Nokia for Business

Nokia Intrusion Prevention and IP-series updates

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Agenda

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- Nokia IPSO operating system
- Nokia IP Platforms
- SourceFire in Nokia appliances
- Nokia Support offering

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Nokia IPSO

IPSO 4.0

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- New Features:
  - New look and feel of Network Voyager
  - Role-based management (Role-Based Access Control)
  - IP Clustering for IP2250
  - BGP 4+ (BGP For IPv6)
  - SNMP v3 USM Improvements
  - Route maps
- New Interface Card: 10GigE
- Support Check Point VPN-1 NGX R60
- Platform Support
  - IP120/130, IP260/265, IP330, IP350/355/380/385, IP530, IP650, IP710/740, IP1220/1260, IP2250
- Upgrade Path: IPSO 3.5, ..., IPSO 3.9

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IPSO 4.0: Network Voyager Layout

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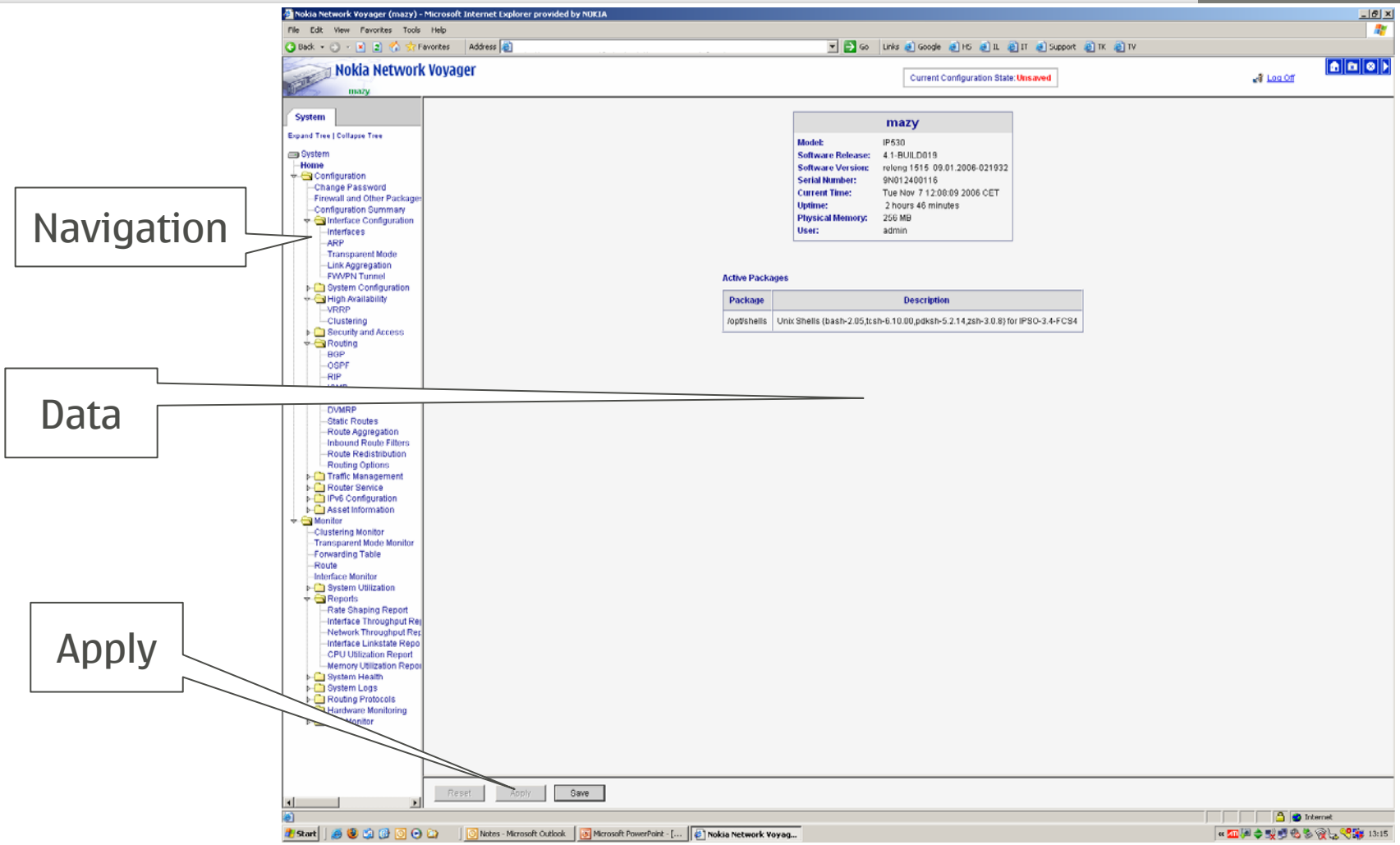

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IPSO 4.0: Network Voyager Config Example

