyber criminals use the Web as a primary threat vector to deliver zero-day exploits and malicious URLs contained in email and to exfiltrate data. Network Security is designed to stop drive-by downloads and blended Web and email attacks. In addition, Network Security offers a defense against infections that take place outside the network.

HIGHLIGHTS

- Detects advanced and zero-day attacks with a patented, signature-less MVX engine
- Prevents future attacks by applying machine learning, and retrospective and weak-signal analysis
- Identifies common and known attacks with traditional, signature-based IPS technology
- Fights blended attacks across web and email threat vectors
- Facilitates quick containment of advanced threats with actionable, contextual intelligence
- Improves operational effectiveness with a low, false-positive rate and alert categorization
- Configures for high availability and automatic failover ensuring continuous threat prevention and detection
- Protects entire organization by supporting mixed environments with Windows and OS X users
- Disrupts attacks in real time with in-line blocking at up to 4 Gbps throughput for up to 40,000 users
- Simplifies management with low-touch deployment and a high degree of automation

FireEye
SECURITY REIMAGINED

Real-time threat prevention blocks Web-based attacks

Network Security can be deployed in-line at Internet egress points to block Web exploits and outbound multi-protocol callbacks. Utilizing the FireEye Multi-vector Virtual Execution™ (MVX) engine, Network Security confirms zero-day attacks, creates real-time threat intelligence, and captures dynamic callback destinations. In monitor mode, it signals incident response mechanisms. In out-of-band prevention mode, Network Security issues TCP resets for out-of-band blocking of TCP, UDP or HTTP connections.

Fights blended attacks across Web and email threat vectors

The FireEye Platform protects against blended, advanced attacks that use Web, spear-phishing emails and zero-day exploits. With FireEye Network Security, Email Security and Central Management, customers get real-time protection against malicious URLs and the ability to connect the dots of a blended attack.

Protects against unknown, zero-day attacks

Network Security uses the signature-less MVX engine which executes suspicious binaries and Web objects against a range of browsers, plug-ins, applications and operating environments that track vulnerability exploitation, memory corruption and other malicious actions. As the attack plays out, the MVX engine captures callback channels, dynamically creates blocking rules and transmits this information back to Network Security.

YARA-based rules enable customization

With support for custom YARA rules, security analysts can specify which Web objects should be analyzed for threats.

Streamlined incident prioritization

With the FireEye Antivirus-Suite, each malicious object can be further analyzed to determine whether antivirus-generated alerts are reliable. This enables customers to more efficiently prioritize incident response.

Dynamic threat intelligence sharing

The resulting dynamically generated, real-time threat intelligence produced by Network Security helps all FireEye products protect the local network. This intelligence includes callback coordinates and communication characteristics which can be shared globally through the FireEye Dynamic Threat Intelligence™ cloud to notify all subscribers of new threats.

No rules tuning and near-zero false positives

Network Security is an easy-to-manage, clientless platform that deploys in under 60 minutes and requires absolutely no tuning. It offers flexible deployment modes including out-of-band via a TAP/SPAN, in-line monitoring or in-line active blocking.

Comprehensive and real-time protection

To maintain strong security and keep organizations running smoothly without interruption or lag, Network Security supports integration with the FireEye Active Fail Open (AFO) switch to ensure no link downtime. It also drives continued availability for in-line hardware deployments in the face of power or link failures. In addition, high availability provides redundancy and an automatic failover for deployments in either in-line active or monitoring (passive) mode. This ensures the continuity of threat prevention and detection if a hardware or software failure occurs.

IPS support

Network Security with IPS consolidates advanced threat prevention with traditional security to optimize spend. It automates alert validation, leveraging the power of MVX to reduce false alerts and illuminates attacks hidden within the noise to drive down operational expenditure and reduce the business exposure of missed incidents. Network Security complements the signature-less security provided by MVX with the signature based security of the traditional IPS technology to augment security and enable compliance.

