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1. Executive Summary

What's offered?

Check Point has released a version of their firewall application, FireWall-1 GX, specifically for the purpose of securing GPRS networks. In addition to providing all the firewall capabilities available in their FW-1 product, FireWall-1 GX has been designed to recognize GPRS Tunneling Protocol (GTP).

Nokia platforms running Check Point FireWall-1 GX can be used to inspect the GTP tunnel fields in the context of both the tunnel and the individual packets. FireWall-1 GX also provides GTP-specific log information including details on tunnel creations, updates and deletions.

When and where is it available?

Check Point FireWall-1 GX for Nokia is available immediately. The product can be ordered from the October 2002 pricelist.

What's the opportunity?

As the deployment of GPRS wireless infrastructure increases, there are growing concerns of securing the network from external threats. The initial opportunity for this product will be in conjunction with Nokia Networks as part of their GPRS infrastructure sales. The product is positioned for current and future Nokia Networks customers.

Why offer Check Point FireWall-1 GX for Nokia?

Offering Check Point FireWall-1 GX for Nokia ties in with the wireless infrastructure plans of Nokia Networks. Overall security solution for GPRS network is becoming a necessary portion of any GPRS sales. By providing Check Point FireWall-1 GX for Nokia, Nokia can be a One-Stop-Shop for all GPRS infrastructures including security.

Who needs it?

Since GPRS is an overlay/enhancement to GSM networks, the target customers for FireWall-1 GX are GSM service providers/operators. Some customers may already have Nokia GPRS infrastructure in place and adding additional security measures. Others may be new GPRS customers who will be installing a new network along with the necessary security platforms.

Who's the competition?

Competitors who have product offerings in this space include Netscreen and Ericsson.

Who can sell it?

Check Point FireWall-1 GX for Nokia is available for sale by NIC sales and resellers. However, since the product is targeted for service providers of GPRS networks and not enterprise, we expect majority of the sales to be tied to Nokia Networks GPRS infrastructure opportunities.

2. Product Positioning

Check Point FireWall-1 GX for Nokia adds to the NIC product security portfolio by providing a solution for wireless service provider market. With the addition of this product, Nokia security platforms can fully secure all facets of GPRS network from its connection to the Internet as well as to the neighboring GPRS networks.

The key capabilities offered by Check Point FireWall-1 GX for Nokia is its capability to analyze and inspect GTP. This is a key capability since GTP is used throughout the GPRS backbone. Standard firewall capabilities alone cannot protect the various GPRS Support Nodes (GSNs) from security hazards embedded in GTP packets.

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3. Benefits

Deployment of GPRS network provides a unique security challenges unseen in second-generation wireless infrastructures. GPRS networks with its direct connection to the Internet as well as other packet data network makes it a potential target for variety of security risks. The GRX connecting different GPRS service provider can also be a source of security threats.

The key feature of Check Point FireWall-1 GX for Nokia is its capability to inspect GTP. GTP is used throughout the backbone of GPRS network and the ability to inspect GTP packets is a must for securing GPRS network. Nokia's proven security platforms with Check Point VPN-1/FW-1 can secure the connection between the GPRS network and the Internet or other packet data network.

Check Point's patented State-ful Inspection technology available on their FW-1 application is also used in the FireWall-1 GX application. The combination of State-ful Inspection, GTP support and Nokia IP platforms provide the leading edge technology in GPRS security.

4. Product Description/Key Features

There are two areas where an attack can be launched to compromise the GPRS networks; from neighboring GPRS network through GRX and external packet data networks. The attacks can range from Denial of Service (DOS), IP Spoofing, Tunnel Hijack, etc...

Gp interface (part of GTP) is used to provide connection between different GPRS networks. This interface can be used to support roaming scenarios as well as DNS lookup of subscriber destination. It is this interface that the Nokia IP platforms running Check Point FireWall-1 GX can protect and secure.