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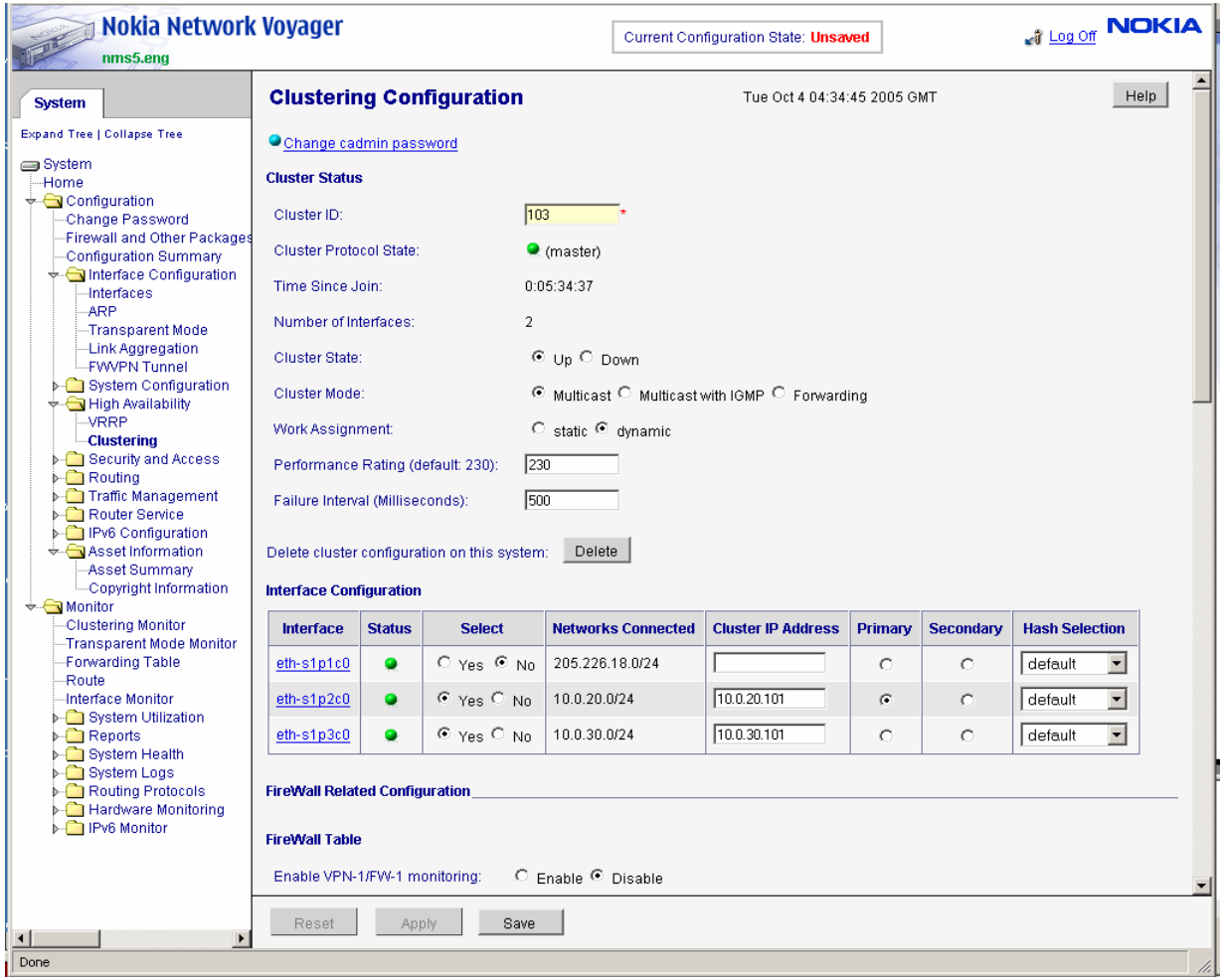

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IPSO 4.0: Network Voyager Monitor Example