TECHNICAL SPECIFICATIONS

	NX 900	NX 1400	NX 2400	NX 4400/4420	NX 7400/7420	NX 7500	NX 9450	NX 10000	NX 10450	NX10550
User Count	50	100	500	1,000 or 2,500	10,000	10,000	20,000	40,000	40,000	40,000
OS Support	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows Mac OS X	Microsoft Windows	Microsoft Windows	Microsoft Windows	Microsoft Windows Mac OS X
Performance *	Up to 10 Mbps	Up to 20 Mbps	Up to 50 Mbps	100 Mbps or 250 Mbps	Up to 1 Gbps	Up to 1 Gbps	Up to 2 Gbps	Up to 4 Gbps	Up to 4 Gbps	Up to 4Gbps
Network Monitoring Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	4x 10/100/1000 BASE- T Ports	4400: 4x 10/100/1000 BASE- T Ports 4420: 4x 1000 BASE-SX Fiber Optic Ports (LC Multimode)	7400: 4x 10/100/1000 BASE- T Ports 7420: 4x 1000 BASE-SX Fiber Optic Ports (LC Multimode)	4x 10/100/1000 BASE- T Ports	4x SFP+, 4xSFP ports, 1000baseSX (LC MMF), 1000baseLX (LC, SMF), 1000baseT (RJ45, UTP5)	2x 10GBASE - SR/SW 850nm Fixed interfaces: 10GbaseSX (LC MMF)	8 x SFP+ (4 x 1000base and 4 x 10Gbase), 1000baseSX/ 10GbaseSR (LC, MMF), 1000baseLX/ 10GbaseLR (LC SMF), 1000baseT (RJ45, UTP5), 10GbaseCu (5m direct-attached cable)	8 x SFP+ (4 x 1000base and 4 x 10Gbase), 1000baseSX/ 10GbaseSR (LC, MMF), 1000baseLX/ 10GbaseLR (LC, SMF), 1000baseT (RJ45, UTP5), 10GbaseCu (5m direct-attached cable)
High Availability (HA)	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Active-Passive HA	Not Available	Active-Passive HA	Active-Passive HA
Network Ports Mode of Operation	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW	In-line Monitor, or Tap/Span	In-line Monitor, Fail-Open, Fail-Close, or Tap/ Span, HW Bypass	In-line Monitor, or Tap/Span	In-line Monitor or Tap/Span
High Availability (HA) Ports (rear panel)	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	2x 100/1000/10G Base-T Ports	Not Available	2x 100/1000/10G Base-T Ports	2x 100/1000/10G Base-T Ports
Management Ports (rear panel)	2x 10/100/1000 BASE-T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 BASE- T Ports	2x 10/100/1000 Base-T Ports
IPMI Port (rear panel)	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Front LCD & Keypad	Not Available	Included	Included	Included	Included	Included	Included	Included	Included	Included
PS/2 Keyboard and Mouse, DB15 VGA Ports (rear panel)	Included	Included	Included	Included	Included	Included (no PS/2 Keyboard and Mouse)	Included	Included	Included	Included (no PS/2 Keyboard and Mouse)
USB Ports (rear panel)	2x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports	4x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports	2x Type A USB Ports
Serial Port (rear panel)	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 Bits, 1 Stop Bit	115,200 bps, No Parity, 8 bits, 1 Stop Bit
Drive Capacity	Single 500 GB HDD, Internal, fixed	Single 500 GB HDD, Internal, fixed	Single 500 GB HDD, Internal, fixed	2x 600 GB HDD, RAID 1, 2.5 inch, FRU	2x 600 GB HDD, RAID 1, 2.5 inch, FRU	4x 900 GB HDD, RAID 10, 2.5 inch, FRU	4x 900 GB HDD, RAID 10, 2.5 inch, FRU	2x 800 GB SSD, RAID 1, 2.5 inch, FRU	4x 800 GB SSD, RAID 10, 2.5 inch, FRU	4 x 960GB SSD, RAID 10, 2.5 inch, FRU

