Nokia for Business

Nokia IP Security Solutions

Nokia IPSO™

Nokia IPSO™, a UNIX-based operating system designed to protect business networks, ensures valuable business information is delivered securely and reliably.

Designed with security in mind, Nokia IPSO features security hardening, advanced routing, high availability (HA) and core clustering capabilities. The latest versions of Nokia IPSO and Check Point™ SecureXL 2.1 deliver a significant increase in firewall connections per second and VPN performance on currently shipping, and many previous Nokia IP Security Platforms. To ensure reliability, Nokia IPSO has features such as hard disk mirroring, redundant and hot swap components for select Nokia IP Security Platforms.

Nokia IPSO also has tools for administrators to manage Nokia IP Security Solutions through a choice of the Web-based Nokia Network Voyager interface or comprehensive Command Line Interface (CLI). Either interface provides the same configuration and monitoring features in different forms: Nokia Network Voyager—SSL-secured browser GUI, or the CLI—SSH-secured, non-modal command-line interface. Each of these interfaces enables complete configuration of Nokia IPSO devices in all their details and variations, and are robust interfaces for complete single device management.

Nokia IPSO based security platforms deliver excellent router capabilities and support a wide array of routing protocols. The customer can deploy a Nokia IP Security Platform as a firewall utilizing the router capabilities of Nokia IPSO, saving them both time and money.

Other Nokia IPSO capabilities are provided through SNMP for support of third-party monitoring systems. This includes an SNMP agent for SNMP v1, v2c, and v3 (USM) protocol versions that provide comprehensive interoperability with cutting-edge network management systems (NMS) for secure, centralized and highly scalable monitoring. Additional support for MIB-II for SNMP v1/v2c/v3 as well as a Host Resources MIB, VRRP MIB, Nokia IPSO System MIB, the Check Point MIB and several other standard MIBs are available. These MIBs allow intuitive and standards-based support for monitoring device utilization, HA, interoperation of devices and Check Point FireWall-1® utilization as well as traffic load monitoring.

Nokia Network Voyager, with its CLI, is a comprehensive and secure "Application Operating Environment" for software management on Nokia IP Security Platforms. This includes Nokia IPSO version inventory, up or downgrading to other Nokia IPSO versions, application version inventory and installation, upgrading or enabling, as well as disabling and deletion capabilities for unused applications. Nokia IPSO, through Nokia Network Voyager and the CLI can also display a summary of an entire set of configuration data in use, and supports commands to back-up configuration data in use to a file via both interactive and scheduled operations. Additionally, Nokia Network Voyager and the CLI provide both real-time and historical monitoring of many single device system statistics with the ability to deliver user-configurable e-mail notifications in the case of system faults. Nokia Horizon Manager also runs with Nokia IPSO, and enables management of multiple Nokia IPSO devices running different security applications.

Best of all, security, performance and reliability are backed by world-class Nokia First Call—Final Resolution global support and service.

NOKIA
CONNECTING PEOPLE

Nokia IPSO At a Glance

Internet Protocols

- IP (RFC791)
- ICMP
- ARP
- ICMP Router Discovery (Server)
- CIDR
- Static Routes
- RIP
- RIP Version 2 (With authentication)
- OSPF
- DVMRP (multicast)
- IGMP (multicast)
- PIM-DM (multicast)
- PIM-SM
- Multicast Tunnels
- IGRP (optional)
- BGP4 (optional)
- IPv6 core RFCs
- Requirements for IPv4 Routers
- Differentiated Services (EF)
- Bootp/DHCP Relay
- Route Aggregation
- Route Redistribution
- Unnumbered Interfaces
- VLAN
- IPSec
- PPP Point to Point Protocol
- GRE Generic Routing Encapsulation

WAN Support

- PPP
- Frame Relay
- HDLC
- T1/E1 (not available on all platforms)
- V.35/X.21 (not available on all platforms)
- ATM (not available on all platforms)
- ISDN (not available on all platforms)
- HSSI (not available on all platforms)

LAN Support

- 10/100 Mbps Ethernet
- Multi-mode fiber Gigabit Ethernet
- Multi-mode copper Gigabit Ethernet

Management

- SNMPv1
- SNMPv2c
- SNMPv3
- Telnet Server
- FTP
- SSHv2 Server
- HTTP
- SSL/TLS
- Command Line Utilities
- Supported in Nokia Horizon Manager

High Availability

- VRRP
- Check Point VPN-1/FireWall-1 State Sync
- IP Clustering
  (not available on all platforms)
- Disk mirroring
  (RAID 1 – only certain systems)

Security

- Secure Administrative Access
- Read/Write and Read-Only Access Modes
- SSH Server
- SSL/TLS (secure HTTP)
- S/Key (one-time password)
- Access Control Lists
- Traffic Management
- MD5 Routing Authentication (RIPv2)
- Centralized Authentication
- Native IPSec (for non-firewall applications)
- DNS Client
- NTP Client and Server
- RADIUS Client
- TACACS+ Client

Nokia IP Platforms At a GLANCE . . .
All supported by Nokia Horizon Manager

Nokia IP130
- Desktop system with 3 integrated 10/100 ports with great firewall & VPN performance

Small to mid enterprise system

Nokia IP350
- 4 integrated 10/100 Ethernet ports, 2 option slots for dual-port Ethernet or serial WAN cards
- Expandable, versatile, flexible and scalable
- Serviceable 1 RU system

Small mid enterprise system with SP serviceability

Nokia IP380
- 4 integrated Ethernet ports, 2 option slots for dual-port Ethernet or serial WAN cards
- Serviceable 1 RU system
- High speed, small packet performance
- Expandable, versatile, flexible and scalable

Mid enterprise 1.3Gbps FW class system

Nokia IP530
- High performance enterprise class system
- Flexible, scalable
- 2 RU system
- High port density – 4 integrated 10/100, 3 CPCI slots, GigE and 2 type II PCMCIA slots

Mid to large enterprise class system

Nokia IP710
- 3 RU system with redundant options
- Serviceable – hot-swap cards, fans, power
- High port density – 4 integrated 10/100, 4 CPCI slots, GigE and 2 type II PCMCIA slots

Large Enterprise and Service Provider class system

Nokia IP740
- 3 RU redundant and VPN ready system
- Serviceable – hot-swap cards, fans, power
- High port density – 4 integrated 10/100 Ethernet ports, 4 CPCI slots and 2 type II PCMCIA slots, GigE performance

Large Enterprise and Service Provider class system

Nokia IP1220
- 2+ Gig FW and near Gig VPN performance
- Options: dual power, fans, HDD VPN card
- Hot-swappable interface cards and fans, 4 integrated 10/100,4 CPCI and 2 type II PCMCIA
- 2 RU large business, data center, SP HA system

Large enterprise, Service Provider class system

Nokia IP1260
- 4+ Gig FW and near Gig VPN performance
- Dual power, fans, HDD & VPN card included
- Hot-swappable interface cards and fans
- 4 integrated 10/100,4 CPCI and 2 type II PCMCIA slots
- 2 RU large business, data center, SP HA system

Data Center, Service Provider class system

Nokia IP2250
- 7.5 Gig FW and near 2 Gig VPN performance
- Dual power, fans, diskless system
- Hot-swappable interface cards, fans & power
- Very high port density, 4 integrated 10/100, 4 CPCI and 2 type II PCMCIA slots

Highest Performance Data Center, Service Provider system

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