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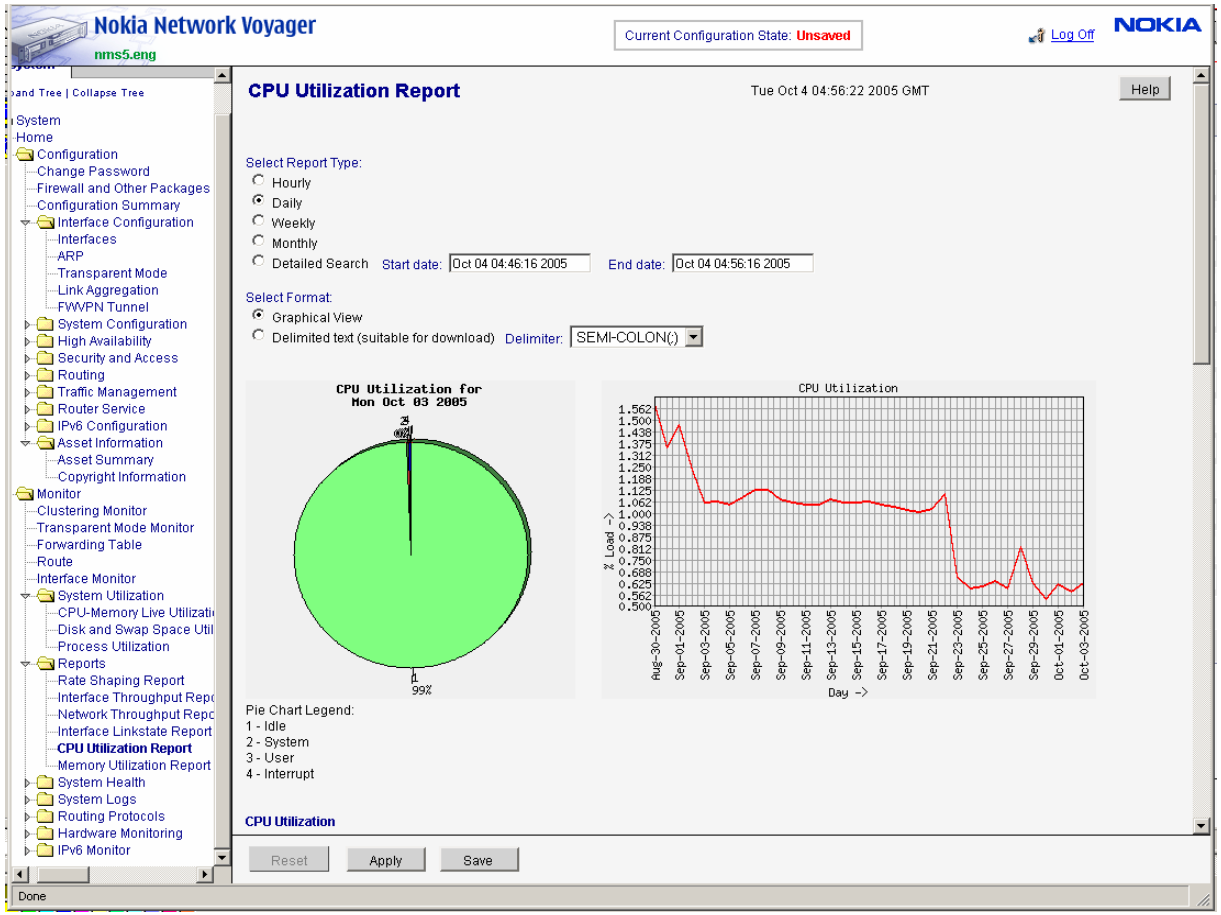

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IPSO 4.0: Network Voyager Cluster configuration

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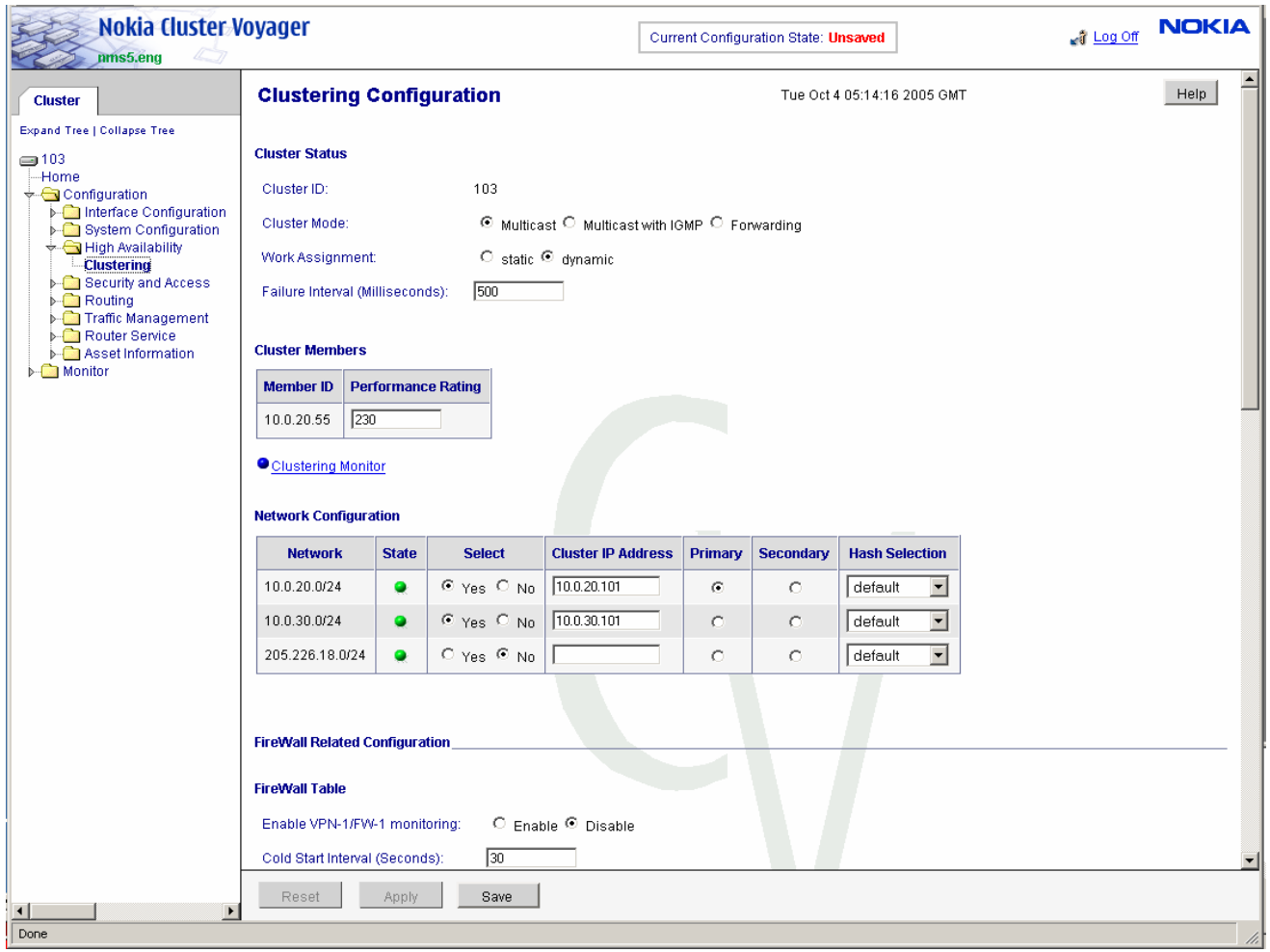