TECHNICAL SPECIFICATIONS

	NX 900	NX 1400	NX 2400	NX 4400/4420	NX 7400/7420	NX 7500	NX 9450	NX 10000	NX 10450	NX10550
Enclosure	1RU, Fits 19 inch Rack	1RU, Fits 19 inch Rack	1RU, Fits 19 inch Rack	1RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack	2RU, Fits 19 inch Rack
Chassis Dimension WxDxH	16.8" x 14" x 1.7" (427 x 356 x 43 mm)	17.2" x 24.1" x 1.70" (437 x 612 x 43.2mm)	17.2" x 24.1" x 1.70" (437 x 612 x 43.2 mm)	17.2" x 27.8" x 1.70" (437 x 706 x 43.2 mm)	17.2" x 28.0" x 3.41" (437 x 711 x 86.5 mm)	17.2" x 28" x 3.41" (437 x 711 x 86.6mm)	17.2" x 27.9" x 3.5" (437 x 709 x 89 mm)	17.2" x 27.9" x 3.5" (437 x 709 x 89 mm)	17.2" x 27.9" x 3.5" (437 x 709 x 89 mm)	17.2"x33.5"x3.5" (437 x 851 x 89 mm)
DC Power Supply	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
AC Power Supply	Non-redundant, non-FRU, internal 200 watt, 100 - 240 VAC 3 – 1.5A, 50-60 Hz EC60320-C14 Inlet	Non-redundant, non-FRU, internal 500 watt, 100 - 240 VAC 5 – 2.5A, 50-60 Hz IEC60320-C14 inlet	Non-redundant, non-FRU, internal 500 watt, 100 - 240 VAC 5 – 2.5A, 50-60 Hz IEC60320-C14 inlet	Redundant (1+1) 750 watt, 100 - 240 VAC 9 – 4.5A, 50-60 Hz IEC60320-C14 inlet, FRU	Redundant (1+1) 750 watt, 100 - 240 VAC 9 – 4.5A, 50-60 Hz IEC60320-C14 inlet, FRU	Redundant (1+1) 750 watt, 100 - 240 VAC 9 – 4.5A, 50-60 Hz IEC60320-C14 inlet, FRU	Redundant (1+1) 1200 watt, 100-140 VAC, 14.7 - 10.5 A 1400 watt, 180-240 VAC, 9.5 - 7.2 A, 50-60 Hz, FRU IEC60320-C14 inlet, FRU	Redundant (1+1) 1200 watt, 100-140 VAC, 14.7 - 10.5 A 1400 watt, 180-240 VAC, 9.5 - 7.2 A, 50-60 Hz, FRU IEC60320-C14 inlet, FRU	Redundant (1+1) 1200 watt, 100-140 VAC, 14.7 - 10.5 A 1400 watt, 180-240 VAC, 9.5 - 7.2 A, 50-60 Hz, FRU IEC60320-C14 inlet, FRU	Redundant (1+1) 800W: 100-127V, 9.8A-7A 1000W: 220-240V, 7-5A, 50-60Hz, FRU IEC60320-C14 inlet, FRU
Power Consumption Maximum (watts)	136 watts	208 watts	210 watts	305 watts	501 watts	479 watts	550 watts	962 watts	850 watts	760 watts
Thermal Dissipation Maximum (BTU/h)	464 BTU/h	710 BTU/h	717 BTU/h	1041 BTU/h	1709 BTU/h	1634 BTU/h	1881 BTU/h	3282 BTU/h	2908 BTU/h	2594 BTU/h
MTBF (h)	94,700 h	67,500 h	55,200 h	37,000 h	58,900 h	58,900 h	52,469 h	50,200 h	40,275 h	36,101 h
Appliance Alone / As Shipped Weight lb. (kg)	11 lb. (5 kg) / 20 lb. (9 kg)	24 lb. (11 kg) / 39 lb. (18 kg)	24 lb. (11 kg) / 39 lb. (18 kg)	31 lb. (14 kg) / 46 lb. (21 kg)	42 lb. (19 kg) / 58 lb. (26 kg)	43 lb. (19.5 kg) / 59 lb. (27kg)	51 lb. (23 kg) / 66 lb. (30 kg)	51 lb. (23 kg) / 66 lb. (30 kg)	51 lb. (23 kg) / 66 lb. (30 kg)	46 lb (21 kg) / 90 lb (40.2 kg)
Regulatory Compliance Safety	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950 EN 60950 CSA 60950-00 CE Marking	IEC 60950-1 EN 60950-1 CSA 60950-1 CE Marking	IEC 60950-1 EN 60950-1 CSA 60950-1 CE Marking	IEC 60950-1 EN 60950-1 CSA 60950-1 CE Marking	UL 60950-1, CAN/CSA C22.2 No. 60950-1-07, IEC 60950- 1:2005+ A1:2009+A2:2013, AS/NSZ 60950.1-2011
Regulatory Compliance EMC	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI(Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI(Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI (Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI (Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI (Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI (Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI(Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI(Class A)	FCC (Part 15 Class-A), CE (Class-A), CNS, AS/NZS, VCCI(Class A)	FCC Part 15 SubPart B Class A, ICES-003 Class A, EN55022 Class A, VCCI V-3 Class A,EN 55024, EN 61000-3-2 Class A, EN 61000-3-3, CNS 13438 (2006) Class A, CISPR22 Class A, AS/NZS CISPR 22 Class A