Various types of attacks that can be launched through this interface are:

- GTP Flood – Denial of Service Attack
- DNS Flood – Denial of Service Attack
- Border Gateway Denial of Service Attack
- Compromised Routing table in Border Gateway
- Compromised Confidentiality
- Spoofed PDP Context

Gi interface provides the connection between the GGSN and external packet data network. The external network can include corporate networks, other service providers and the public Internet. The Gi interface can be secured by Nokia IP platforms running Check Point VPN-1/FW-1. Since this interface can be used to carry various types of network traffic, it is open to number of attacks including:

- GGSN Denial of Service Attack
- Mobile Terminal Denial of Service Attack

5. Launch Plans

A special trial program has been launched on September 2002 to provide potential customers with hands-on evaluation of Check Point FireWall-1 GX for Nokia. As part of the trial, the necessary software, licenses and hardware will be loaned

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to the customer for the duration of the evaluation. Local SEs from both Nokia and Check Point are tasked to assist the customer with the evaluation.

6. Availability

Check Point FireWall-1 GX for Nokia is currently available. The ordering information can be found on the black pages of NIC October 2002 pricelist.

7. Technical Training

Nokia training organization is currently preparing technical training courses for Check Point FireWall-1 GX for Nokia.

8. Technical Documentation

Technical note outlining the details of the various security attacks addressed by Check Point FireWall-1 GX for Nokia is available.

9. Technical Support

Nokia Global Support & Services (GSS) provides worldwide First Call-Final Resolution support for Nokia appliances, software and applications. Nokia provides a single point of contact for technical assistance, problem resolution, and escalation for Check Point FireWall-1 GX for Nokia as well as Nokia platforms and operating systems.

Nokia recommends one of the following support packages to provide total support solution for Check Point FireWall-1 GX for Nokia. Please note that the support packages for the application and management must be ordered separately.

- Nokia Access 5x8 for Check Point
- Nokia Access 7x24 for Check Point

Both support packages includes the following:

- Nokia IPSO Software Subscription
- Unlimited Support Web Access
- TAC support with 5x8x2 trouble call/case handling
- Unlimited next business day On-Site Hardware Replacement

10. Configuration Information

The following list indicates the minimum equipment needed to provide basic GPRS security utilizing Check Point FireWall-1 GX:

- IP530, IP650 or IP700 series platform (IP700 series preferred)
- Check Point FireWall-1 GX Application
 - Includes Check Point NG VPN-1/FW-1 application
- Check Point FireWall-1 GX Management Application
 - Includes management capabilities for Check Point NG VPN-1/FW-1
- Check Point FireWall-1 GX Unlimited License
- Check Point FireWall-1 GX Management Unlimited License

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- SecurePlatform or Nokia IP security platform for use as a management server

The following equipment may be needed to provide a complete or more robust solution.

- Second IP security platform to provide HA solution via VRRP
- IP security platform with Check Point NG FW-1/VPN-1 for securing Gi interface (connection to Internet)

11. System Specifications

Check Point FireWall-1 GX for Nokia is supported on IP530, IP650 and IP700-series platforms. The following list is a detailed specification of the IP740 Value Enhanced Base System Bundle. Please refer to the latest NIC pricelist for the up-to-date information on all the supported platforms and corresponding bundles.

- 1GB RAM
- IDE-based Hard Drive
- Four 10/100 Ethernet ports
- Four cPCI slots
- Internal VPN Accelerator
- Redundant Power Supply
- Power Cords
- IPSO OS Software

Check Point FireWall-1 GX for Nokia is supported on IPSO 3.5 and 3.6.

12. Upgrades

There are no upgrade options available for Check Point FireWall-1 GX application. The application and management includes the support for Check Point VPN-1/FW-1. Also, only the unlimited licensing option is available for this product.

There are however, several upgrade options available for the IP platforms to meet the different needs of the customer. The upgrade options can include Gigabit Ethernet cards, 10/100 Ethernet cards, Accelerator card, etc... Please refer to the latest NIC pricelist for the available upgrade options for the IP530, IP650 and IP700-series platforms.