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IPSO 4.0.1

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- Support for IP560 Network Security Platform
- Support for 10 Gigabit Ethernet NIC
- IP Clustering Support for IP2250
- Improved Network Voyager User Interface
- Role-Based Administration
- SNMP v3 User Enhancements
- OSPF Not-So-Stubby-Areas (NSSA)
- BGP-4++ for IPv6
- Route Maps
- Support for Longer User Names
- Enhanced Downgrade for Flash-Based Systems

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IPSO 4.1 contains the following new features and enhancements

- Support for New Platforms
- Enhancements for Time Configuration
- Enhanced Link Detection for Fiber Connections
- Enhancement for Link Aggregation
- Enhancements for Transparent Mode
- IP Cluster Support for BOOTP/DHCP Relay
- Support for Nonlocal Users
- SSH v1 and Telnet Disabled by Default

New Nokia IP-Platforms

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Nokia Integrated Security Platforms

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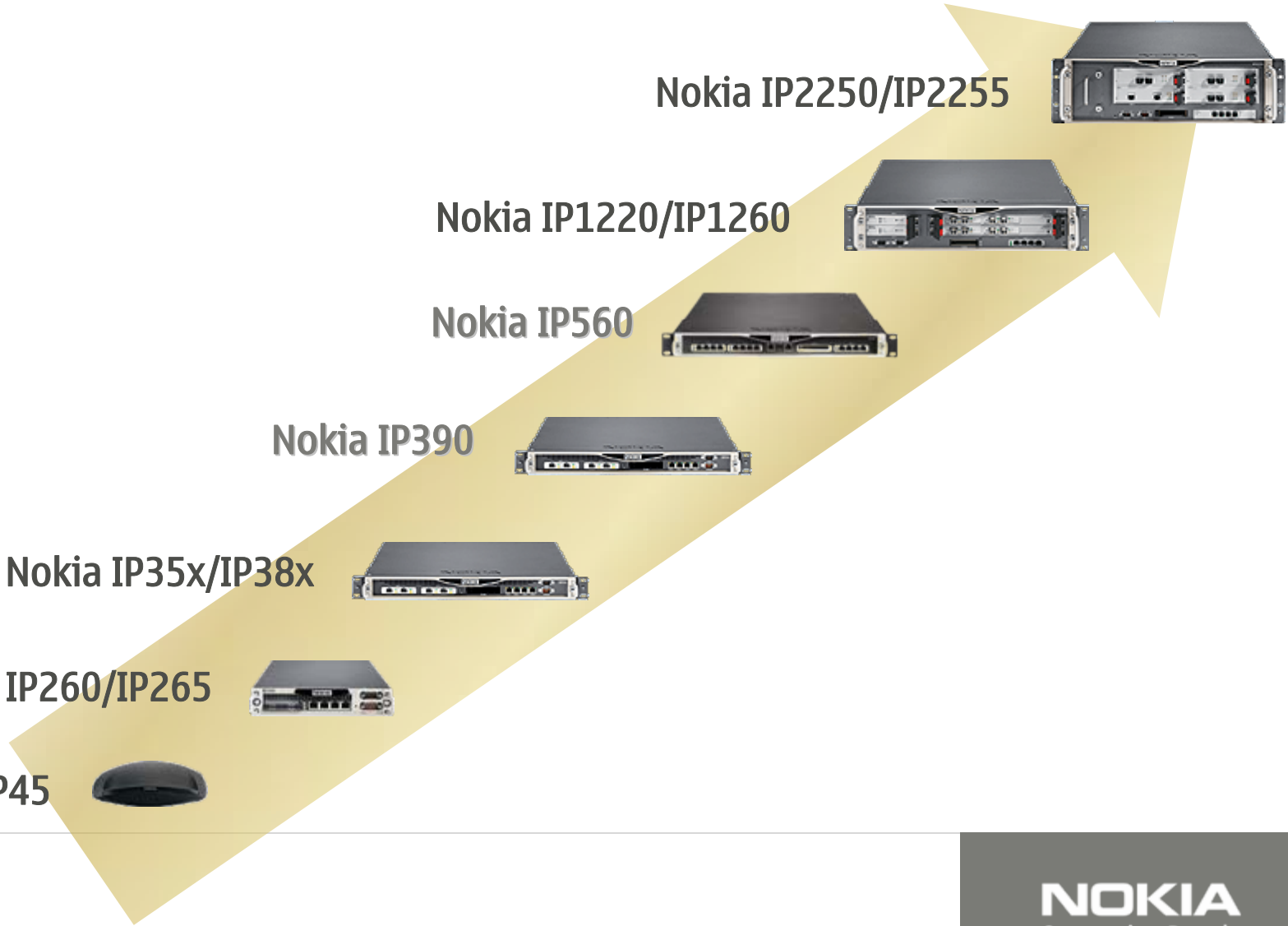