TECHNICAL SPECIFICATIONS										
	NX 900	NX 1400	NX 2400	NX 4400/4420	NX 7400/7420	NX 7500	NX 9450	NX 10000	NX 10450	NX10550
Security Certifications	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	CC NDPP v1.1	UL 60950-1, CAN/CSA C22.2 No. 60950-1-07, IEC6060950-1:2005 +A1:2009+ A2:2013, AS/NSZ 60950.1-2011
Environmental Compliance	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE	RoHS, REACH, WEEE
Operating Temperature	10°C to 35°C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin	10° C to 35° C Tested from 0°C to 40°C for additional margin
Non-Operating Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
Operating Relative Humidity	8% - 90% (non-condensing)	8% - 90% (non-condensing)	8% - 90% (non-condensing)	8% - 90% (non-condensing)	8% - 90% (non-condensing)	8% - 90% (non-condensing)	10% - 85% (non-condensing)	10% - 85% (non-condensing)	10% - 85% (non-condensing)	10% - 85% (non-condensing)
Non-Operating Relative Humidity	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)	5% - 95% (non-condensing)
Operating Altitude	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft	5,000 ft

Note: All performance values vary depending on the system configuration and traffic profile being processed.

IPS TECHNICAL SPECIFICATIONS

	NX 900	NX 1400	NX 2400	NX 4400/4420	NX 7400/7420	NX 7500	NX 9450	NX 10000	NX 10450	NX 10550
IPS Performance	10 Mbps	20 Mbps	50 Mbps	100 Mbps or 250 Mbps	1 Gbps	1 Gbps	2 Gbps	4 Gbps	4 Gbps	4 Gbps
Concurrent Connections	4K	7.5K	15K	80K	500K	500K	1M	2M	2M	2M
New Connections Per Second	200/Sec	375/Sec	750/Sec	4K/Sec	10K/Sec	10K/Sec	20K/Sec	40K/Sec	40K/Sec	40K/Sec
Packets Per Second	600/Sec	1200/Sec	4K/Sec	20K/Sec	90K/Sec	90K/Sec	105K/Sec	120K/Sec	120K/Sec	360K/Sec

ACTIVE FAIL OPEN SWITCH TECHNICAL SPECIFICATIONS

	AFO 1G SWITCH	AFO 10G SWITCH
Dimensions (WxDxH)	8.75" x 11.0" x 1.35" (22.2 x 27.9 x 3.4 cm)	6.5" x 14.0" x 1.125" (16.5 x 35.6 x 2.8 cm)
Management Ports	(1) DB9 Serial Console, (1) RJ45 Cat5e Port (10/100)	(1) DB9 Serial Console, (1) RJ45 Cat5e Port (10/100)
Network Ports	(2) RJ45 Cat5e Ports (10/100/1000)	(1) Quad LC Connector
Monitoring Ports	(2) RJ45 Cat5e Ports (10/100/1000)	(2) XFP Ports
AC Power Input	100 ~ 240 VAC, 0.5 A, 47-63 Hz	100 ~ 240 VAC, 1.0 A, 47-63 Hz
Operating Temp	0° C to 40° C	0° C to 40° C

Note: All performance values vary depending on the system configuration and traffic profile being processed.

For more information on FireEye, visit:
www.FireEye.com

FireEye, Inc.
1440 McCarthy Blvd. Milpitas, CA 95035
408.321.6300 / 877.FIREEYE (347.3393) / info@FireEye.com

www.FireEye.com

FireEye