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Nokia IP45/AV software features

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- New Vstream Anti-Virus - Antivirus Configuration (Signatures), Policy (Rule Base)
- Advanced Antivirus Settings (File Types, Archive File Handling and Corrupt Files)
- 802.1x port-based security
- Integrated L2TP VPN Server
- Enhanced Syn-Defender Configuration
- Smart Defense Policy Wizard
- New Administrative Role: Users Manager
- High Availability - WAN Virtual IP
- Backup DHCP Relay
- New Internet Connection Wizard
- New Security Level - Block All
- Enhancements in wireless HotSpots

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Nokia IP390

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Two front facing PCI-X PMC expansion slots

Two integrated RJ-45 communication ports

Two integrated Type II PCMCIA Slots

Four integrated 1000 BASE-T Ethernet interfaces

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Nokia IP390

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- Pricing
  - Nokia IP390 - $6,995
  - **Nokia IP390"G": IP390 + two 2-port 1000 BASE-T cards - $10,995**
- RoHS compliant / lead-free manufacturing
- Four integrated 10/100/1000 BASE-T Ethernet interfaces
- Integrated Type II PCMCIA slots
- 1 GB RAM, expandable to 2 GB
- 1GB Solid-state compact flash
- 40 Gig hard disk drive
- Two external facing PCI-X PMC card slots
- Supported network interface cards
  - Four-port 10/100 BASE-TX Ethernet
  - Two-port 1000 BASE-SX Fiber Ethernet
  - Two-port 10/100/1000 BASE-T Ethernet
- Two RJ-45 Communication Ports

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Nokia IP390

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- Software requirements
  - Nokia IPSO 4.1
  - Check Point R55P, NGX R60, NGX R61
- Performance highlights
  - 3 Gbps large packet firewall (1518-byte UDP)
  - 300 Mbps small packet firewall (64-byte UDP)
  - 5,600 HTTP transactions per second
  - 3,000 TCP connections per second
  - 500 Mbps large packet encrypted VPN (1450-byte UDP)
- Keep in mind
  - Nokia IP390 does NOT support WAN cards
  - Nokia IP390 does NOT support non-RoHS interface cards
  - Nokia IP390 interface cards are not hot-swappable
  - Check Point management cannot be run on Nokia IP390 Flash version

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Nokia IP560

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Nokia IP560

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- Up to 2GB RAM
- Solid-state slot (Compact Flash)
- Up to two hard disk drives
- Disk mirroring
- Four external facing PCI-X PMC card slots
  - One pre-populated with four-port 10/100/1000 Mbps Ethernet
  - Supported network interface cards
    - Four-port 10/100 Mbps Ethernet
    - Four-port 10/100/1000 Mbps Ethernet
    - Two-port 1000 Mbps Fiber Ethernet
    - Two-port 10/100/1000 Mbps Ethernet
- Single Internal PCI-X PMC Card Slots
  - Bundled VPN accelerator card

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Nokia IP560

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- Software requirements
  - Nokia IPSO 4.0.1
  - Check Point R60 NGX, R55P under Selective Availability program
- Pricing
  - **Nokia IP560 - $16,495**
  - 4 port 10/100 card - $1,500
  - 2 port GigE (copper and fiber) card - $4,500
  - 4 port GigE card - $6,000
- Performance highlights
  - 6.0 Gbps large packet firewall (1518-byte UDP)
  - 440 Mbps small packet firewall (64-byte UDP)
  - 8,900 HTTP transactions per second
  - 58,000 TCP connections per second
  - 1,500 Mbps Nokia traffic mix
- Keep in mind
  - Nokia IP560 does NOT support WAN cards
  - Nokia IP560 does NOT support non-RoHS interface cards
  - Nokia IP560 interface cards are not hot-swappable
  - Check Point management cannot be run on Nokia IP560 Flash only version

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Nokia Intrusion Prevention

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Nokia Intrusion Prevention with Sourcefire

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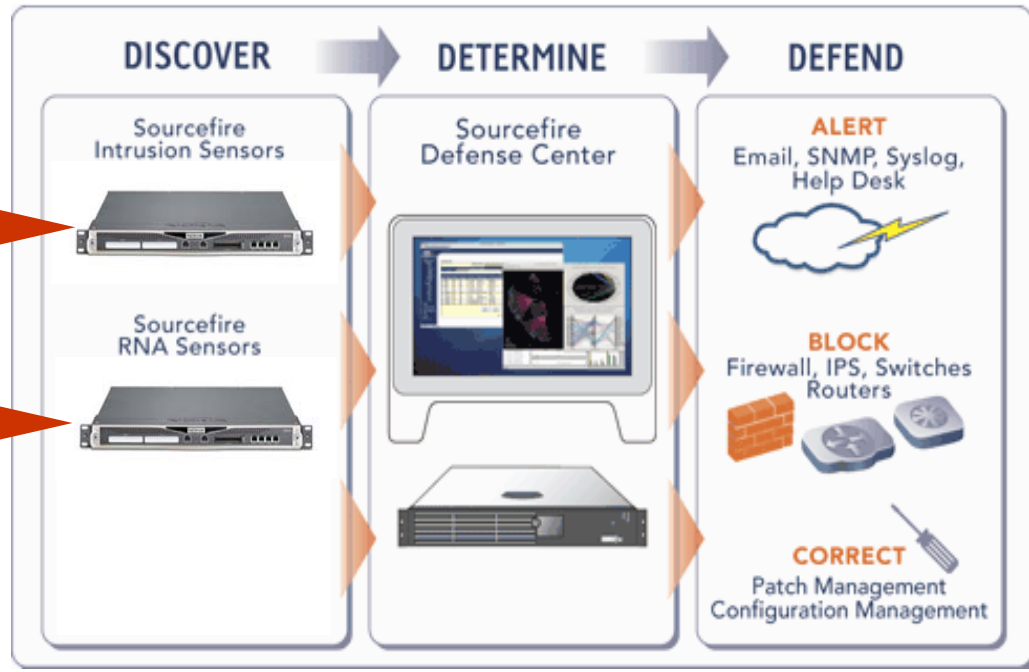
Sourcefire 3D System

- Sourcefire Intrusion Sensor for Nokia IP390
- Sourcefire RNA Sensor for Nokia IP390
- Sourcefire Defense Center for Nokia



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Nokia IP390 Appliance for IS and RNA

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- 1 RU system and with single AC power
  - Same exact system as IP390
- Base Configuration
  - Built in 4 port 10/100/1000Base-TX and PCMCIA Slots
  - 2 empty PMC slot (uses current I/F modules common to IP390 & IP560)
    - ***NEW*** 'fail-open' 2 port 10/100/1000BaseTX and 1000Base-SX for 'inline' IPS' deployment
  - Console (RJ45) and AUX (RJ45)
  - HDD version only (64 Mb Flash + 1 Gig DRAM + 40 Gig HDD)
- Software:
  - IPSO – LX + SF application

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Nokia IP390 Applications

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- Sourcefire Intursion Sensor
  - SNORT® based detection Engine
  - In-line or Passive Monitoring
  - Pre-loaded on appliance

- Sourcefire RNA Sensor
  - Real-Time Network Awareness
  - Asset Monitoring
  - Enhanced Awareness
  - Pre-loaded on appliance

- Both Intrusion Sensor and RNA Sensor can run at the same time on a single appliance

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IP390 Sensors

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- IP390 Sensors can have up to 2 Detection Engines (DE)
- Each Detection Engine can be used for the following
  - In-line prevention – on a single port pair
  - Passive monitoring for Detection – for any number of ports
  - Passive monitoring for RNA – for any number of ports
- IP390 Interface card options
  - 4 on-board ports, dual-port fail open Gigabit and dual-port passive Gigabit

- The deployment options with various ports
  - With Fail-Open cards:

    1 port-pair In-Line (1-DE), 2 port-pairs In-Line (2-DEs) and 1 port-pair In-Line & rest of the ports (up to 5) can be monitored by IDS or RNA mode (2-DEs)
  - With non fail open cards:
    1-7 ports monitored by IDS (1-DE), 1-7 ports monitored by RNA (1-DE), and

    x of 7 monitored by RNA AND x of 7 monitored by IDS (2-DEs) or

    All 7 could be monitored by RNA and IDS at the same time (2 DEs)

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Bringing it all together

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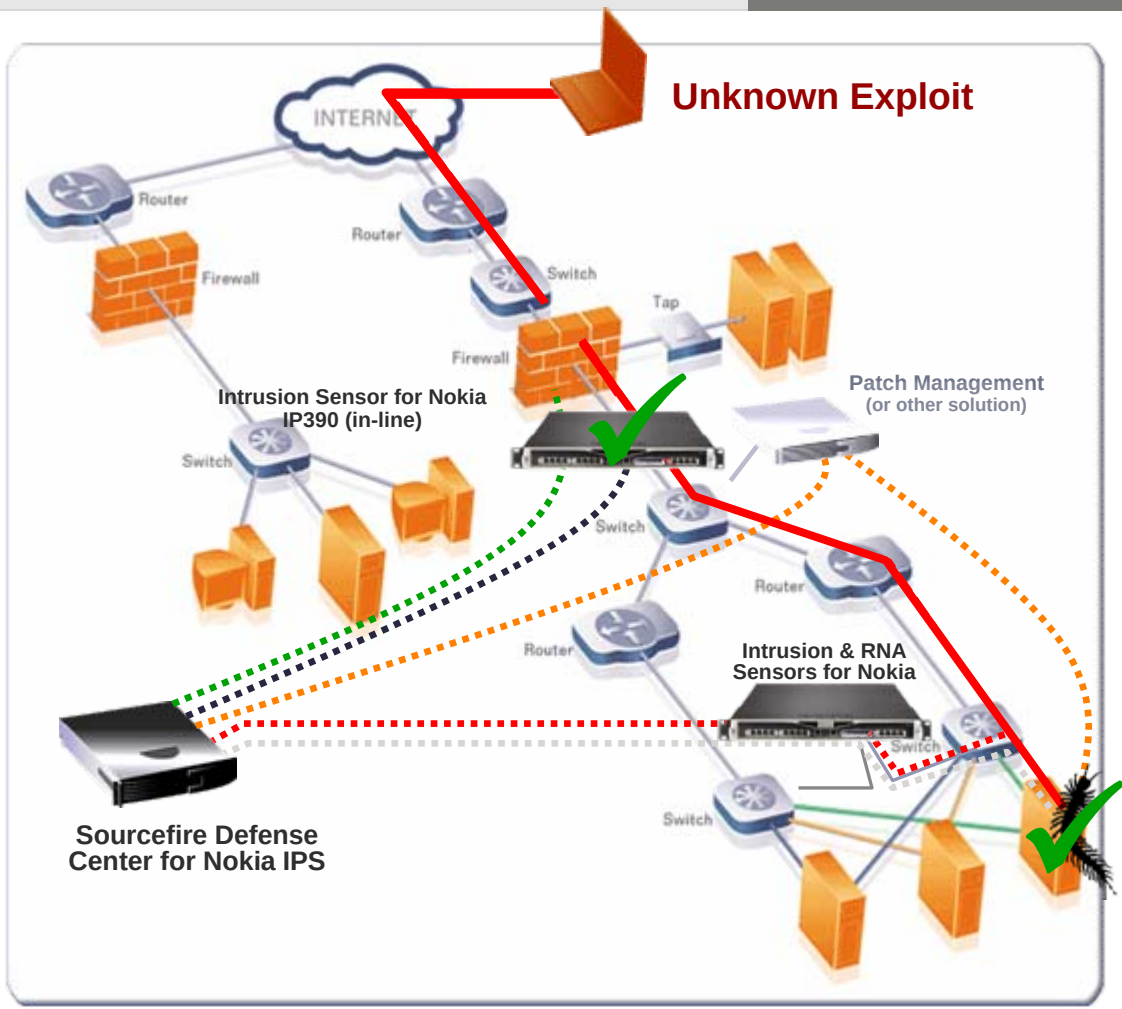
1. Reconnaissance activity detected by passive Intrusion Sensor, events associated with the target assigned higher priority.

2. RNA detects change in the behavior and/or composition of the compromised asset.

3. Correlated events trigger remediation policy:
   - Isolate compromised server
   - Block attacker at firewall
   - Direct configuration mgmt.
   - Notify system administrator

4. In-line Intrusion Sensor policy updated to prevent reoccurrence.



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News on ES Services

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News on Services offering

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- We still sell Essential and Access Service
  - Well established and known procedures
  - This scheme normally applies to all even new service offerings as the model is well understood by the whole channel
- What is going to change in very near future is the **response times**
  - This is also to align with IntelliSync service offerings
  - 12x5 response time to be established instead of 8x5
    - Next Business Day Advance Replacement definitions remain the same (8x5xNBD)
  - 24x7 remains as it is
- **Onsite** (Essential or Access Plus offerings) coverage keeps changing, new areas are being established, check always the latest offerings from support.nokia.com at QuoteService – View Service Availability
- **Access and Access Plus** Services are also available, especially for big end customers that have good technical expertise and want direct access Nokia technical support personnel

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Enterprise Support - Nokia Access

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Nokia Access

Business Model:

- Sold through the channel
- Support provided directly by Nokia

Channel Benefits:

- Low cost - no additional resource requirement for channel
- Complete leverage of Nokia expertise of solution

PLAN FEATURES	Nokia Access 5x12	Nokia Access 7x24
Audience	ENTERPRISE	ENTERPRISE
Plan Type	Extended Business Day (5x12)	7x24
Plan Term	1 Year	1 Year
Annual Min. Support Fee	$1000	$1000
Access to Technical Assistance Centers	✓	✓
Named Contacts	2	4
Response Times	<2 hours	<2 hours
Software Updates	✓	✓
Access to Support Web and Electronic Support	✓	✓
Multi-Vendor Coordination	✓	✓
Migration/Upgrade Support	✓	✓
PLAN OPTIONS		
Onsite Installation Services	Optional	Optional
Technical Account Management	Optional	Optional
Additional Named Contacts	Optional	Optional
Pre-scheduled On-site Support	Optional	Optional
On Site Technical Training	Optional	Optional

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IT Channel Support –Nokia Essential

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Nokia Essential

Business Model:

- Sold and delivered by Channel
- Nokia provides backline support to channel

Channel Benefits:

- Channel has full power and maximum customer intimacy
- Complete leverage of Nokia expertise of solution

PLAN FEATURES	ESSENTIAL 7x24
Audience	CHANNEL PARTNER
Plan Type	7x24
Plan Term	1 Year
Annual Min. Support Fee	$1000
Access to Technical Assistance Centers	✓
Named Contacts	2
Response Times	<2 hours
Software Updates	✓
Access to Support Web and Electronic Support	✓
Multi-Vendor Coordination	✓
Migration/Upgrade Support	✓
PLAN OPTIONS	
Onsite Installation Services	Optional
Technical Account Management	Optional
Additional Named Contacts	Optional
Pre-scheduled On-site Support	Optional
On Site Technical Training	Optional

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With or without Services?

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- ***With Support, ES provides:***
  - Next business day HW replacement
    - Minimized downtime for best customer satisfaction
    - Optional onsite support available
  - SW updates and knowledge base web
    - Keep your SW up-to-date and secure
    - Get all product knowledge you need
  - 24x7 technical support
    - Technical Assistance Centers you can count on

- ***Without Support:***
  - 12 months limited HW warranty (30 day turnaround)
  - No SW updates / upgrades
  - No knowledge base access
  - No technical backup support from Nokia ES
  - ***IMPLICATIONS:***
  - No fast HW replacements
  - System SW not maintained
  - No technical support from TAC

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Our Support Strengths

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- **Global** footprint
  - Expert resources strategically located
- **TAC 7x24** availability
  - Deep technical expertise on Device, Security & Mobility apps
  - Annually certified through SCP
- **Single Point of Contact**
  - First Call – Final Resolution
  - Collaborative support
- **Nokia Support Web**
  - Online Ask Nokia - Knowledge Base
  - Documentation & Self help
  - QuoteService
- Expansive labs to **replicate and troubleshoot** customer issues

A strong market differentiator….

Issues	Crossbeam Problem	Result	Nokia Solution
Single-source support	• Crossbeam commitment to and ability to support its application partners is questionable • Multiple customers have indicated application support is a problem	• Slow time-to-resolution slows when customer needs it the most • Must purchase both Crossbeam & application vendor support increasing overall support costs	Nokia First Call – Final Resolution support offerings includes support for Check Point VPN-1 Pro.
Replicating/ troubleshooting customer issues	Customers have indicated Crossbeam does not have the ability to replicate a customer issue at its TAC centers	• Slow time-to-resolution • Customer must expend extra resources to document issues	Nokia Product Line Support specialists have the resources necessary to reproduce customer environments and issues
Comprehensive knowledge base	Customers have indicated that Crossbeam's knowledgebase is "non-existent"	Inhibits the customers ability to troubleshoot problems	Nokia maintains a complete knowledgebase, often regarded as superior to Check Point's
Language skills	• Customers have indicated that Crossbeam's thin TAC resources – especially in EMEA – can run into language skills issues, even for English • This is symptomatic of overall thin support resources	• Slows time-to-resolution • Problems with English in EMEA may impact U.S. 7x24 support offerings	Nokia TAC centers are able to provide support all over the world 7x24* ** Nokia leverages channels in several countries for local language Level 1 and Level2 support*

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